

IOZONE
A³ SCIENCE & ENGINEERING
THE JOURNAL OF THE
INTERNATIONAL OZONE ASSOCIATION

Keyword Index Vol. 1-40 (1979-2018)



Taylor & Francis
Taylor & Francis Group

Key Word Index for Volumes 1-40 (1979-2018)

A. H. Weeks Water Treatment Plant, 26:125

Absorbance in treatment of ozone residual in water, 38:373

Absorbance in wastewater ozonation, 35:501

Absorbance Standards, in use of ozone for treatment of dye wastewater, 20:111

Absorber, ozone, packed column in water reclamation, design and application of, 2:283

Absorption and ozone injection for NO_x abatement, 36:472

Absorption Efficiency, of ozone contacting at Lengg plant, Zürich, Switzerland, 13:41

Absorption of Ozone, kinetics of, 14:303

Absorption Theories, of ozone contacting, 12:341

Absorption with pseudo-second order sorption kinetics, 38:3

Absorption, of ozone in water, 9:1; 32:3

ABTS in determination of ozone residual, 38:373

AC Discharge in humid oxygen, 23:467

Acanthamoeba Protozoa, 30:367

Accumulated Charge in multiple needles to plane configuration, 33:98

Acesulfame, 35:168

Acetaldehyde, 12:1; 12:231

Acetaldehyde, Formation during ozonation of Water, 17:53

Acetaldehyde, from ozonation of natural organic matter, 16:1

Acetaldehyde, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

Acetamide as chloropicrin precursor during ozonation of drinking water, 10:241

Acetaminophen oxidation by pulsed corona discharge, 35:116

Acetate Anion, effects of hydrogen peroxide residuals on removal of in biologically active filters, 19:371

Acetate Ion in reaction of ozone with Ag(1), 37:393

Acetate removal by biologically active filters, 22:77

Acetic Acid degradation by advanced oxidation, 35:359

Acetic Acid degradation by catalytic ozonation, 33:441

Acetic Acid degradation by catalytic ozonation, 38:194

Acetic Acid for removal of tetracycline, 37:405

Acetic Acid, as a model compound in water/wastewater ozonation, 15:149

Acetic Acid, Formation during Ozonation of

Drinking Water, 8:199; 12:1; 17:511

Acetic Acid, from ozonation of natural organic matter, 16:1

Acetic Acid, identification during ozonation of organic compounds in water, 2:251

Acetic Acid, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

Acetic Acid, ozonation in secondary effluent using spinning disc ozone contactor, 13:501

Acetone, formation during drinking water ozonation, 12:231

Acetone, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

Acid Black 210, 40:372

Acid Black 52 (Chromium), Destruction of by Ozone and Advanced Oxidation, 17:149

Acid Black 52, ozonation of, 11:391

Acid Blue 129 ozonation, 35:423

Acid Orange 7 ozonation, 35:423

Acid Red 27 ozonation, 35:423

Acid Red B. catalytic ozonation, 37:287

Acid Red removal with ozone, 37:420

Acid Red-151 oxidized by peroxone process, 28:155

Acid Sites for catalytic ozone destruction, 33:279

Acidity, of aquatic natural organic matter upon ozonation, 16:89

Acinetobacter baumannii in ozone laundry systems, 31:369

Acinetobacter calcoaceticus for determination of AOC in ozonated water, 18:521

Acridine oxidation with ozone, 24:271

Acrolein, formation during drinking water ozonation, 12:231

Acrylic Acid ozonation, 31:301

Acrylic Resin cylindrical tube for ozone generation, 33:106

Activated Alumina Adsorbent at Montreal, Canada water treatment plant, 15 years of experience with for air drying, 18:299

Activated Carbon Adsorption Models and microbiological mechanisms for removal of natural organics in GAC columns, 8:299

Activated Carbon Adsorption of coal gasification wastewater, 40:275

Activated Carbon adsorption of diuron after ozonation, 25:399

Activated Carbon adsorption of NOM, 33:185

Activated Carbon Adsorption, influence of preozonation on adsorption equilibrium of DOC, 8:277

Activated Carbon Adsorption, of natural and synthetic organics in water, effect of ozone on the bio-

2 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

logical degradation of and, 1:263, 1:347

Activated Carbon and ozone for drinking water treatment, 28:237

Activated Carbon and ozone for humic acids degradation, 37:371

Activated Carbon and ozone for treatment of landfill leachate, 35:55

Activated Carbon and ozone in removal of TRIC and PERC, 38:302

Activated Carbon Fiber for ozonation of p-nitrophenol, 37:178

Activated Carbon Filter Media, improvement by oxidative pretreatment with ozone and persulfate, 5:113

Activated Carbon Filtration, contribution of ozone to the removal of organic materials in a process including a slow filtration through sand and, 4:33

Activated Carbon Filtration, Following Ozone or Advanced Oxidation for Drinking Water Treatment, 17:673

Activated Carbon Filtration, influence of ozonation dosage on the structure and biodegradability of pollutants in water and its effect on, 4:15

Activated Carbon for bromate control, 37:357

Activated Carbon for catalytic ozonation of oxalic acid, 40:448

Activated Carbon for ozone decomposition, 35:308

Activated Carbon for treatment of refinery wastewater, 33:403

Activated Carbon in coal coking processing wastewater, 25:273

Activated Carbon in ozonation of cyanide, 37:240

Activated Carbon in ozonation of ethynlestradiol, 31:422

Activated Carbon olive stones for ozone decomposition, 39:436

Activated Carbon removal of harmful ozone-produced oxidants, ;33:224

Activated Carbon to catalyze ozonation of Pyruvic Acid, 27:159

Activated Carbon treatment of phenolic wastewater, 32:417

Activated Carbon Treatment, of Phosphoric Acid, Effect of Ozone on, 17:637

Activated Carbon used for heterogeneous ozone decomposition, 24:227

Activated Carbon, and ozone for tertiary wastewater treatment, 7:1

Activated Carbon, biological reactivation of in water reclamation, 8:355

Activated Carbon, in conversion of aqueous O₃ into OH-radicals, 20:67

Activated Carbon, ozone and Zeolite in removal of

2,4-Dichlorophenol, 32:391

Activated Carbon, performance in water reclamation, effect of various oxidants on, 3:225

Activated Carbon, treatment of surface water, with ozone, 18:57

Activated Hydrogen Peroxide Treatment, of Hazardous Wastes, 17:119

Activated Oxidation Processes for removal of antibiotic substances, 34:137

Activated Sludge characteristics during ozonation, 39:80

Activated Sludge Effluent, influence of ozonation on GAC adsorbability of organic substances in, 8:355

Activated Sludge for azo dye removal, 31:279

Activated Sludge Inhibition of tannins wastewater, 29:443

Activated Sludge Inhibition Test of ozonated textile biocidal finishing agents, 29:335

Activated Sludge Inhibition Test, 32:238

Activated sludge Mineralization with ozone, 22:473

Activated Sludge of phenolic wastewater treated by ozone, 32:408

Activated Sludge ozonation, 10:291; 20:1; 25:73; 29:201

Activated Sludge performance after ozonation of Kraft pulp mill effluent, 28:453

Activated Sludge Process in pulp and paper industry, 35:109

Activated Sludge Process, ozone treatment, 34:334

Activated Sludge Treatment, of preozonated chlorophenols, 16:13

Activated Sludge, and ozone for treatment of cherry stillage, 26:257

Activation Energy of reaction of ozone with tertiary butanol and formate ion, 36:532

Activation Energy of UV processes, 34:354

Activation Parameters in reaction of triazines with ozone, 25:81

Acute Toxicity of ozonated textile biocidal finishing agents, 29:335

Acute Toxicity of sonodegraded petrochemical wastewater, 33:194

ACVK Method of Analysis, for ozone and for chlorine dioxide, 11:209

Adenine, ozonation of, 13:265

Adenosine Tri Phosphate present in disinfection of seawater, 35:63

Adenosine Triphosphate to evaluate fixed bed biofilm reactors, 37:227

Adenosine-5'-triphosphate to evaluate activated sludge ozonation, 32:408

Adenovirus and ultraviolet light, 30:70

- Adhesives** resistance to liquid and gas phase ozone, 24:249
- Adipic Acid**, 12:1
- ADR Model** for predicting ozone decay, 36:100
- Adsorbability** of textile effluents, 35:7
- Adsorbable Organic Carbon (AOC) Determination**, in ozonated water with *Acinetobacter calcoaceticus*, 18:521
- Adsorbable Organic Halide (AOX)** removal of in chemical and mechanical pulp mill effluents by ozonation, 18:363
- Adsorbable Organic Halide Formation Potential (AOXFP)** of dyeing wastewater, 30:439
- Adsorbable Organic Halides** removal, 38:452
- Adsorption** and ozonation of dyeing wastewater, 40:133
- Adsorption** capacities on BAC following ozonation, 25:351
- Adsorption** filtration of iron from ozonated groundwater, 28:269
- Adsorption** into activated carbon, 34:259
- Adsorption** of 2,4-Dichlorophenol by Zeolite, 32:391
- Adsorption** of bromate by activated carbon, 37:357
- Adsorption** of NOM affected by preozonation, 33:185
- Adsorption** of ozone in silica gel, 25:315
- Adsorption of Ozone**, 28:149
- Adsorption** of p-nitrophenol on activation carbon filter, 37:178
- Adsorption** of UV light into food products, 30:93
- Adsorption** on zeolite surface, 32:344
- Adsorption** procedures, experiments for wastewater treatment with ozone in combination with, 3:169; 4:3
- Advance Oxidation Processes** for treatment of jewelry manufacturing effluent, 36:196
- Advanced Oxidant Regeneration of GAC**, for controlling air-phase VOCs, 18:417
- Advanced Oxidation (UV/H₂O₂)** of micropollutants, 34:120
- Advanced Oxidation** after IX-UV treatment, 32:383
- Advanced Oxidation** applied to foundries, 29:461
- Advanced oxidation** bleaching of cotton fabric, 37:203
- Advanced Oxidation** during electroozonation, 23:467
- Advanced Oxidation** for acetic acid degradation, 35:359
- Advanced Oxidation** for Atrazine removal, 21:39
- Advanced Oxidation** for carboxylic acids decomposition, 27:11
- Advanced Oxidation** for degradation of Acid Black 210, 40:372
- Advanced Oxidation** for destruction of toxic organics in injection-type downflow UV/O₃ oxidation reactor, 21:539
- Advanced Oxidation** for estriol degradation, 38:358
- Advanced Oxidation** for inactivation of *clostridium perfringens*, 30:431
- Advanced Oxidation** for removal of odorous algal-derived compounds, 33:121
- Advanced Oxidation** for tannic acid removal, 25:199
- Advanced Oxidation** in denim color fading ozonation, 40:377
- Advanced Oxidation** in ozone-electrolysis process, 33:463
- Advanced Oxidation** in sewage treatment, 30:263
- Advanced Oxidation** in treatment of Dye-Bath waters with ozone, 24:413
- Advanced Oxidation** of acetic acid with catalyst, 38:194
- Advanced Oxidation** of aqueous naphthalene-1,5 disulfonic acid, 28:437
- Advanced Oxidation** of aqueous nitrophenols, 23:333
- Advanced Oxidation** of aromatic pollutants by ozone, 28:287
- Advanced Oxidation** of caffeine, 37:379
- Advanced Oxidation** of chlorobenzenes, 22:415
- Advanced Oxidation** of chlorobenzoic acid, 37:527
- Advanced Oxidation** of coffee effluent, 40:293
- Advanced Oxidation** of forest industry landfill leachate, 24:369
- Advanced Oxidation** of industrial wastewater, 36:229
- Advanced Oxidation** of methyl orange, 36:244
- Advanced Oxidation** of micropollutants in water, 21:207
- Advanced Oxidation** of MTBE, 24:56
- Advanced Oxidation** of Netherlands drinking water, 34:92
- Advanced Oxidation** of night soil, 30:282
- Advanced Oxidation** of pharmaceutical compounds, 34:3
- Advanced Oxidation** of phenylphenol isomers, 39:333
- Advanced Oxidation** of polybenzimidazole, 40:392
- Advanced Oxidation** of pulp and paper wastewater, 30:105
- Advanced Oxidation** of Pyruvic Acid, 27:159
- Advanced Oxidation** of refinery wastewater, 37:546
- Advanced Oxidation** of secondary effluent, 29:23
- Advanced Oxidation** of secondary treated municipal effluent, 37:323

4 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Advanced Oxidation** of sulfamethoxazole, 37:509
Advanced Oxidation of textile wastewater, 23:327
Advanced Oxidation of toluene and 2,4,6-trinitrotoluene, 22:519
Advanced Oxidation of wastewater, 35:501
Advanced Oxidation Press for degradation of dichlorophenol, 38:14
Advanced Oxidation Process (AOP) for 1,4-dioxane removal, 35:331
Advanced Oxidation Process (AOP), in carbon-catalyzed conversion of aqueous O₃ into OH-radicals, 20:67
Advanced Oxidation Process and catalytic ozonation, 38:3
Advanced Oxidation Process for 1,4-Dioxane removal, 33:396
Advanced Oxidation Process for cyanide destruction, 37:240
Advanced Oxidation Process for drinking water treatment, 32:217, 32:295
Advanced Oxidation Process for removal of azo dyes, 37:420
Advanced Oxidation Process for removal of pharmaceuticals and endocrine disruptors, 28:445
Advanced Oxidation Process for treatment of drinking water, 32:244
Advanced Oxidation Process in treatment of o-nitrotoluene, 23:127
Advanced Oxidation Process of water containing adsorbable organic halides, 38:452
Advanced Oxidation Processes affected by bicarbonate, 35:302
Advanced Oxidation processes and bromate formation, 34:325
Advanced Oxidation Processes and pulsed corona discharge, 36:94
Advanced Oxidation Processes and UV oxidation 34:354
Advanced Oxidation Processes by pulsed corona discharge, 35:116
Advanced Oxidation Processes during ozone generation in presence of foam, 24:181
Advanced Oxidation Processes effect on ozone decomposition in wastewater, 28:247
Advanced Oxidation Processes for 1,4 Dioxane removal, 29:13
Advanced Oxidation Processes for bio-decontamination, 27:469
Advanced Oxidation Processes for decolorization of molasses wastewater, 27:365
Advanced Oxidation Processes for degradation of carbamazepine, 40:113
Advanced Oxidation Processes for degradation of cisplatin, 30:189
Advanced Oxidation Processes for degradation of endocrine disrupting chemicals, 29:153
Advanced Oxidation Processes for degradation of estrone, 30:249
Advanced Oxidation Processes for degradation of pesticides, 27:83, 27:173
Advanced Oxidation Processes for destruction of micropollutants, 30:34
Advanced Oxidation Processes for detergent removal, 33:301
Advanced Oxidation Processes for dimethyl sulfoxide, 29:391
Advanced Oxidation Processes for elimination of drugs, 32:305
Advanced Oxidation Processes for groundwater treatment, 38:413
Advanced oxidation processes for *Helminth Hymenolepis nana* eggs, 35:201
Advanced Oxidation Processes for N-Methyl-2-Pyrrolidone, 29:177
Advanced Oxidation Processes for NOM removal, 33:267
Advanced Oxidation Processes for oxidation of Acid Red-151 Aqueous Solutions, 28:155
Advanced Oxidation Processes for ozonation of a lake water, 38:100
Advanced Oxidation Processes for pharmaceuticals treatment, 28:353
Advanced Oxidation Processes for phenol decomposition, 24:49
Advanced Oxidation Processes for poultry-processing chiller water treatment, 23:53
Advanced Oxidation Processes for propylene glycol methyl ether acetate, 30:332
Advanced Oxidation Processes for reactive dyes, 39:14
Advanced Oxidation Processes for removal of PPCP, 33:150
Advanced Oxidation Processes for removal of PPCPs and EDCs, 37:154
Advanced Oxidation Processes for simultaneous control of bromate ion and chlorinous odor, 33:136
Advanced Oxidation Processes for soil remediation, 38:272
Advanced Oxidation Processes for textile wastewater, 33:285
Advanced Oxidation Processes for textile wastewaters, 22:535
Advanced Oxidation Processes for treatment of diethyl phthalate, 32:238
Advanced Oxidation Processes for treatment of EDCs and Pharmaceuticals, 30:65

- Advanced Oxidation Processes** for treatment of emerging organic pollutants, 30:21
- Advanced Oxidation Processes** for treatment of esculetin, 27:317
- Advanced Oxidation Processes** for treatment of herbicides in groundwater, 22:607
- Advanced Oxidation Processes** for treatment of landfill leachate, 38:367
- Advanced Oxidation Processes** for treatment of MTBE, 27:27
- Advanced Oxidation Processes** for treatment of municipal secondary effluents, 33:243
- Advanced Oxidation** processes for treatment of pulp and paper industry wastewater, 27:37
- Advanced Oxidation Processes** for treatment of recalcitrant and toxic wastewater concentrate, 34:163
- Advanced Oxidation Processes** for treatment of refinery wastewater, 33:403
- Advanced Oxidation Processes** for treatment of wastewater from painting processes, 27:279
- Advanced Oxidation Processes** in “pure water”, 30:300
- Advanced Oxidation Processes** in degradation of nitroaromatics, 23:343
- Advanced Oxidation Processes** in ozonation of chlorophenol, 24:133
- Advanced Oxidation Processes** in treatment of lye-wastewater, 24:105
- Advanced Oxidation Processes** in UASB effluent, 29:485
- Advanced Oxidation Processes** in water reclamation, 36:153
- Advanced Oxidation Processes** modeled, 40:79
- Advanced Oxidation Processes** using ozone and granular activated carbon, 28:237
- Advanced Oxidation Processes** using UV and H₂O₂ for treatment of natural waters, 32:329
- Advanced Oxidation Processes** using zeolite, 32:344
- Advanced Oxidation Processes** with ozone in semiconductor processing, 25:445
- Advanced Oxidation Processes** with UV lamps, 35:38
- Advanced Oxidation Processes**, 14:185; 14:197; 14:263; 14:367; 17:97; 17:119; 17:149; 17:183; 17:237; 17:527; 17:657; 17:673; 35:73
- Advanced Oxidation Processes**, for treatment of surfactants in wastewater, 26:327
- Advanced oxidation processes**, with nitrobenzene and Mn-loaded GAC, 26:1
- Advanced Oxidation Technologies** using ozone and electron beam irradiation, 25:377
- Advanced Oxidation** to remove pharmaceutical products, 34:16
- Advanced Oxidation Treatment**, 12:73; 12:195; 12:281; 12:401
- Advanced Oxidation** using a rotating packed bed, 35:101
- Advanced Oxidation** using metal oxides, 25:25
- Advanced Oxidation** with carbon nitride nanosheet, 38:312
- Advanced Oxidation** with multiwalled carbon nanotubes, 37:269
- Advanced Oxidation** with ozone and PFOA, 24:63, 25:185
- Advanced Oxidation** with ozone and supported titanium dioxide, 22:185, 22:471
- Advanced Oxidation** with ozone in BENELUX, 21:139
- Advanced Oxidation** with ozone in the USA, 21:99
- Advanced Oxidation** with ozone/UV, 23:245
- Advanced Oxidation** with TiO₂ for monochloroacetic acid removal, 27:311
- Advanced Oxidation**, 19:13; 19:39; 19:75; 19:129; 19:157; 19:495; 19:513;
- Advanced Oxidation**, for 5-Methylresorcinol Destruction, 17:399; 17:527
- Advanced Oxidation**, for Cyanazine Degradation, 17:237
- Advanced Oxidation**, for Destruction of Pesticides, 17:657; 17:673
- Advanced Oxidation**, for Destruction of Phenols, 17:527
- Advanced Oxidation**, for Particle Destabilization, 17:25
- Advanced Oxidation**, in ozonation of chlorophenol solutions, 20:259; 20:283
- Advanced Oxidation**, in treatment of drinking waters with ozone and microbial growth, 20:303
- Advanced Oxidation**, of 1,3,5-trichlorobenzene, 18:535
- Advanced Oxidation**, of chlorobenzenes in water, 18:291
- Advanced Oxidation**, of molasses processing wastewater, 19:157
- Advanced Oxidation**, of pesticides, 32:25
- Advanced Oxidation**, of phenols in aqueous solution by a UV/O₃ process, 18:443
- Advanced Oxidation**, of selected herbicides by ozone and ozone-hydrogen peroxide in a lowland surface water, 18:251
- Advanced Oxidation**, with ozone + hydrogen peroxide in a static mixer contactor for destruction of Atrazine and Simazine, 16:455
- Advanced Oxidation**, with ozone and TiO₂ based

6 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

photocatalysis, 26:585

Advanced Oxidation, with ozone in a Chemical Sequential Reactor, 15:201

Advanced Oxidation, with ozone/hydrogen peroxide and GAC at 11 Anglican Water (U.K.) surface water treatment plants, 18:19

Advanced Oxidation/Reduction Processes and radiation chemistry, 30:58

Advanced Sewage Treatment with ozone, 30:238

Advanced Treatment Costs, 36:485

Advanced Wastewater Treatment of paper mill effluent, 30:310

Aerobic Biodegradation of activated sludge, 29:191

Aerobic Biodegradation of olive wastewater, 22:617

Aerobic Biodegradation of pharmaceutical effluent, 37:538

Aerobic Biological Treatment, 30:447

Aerobic bio-oxidation of phenolic wastewater, 32:417

Aerobic Degradation of lye wastewater, 24:105

Aerobic Digestion of ozonated sludge, 39:148

Ag Coating for ozone decomposition, 37:252

Agricultural Application of ozone for plant pathological applications, 27:495

Agricultural Applications and effect of ozonated water on hydroponically grown tomatoes, 31:21

Agricultural Applications and inactivation of *Fusarium oxysporum* with ozone, 26:517

Agricultural Applications and powdery mildew infection control, 31:10

Agricultural Applications and promotion of adventitious roots in *Chrysanthemum*, 31:15

Agricultural Applications and treatment of chlorpyrifos residues, 33:232

Agricultural Applications for ozone, 23:65; 24:1; 24:463; 26:217; 28:125; 24:343

Agricultural Applications involving ozone washing of apples, 39:97

Agricultural Applications, 40:209

Agricultural Applications, fruit-vegetable seedlings, 33:179

Agricultural Applications, using ozone-treated spray water, 26:511

Agricultural Crops treated with ozone, 30:210, 30:216

Agriculture Reuse of ozone treated wastewater, 22:151

Agri-Food Applications and cucumber fruits treatment, 39:188

Agri-Food Applications and cut vegetables treated with ozone, 31:309

Agri-Food Applications and patulin degradation with ozone, 31:224

Agri-food Applications with ozone to inactivate *E. coli* bacterial colonies, 39:127

Agri-food Applications, 34:387, 37:479, 40:415

Agri-Food Applications, Kabob Dates, 36:269

Agro-industrial Wastewaters, 34:387

Agro-industrial Wastewaters, 36:3

Aldehydes formation in ozonation of sunflower oil, 23:121

Air Breathing, 35:149

Air Cleaning of ozone by $MnCO_3$, 40:21

Air Conditioning Cooling Systems, ozonation in, 15:81

Air Dryer Regeneration, at Montreal, Canada drinking water treatment plant, 15 years of experience,

Air Feed Gas, for ozone generation, design considerations, 14:13; 14:276, 18:57

Air Pollutant Transport in Hong Kong, 25:513

Air Preparation, for ozone generation, 10:241

Air Pretreatment, design considerations, 9:109

Air Purifier for Herpes Virus inactivation, 36:249

Air Purifier Ozone Generator, 34:225

Air Quality, 33:80

Air Stripping Tower, treatment of waste gases from using photochemically generated ozone, 10:323

Air Temperature, effect on ozone generation, 12:255

Air Treatment in the food/restaurant industry, 32:137

Air Treatment of building materials with ozone, 31:316

Air Treatment of VOCs with ozone, 31:393

Air, ozone generation in, 12:41; 12:255

Airborne Disease prevention by micro/nanobubble ozonated water, 37:78

Airborne Pathogens, bactericidal effects of high airborne ozone concentrations on *Escherichia coli* and *Staphylococcus aureus*, 20:205

Al₂O₃ Pellets in packed bed reactors for ozone generation, 28:111

Alachlor and Its Chlorine and Ozone By-Products, non-genotoxic effects of on gap junctional intercellular communication, 19:351

Alachlor, Removal by Ozone and Ozone/Hydrogen Peroxide, 17:97

Alcohols, and aliphatic amines, ozonation reaction patterns of, 4:195

Alcohols, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methyl-isoborneol, 15:1

- Aldehyde Formation** and ozone demand in ozonation of amino acids, 20:381
- Aldehyde formation** during ozonation, 25:53
- Aldehyde Formation** in ozonation of p-hydroxybenzoic acid solution 20:343
- Aldehyde Formation**, during drinking water ozonation, 12:231
- Aldehyde removal** by biological activated carbon, 22:393
- Aldehydes** and fixed bed biofilm reactors, 37:227
- Aldehydes** formation during ozonation of Unibl-u-A, 24:439
- Aldehydes** formed during ozone treatment of drinking water, 17:53; 17:657; 21:79
- Aldehydes** removal by ozone/GAC treatment, 24:357
- Aldehydes**, as byproducts from catalytic ozonation of humic substances in water, 18:195
- Aldehydes**, as byproducts from ozonation of natural organic matter, 16:1
- Aldehydes**, as disinfection byproducts of humic acid in drinking water following ozonation/post-chlorination, 14:51
- Aldehydes**, formation of during ozonation of natural waters, 19:179
- Aldehydes**, formation of during ozonation, followed by BAC, 15:95
- Aldicarb**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:657
- Aldonic Acids**, from ozonation of carbohydrates, 13:265
- Aldrin Aldehyde Formation**, in ozonation of p-hydroxybenzoic acid solution 20:343, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:657
- Alfatoxin M₁** reduction by ozone, 39:448
- Algae Flocculation**, interference of ozone on, 16:247
- Algae** in eutrophic lake water, 28:29
- Algae** in surface waters, 28:277
- Algae Removal**, by ozone and flotation, 15:465; 15:481, *Correction*, 16:179
- Algae Removal**, in drinking water by preozonation, 15:445
- Algal Treatment** of ozonated Kraft pulp mill effluent, 28:453
- Alginic Acid** effect on ozone oxidation of cyclophosphamide, 35:125
- Alicyclic Amines**, treatment with ozone, 21:23
- Aliphatic Aldehydes**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Aliphatic Compounds** removal process cost, 33:211
- Alkalinity** effect in ozone treatment in presence of bicarbonate, 25:285
- Alkalinity** effect in treatment of MTBE with ozone, 24:56
- Alkalinity Effect** on hydroxyl radical ozone ratios, 22:123
- Alkalinity** effect on ozone decay in water, 34:233
- Alkalinity Effects**, on ozone utilization rate in natural waters, 10:277
- Alkalinity**, in drinking water, effects of on bromate ion formation during ozonation, 18:1
- Alkalinity**, influence on ozone/UV system, 9:391
- Alkalinity**, reduction in ozone treatment of landfill leachate, 26:287
- Alkane Oxidation**, 30:165
- Alkanes Degradation** of diesel fuel contaminated soil, 28:37
- Alkanes**, ozone destruction of in distilled and drinking water, 9:265
- Alkenes**, ozone destruction of in distilled and drinking water, 9:265
- Alkyl Sulfides**, deodorization by aqueous washing, then ozonation, 13:331
- Alkylbenzoic Acids**, products of ozonolysis of naphthalene derivatives in water and in kerosene films, 9:23
- Alkylphenol Ethoxylates** degradation by ozone and/or AOP, 26:327, 29:153
- Allergic Disease** caused by house dust mites, 28:191
- Alloxanic Acid**, formation of by ozonation, 8:199
- Alternaria** disinfection with ozone, 38:115
- Alton (UK) Water Treatment Plant**, 17:607
- Alum**, Coagulation in Conjunction with Ozone or Ozone/Hydrogen Peroxide, 17:25
- Alumina** as catalyst in removal of humic substances with ozone, 21:261
- Alumina** in catalytic ozonation of ibuprofen and humic acid, 38:203
- α -Alumina** supported silver catalyst for ozone decomposition, 37:216
- γ -Alumina** for removal of DMP, 36:221
- Aluminum Alloys**, 35:220
- Aluminum Oxide** catalyst for catalytic ozonation, 37:287
- AM1 Method** to study decomposition of ozone on Cu (110) surface, 24:39
- Ames Salmonella typhimurium Assay**, to determine mutagenicity of drinking water
- Ametryn**, ozonation of, 15:227
- Amidoxalic Acid**, formation during ozonation of quinoxaline, 12:329
- Amines** removal with ozone, 21:23
- Amines**, aliphatic, and alcohols, ozonation reaction

8 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

patterns of, 4:195

Amines, aromatic, ozonation in water, 2:65

Amines, from carcass rendering, action of chlorine and ozone on, 2:261

Amino Acids in ozonation of waste-activated sludge, 37:316

Amino Acids oxidation by ozone, 32:81

Amino Acids, ozonation and aldehyde formation, 20:381

Aminoacids, produced during ozonation of municipal sludges, 16:385

Aminomethylphosphonic Acid in ozonation of ethylenediaminetetra (methylenephosphonic acid), 20:99

Amitrole, ozonation of aqueous solutions of, 9:233

Ammelide, formation during oxidation of Fluorescent Brightener 28, 19:129

Ammeline, formation during oxidation of Fluorescent Brightener 28, 19:129

Ammonia Addition effect on bromate formation during ozonation of water, 22:267

Ammonia effect on ozone demand, 34:26

Ammonia for bromate control during ozonation of the Yellow River water, 37:127

Ammonia for bromate control, 29:363

Ammonia in night soil, 30:282

Ammonia removal in ozonized systems, 33:425

Ammonia Removal with bromide under ozonation, 22:23

Ammonia, effect of in ozonation of bromide solutions, 26:267

Ammonia, effects on bromate ion formation during ozonation of drinking water, 18:1

Ammonia, formation of during ozonation of cysteine and cystine in aqueous solution, 19:145

Ammonia, ozone oxidation of, 7:179

Ammonia, removal by ozonation and BAC process, 11:227

Ammonia-Nitrogen, reduction in ozone treatment of landfill leachate, 26:287

Ammonium Ion, ozone oxidation of, 7:179

Ammonium Ions, elimination by ozone and biological treatment, 7:85

Ammonium Nitrogen Removal, purification of polluted source water with ozonation and biological activated carbon, 6:245

Amoeba Cysts, action of ozone on, 8:187

Amperometry, for ozone analysis, 10:337

Ampicillin degraded with ozone, 34:156

Amsterdam Water Supply, treatment with ozone, 26:465

Anabaena, destruction with ozone, 20:223

Anaerobic – Anoxic – Oxidic Process for sludge

reduction, 33:171

Anaerobic Digestion of pretreated distillery effluent, 37:411

Anaerobic Digestion of waste-activated sludge, 37:316

Anaerobic Digestion with ozonation, 33:164

Anaerobically Treated Effluent (UASB) with ozone, 29:485

Analgesic oxidation by pulsed corona discharge, 35:116

Analyses, for ozone, 7:327

Analysis of Ozone at High Concentration, 20:489

Analysis of Ozone, by indigo method; a submitted standard method, 4:169

Analysis of Ozone, in aqueous solutions using a modified iodometric technique with As(III), 2:183

Analysis of Ozone, in process gas from an ozone generator, guideline for, 18:209

Analysis of water in drinking water plants, 21:433

Analysis, of carbonyl compounds formed by ozonation, 11:127

Analysis, of ozone by bis(terpyridyl)-iron(II), 11:59

Analysis, of ozone in the gas phase by indigo trisulfonate method, 11:115

Analysis, of ozone in the gas phase, 14:91

Analytical Methods for disinfection byproducts, 21:447

Analytical Methods for drinking water, 21:433

Analytical Methods for Ozone, 10:89; 10:337

Analytical Methods, for residual ozone measurement, a detailed comparison of, 5:203

Aniline, and anilinium ion, ozonation of in aqueous solution, 7:167

Aniline, as a model compound for COD in wastewater ozonation, 15:149

Aniline, ozonation of, 8:129

Aniline, reaction With Ozone to Form Azo- and Azoxybenzenes, 17:619

Anilinium Ion, and aniline, ozonation of in aqueous solution, 7:167

Animal Infectivity in inactivation of *Cryptosporidium* with ozone, 23:1

Animal Infectivity Model, for *Giardia muris* inactivation, 14:1

Animal Waste treatment with ozone, 30:290

Anion Exchange by MIEX[®] resin, 27:371

Anion Exchange effect on NOM, 35:283

Anionic Surfactants, review of aqueous ozonation of, 13:639

Anisole, ozonation of, 8:129

Ann Arbor WTP distribution system, 22:65, 25:473

Anodes in electrochemical ozone generation, 34:49

Anomeric Carbon in drinking water treatment,

- 21:551
ANOVA and cotton yarn fading, 38:395
Anthracite Filter Medium, viable bacteria counts in after ozonation, 12:1
Anthracite/Sand filters for biofiltration, **22:77**
Anthraquinone-2-sulfonic Acid, improvement in biodegradability by preozonation of, 11:155
Anthrax inactivation by ozone, 23:285; 24:151
Antibacterial Activity of ozonated sunflower seed oil, 39:139
Antibacterial Activity of ozonized sunflower oil, 38:143
Anti-Biofouling, ozone system for cooling water circuits, applied to seawater, 7:31
Antibiofouling, ozone system for fresh water cooling circuits, 2:327
Antibiotic products removed by ozone, 26:525; 28:353; 30:175; 30:290
Antibiotic Resistance, 35:73
Antibiotics Removal with membrane bioreactors and advanced oxidation processes, 31:428
Anticarsia gemmatalis Plusia spp treated with PhytoO3 Tech Crop Protection Technology, 30:210
Anticonvulsants removed by ozone, 28:353
Antifungal Activity of olive oil and ozonated olive oil, 39:463
Antifungal effect of ozone gas on pet food, 40:487
Anti-Fungal properties of ozone treated surfaces, 31:326
Anti-Inflammatory Drugs and pulsed corona discharge, 36:94
Anti-Inflammatory Effect of ozonated vegetable oils, 39:374
Anti-Inflammatory Effect of water treated with electrolytic ozone generator, 33:114
Anti-Microbial Action of ozone in treatment of raw animal skins, 32:449
Antimicrobial activity of ozonated mineral oil, 38:253
Antimicrobial Activity of ozonated sunflower oil, 28:59
Antimicrobial Activity of ozonized coconut oil, 27:153
Antimicrobial Activity of ozonized theobroma oil, 28:187
Antimicrobial Effect in dental applications, 34:484
Antimicrobial Efficacy in treatment of building materials with ozone, 31:316
Antimony effect on ozone generation, 32:153
Antioxidant Status, of blood treated with ozone, 26:195
Antioxidant, 40:415
Antioxidant, effect in ozonation of methyl linoleate, 26:189
Antioxidants in medical applications of ozone, 23:207
Antipyretic products removed by ozone, 28:353
Antiviral effects of ozone, 31:216
AOC content of humic Finnish groundwater, 35:86
AOP (Advanced Oxidation Process) influenced by carbonate, 22:305
AOP for 1,4 dioxane removal, 39:244
AOX (Adsorbable Organic Halogen) Degradation With Ozone/Hydrogen Peroxide, Hydrogen Peroxide/UV Radiation or Hydrogen Peroxide/Iron(II), 17:119
AOX in pulp and paper industry, 35:109
AOX removal in Kraft pulp mill effluents, 23:479
AOX Removal in ozonation of pulp mill wastewaters, 22:31
AOXFP reduction in dyeing wastewater by ozonation, 28:199; 29:139
Apparent Kinetic Constants in flow-through electrochemical reactor, 30:113
Apparent Molecular Weight, of organics in ozonated groundwater, 13:109
Apple Juice toxins, 30:189
Apple Washing with ozone aqueous solution, 39:97
Apples treated with ozone and UV Radiation, 32:144
Apples, 40:482
Applicability Domain in ozonation of micropollutants, 36:289
Aquaculture and removal of chloramines, 33:224
Aquaculture recirculating systems, 33:345
Aquaria, Closed-Cycle Marine, ozonation as component of, 1:11
Aquatic Acute Toxicity of ozonated sewage effluent containing endocrine disruption chemicals, 27:389
Aquatic Fulvic Acid, rate constants of ozone consumption of, 13:349
Aqueous Ozone Decomposition models for, 14:33
Aqueous Ozone for root canal infections, 36:264
Aqueous Ozone Measurement with Semiconductor Based Sensor, 20:507
Aqueous Phase Ozone Analysis, 10:337; 17:329
Aqueous Solution of cyanuric acid, 38:233
Aqueous Solutions With Interfacial Resistance, combined absorption and self-decomposition of ozone in, 18:183
Arcacide, 40:183
ArF Laser Radiation, at 193 nm for generation of ozone, 19:273
Argon effect in ozone formation with (V)UV-

10 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Enhanced Barrier Discharges, 21:583
Argon effect on ozone generation, 22:53; 23:95; 24:29; 32:153
Argon effect on the sonication process, 37:93
Aromatic Amines, degradation by ozone, 26:499
Aromatic Amines, ozonization in water, 2:65
Aromatic Carbon in drinking water treatment, 21:551
Aromatic Chloro-acids, formed during ozone or ozone/H₂O₂ treatment of dicofol and tetradifon wastewaters, 16:487
Aromatic compounds degradation by ozone, 21:571; 23:139; 32:61
Aromatic Compounds, Ozonation in Water Containing Nitrite Ion, 17:627
Aromatic Compounds, ozonation of some in aqueous solution: Styrene, benzaldehydenaphthalene, diethylphthalate, ethyl and chlorobenzenes, 5:151
Aromatic Compounds, reactions of with ozone and chlorine, 10: 153
Aromatic Compounds, removal from water by polymerization by ozone and peroxidase treatment, 8:247
Aromatic Hydrocarbon Micropollutants, identification of ozonation products of: Effect on chlorination and biological filtration, 3:33
Aromatic Hydrocarbons treated by ultrasonic irradiation, 33:194
Aromatic Nitro Compounds, increased biodegradability after ozonation, 10:1
Aromatic Nitro Compounds, removal from water by ozonation, 10:1
Aromatic Nitro Compounds, UV spectrograms, before and after ozonation, 10:1
Aromatic Organic Compounds, as byproducts from catalytic ozonation of humic substances in water, 18:195
Aromatic Pollutants oxidation by ozone, 28:287
Aromatics, mechanism of reaction with ozone, 2:39
Aromatics, ozone destruction of in distilled and drinking water, 9:265
Aromatics, substituted, variations in cytotoxicity during ozonation of, 2:25
Arsenic (III) Direct Oxidation Method, for ozone analysis, 10:337
Arsenic Removal, during Ozonation of Drinking Water, 17:297
Arsenite, analysis of ozone in aqueous solution using a modified iodometric technique with, 2:183
Arsenopyrite and gold extraction, 33:42
Arsenopyrite, 40:284
Artemia salina in ballast water, 33:3
Artificial Neural Networks for modeling of ozone bubble column, 29:343
Artificial Neural Networks in azo dyes ozonation, 35:423
Artificial Neural Networks in modeling of bromate formation, 29:353; 29:429
Artificial Neural Networks used in predicting methane generation, 38:465
Artificial Seawater, ozone disinfection of, 12:423
Ascaris suum Eggs, disinfection with ozone, 24:359
Asian Pollutant Emissions, 25:513
Asian Rust (*Phakopsora pachyrhizi*) treated with PhytoO₃ Tech Crop Protection Technology, 30:210
ASMI Model for sludge reduction by ozone, 29:415
Asparagus treated with ozone and UV Radiation, 32:144
Aspergillus flavus inactivation by ozone, 30:423
Aspergillus flavus, 40:487
Aspergillus niger in ozone laundry systems, 31:369
Aspergillus niger inactivation by ozone, 28:347, 30:423
Asperigillus disinfection with ozone, 38:115
Assimilable Organic Carbon (AOC) and fixed bed biofilm reactors, 37:227
Assimilable Organic Carbon (AOC) of ozone treated water from eutrophic lake, 28:29
Assimilable Organic Carbon (AOC), effects of ozonation, biological filtration, and distribution on concentrations of in drinking water, 11:297
Assimilable Organic Carbon during phenol ozonation, 31:201
Assimilable Organic Carbon in ozone treatment of colored groundwater, 23:393
Assimilable Organic Carbon increase during ozonation, 29:379
Assimilable Organic Carbon, 12:377
Assimilable Organic Carbon, evaluation of ozone/BAC for control of, 15:95
Assimilable Organic Carbon, Formation During Ozonation in Water, 17:53; 17:485
Assimilable Organic Carbon, ozone production of in Colorado River water, 13:127
Assimilable Organic Carbon, production and removal of through use of ozone and PEROXONE, 16:197
Assimilable Organic Carbon, production of in ozonated groundwater, 13:109
Assimilated Organic Carbon (AOC) reduction with ozone and membranes, 29:75
Assimilation of Nitrogen into Bacterial Cells, during ozone/BAC treatment, 11:227
Atmospheric Modeling, 23:445
Atmospheric Ozone, 23:421, 23:429, 23:461

- Atmospheric Pressure** dielectric barrier discharge with ultrasonic irradiation, 33:483
- Atmospheric Townsend Discharge**, 33:93
- Atomic Oxygen**, generation by pulsed discharge in water, 24:471
- ATP Bioactivity** measurements I ozonation of secondary treated municipal wastewater, 37:143
- Atrazine and Its Chlorine and Ozone By-Products**, non-genotoxic effects of on gap junctional intercellular communication, 19:351
- Atrazine** as OH[•] probe compound, 24:413
- Atrazine** catalytic ozonation, 33:434
- Atrazine Degradation**, with ozone and ozone-hydrogen peroxide in a lowland surface water, 18:251
- Atrazine Oxidation** with ozone and bromate formation, 22:267
- Atrazine Photo oxidation By-Products**, from UV/H₂O₂ oxidation, 19:395
- Atrazine** reaction with ozone, 21:39; 25:81
- Atrazine Removal** by ozone from natural waters, 21:239
- Atrazine Removal** from greenhouse effluents by ozone, 23:385
- Atrazine Treatment**, with ozone/GAC at 11 Anglican Water (U.K.) surface water treatment plants, 18:19
- Atrazine**, destruction by manganese-catalyzed ozonation, 19:227
- Atrazine**, destruction by ozone advanced oxidation, 19:13; 19:39;
- Atrazine**, destruction by ozone/H₂O₂, 12:195
- Atrazine**, Kinetics of Ozone Degradation of, 17:163
- Atrazine**, modeling its oxidation by H₂O₂/UV; estimation of kinetic parameters, 19:395
- Atrazine**, oxidation in a lime softening plant, 20:177
- Atrazine**, ozonation of aqueous solutions of, 9:233
- Atrazine**, ozone and ozone/H₂O₂ oxidation of in a static mixer, 16:455
- Atrazine**, ozone and ozone/H₂O₂ oxidation of, 16:135; 16:455
- Atrazine**, ozone removal of in presence of humic materials, 14:263; 14:283
- Atrazine**, Removal from Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:97; 17:183; 17:485; 17:657; 17:673
- Atrazine**, Removal from Drinking Water by Ozone/UV Radiation, 17:183
- Austrian Standards Institute**, 30:43
- Auto-Decomposition** in ozone bubble column, 23:369
- Autodecomposition of Ozone**, 14:215
- Autodigestion** of ozonated sludge, 31:247
- Autohemotherapy**, with ozone, 11:411
- Automated Controls**, in ozone application systems, 7:77
- Automated Equipment**, for bleaching of Kraft pulp in TCF process, 26:443
- Automated Ozone system**, 7:77; 7:155
- Automated Procedure**, for monitoring ozone oxidation reactions of organic materials, 8:321
- Automatic Ozone Control Unit (ACU)** for drinking water, 25:383
- Available Chlorine** in electrolyzed anodic solution, 31:10
- Avon, CO, Water Treatment Plant**, 10:55
- Avulsion**, 34:484
- Axial Dispersion Model** for ozone bubble column design, 23:313, 23:369
- Axial Dispersion Model** for ozone self-decomposition in a semi-batch bubble column reactor, 27:409
- Axial Dispersion Model**, of ozone disinfection in a bubble column, 16:429
- Axial Dispersion Reactor**, 40:79
- Axo Dyes** removal with ozone, 37:420
- Azaarenes** oxidation with ozone, 24:271
- Azathioprine** removal with ozone, 21:69
- 2,2'-azino-bis(3-ethylbenzothiazoin-6-sulfonate)** in determination of ozone residual, 38:373
- Azo Dye** oxidized by peroxone process, 28:155
- Azo Dye** removal by ozonation within activated sludge, 31:279
- Azo Dye**, treatment with ozone, 26:539; 27:475; 35:423
- Azo Dyes**, in Kraft paper machine whitewater, ozone decolorization of, 19:549
- Azo Dyes**, ozonation of, film theory utilization for kinetic study, 11:391
- Azo Dyes, Premetalized**, Treatment With Ozone, Ozone/Hydrogen Peroxide, and Ozone/UV Radiation, 17:149
- Azobenzenes**, From Reaction of Anilines and Ozone, 17:619
- Azoxybenzenes**, From Reaction of Anilines and Ozone, 17:619
- Azoxystrobin** degradation by ozone fumigation, 37:479
- Bacillus cereus** inactivation with ozone, 38:124
- Bacillus globigii** inactivation by ozone, 23:285; 24:151
- Bacillus** in food processing plants treatment with ozone, 28:425
- Bacillus Spores** inactivation by ozone, 24:151

12 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Bacillus subtilis* inactivation by ozone, 22:501, 23:239, 24:91; 24:145; 24:151; 35:168
- Bacillus subtilis* Spores**, in ballast water, treatment with ozone, 26:389
- Bacillus subtilis* spores**, inactivation with ozone in a static mixer, 26:207
- Bacillus subtilis***, inactivation in Amsterdam water supply, 26:465
- Back Flow Cell Model**, 29:245
- Back-Corona Effect**, in ozone generators, 26:11
- Back-Flow Cell Model**, of ozone disinfection in a bubble column, 16:429
- Background Organic Matter**, effects of pH, carbonate species, and, on ozone consumption in natural waters, 10:277
- Background Ozone Change** in Hong Kong, 25:513
- Backmixing** in impinging jet ozone bubble column, 29:245
- Backmixing** in ozone bubble column, 23:313, 23:369
- Bacteria** in aerobic sludge digestion, 36:57
- Bacteria** in cooling water systems, 35:90
- Bacteria** inactivation by electric discharge, 27:469
- Bacteria Kills** in ozone treated laundry, 29:85
- Bacteria** removal in wastewater ozonation, 35:501
- Bacteria** removal with ozone and ultrafiltration, 29:75
- Bacteria**, biological stress of, 7:85
- Bacterial Aftergrowth**, 7:205; 7:327
- Bacterial Cell Structures**, effects of ozone on, 14:517
- Bacterial Development**, in waters, influence of temperature on, 7:205
- Bacterial Inactivation** of drinking water- CT concept/ Chick Watson Law, 22:227
- Bacterial Inactivation** with ozone, 21:293
- Bacterial Regrowth Potential**, evaluation of ozone/BAC for control of, 15:95
- Bacterial Regrowth**, in drinking water distribution systems, 12:377
- Bacterial Regrowth**, in ozonized drinking waters, 8:95
- Bacterial Resistance To Ozone**, influence of exopolysaccharides on, 9:259
- Bacteriological Standards**, stringent, engineering and economic aspects of wastewater disinfection with ozone under, 2:139
- Bacteriophages, F-Specific**, as indicators of disinfection efficiency of secondary effluent with UV radiation, 9:353
- Baffled Contact Tank** in gas induced ozone reactor, 21:277
- Baffling Factor** in design of ozone contactors at Lake Washington Surface Water Treatment Plant, 31:262
- Ballast Water** treated with ozone, 26:389; 33:3; 34:174
- Ballast Water Treatment**, 36:515
- Bank-Filtered Surface Water**, ozone and ozone/H₂O₂ treatment of, 16:367
- Barje Water Treatment Plant, Leskovac, Yugoslavia**, with ozone, 14:101
- Barley** disinfection with ozone, 38:115
- Barrier Discharge** for multiple needles to plane configuration, 33:98
- Barrier Discharge** in ozone generation, 24:193
- Barrier Discharge** using plate rotating electrode, 22:563
- Basin Nozzle Manifold**, 38:245
- Batch Reactor**, for ozonation of crotonic acid solutions, 26:415
- Bath Water** disinfection with ozone, 25:345
- Bayer-Villager** cleavage, 23:139
- BDOC Formation**, upon ozonation or by O₃/H₂O₂, by the "Ozotest" method, 15:389; 15:405
- BDOC** removal with ozone and biofilters, 21:79
- Beer Lambert Law** for measuring performance of light emission models, 27:459
- Beets** treated with ozone and UV Radiation, 32:144
- Belle Glade, FL**, ozone drinking water case history, 12:199, 14:501
- Benazolin Degradation**, with ozone and ozone-hydrogen peroxide in a lowland surface water, 18:251
- Bench Scale** analysis of formation of oxamic acid, 37:441
- Bench-scale** testing of Coquitlam water supply, 29:287
- Benefits of Ozone Laundering**, 31:339, 31:348
- BENELUX**, use of ozone, 21:139
- Bentazone Degradation**, with ozone and ozone-hydrogen peroxide in a lowland surface water, 18:251
- Benzafibrate** ozonation modeling, 32:424
- Benzaldehyde** ozonation, 35:489
- Benzaldehyde**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Benzaldehyde**, ozonation of in aqueous solution, 5:151; 8:129
- Benzene Polycarboxylic Acids**, formed during ozonation of soil fulvic acid, 15:19
- Benzene** reaction with hydroxyl radicals, 35:375
- Benzene** removal by ozonation, 23:77; 31:393; 32:61
- Benzene**, ozone destruction of in distilled and drinking water, 9:265

- Benzene**, vapor and liquid phase ozonation of, 19:109
- Benzo[a]pyrene**, treatment with ozone, 26:453
- Benzoic Acid** as hydroxyl radical probe, 38:150
- Benzoic Acid**, from ozonation of natural organic matter, 16:1
- Benzoic Acid**, ozonation of, 8:129
- Benzophenone-2** removal by ozonation, 40:122
- Benzoquinone** reaction with ozone, 23:139
- Benzoquinone**, in ozonation of chlorophenol solutions, 20:259; 20:283
- Benzothiazole Dyes**, in Kraft paper machine whitewater, ozone decolorization of, 19:549
- Benzotriazoles**, ozonation of aqueous solutions of, 9:233
- Beta Blocker** products removed by ozone, 28:353
- Better Lime Purification** of raw sugar beet juice, 40:54
- Bicarbonate Alkalinity** and 1,4 Dioxane removal, 29:13
- Bicarbonate** effect in ozone treatment of drinking water, 25:285
- Bicarbonate** effect on ozone-UV process, 35:302
- Bicarbonate Ion** effect on ultrasonic irradiation, 33:194
- Bicarbonate Ion Effect**, on ozonation of extracted aquatic fulvic acid, 11:69
- Bicarbonate Ion Effects**, on removal of iron and manganese during ozonation in presence of humic substances, 11:93
- Bicarbonate Ion** in treatment of colored aqueous solutions, 37:62
- Bicarbonate Ion**, effects on advanced oxidation of 1,3,5-trichlorobenzene, 18:535
- Bicarbonate Ion**, effects on chlorine reaction with fulvic acid following ozonation, 13:349
- Bicarbonate Ion**, effects on ozonation at Choisy-le-Roi water treatment plant, 13:147
- Bicarbonate Ion**, effects on ozone oxidation of iron and manganese, 13:675
- Bicarbonate Ions**, effects on advanced oxidation, 12:73
- Bicarbonate** removal in ozonized systems, 33:425
- Big Switch**, at Los Angeles, CA, 13:711
- Billen and Servais Method**, for AOC determination, 12:377
- Bioactive Compounds** in melon seeds, 40:209
- Bioassay**, toxicity and effects of bromoform on five marine species, 1:47
- Biochemical Oxygen Demand (BOD)** reduction in ozone treatment of landfill leachate, 26:287
- Biochemical Processes**, underlying ozone therapy, 7:275
- Biocidal Activity**, of ozone in cooling water treatment, 14:517
- Biocidal Finishing Agents** treatment with ozone, 29:335
- Biocide** for clumped and dirty spores of *Bacillus globigii*, 23:285
- Biocide Wastewater** treatment with ozone, 33:31
- Biocides** in cooling water systems, 35:90
- Biodegradability** after ozonation of 4-chlorophenol, 30:447
- Biodegradability Enhancement** of agro-industrial wastewaters, 34: 387
- Biodegradability Enhancement** of agro-industrial wastewaters, 36:3
- Biodegradability Improvement** of ozonated activated sludge, 29:191
- Biodegradability** in stabilization of landfills and leachates with ozone, 20:121
- Biodegradability Index** of pharmaceutical effluent, 37:538
- Biodegradability** of ampicillin degraded with ozone, 34:156
- Biodegradability** of canned maize production sludge, 31:257
- Biodegradability** of dyestuffs treated with ozone, 28:141
- Biodegradability** of humic Finnish groundwater, 35:86
- Biodegradability** of landfill leachate, 31:28
- Biodegradability** of *meta*-Chloronitrobenzene, 36:496
- Biodegradability** of NSAID ozonated solution, 32:91
- Biodegradability of Organics**, improvement of by ozonation, 14:461
- Biodegradability** of ozonated 2,4 dichlorophenol and nitrobenzene solutions, 27:381
- Biodegradability** of ozonated C.I. Reactive Yellow 3, 27:273
- Biodegradability** of Ozonated Humic Acids in Water, 17:511
- Biodegradability** of ozonated landfill leachates, 15:433
- Biodegradability** of ozonated non-ionic surfactants, 27:437
- Biodegradability** of ozonated tannery wastewater, 39:159
- Biodegradability** of ozonated tannins wastewater, 29:443
- Biodegradability** of ozonated textile biocidal finishing agents, 29:335
- Biodegradability** of ozonation products within activated sludge, 31:279
- Biodegradability** of ozonized organic oxidation

14 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- products, elimination of humic materials, 4:79
- Biodegradability** of pollutants in water, influence of ozonation dosage on the structure of, and its effect on activated carbon filtration, 4:15
- Biodegradability** of preozonized phenolic solution, 28:77
- Biodegradability** of pretreated distillery effluent, 37:411
- Biodegradability** of pulp and paper wastewater, 30:105
- Biodegradability** of Pulp Mill Effluents, Increase in After Ozonation, 17:419
- Biodegradability** of single substances, changes in induced by ozonation, 5:137
- Biodegradability** of sludge after ozonation, 22:473
- Biodegradability** of tanning wastewaters treated with ozone, 27:351
- Biodegradability** of textile effluents, 35:7
- Biodegradability** of β -Triketone Pesticides, 39:3
- Biodegradability**, 7:191
- Biodegradability**, effect of preozonation of micropollutants on GAC adsorbability, 8:11
- Biodegradability**, enhancement of by ozonation, 2:25, 2:39
- Biodegradability**, improvement of by ozonation of textile wastewaters, 18:73
- Biodegradability**, of oil field drilling wastewater, 26:309
- Biodegradability**, of ozonized organic compounds, 8:129
- Biodegradable DOC Method**, 12:277
- Biodegradable Material**, 12:107
- Biodegradable Organic Carbon**, Effect of Ozonation On, 17:283
- Biodegradable Organic Carbon**, filter-removable, formation of during ozonation, 19:179
- Biodegradable Organic Matter**, filter-removable, formation of during ozonation, 19:179
- Biodegradation** capacities on BAC following ozonation, 25:351
- Biodegradation** in soil aquifer treatment, 39:385
- Biodegradation** of activated sludge for azo dye removal, 31:279
- Biodegradation** of byproducts from ozonation of 2,5-dichlorophenol, 38:181
- Biodegradation** of Polyaromatic Hydrocarbons, 21:571
- Biodegradation** of textile wastewater treated by ozone, 23:327
- Biodegradation** processes affected by preozonation, 33:185
- Biodegradation**, effect of ozone on, and activated carbon adsorption of natural and synthetic organics in water, 1:263, 1:347
- Biodegradation**, of ozonized solutions of extracted aquatic fulvic acid, 11:69
- Biodosimetry** and UV reactor performance, 34:81
- Biodosimetry** for measurement of UV dosage, 23:239
- Biodosimetry**, 30:43
- Biofilm** affected by monochloramine and ozone, 34:243
- Biofilm Development** and destruction in turbulent flow, 1:167
- Biofilm** in cooling water systems, 35:90
- Biofilm Reactor** for ozone treatment of 3-methylpyridine, 23:189
- Biofilm** reduction in dental water, 33:417
- Biofilm** regrowth in dental water systems, 31:436
- Biofilms**, in cooling water treatment, effects of ozone on, 14:517; 31:3, 36:4
- Biofiltration** and ozone to remove NSAIDS, 37:343
- Biofiltration** and ozone treatment of Arlington, Texas water, 29:261
- Biofiltration** for soil aquifer treatment, 39:385
- Biofiltration** for treatment of refinery wastewater, 33:403
- Biofiltration** influence by periodic ozone residuals, 22:77
- Biofiltration** of paper mill effluent, 30:310
- Biofiltration** systems with ozone, 36:276
- Biofiltration** with ozone of secondary treated municipal wastewater, 37:143
- Biofiltration**, 40:3, 40:427
- Biofiltration**, effects of hydrogen peroxide residuals on, 19:371
- Biofiltration**, for removal of assimilable organic carbon, 16:197
- Biofiltration**, of ozonated drinking water, 19:97
- Biofor** process in France, 21:153
- Biofouling Control**, in condensers; a comparison of the effectiveness of ozone and chlorine using fresh water as a coolant, 1:201
- Biofouling Control**, in ozonated cooling waters, 14:517; 15:81; with mineral removal, 14:231
- Biofouling Control**, with ozone in condensers, 3:95
- Biofouling of Cooling Systems**, prevention of by ozonation, 11:325
- Biofouling Prevention**, ozone system for fresh water cooling circuits, 2:327
- Biofouling**, of reverse osmosis membranes, ozone prevention of, 9:93
- Biofouling**, ozone for control of in seawater cooling water systems, 7:31
- Biogas** production in anaerobic digestion, 29:201
- Biogenic Volatile Organic Compounds**, 32:274

- Bioinvasions** in ballast water, 34:174
- Biolite** filter in drinking water treatment/ozonation, 21:79
- Biological Activated Carbon (BAC)** for drinking water treatment, 37:257
- Biological Activated Carbon (BAC)** for water reuse, 36:123
- Biological Activated Carbon (BAC)**, 40:427
- Biological Activated Carbon** and ozone to remove NSAIDS, 37:343
- Biological Activated Carbon** at South Caboolture Water Reclamation Plant, 25:107
- Biological Activated Carbon** following ozonation, 25:351
- Biological Activated Carbon** for removal of ozone and chlorine DBP, 22:393
- Biological Activated Carbon** in treatment of secondary treated municipal wastewater, 37:143
- Biological Activated Carbon Process**, effect of preozonation on the removal of ammonia, nitrite, and nitrate ion by, 11:227
- Biological Activated Carbon**, 6:71
- Biological Activated Carbon**, a preliminary study of the efficiency and mechanism of THM removal on the ozonation and BAC process, 6:261
- Biological Activated Carbon**, and ozonation, optimization of in a water reclamation context, 5:171
- Biological Activated Carbon**, biological activity on, influence of ozone, oxygen and chlorine on, 7:287
- Biological Activated Carbon**, effect of ozone on the biological degradation and activated carbon adsorption of natural and synthetic organics in water, 1:263, 1:347
- Biological Activated Carbon**, evaluation of with ozone for DBP control and biologically stable water, 15:95
- Biological Activated Carbon**, for drinking water treatment in Yugoslavia, 14:101
- Biological Activated Carbon**, for drinking water treatment, 9:37; 14:123; 17:449
- Biological Activated Carbon**, for reducing AOC levels in ozonated drinking water, 18:521
- Biological Activated Carbon**, for removal of natural organics in GAC columns, 8:299
- Biological Activated Carbon**, for water reclamation, 8:355
- Biological Activated Carbon**, in tertiary wastewater treatment, 7:1
- Biological Activated Carbon**, performance of with preozonation, 8:11
- Biological Activated Carbon**, purification of polluted source water with ozonation and, 6:245
- Biological Activated Carbon**, stimulation of by ozone, 13:91
- Biological Activated Carbon**, treatment at Choisy-le-Roi plant, 13:147
- Biological Activated Carbon**, used in water reclamation, effect of various oxidants on the performance of, 3:225
- Biological Activity**, influence of ozone, oxygen and chlorine on, on biological activated carbon, 7:287
- Biological Activity**, ozone promotion of, 11:227
- Biological Effects**, a comparative evaluation of the effects of ozonated and chlorinated condenser discharges on the white perch, *Morone americana*, 3:155
- Biological Filtration** and chlorination, effect on by ozonation of aromatic hydrocarbon micropollutants, 3:33
- Biological Filtration** and effect of ozone, 21:79
- Biological Filtration** and ozonation, 37:227
- Biological Filtration** influence by periodic ozone residuals, 22:77
- Biological Filtration**, effects on easily assimilable carbon in drinking water, 11:297
- Biological Nutrient Removal**, in activated sludge plant, 20:1
- Biological Phosphorus Removal** in sludge ozonation, 36:238
- Biological Reactivation**, of activated carbon in water reclamation, 8:355
- Biological Stress of Bacteria**, 7:85
- Biological treatment** and ozonation of dyeing wastewater, 29:139
- Biological Treatment of Drinking Water**, 7:85; 15:95;
- Biological Treatment** of forest industry landfill leachate, 24:369
- Biological Treatment** of landfill leachate with ozone, 21:1
- Biological Treatment** of micropollutants, 39:296
- Biological Treatment** of ozone treated textile dyeing wastewater, 23:199; 28:199; 30:439
- Biological Treatment of Sludge**, 32:252
- Biological Treatment**, in sand and activated carbon filters, contribution of ozone to the removal of organic materials in a process including a slow filtration through sand and activated carbon, 4:33.
- Biological Treatment**, of chlorophenolic municipal wastewater following preozonation, 16:13
- Biological Treatment**, of industrial wastewaters containing biorefractory compounds, ozone-assisted, 4:177
- Biological Treatment**, of ozonated drinking water, impact of support media on, 19:97
- Biological Treatments**, and ozone, effects on the elimination of cyanides, 7:85

16 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Biological Wastewater Treatment** for elimination of drugs, 32:305
- Biological Water Treatment Processes**; purification of polluted source water with ozonation and biological activated carbon, 6:245
- Biologically Active Filters**, effects of hydrogen peroxide residuals on, 19:371
- Biologically Active Filtration** and ozone in proposed membrane facility, 29:281
- Biologically Stable Water**, evaluation of ozone/BAC for, 15:95
- Biologically Treated Wastewater Effluent** treatment with ozone, 23:351
- Bioluminescence Test** in ampicillin degraded with ozone, 34:156
- Biomarkers** in soil ozonation, 35:366
- Biomass** and ozone treatment of Arlington, Texas water, 29:261
- Biomass Harvesting**, 39:264
- Biomedical Applications**, 39:61
- Biomembrat®-Plus Process** for treatment of landfill leachate treatment coupled with the Ecoclear® Process, 19:297
- Biomethanated Distillery Effluent**, 37:411
- Biopolymers** in catalytic ozonation, 38:279
- Bioreactor Performance** in sequential ozonation and biological oxidation of wastewaters, 25:95
- Bioregeneration** in treatment of secondary treated municipal wastewater, 37:143
- Bioremediation** of domestic well drinking water, 38:25
- Bioscreening**, examination by HPLC, of oxidant effects on complex mixtures of nonvolatile organics in polluted waters, 1:31
- Biosludge** in pulp and paper industry, 35:109
- Biosolids** in active sludge treated with ozone, 36:451
- Biosorption** after ozonation of nonionic polyethoxylated surfactants, 28:295
- Biosorption** of ozonation products within activated sludge, 31:279
- Bio-toxicity** of ozonated non-ionic surfactants, 27:437
- Biotoxicity** of ozonated tannery wastewater, 39:159
- Biotreatability**, improvement of in Kraft pulp & paper mill effluent, 14:461
- Biphasic Model** for *B. cereus* inactivation with ozone, 38:124
- Birefringence** in ozone treatment of wheat and corn starches, 37:71
- 4,4'-Bis[[4-anilino-6-bis(2-hydroxyethyl)amino-1,3,5-triazin-2-yl]amino]stilbene-2,2'-disulfonic acid**, (Fluorescent Brightener 28) destruction by ozone and ozone advanced oxidation, 19:129
- Bisphenol A** degradation by ozone/AOP, 29:153
- Bisphenol A** ozonation, 23:338; 32:204;
- Bisulfide** reaction with ozone, 33:37
- Bisulphite**, to reduce bromate formation in ozonation of drinking water, 26:381
- Bitumen** performance improved, 30:275
- Black Table Olives** water treatment with ozone, 24:105
- Bleaching Effluent** and removal of EDTA with ozone, 22:279
- Bleaching** of soybean fibers with ozone, 34:143, 37:195
- Bleaching**, of Kraft pulp in TCF process, 26:443
- Bleaching**, of recyclable papers with ozone, 7:229
- Blockage of Sand Filter** alleviated by pre-ozonation, 33:66
- Blood Circulation**, enhancement of by ozone therapy, 7:275
- Blood Lipid Regulators** removed by ozone, 28:353
- Blood** oxidation by ozone, 28:317
- Blue Indigo Trisulfonate** in modeling of ozone gas-liquid reactors, 28:17
- Blue-Green Algae** and cyanobacterial toxin destruction with ozone, 20:223
- BOD Increase**, then reduction during ozone or advanced oxidation of molasses processing wastewaters, 19:157
- BOD** reduction after ozonation of 2,4 dichlorophenol and nitrobenzene solutions, 27:381
- BOD removal** in Kraft pulp mill effluents, 23:479
- BOD Removal** in on-board wastewater with ozone, 25:177
- BOD Removal**, from Kraft mill pulp & paper mill effluent with ozone, 14:461
- BOD**, ozone oxidation of, 7:179
- BOD₅** as indicator of synergistic effect during ozonation of C.I. Reactive Yellow 3, 27:273
- BOD₅**, Effects of Ozone on in Night Soil Plants, 17:195
- BOD₅/COD Ratio**, Increase of by Ozone and Advanced Oxidation, 17:399
- BOD₅/TOC Ratios**, of organic compounds after ozonation of, 11:155
- Boiler Feed Water**, organic matter removal by ozone in, 19:471
- BOM Removal Inhibition**, during ozonation, 22:77
- Bond Strength** of ozone treated caries, 37:555
- Boric Acid** vs. ozone for caries disinfection, 37:555
- Bottle Sterilization**, with ozone, in bottled water treatment, 5:95
- Bottled Water** ozonation and bromate control, 25:167

- Bottled Water** treatment with ozone in BENELUX, 21:139
- Bottled Water** treatment with ozone in Canada, 21:119
- Bottled Water Treatment** with ozone in Germany, 21:163
- Bottled Water** treatment with ozone in the USA, 21:99
- Bottled Water**, treatment with ozone in Belgium, 7:327
- Bottled Water**, use of ozone in the technology of, 5:95
- Botulinum Type E Toxin**, ozone inactivation of, 6:229
- Botrytis cinera* ozonation in a bubble column, 38:62
- Bovine Serum Albumin**, effects of ozone and ozone/GAC on, 13:147
- Box-Bechnken** for design of bleaching of linen fabrics, 35:316
- Breakdown Voltage** in corona discharge with inert gas, 36:526
- Breakpoint Chlorination** after ozone treatment of night soil, 30:282
- Breakthrough Curves** on ozone adsorption on silica gel, 25:315
- Brightness** of ozone bleached wheat straw pulp, 40:148
- Bromamine** in treated drinking water, 29:363
- Bromamine**, decomposition during ozonation in presence of ammonia, 26:267
- Bromamines** removal by activated carbon filtration, 33:224
- Bromate** and natural organic matter, 36:73
- Bromate Control** during ozonation of bromide containing waters, 22:487
- Bromate** control in Yellow River water, 37:127
- Bromate** control process, 29:363
- Bromate Control** with ammonia and chloramine, 35:438
- Bromate Control** with nano-metal oxides, 36:549
- Bromate Decomposition** with low pressure mercury vapor lamp, 28:217
- Bromate** effect on water containing adsorbable organic halides, 38:452
- Bromate Formation** affected by anion exchange, 35:283
- Bromate** formation affected by electrolysis, 34:269
- Bromate** formation affected by MIEX[®] resin, 27:371
- Bromate Formation** and ozone in BENELUX, 21:139
- Bromate** formation by preozonation, 29:317
- Bromate Formation** during ozonation of bottled water, 25:167
- Bromate** formation in advanced oxidation processes, 34:325
- Bromate** formation in ballast water treatment, 36:515
- Bromate Formation** in Ohio River Water, 22:501
- Bromate** formation in ozonation of drinking water, 33:14
- Bromate** formation in ozonation of high bromide water, 27:19
- Bromate** formation in ozonation, 30:339
- Bromate** formation modeling, 29:429
- Bromate Formation** of ozonation during ammonia removal, 22:23
- Bromate** formation prediction by artificial neural networks, 29:353
- Bromate** formation, 35:465
- Bromate Formation**, during disinfection, , 26:247
- Bromate Formation**, in treatment of *Bacillus subtilis* with ozone, 26:207
- Bromate** in seawater ozonation, 40:399
- Bromate** in Switzerland drinking water, 25:159
- Bromate** increase during ozonation, 29:379
- Bromate Ion Analysis**, in European drinking water, 18:325
- Bromate Ion** control by advanced oxidation process, 33:136
- Bromate Ion Control**, with H₂O₂ after ozone treatment of drinking water in Florence, Italy, 18:117
- Bromate Ion Control**, with ozone/GAC at 11 Anglican Water (U.K.) surface water treatment plants, 18:19
- Bromate Ion Destruction**, by UV irradiation and electric arc discharge, 18:271
- Bromate Ion** formation controlled by ozone/hydrogen peroxide process, 33:121
- Bromate Ion** formation during ozonation, 21:447; 29:3
- Bromate Ion Formation**, compromise between pesticides degradation and/or manganese removal and, 19:39
- Bromate Ion Formation**, impact of ozone contactor hydraulics and operating conditions on, 18:87
- Bromate Ion Formation**, threshold levels for in drinking water, 19:323
- Bromate Ion** in simulated gastric juices, 28:165
- Bromate Ion**, Analysis by Ion chromatography, 17:561
- Bromate Ion**, analysis for low levels of, in ozonated waters, 16:79
- Bromate Ion**, Analysis in Very Low Levels, 17:551
- Bromate Ion**, effects on fish larvae, 13:697
- Bromate Ion**, formation by reaction of ozone with

18 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

bromide ions, 7:313

Bromate Ion, formation in a continuous flow reactor, 26:573

Bromate Ion, Formation of During Ozonation or Advanced Oxidation of Drinking Water for Pesticide Destruction, 17:673

Bromate Ion, formation of in ozonated groundwaters containing bromide ion, 8:63

Bromate Ion, genotoxicity of, 16:443

Bromate Ion, in European drinking water -- a survey of, 18:325

Bromate Ion, inactivation of genotoxicity of by -SH compounds, 16:443

Bromate Ion, model for prediction of upon ozonation, 16:157

Bromate Ion, Monitoring in European Ozone Drinking Water Plants, 17:311

Bromate Ion, parameters affecting formation of during ozonation, 18:1

Bromate Ion, Presence of in Sodium Hypochlorite Solutions, 17:311

Bromate Mitigation and ozone in proposed membrane facility, 29:281

Bromate modeling, 34:280

Bromate reduction by modified granular activated carbon, 37:357

Bromate Removal in natural waters, 22:267

Bromate risk assessment, 36:419

Bromate surveys in French Drinking Waterworks, 24:293

Bromate, reduction in ozone treatment of drinking water, 26:381

Bromate-ozone treatment of swimming pool water, 37:456

Bromide (high) raw water treated with ozone, 27:10

Bromide Formation with low pressure mercury vapor lamp, 28:217

Bromide in drinking water and bromate control, 29:363

Bromide in waters pretreated by MIEX[®] resin, 27:371

Bromide Incorporation factor, 33:14

Bromide Incorporation Factor, effects of bromide ion on organohalogenated disinfection byproducts formation during ozonation, 18:349

Bromide Ion Concentration effect on bromate formation, 22:487

Bromide ion effect on bicarbonate and ammonia depletion in ozonized systems, 33:425

Bromide Ion effect on bromate formation, 22:487

Bromide Ion Oxidation by ozone, model for, 19:55

Bromide Ion Oxidation, by ozone/silver catalysis, 15:533

Bromide Ion, Analysis by Ion Chromatography, 17:561

Bromide Ion, chlorination in presence of in drinking water, 14:51

Bromide Ion, effect in ozone water treatment, 7:313

Bromide Ion, effect on ozonation of extracted aquatic fulvic acid, 11:69

Bromide Ion, effects of on formation of organohalogen disinfection byproducts during ozonation, 18:349

Bromide Ion, Monitoring in European Ozone Drinking Water Plants, 17:311

Bromide Ion, oxidation of by ozone and by chlorine, 10:153

Bromide Ion, ozone oxidation of in swimming pool water treatment, 13:63

Bromide Ion, ozone oxidation of, 14:329

Bromide Ion, reactions of ozone with and products formed in water, 6:103

Bromide Ion, role in formation of bromoform in ozonated groundwater, 8:63

Bromide reactions with ozone, 30:339

Bromide Removal by electrolysis, 34:269

Bromides in industrial liquid wastes, 38:219

Brominated Byproducts in two Paris water treatment plants, 23:229

Brominated Byproducts, of ozonation, models for prediction of 16:157

Brominated Organic Compounds formed in ozonation of secondary effluent, 29:23

Brominated Organic Ozone Byproducts Control, with H₂O₂ after ozone treatment of drinking water in Florence, Italy, 18:117

Brominated THM Speciation, in drinking water at Belle Glade, FL, 12:199

Bromine Compounds, organic, formation of by interactions of ozone with bromide ion, 7:313

Bromine in seawater ozonation, 40:399

Bromine, reactions of ozone with and products formed in water, 6:103

Bromite formation in ozonation, 30:339

Bromobenzene, ozone destruction of in distilled and drinking water, 9:265

Bromochloramine in treated drinking water, 29:363

Bromoform in seawater ozonation, 40:399

Bromoform Toxicity, and effects on five marine species, 1:47

Bromoform, formation in ozonated groundwater containing bromide ion and humic substances, 8:63

Bromoform, model for prediction of upon ozonation, 16:157

Bromoform, oxidation by ozone/UV radiation, 9:391

Bromoform, ozone destruction of in distilled and

drinking water, 9:265

Bromoform, reduction of concentrations of by ozonation of swimming pool waters, 13:63

Bromoxynil, treatment with ozone, 32:16

Brown Chitooligomers, 37:489

Browning in chitooligomers, 37:489

BTEX removal by catalytic ozonation, 27:301

BTEX removal by ozonation, 23:77

BTEX, destruction by the Ecoclear® Process, 19:297

Bubble Characteristics in impinging jet ozone

bubble column, 29:245

Bubble Column and evaluation of dissolved ozone, 39:44

Bubble Column Contactor in domestic wastewater ozonation, 23:219

Bubble Column Design by axial dispersion model, 23:369

Bubble Column for ozonation of *Botrytis cinera*, 38:62

Bubble Column hydrodynamics, 23:313

Bubble Column kinetics in wastewater ozonation, 32:424

Bubble Column reactor for treatment of nonionic surfactants with ozone, 29:65

Bubble Column Reactor for treatment of paper mill circulating water, 22:585

Bubble Column Reactors, 20:513

Bubble Column used for degradation of 3-methylpyridine by ozone, 23:359

Bubble Columns for ozone treatment of Kraft pulp mill effluents, 23:479

Bubble Columns modeling by artificial neural networks, 29:343

Bubble Contact Column, computer simulation to study ozone mass transfer, 13:535

Bubble Contactor, comparison of ozone and oxygen mass transfer in, 10:321

Bubble Contactors, mass balance analysis of ozone in, 9:289

Bubble Contactors, Modeling Ozone in, 17:355; 17:379; 17:469;

Bubble Diffuser Contactors, 12:269

Bubble Diffuser Ozonation of BTEX, 23:77

Bubble Diffuser Ozone Contactor, practical design model for calculating ozone transfer efficiency, 10:173

Bubble Diffuser Ozone Contactors, enhancement of on full-scale, 15:295

Bubble Diffuser Ozone Contactors, modeling of, 15:213

Bubble Diffuser Reactor for *Cryptosporidium* inactivation, 22:99

Bubble Diffusers, for ozone contacting, 14:391

Bubble Diffusion Reactor for ozone dissolution systems, 22:329

Bubble Size in impinging jet contactors, 32:99

Bubble Size in ozone bubble column, 29:343

Budapest (Hungary) Waterworks, new pilot plant studies at, 16:29

Building Materials treated with ozone, 31:316

Bulking, of filamentous sludge with ozonation, 20:1

Butanone, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

Butoniga Water Treatment Plant, Buzet, Yugoslavia, with ozone, 14:101

By-product formation in ozonation/electrolysis of 1,4 Dioxane, 29:13

Byproduct Formation of ozonation during ammonia removal with bromide, 22:23

Byproducts (Organic) of Ozonation, quantified using fractionated natural organic matter, 16:1

Byproducts Formation, during ozonation of Uniblu-A, 24:439

Byproducts formed in ozonation in ozonation of p-nitrophenol, 23:303

Byproducts formed in ozonation of drinking water, 12:1; 12:73; 17:53; 17:511; 21:79

Byproducts of Catalytic Ozonation, of humic substances in water, 18:195

By-Products of oil sands water treatment, 37:45

By-products of ozonation of azo dyes, 37:420

Byproducts of ozonation within activated sludge, 31:279

Byproducts of UV oxidation of micropollutants, 34:125

Byproducts of water treated by UV, 37:134

Byproducts, of chlorination of extracted aquatic fulvic acid, 11:69

Byproducts, of ozonation of extracted aquatic fulvic acid, 11:89

Byproducts, of ozonation of organic materials at Los Angeles, CA, 13:711

Byproducts, of ozone, during degradation of soil fulvic acid, 15:19

2,2'-Bypyridine synthesis, 39:418

C. difficile in ozone laundry systems, 31:357, 31:369

C. I. Acid Blue 80, 39:219

C. I. Disperse Blue 56 degradation by UV/Photooxidation, 31:37

Caboolture Water Reclamation Plant, 25:107

Cadmium Removal, During Ozonation of Drinking Water, 17:297

Caffeine removal with advanced oxidation, 34:3,

20 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

37:379

Calcination Temperature, 38:261

Calcium Carbonate in ozone decomposition of phenol, 33:143

Calcium Carbonate, ozone-enhanced precipitation in cooling waters, 13:375; 15:47

California State Project Water, ozone treatment of at Los Angeles Aqueduct Filtration Plant, CA, "The Big Switch", 13:711

Calorimetry, for ozone analysis, 10:337

Campesterol, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

Canada ozone installations, 34:64

Canadian Use of Ozone, 21:465

Cancer concerns from bromate, 36:419

Candida albicans inactivation by ozone, 23:183, 28:187

Candida Spp in ozonated olive oil, 39:455

Canned Maize Production Sludge, 31:257

Capilano Reservoir, 30:321

Capillary Condensation of ozone in silica gel, 25:211

Capillary Condensation of ozone, 28:149

Carbamazepine degradation by photo-assisted ozonation, 40:113

Carbofuran and Its Chlorine and Ozone By-Products, non-genotoxic effects of on gap junctional intercellular communication, 19:351

Carbofuran removal in injection-type downflow UV/O₃ oxidation reactor, 21:539

Carbofuran, Removal with Ozone and Ozone/Hydrogen Peroxide, 17:97

Carbohydrates, ozonation of, 13:265

Carbon Black and ozone for treatment of landfill leachate, 35:55

Carbon Black for preparation of gas diffusion electrode 25:307

Carbon Black, in carbon-catalyzed conversion of aqueous O₃ into OH-radicals, 20:67

Carbon Dioxide Effect on ozone generation from oxygen, 24:29

Carbon Dioxide effect on ozone generation, 29:399; 30:145

Carbon Dioxide generation used as indicator of ozone concentration, 25:155

Carbon Dioxide Production in landfill leachate, 36:427

Carbon Dioxide Selectivity during catalytic ozonation of toluene, 33:158

Carbon Monoxide Conversion Catalyst in ozone oxidation of *p*-chlorobenzoic acid, 25:25

Carbon Monoxide, in relation to tropospheric ozone, 12:177

Carbon Nanotube and ozone, 36:465

Carbon Nitride nanosheet, 38:312

Carbon Tetrachloride, attempted oxidation by ozone/UV radiation, 9:391

Carbon Tetrachloride, oxidation in water by ozone then ozone/UV radiation, 9:369

Carbon Tetrachloride, ozone destruction of in distilled and drinking water, 9:265

Carbon, Activated, and ozone for tertiary wastewater treatment, 7:1

Carbon, ozone enhanced, 6:71

Carbonate Ion, effect on ozone decomposition, 11:49; 14:33

Carbonate Ion, effects on ozone decomposition,

Carbonate Radical in ozone/ hydrogen oxide treatment of water, 22:305

Carbonate Species, effects of background organic matter, pH, and, on ozone consumption in natural waters, 10:277

Carbonates as scavengers during wastewater ozonation in a Chemical Sequential Reactor, 15:201

Carbonates, Effects on Advanced Oxidation of Pesticides in Water, 17:657

Carbonates, effects on kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methyl-isoborneol, 15:1

Carbon-carbon Double Bond Content determined with ozone, 25:145

Carbonyl Compound Analysis, for ozonation/post-chlorination byproducts from humic acid, 14:51

Carbonyl Compounds, formation during ozonation, 11:127

Carbonyl Compounds, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

Carbonyl disinfection byproducts analysis by DNPH derivitization, 22:653

Carbonyl Ozonation Byproducts, 22:415

Carboxyl Carbon in drinking water treatment, 21:551

Carboxylic Acid Formation during ozonation, 25:53

Carboxylic Acids decomposition in water with ozone and advanced oxidation, 27:11

Carboxylic Acids formation in O₃/DI Processing, 24:391

Carboxylic Acids removal by biological activated carbon, 22:393

Carboxylic Acids removal by ozone and hydrogen peroxide, 28:53

Carboxylic Acids, as byproducts from catalytic ozonation of humic substances in water, 18:195

Carboxylic Acids, byproducts of ozonation of

- natural organic matter, 16:1
- Carboxylic Acids**, formation of during ozonation of natural waters, 19:179
- Carboxylic Acids**, removal with ozone and TiO₂ based photocatalysis, 26:585
- Carbozone Process** in carbon-catalyzed conversion of aqueous O₃ into OH-radicals, 20:67
- Cardiff University Method**, for AOC determination, 12:377
- Caries** (Dental) reduced by ozonated water/ultrasound, 37:84
- β-carotene Milk** affected by ozone, 39:448
- Carpent Odors** from chlorine dioxide in drinking water, 21:465
- Carrots** treated with ozone and UV Radiation, 32:144
- Case Histories**, Belle Glade, FL, 12:199
- Case Studies** of ozone treatment in wastewater plants, 31:415
- Casein Fiber** dyeing after ozonation, 40:140
- Castaic Lake** pipeline contactor, 29:291
- Catalysis** by manganese and cobalt oxides, 36:502
- Catalysis** of nitrobenzene oxidation with magnesium cation, 32:113
- Catalysis**, in carbon-catalyzed conversion of aqueous O₃ into OH-radicals, 20:67
- Catalysis**, with granular activated carbon in aqueous solutions, 26:299
- Catalyst Activity and Stability** in catalytic ozonation of pyruvic acid, 28:229
- Catalyst Characterization**, 38:261
- Catalyst** effect in ozone production with inert gases, 22:53
- Catalyst** for catalytic ozonation of ibuprofen and humic acid, 38:203
- Catalyst Regeneration** with ozone, 24:1
- Catalyst**, for catalytic ozonation, 26:1
- Catalysts** for ozone decomposition, 29:41
- Catalysts**, effects of ultraviolet and/or ultrasound ozone oxidation of humic acid and trihalomethane precursors, 7:47
- Catalyst-sorbents** for SO₂ and NO_x removal from flue gas by ozone, 34:204
- Catalytic Capability** of carbon nitride nanosheet, 38:312
- Catalytic Converter** for removal of ozone, 31:216
- Catalytic Decomposition** in photochemical ozone generator, 30:228
- Catalytic Decomposition**, 35:308
- Catalytic Effect** of ozone/carbon nanotube process, 36:465
- Catalytic Oxidation** of Ciprofloxacin Hydrochloride, 40:457
- Catalytic Oxidation** of formic acid solution, 22:241
- Catalytic Oxidation** of *p*-chlorobenzoic acid, 25:25
- Catalytic Oxidation** of salicylic acid, peptides and humic substances, 21:261
- Catalytic Oxidation** of sulfosalicylic acid, 24:117
- Catalytic Oxidation**, by ozone/silver or oxygen/silver, 15:533
- Catalytic Oxidation**, of natural organic matter, 26:141
- Catalytic Ozonation** for NO_x removal, 38:382
- Catalytic Ozonation** for reduction of organic nitrogen compounds, 34:359
- Catalytic Ozonation** for removal of *Escherichia coli*, 29:75
- Catalytic Ozonation** for urban wastewater treatment, 38:3
- Catalytic Ozonation** in presence of Co(II), 25:261
- Catalytic Ozonation** in presence of TiO₂/Zeolite, 33:236
- Catalytic Ozonation** of acetic acid, 38:194
- Catalytic Ozonation** of Acid Red B., 37:287
- Catalytic Ozonation** of agro-industrial wastewaters, 34: 387
- Catalytic Ozonation** of aqueous reactive dye, 27:257
- Catalytic Ozonation** of carboxylic acids, 28:53
- Catalytic Ozonation** of chlorobenzoic acid, 37:527
- Catalytic Ozonation** of Citric Acid, 27:499
- Catalytic Ozonation** of coal gasification wastewater, 40:275
- Catalytic Ozonation** of cyanuric acid, 38:233
- Catalytic Ozonation** of ethynlestradiol, 31:422
- Catalytic Ozonation** of fenofibric and clofibric acids, 33:434
- Catalytic Ozonation** of Fipronil, 37:186
- Catalytic Ozonation** of gasoline compounds, 27:301
- Catalytic Ozonation** of ibuprofen and humic acid, 38:203
- Catalytic ozonation** of industrial wastewater, 36:229
- Catalytic Ozonation** of *m*-Dinitrobenzene, 27:359
- Catalytic Ozonation** of nitrobenzene, 31:45
- Catalytic Ozonation** of olive mill wastewater, 38:261
- Catalytic Ozonation** of organic pollutants in water, 27:115
- Catalytic Ozonation** of organic pollutants, 38:48
- Catalytic Ozonation** of oxalic acid, 40:448
- Catalytic Ozonation** of *p*-chlorobenzoic acid using metal oxides, 25:25
- Catalytic Ozonation** of *p*-chloronitrobenzene, 38:42
- Catalytic Ozonation** of pharmaceutical compounds,

22 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

32:230

Catalytic Ozonation of phenolic acids, 31:403

Catalytic Ozonation of pyruvic Acid, 27:159;
28:229

Catalytic Ozonation of refinery wastewater, 37:546

Catalytic Ozonation of salicylic acid, peptides and humic substances, 21:261

Catalytic Ozonation of substituted phenols over CuO-Al₂O₃ catalyst, 25:335

Catalytic Ozonation of Sulfamethoxazole, 39:25

Catalytic Ozonation of sulfosalicylic acid, 24:117;
27:233

Catalytic Ozonation of tequila industry vinasses, 38:279

Catalytic Ozonation of toluene with metal and Zeolite, 33:158

Catalytic Ozonation of water in presence of titanium dioxide, 22:185

Catalytic Ozonation using O₃/CA(OH)₂ system, 40:173

Catalytic Ozonation using zeolite, 32:344

Catalytic Ozonation with cerium oxide/activated carbon, 37:371

Catalytic Ozonation with multiwalled carbon nanotubes, 37:269

Catalytic Ozonation with PFOA, 25:185

Catalytic Ozonation with strontium titanate, 33:74

Catalytic Ozonation, Heterogeneous, by the Ecoclear® Process, 19:297

Catalytic Ozonation, of drinking water with nonpolar bonded alumina phases, 26:367

Catalytic Ozonation, of humic substances in water and their ozonation byproducts, 18:195

Catalytic Ozonation, of pesticides, 32:25

Catalytic Ozonation, with Mn-loaded GAC, 26:1

Catalytic Ozone Decomposition (heterogeneous) on activated carbon, 24:227

Catalytic Ozone Decomposition on Cu (110) surface, 24:39

Catalytic Ozone Decomposition with manganese dioxide, 38:79

Catalytic Ozone Decomposition with zeolite, 33:279

Catalytic Ozone Decomposition, 38:434

Catalytic Reduction of nitrogen oxides, 28:105

Catalytic Reusability in catalytic ozonation, 33:74

Catechin ozonation in food processing wastewater, 22:167

Catechol formation decomposition with ozone, VUV and TiO₂/UV, 24:49

Catfish Processing and ozone treatment, 29:221

Cationic dyes removed by catalytic ozonation using zeolite, 32:344

Cationic Surfactants, review of aqueous ozonation of, 13:639

Cavity Disinfection, 36:206, 37:555

Cell Lysis in active sludge treated with ozone, 36:451

Cell Lysis in biological wastewater treatment, 31:247

Cell Membranes, damages to and loss of microorganism metabolic activity upon ozonation, vital-fluorochromization of microorganisms using 3',6'-diacetylfluorescein to determine, 18:173

Cellobiose ozonation in pulp, 22:447

Cellobiose, ozone byproducts of, 13:265

Cellulose Degradation in ozone bleaching of Kraft pulp, 25:523

Cellulose Degradation of ozone bleached cotton fabric, 37:170

Cellulose in cotton fabrics, 40:44

Cellulose Model Compounds in ozone treatment of pulp, 22:447

Cellulose, ozone attack of, 11:217

Central Nervous System and ozone therapy, 34:425, 34:432

Ceramic Membrane filtration of ozonated wastewater, 35:243

Ceramic Membranes and ozone for removal of *Escherichia coli*, 29:75

Ceramic Membranes as ozone contactors, 22:379

Ceramic Raschig Rings in ozone treatment, 37:22

Ceramic Transformer for ozone generation, 24:215

Ceratomyxosis, control of in steelhead trout, 9:141

Cerium Oxide and carbon for humic acids degradation, 37:371

Cetylpyridinium Chloride to modify granular activated carbon, 37:357

CFD in UV oxidation of micropollutants, 34:120

CFD Modeling for ozone contactors, 30:49

CFU Numbers of Bacteria in tooth decay, 35:456

C-H Bond Activation in catalytic oxidation of cyclohexane, 38:482

Chain Reaction in carbon-catalyzed conversion of aqueous O₃ into OH-radicals, 20:67

Chamois Leather Oil treated with ozone, 29:405

Chappuis Band, 35:229

Characterization of dissolved organic matter during ozonation, 32:323

Characterization of landfill leachate, 21:1

Chelating Agents effect on patulin degradation with ozone, 31:224

Chemical and Mechanical Pulp Mill Effluent Treatment by ozonation, 18:363

Chemical Changes, in biologically treated wastewater during ozone disinfection, 9:63

- Chemical Characteristics** of activated carbon filter after ozonation, 37:178
- Chemical Clarification** of ozone treated textile dyeing wastewater, 23:199
- Chemical Composition** of ozone treated Kabob Dates, 36:269
- Chemical** control of filamentous sludge bulking, 20:1
- Chemical Effect** in ozone mass transfer, 35:482
- Chemical Kinetic Mechanism** of flue gas oxidation by ozone, 29:207
- Chemical Kinetics** in modeling of bromate and ozone concentration, 34:280
- Chemical Oxidation** for site remediation, 32:130
- Chemical Oxidation** of wastewaters in conjunction with biological oxidation, 25:95
- Chemical Oxidation** with ozone in the USA, 21:99
- Chemical Oxidation**, impact on biological treatment of a primary municipal wastewater. Effects on COD and biodegradability, 19:495
- Chemical Oxidation**, impact on biological treatment of a primary municipal wastewater. Effects of ozonation on kinetics of biological oxidation, 19:513
- Chemical Oxygen Demand (COD)**, reduction in ozone treatment of landfill leachate, 26:287
- Chemical Oxygen Demand Removal** of landfill leachate, 31:28
- Chemical Oxygen Demand** with wastewater in impinging zone reactor, 21:501
- Chemical Oxygen Demand**, in modeling water/wastewater ozonation, 15:149
- Chemical Plants**, ozonation of cooling water systems, 15:81
- Chemical Sequential Reactor**, for ozonation of wastewaters, 15:201
- Chemical Surface Properties** of zeolite, 33:279
- Chemical Synthesis**, 30:165
- Chemically Active Species** in methyl orange ozonation, 36:244
- Chemically-Enhanced Primary Treatment**, of wastewater with ozone, 20:151
- Chemiluminescence**, analysis for ozone, 10:337
- Chemistry of Ozone**, in cooling waters, 14:329
- Cheng-Ching Lake Water Works**, 28:29
- Chick-Watson Law** applied to ozonation of drinking water, 22:227
- Chick-Watson Model** for inactivation of *Cryptosporidium parvum*, 23:411
- Chilling Stress Tolerance**, 40:415
- Chitosan**, 37:489
- Chloramination** and NDMA formation, 36:215
- Chloramination**, after ozonation at Belle Glade, FL, 12:199
- Chloramine** and bromate control, 29:363; 35:438
- Chloramine** and ozone treatment of Arlington, Texas water, 29:261
- Chloramine** treatment of colored ground water, 23:393
- Chloramine**, combined application with chlorine or ozone to reduce production of chlorinated organics in drinking water disinfection, 5:79
- Chloramine**, comparison with ozone in producing mutagenicity during drinking water disinfection, 11:245
- Chloramine**, oxidation by ozone; reaction kinetics, 3:139
- Chloramine**, reduction in concentration by ozone treatment of swimming pool water, 7:93
- Chloramines** removal by activated carbon filtration, 33:224
- Chloramines**, reactions with ozone and products formed in water, 6:103
- Chlorate** formation in ballast water treatment, 36:515
- Chlorate Formation** in treatment of waters with ozone and chlorine dioxide, 22:215
- Chlorfenvinphos**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673
- Chlorhexidine Gluconate** for dental cavity disinfection, 36:206
- Chlorhexidine** vs. ozone for caries disinfection, 37:555
- Chloridazon Metabolites**, 37:441
- Chloride** effect on degradation of humic acid, 34:101
- Chloride** effect on ozone oxidation of wastewater, 27:287
- Chloride Ion** and 1,4 Dioxane removal, 29:13
- Chlorinated Alkanes**, oxidation of, 14:197
- Chlorinated** and ozonated condenser discharges, a comparative evaluation of the effects of on the white perch, *Morone americana*, 3:155
- Chlorinated Drinking Water**, formation of formaldehyde by boiling of, 14:153
- Chlorinated Hydrocarbon Pesticides**, aqueous ozonation of, 11:339
- Chlorinated Olefins**, oxidation of, 14:197
- Chlorinated Organic Compounds**, UV-enhanced ozonation of, 8:339
- Chlorinated Organics** in drinking water, combined application of ozone and chlorine or chloramine to reduce production of, 5:79
- Chlorinated Organics**, destruction by ozone-loaded solvent, 26:475
- Chlorinated Solvents** in contaminated groundwater, for groundwater treatment, 38:413
- Chlorinated Solvents** site removal with ozone,

24 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

32:130

Chlorinated Solvents, oxidation of, 14:197

Chlorination disinfection byproducts, 34:213

Chlorination and biological filtration, effect on by ozonation of aromatic hydrocarbon micropollutants, 3:33

Chlorination Byproducts in swimming pool water treatment, 10:377

Chlorination By-Products of Pesticides, non-genotoxic effects of on gap junctional intercellular communication, 19:351

Chlorination Byproducts, reduction in formation of by BAC processing, 13:91

Chlorination of synthetic treated urban wastewater, 37:467

Chlorination vs. Ozonation for swimming pool water treatment, 22:677

Chlorination, following ozonation of humic acid in drinking water, byproducts of, 14:51

Chlorination, following ozone drinking water treatment, 12:231

Chlorination, in presence of bromide ion in drinking water, 14:51

Chlorination, in treatment of fresh cut salad mixes, 32:66

Chlorination, of extracted aquatic fulvic acid, 11:69

Chlorination, of natural organic materials, 2:75

Chlorination, toxicity and effects of bromoform on five marine species, 1:47

Chlorine action, comparison with that of ozone on malodorous organic products: the particular case of incondensable gases resulting from rendering of carcasses, 2:261

Chlorine and ozone for water treatment in Switzerland, 21:187

Chlorine Demand in Quebec (Canada) drinking water facilities, 37:294

Chlorine Demand, effects of ozone and ozone/GAC treatments on in surface water, 13:147

Chlorine Demand, evaluation of ozone/BAC for reduction of, 15:95

Chlorine Dioxide and disinfection byproducts formation, 22:215

Chlorine Dioxide and ozone for drinking water treatment, 21:465

Chlorine Dioxide and ozone, similar chemistry and measurement issues, 21:447

Chlorine Dioxide Disinfection of *Cryptosporidium parvum*, sequential with ozone 19:409

Chlorine Dioxide generation in drinking water treatment, 21:433; 21:477

Chlorine Dioxide inactivation of *Cryptosporidium*, 21:477

Chlorine Dioxide state of the art, 27:203

Chlorine Dioxide, analysis of in aqueous solution by ACVK method, 11:209

Chlorine Dioxide, comparison with ozone in producing mutagenicity during drinking water disinfection, 11:245

Chlorine Dioxide, following ozone + GAC treatment of drinking water, 14:123

Chlorine Dioxide, importance of ozone on oxidation processes for the treatment of potable water interference with other oxidants, 4:59

Chlorine Dioxide, mutagenic activity formed by in drinking water, 8:217

Chlorine Dioxide, pre- and intermediate oxidation with in Switzerland, 8:151

Chlorine effect on ozone treatment of high bromide water, 27:19

Chlorine for bromate control, 29:363

Chlorine for drinking water treatment, 35:73

Chlorine in cooling water systems, 35:90

Chlorine in inactivation of *Cryptosporidium parvum* by ozone, 23:411

Chlorine Poisoning, of ozone off-gas destruct catalyst, 16:247

Chlorine Residual in drinking water, 21:465

Chlorine treatment of colored ground water, 23:393

Chlorine vs. ozone in removal of Natural Organic Matter (NOM), 22:249

Chlorine, bacterial depuration of the Mexican scallop, *Argopecten circularis* with, 4:121

Chlorine, combined application with chloramine or ozone to reduce production of chlorinated organics in drinking water disinfection, 5:79

Chlorine, comparison of effectiveness with ozone for controlling biofouling within condensers using fresh water as a coolant, 1:201

Chlorine, comparison with ozone in producing mutagenicity during drinking water disinfection, 11:245

Chlorine, effects on the performance of activated carbon used in water reclamation, 3:225

Chlorine, for Drinking Water, Bromate Ion in, 17:311

Chlorine, importance of ozone on oxidation processes for the treatment of potable water interference with other oxidants, 4:59

Chlorine, in control of filamentous sludge bulking, 20:1

Chlorine, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methylisoborneol, 15:1

Chlorine, mutagenic activity formed by in drinking

water, 8:217

Chlorine, oxidation of bromide ion by, 10:153

Chlorine, ozone and oxygen, influence on biological activity on biological activated carbon, 7:287

Chlorine, pre- and intermediate oxidation with in Switzerland, 8:151

Chlorine, reaction with fulvic acids following ozonation, effect of bicarbonate ion, 13:349

Chlorine, reactions of ozone with and products formed in water, 6:103

Chlorine, vs. ozone in sludge bulking control, 12:145

Chlorine-Reactive Sites, in ozonated organics, 13:91; 13:147

Chlorinous Odor in Ozone/UV advanced oxidation, 40:79

Chlorinous Odor removal in advanced oxidation process, 33:136

Chlorite Formation in treatment of waters with ozone and chlorine dioxide, 22:215

Chlorite in drinking water treatment, 21:433

Chlorite Ion, masking during chlorpromazine determination of low level bromate ion analysis in ozonated waters, 16:79

2-chloro-4,6-dialkylamino-1,3,5- triazines reaction with ozone, 25:81

Chloroaniline, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487

Chlorobenzene removal with ozone and PFOA, 25:185

Chlorobenzene, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487

Chlorobenzene, reaction with ozone, 32:61

Chlorobenzenes removal with advanced oxidation, 22:415

Chlorobenzenes, Advanced Oxidation of in water, 18:291

Chlorobenzenes, ozonation of in aqueous solution, 5:151; 9:265

Chlorobenzoic Acid Scavenger for Hydroxyl Free Radicals, 20:67

Chlorobenzoic Acid treatment with ozone, 36 ;141; 27:3

Chloroform Formation Potential, effect of preozonation on, 8:129

Chloroform Formation Potential, in swimming pool water treatment, reduction in by ozone treatment, 7:93

Chloroform, oxidation in water by ozone and ozone/UV, 9:369; 9:391

Chloroform, ozone destruction of in distilled and

drinking water, 9:265

Chloroform, treatment of in air stripping tower waste gases with photochemically generated ozone, 10:323

Chloromethylisothiazolone (CMI) treatment with ozone, 33:31

Chloronitrobenzene, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487

4-Chloronitrobenzene, oxidation of, 12:73

1-Chloropentene, oxidation of, 14:197

Chlorophenol decomposition by ozone, 24:133

2-Chlorophenol, byproduct of ozone advanced oxidation of chlorobenzenes in water, 18:291

2-Chlorophenol, decomposition in aqueous solution by a UV/O₃ process, 18:443

2-Chlorophenol, degradation of by advanced oxidation, 19:75

2-Chlorophenol, preozonation of in wastewater for subsequent biological treatment, 16:13

2-Chlorophenol, treatment of solutions with ozone, 20:259; 20:283

3-Chlorophenol, kinetics of ozonolysis of, 9:207

3-Chlorophenol, preozonation of in wastewater for subsequent biological treatment, 16:13

4-Chlorophenol ozonation, 30:447

4-Chlorophenol removal in injection-type downflow UV/O₃ oxidation reactor, 21:539

4-Chlorophenol, byproduct of ozone advanced oxidation of chlorobenzenes in water, 18:291

4-Chlorophenol, degradation of by advanced oxidation, 19:75

4-Chlorophenol, kinetics of ozonolysis of, 9:207

4-Chlorophenol, Nitration of in Water during Ozonation, 17:627

4-Chlorophenol, preozonation of in wastewater for subsequent biological treatment, 16:13

4-Chlorophenol, treatment of solutions with ozone, 20:259; 20:283

Chlorophenolics in pulp and paper industry, 35:109

Chlorophenols Decomposition by ozone, 27:447

Chlorophenols in Municipal Wastewater, preozonation of for subsequent biological treatment, 16:13

Chlorophenols ozonation over CuO-Al₂O₃ catalyst, 25:335

Chlorophenols, degradation of by advanced oxidation, 19:75

Chlorophenols, treatment of solutions with ozone, 20:259; 20:283

Chlorophenoxy Acids, degradation by ozone, 14:283

Chloropicrin, formation after ozonation of drinking water, 10:241

26 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Chlorpromazine** for Bromate Ion Analysis, 17:551
Chlorpromazine, analytical reagent for determination of low levels of bromate ion in ozonated waters, 16:79
Chlorpyrifos treatment with ozone, 33:232
Chlortoluron, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673
Choisy-le-Roi Water Treatment Plant, costs of ozonation in, 13:607
Choisy-le-Roi Water Treatment Plant, ozone and ozone/GAC treatment at, 13:147
Chromate in ozonation of secondary municipal wastewater, 40:441
Chromium Complex Dyes, Destruction by Ozone and Advanced Oxidation, 17:149
Chromium-Nickel Steels, corrosion of in ozonized waters, 12:243
Chromophore Removal in ozone bleaching of Kraft pulp, 25:523
Chronic Nonhealing wounds, 34:438
Chrysanthemum morifolium treatment with ozonated water, 31:15
Chrysene, treatment with ozone, 26:453
CIELab values of indigo dyed yarn, 38:395
Cinnamic Acid treatment with ozone, 20:403 3:177
CIP (Clean in Place) and ozone in wine industry, 32:355
Ciprofloxacin Hydrochloride catalytic oxidation, 40:457
Circular Conduits in ozone injection, 36:191
Cirica Papaya treatment, 34:57
***Cis.trans* Ozonides** in ozonolysis of olive oil, 37:55
***cis*-Dichloroethylene**, ozonation of in presence of humic acid and soils, 13:287
Cisplatin degradation by ozone, 30:189
Citraconic Acid, ozonation of, 8:199
Citric Acid, ozonation of, 8:129 ; 27:499
Citrus Fruit treatment by ozone, 24:343
Citrus industry use of ozone, 32:122
Clarification by flotation for drinking water treatment, influence of preozonation on, 5:3
Clarification, improvement by ozonation, 7:63
Clay as catalyst in removal of humic substances with ozone, 21:261
Cleanability of stainless steel surfaces with ozone, 28:303
Cleaning Agent, (ozone) for stainless steel surfaces, 28:303
Clearing of PET fibers, 35:196
Climate Change and Ozone, 23:429, 23:437
Climatology of stratospheric ozone, 33:489
Clinical Applications, of ozone, 7:259
Clofibric Acid catalytic ozonation, 33:434
Clofibric Acid degradation by ozone, 38:425
Clofibric Acid removal by ozone, 28:47; 28:85
Clostridium difficile inactivation by ozone, 29:85
Clostridium perfringens inactivation with ozone 30:431
Clostridium perfringens, ozone destruction of in municipal wastewater, 13:179
Clumping, in bactericidal effects of high airborne ozone concentrations on *Escherichia coli* and *Staphylococcus aureus*, 20:205
Coagulation (drinking water treatment), effects of ozone, oxalic acid, and organic matter molecular weight on, 18:311
Coagulation and ozonation prior to membrane filtration, 35:243
Coagulation Assistance, With Ozone or Ozone/Hydrogen Peroxide, 17:25
Coagulation effected by ozone, 30:27
Coagulation enhancement during ozonation of wastewater, 32:323
Coagulation Improvement with ozone treatment, 21:465
Coagulation in combination with ozone in treatment of phenol solutions, 25:323
Coagulation in domestic wastewater after ozonation, 21:605
Coagulation in ozone treatment in presence of bicarbonate, 25:285
Coagulation in treatment of textile wastewater, 33:285
Coagulation of dyeing wastewater, 30:439
Coagulation of floc in humic acid ozonation, 32:435
Coagulation, effects of ozonation on, 12:295, 16:55, 16:89
Coagulation/Flocculation for humic acid removal, 40:321
Coagulation-Flocculation and ozonation of dyeing wastewater, 40:133
Coagulation-Flocculation in catalytic ozonation of tequila industry vinasses, 38:279
Coagulation-Flocculation in ozone treatment of wastewater from painting processes, 27:279
Coagulation-Flocculation of ozonated river water, 34:342
Coagulation-Flocculation, of wastewater with ozone, 20:151
Coal Gasification Wastewater, 40:275
Coal Tar Linings of Water Mains, remobilization of polynuclear aromatic hydrocarbons from, 18:517
Coarse Bubble Diffuser Ozone Contactor for treatment of Kraft Pulp Mill effluents, 24:307
Coatings resistance to liquid and gas phase ozone,

24:249

Cobalt Catalyst for ozone decomposition, 39:436

Cobalt for catalytic ozonation, 25:261

Cobalt Incorporated MCM-41 for catalytic ozonation, 37:527

Cobalt Leaching in catalytic ozonation of chlorobenzoic acid, 37:527

Coconut Oil ozonation, 27:153

Cocurrent Flow Ozone Contactor, modeling of in water/wastewater ozonation, 15:149

COD Degradation, by Ozone/Hydrogen Peroxide, Hydrogen Peroxide/UV Radiation or Hydrogen Peroxide/Fe(II), 17:119

COD in reactive orange dye ozonation, 38:291

COD Monitoring, in wastewater ozonation, 14:303

COD of landfill leachate treated with activated carbon and ozone, 35:55

COD Reduction during ozone or advanced oxidation of molasses processing wastewaters, 19:157

COD Reduction in Leachate Treatment with ozone, 21:1

COD Reduction in paper mill effluent, 30:310

COD Reduction in tannery wastewater, 34:397

COD removal by ozonation and adsorption, 34:259

COD Removal from colored aqueous solutions, 37:62

COD Removal from textile dyeing wastewater by ozone, 23:199

COD removal in Kraft pulp mill effluents, 23:479

COD Removal of Kraft Pulp Mill effluents with ozone, 24:307

COD removal with electron beam irradiation, 35:49

COD Solubilization in ozone treated sludge, 39:319

COD, ozone oxidation of, 7:179

COD_{Mn} removal by ozonation, 29:317

Coffee Wastewater, 40:293

Co-generation of ozone and hydrogen peroxide by dielectric barrier discharge, 23:467

Coke Processing wastewater treatment with ozone, 25:273

Coke regeneration by ozone, 39:366

Coke Wastewater Treatment, with ozone, 15:343

Cold Plasma (Ozone) Reactor, practical heat transfer model for oxygen-fed, 18:461

Cold Plasma Ozone Generation, From Air, 17:259

Cold Plasma Reactor, for ozone synthesis, use of thermal and electronic effects in, 9:247

Cold Plasma Reactor, ozone production by, 7:299

Cold Storage of apples, 40:482

Cold Water Temperature effecting ozone treatment, 30:27

Coliform Inactivation in disinfection of wastewater with ozone, 22:113

Collagen Fiber in unhairing of goat skin with ozone, 28:341

Collimated Beam in UV oxidation of micropollutants, 34:125

Collimated Beam setup for water treatment, 37:134

Color Difference in ozone bleaching of cotton fabric, 37:203

Color Filter effluent treatment, 38:163

Color Levels, reduction by ozone treatment, 7:121

Color of dyeing wastewater, 30:439

Color of ozonated wastewater, 35:243

Color of ozone treated dyeing wastewater, 29:139

Color of ozone treated dyestuff solutions, 34:196

Color of ozone treated wheat and corn starches, 37:71

Color of ozonized composting leachate, 36:540

Color Reduction, in ozone treatment of landfill leachate, 26:287

Color Removal during ozonation of dyestuffs, 21:487

Color Removal from colored groundwater by ozone and pressurized biologically-active filtration, 23:393

Color Removal from textile dyeing wastewater, 20:111, 23:199, 23:295, 25:137

Color Removal in catalytic ozonation of aqueous reactive dye, 27:257

Color Removal in coal coking processing wastewater, 25:273

Color Removal in dyeing wastewater, 28:199

Color Removal in gas induced ozone reactor, 21:277

Color Removal in ozonation and post-biodegradation of C.I. Reactive Yellow 3, 27:273

Color Removal in ozone treated upland water, 21:615

Color Removal of coagulated stabilized landfill leachates by ozone, 28:309

Color Removal of dyes removed by ozone and hydrogen peroxide, 27:265

Color removal of groundwater with ozone, 35:438

Color Removal of humic acid solutions by ozonation and photocatalysis, 25:497

Color Removal of Kraft Pulp Mill effluents with ozone, 14:461; 23:479; 24:307

Color Removal of ozonation of azo dye within activated sludge, 31:279

Color Removal of pulp mill wastewaters with ozone, 22:31

Color Removal of sugar industry liquors by ozone treatment, 28:261

Color Removal with ozone in BENELUX, 21:139

Color Removal with ozone in impinging zone reactor, 21:501

28 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Color Removal** with ozone treatment and ceramic raschig rings, 37:22
- Color Removal** with ozone, comparison of low and medium high frequency ozone systems for, 1:107
- Color Removal**, by ozone in drinking water, 8:49; 8:77; 16:247; 16:367
- Color Removal**, elimination of humic materials, 4:79
- Color Removal**, from aged domestic landfill leachates, 15:433
- Color Removal**, from drinking water at Belle Glade, FL, 12:199
- Color Removal**, from Drinking Water by Ozone and Advanced Oxidation, 17:149; 17:485
- Color Removal**, from ground water by in-line ozone contacting using a static mixer, 13:559
- Color Removal**, from ground water by ozone, 13:109
- Color Removal**, from molasses processing wastewaters by ozone or advanced oxidation, 19:157
- Color Removal**, from municipal wastewater by ozone, 13:179
- Color Removal**, from New York City drinking water by ozone/DE filtration, 15:131
- Color Removal**, from Night Soil Treatment Plants with Ozone, 17:195
- Color Removal**, from Phosphoric Acid by Ozone, 17:637
- Color Removal**, from pulp mill bleaching wastewaters with ozone, 15:361
- Color Removal**, from Pulp Mill Effluents with Ozone, 17:205
- Color Removal**, of Dye-finishing wastewater with ozone/UV, 26:239
- Color Removal**, use of ozone in night soil treatment process, 6:185
- Color Removal**, with ozonation in drinking water and night soil treatment, 10:309
- Color Removal**, with preozonation at Los Angeles, CA, 10:255
- Color Removal**; purification of polluted source water with ozonation and biological activated carbon, 6:245
- Color, Humic**, removal of from water by ozonation followed by slow sand filtration, an experimental study of, 6:3
- Colorimetric Method for Ozone Determination**, 20:433
- Combined Municipal/Industrial Wastewater Treatment**, 7:1; 12:107;
- Combined Municipal-Industrial Effluent Treatment**, with Ozone, 17:345
- Combined Oxidation** of pesticides by ozone/biomass sequence, 27:317
- Combined Ozonation** for DMP removal, 36:221
- Combined Ozone/UV** treatment of wheat flour, 30:413
- Combined Process** for treatment of coffee effluent, 40:293
- Combined Process** in treatment of phenolic wastewater, 32:417
- Combined Treatment** in treatment of landfill leachate, 31:28
- Combined Treatment** of landfill leachate, 32:313
- Comparison of Ozone Concentrations (19% vs. 1.5% w/w)**, for Drinking Water Treatment, 17:485
- Comparison** of ozone trends in stratosphere, 33:489
- Comparison** of processes for treatment of recalcitrant and toxic wastewater concentrate, 34:163
- Competition Kinetics**, in the ozone degradation of pesticides and herbicides, 14:283
- Competitive Ozonation Kinetics** in food processing wastewater, 22:167
- Completely Stirred Tank Reactor**, 17:97
- Composite Iron-Manganese Silicate Oxide** for catalytic ozonation of sulfamethoxazole, 39:25
- Composite Iron-manganese Silicate Oxide**, 38:434
- Composting** leachate ozonation, 36:540
- Computational Fluid Dynamics (CFD)** and UV reactor performance, 34:81
- Computational Fluid Dynamics (CFD)** in ozone contactor design, 29:449; 31:262
- Computational Fluid Dynamics Modeling** in London and Oxford water, 25:409
- Computational Fluid Dynamics**, 38:245
- Computational Fluid Dynamics**, in ozone contactor design, 17:607; 26:403
- Computer components** disinfection with ozone, 23:285
- Computer Controlled Ozone System**, 7:77
- Computer Simulation**, of bubble column to study mass transfer of ozone, 13:535
- Computerized Simulation Program**, to Calculate Micropollutant Removal, 17:97
- Concentrate** treated by advanced oxidation, 34:163
- Concentration Measurement** for ozone, 38:352
- Concentration** of ozone by analysis, 35:229
- Concentration** of ozone in argon-oxygen mixtures, 35:134
- Concentration** of ozone in ozone therapy, 34:408
- Concentration** of ozone in processing water, 28:171
- Concentration**, of ozone in treatment of Kraft effluent, 26:317
- Conceptual Design** of Coquitlam water supply, 29:287
- Concrete** resistance to liquid and gas phase ozone, 24:249
- Condenser Biofouling Control**, with ozone, 3:95

- Condenser Discharges**, a comparative evaluation of ozonated and chlorinated on the white perch, *Morone americana*, 3:155
- Condida** aqueous suspensions ozonation, 38:62
- Conditional Moments**, 39:273
- Confectionary Industry**, 35:295
- Confined Plunging Liquid Jet Contactor (CPLJC)**, 28:131
- Confined Plunging Liquid Jet Contactor** for ozone mass transfer, 25:1
- Congo Red** removal with ozone, 37:420
- Conida** germination inhibited by ozone, 36:144
- Coniferaldehyde**, Byproduct of Ozonation of Coniferyl Alcohol in Water, 17:687
- Coniferyl Alcohol**, Byproducts From During Ozonation in Water, 17:687
- Conservative Biochemical Treatments** and ozone therapy, 34:461
- Consistency** of ozone bleached wheat straw pulp, 40:148
- Construction Materials** for ozone service, 24:249
- Consumed Ozone Dose** in color removal from textile wastewater, 25:137
- Contact Angle** of polybenzimidazole film surface, 40:392
- Contact Time** and ozone treatment of Arlington, Texas water, 29:261
- Contact Time**, 12:133
- Contact Time, Extended**, for swimming pool water treatment, 7:93
- Contact Time**, for minimizing bromate formation in ozonation of drinking water, 26:381
- Contacting** in circular conduits, 36:191
- Contacting of Ozone**, decomposition of ozone in highly concentrated aqueous solutions under semi-commercial conditions, 4:45
- Contacting System Design**, in ozone oxidation and disinfection, 7:63
- Contacting Systems**, ozone, nitrophenols as model compounds in the design of, 6:143
- Contacting Techniques**, 7:327
- Contacting**, CT vs. kinetics/hydrodynamics evaluations, 13:451
- Contacting**, in downflow bubble columns, ozone and oxygen absorption in, 9:217
- Contacting**, in ozone oxidation and disinfection design, 7:63
- Contacting**, of ozone, 8:235; 8:261; 12:133; 12:269; 12:341; 12:437;
- Contactor Design and Modeling**, 12:437
- Contactor Design** for a microporous diffuser reactor system, 27:45
- Contactor Design** for bubble columns, 23:369
- Contactor Design**, by computational tank dynamics, 26:403
- Contactor Exhaust Gas Treatment**, 7:327
- Contactor Exhaust Gases**, injection of into activated sludge tank, 6:199
- Contactor** for inactivation of *Cryptosporidium* in a static mixer with ozone, 25:295
- Contactor for** ozone treatment at Lake Washington Surface Water Treatment Plant, 31:262
- Contactor Performance** predicted by computational fluid dynamics, 29:449
- Contactors**, diffused bubble, mechanically agitated, negative pressure, packed towers, 9:125
- Contactors**, hydraulics in, 12:133
- Contactors, Ozone**, energy requirements for mass transfer of ozone into water -- state of the art, 3:181
- Contaminants of Emerging Concern**, 37:323
- Contaminated Site Remediation**, 38:413
- Contamination** of wastewater, 35:249
- Continuity Equation** for ozone transfer in rice grain bulks, 40:191
- Continuity Equation** in ozone concentration profile in Green Gram bulks, 39:54
- Continuous Flow Analysis (CFA)** used for monitoring of ozone gas-liquid reactors, 28:17
- Continuous Flow** model of bromate ion formation, 29:3
- Continuous Flow Reactor**, and bromate ion formation through a radical pathway, 26:573
- Continuous Flow Reactor**, for ozone oxidation of pollutants in water, 14:185
- Continuous Monitoring and Analysis of Ozone in Solution**, computerized, 18:469
- Continuous Ozone Operation** for pesticide control, 25:417
- Control** of ozone-biofiltration treatment systems, 36:276
- Control** of biofilm in cooling water systems, 35:90
- Control** of ozone treatment of paper mill effluents, 31:452
- Control**, of filamentous sludge bulking, 20:1
- Control**, operational, optimizing ozone disinfection, 4:131
- Controls**, automated, in ozone application systems, 7:77; 7:155
- Controls**, of ozonation equipment at Lengg plant, Zürich, Switzerland, 13:41
- Conventional Wastewater Analyses** for ozonated tannery wastewater, 39:159
- Conversion of Ozone into Hydroxyl Free Radicals in Aqueous Solution**, 20:67
- Conversion Tables in Ozone**, 20:433

30 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Cooling Tower Ozonation**, 15:47; 15:81
Cooling Tower treatment with low-concentration dissolved ozone, 31:53
Cooling Tower Water Conditioning, with ozone, 3:109
Cooling Tower Water Ozonation Systems, Practical Guidelines for, 16:501
Cooling Tower Water, ozone treatment of, 13:375; 14:231; 14:329; 14:517; 14:531; 17:71
Cooling Water Circuits, anti-biofouling ozone system for, application to seawater, 7:31
Cooling Water Loops, 39:188
Cooling Water Quality, 39:188
Cooling Water systems, 35:90
Cooling Water Temperatures, 39:188
Cooling Water Treatment with ozone in Germany, 21:163
Cooling Water Treatment with ozone in the USA, 21:99
Cooling Water treatment with UV and hydrogen peroxide, 36:440
Cooling Water treatment, With Ozone, 17:71
Cooling Water, Fresh, comparison of the effectiveness of ozone and chlorine in controlling biofouling in condensers using, 1:201
Cooling Water, ozone system for fresh water cooling circuits, 2:327
Cooling Water, ozone treatment of, 11:325; 12:243;
Cooling Water, provision by ozonation of surface water, 2:229
Coplanar Discharge Arrangements for ozone generation, 24:193; 25:431
Copomer Material, influence of ozone, 27:219
Copper Alloys, corrosion of in ozonized waters, 12:243
Copper Complex Dyes, Destruction by Ozone and Advanced Oxidation, 17:149
Copper Complexes and removal via ozonation, 23:41
Copper Oxide catalyzed ozonation of oxalic acid, 25:393
Copper Oxide-Alumina Catalyst for substituted phenols ozonation, 25:335
Copper Oxides for ozone decomposition, 29:41
Copper Removal, during Ozonation of Drinking Water, 17:297
Copper-Manganese catalyst for catalytic ozonation, 37:287
Copper-Manganese Oxides for ozone decomposition, 29:41
Coquitlam Water Supply, 29:297
Cork Processing Wastewater treatment, 27:317
Corn seeds treated with ozone, 30:427
Corona Discharge (Negative) in wire-to-cylinder ozone generator, 24:29
Corona Discharge for ozone generation, 12:19; 12:41; 29:107; 29:399
Corona Discharge in mixtures of N₂ and O₂, 36:65
Corona Discharge in three phase VSI-driven single-phase ozone generator, 37:9
Corona Discharge in wire-to-plate corona discharge, 35:31
Corona discharge, 35:22
Corona Discharge, in presence of carbon dioxide, 30:145
Corona Discharge, in wire-to-cylinder ozone generator, 20:317
Corona Wire-to-Cylinder Ozone Generator, comparison with economic criteria, Part I Oxygen, 19:533
Corrosion Control, by ozone in cooling tower water treatment, 13:375; 15:81
Corrosion Control, in ozonated cooling waters, 14:531; with mineral removal, 14:231
Corrosion in Cooling Systems, caused by ozonation, 11:325
Corrosion in ozone systems, 40:159
Corrosion Inhibitor in cooling tower treatment with low-concentration dissolved ozone, 31:53
Corrosion Rates, of metals in ozonated cooling towers, 12:243
Corrosion Resistance, of ozone generator electrode, 19:169
Corrosion, of mild steel and yellow metals, during ozonation of cooling waters, 15:47
Cosmetic Product from ozonized sunflower oil, 34:293
Cost Analysis of sludge treated with ozone, 25:73
Cost Comparison, of ozone generation with air, oxygen or air + oxygen, 20:191
Cost Estimate of ozone facilities for water reuse, 36:123
Cost Estimation for removing emerging contaminants, 35:263
Cost Evaluation of treatment of coal coking processing wastewater with ozone, 25:273
Cost of municipal ozone systems, 40:266
Cost of Ozone at Henrico County VA Water Treatment Facility, 31:461
Cost of ozone contact systems, 40:159
Cost of ozone treatment in wastewater plants, 31:415
Cost of pulsed corona discharge, 35:116
Cost Savings of ozone laundry system, 35:399
Cost Savings, in treatment of fresh cut salad mixes with ozone, 32:66

- Costs** of advanced oxidation processes, 33:211
Costs of advanced treatment in water reclamation, 36:485
Costs of landfill leachate treatment, 32:313
Costs of Ozonation for decolorization of wastewater by ozone, 23:295
Costs of Ozonation in wastewater treatment, 22:151
Costs of Ozonation, for drinking water treatment, 10:255
Costs of ozone oxidation of aromatic compounds in groundwater, 28:287
Costs of ozone oxidation of dimethyl sulfoxide, 29:391
Costs of removal of BPA and NPnEOs from secondary effluents via ozonation, 32:204
Costs, of Advanced Oxidation Processes, 17:119
Costs, of atrazine treatment with O₃/H₂O₂, 12:281
Costs, of multi-stage ozone treatment of dye waste, 13:11
Costs, of ozonation at Belle Glade, FL, 12:199
Costs, of ozonation in Paris (France) suburbs drinking water plants, 13:607
Costs, of ozone disinfection of municipal wastewater, 6:87
Costs, of ozone treatment in Belgium, 7:327
Cost-Saving Opportunities in cooling water systems design, 39:188
Cotton bleached by ozone, 37:170
Cotton bleaching with ozone, 29:325
Cotton color fading ozonation 40:377
Cotton Fabric bleached with ozone, 37:203
Cotton Fabrics treated with ozone, 40:44
Cow Pea treated with ozone, 36:36
¹³C-NMR Spectroscopy in ozonated drinking water, 21:551
Cr(III) in ozonation of secondary municipal wastewater, 40:441
Cr(VI) in ozonation of secondary municipal wastewater, 40:441
Cresol Isomers, kinetics of ozonation of in aqueous solutions, 15:267
Criegee Mechanism for ozonation of fatty acids, 31:301
Critical Scaling Temperature, in cooling tower waters, 13:375
Crono Restaurants and use of ozone, 32:137
Cross-linking of polyvinylpyrrolidone in photocatalytic ozonation, 36:560
Crotamiton ozonolysis, 37:385
Crotonic Acid, ozonation, 20:403, 26:415
Crude Glycerol ozonation, 31:445
Cryptic Growth in active sludge treated with ozone, 36:451
Cryptic Growth in biological wastewater treatment, 31:247
Cryptosporidium Cysts, effect of ozonation on in Colorado River water, 13:127
Cryptosporidium in Coquitlam water supply, 30:3
Cryptosporidium Inactivation and bromate control, 29:363
Cryptosporidium inactivation in continuous-flow contactors, 27:487
Cryptosporidium inactivation systems design, 27:129
Cryptosporidium inactivation using full-scale reactors, 22:99
Cryptosporidium Inactivation with ozone and chlorine dioxide, 21:477
Cryptosporidium inactivation with ozone, 22:501; 23:1, 23:15, 23:259
Cryptosporidium inactivation, CT requirements calculations, 27:335
Cryptosporidium parvum inactivation by ozone followed by free chlorine, 23:411
Cryptosporidium parvum inactivation with ozone in a static mixer, 25:295
Cryptosporidium parvum, sequential disinfection of by ozone and chlorine dioxide, 19:409
Cryptosporidium removal at Melbourne, FL surface water treatment plant, 31:262
Cryptosporidium removal with ozone in BENELUX, 21:139
Cryptosporidium treatment by ozone in Japan, 21:127
Cryptosporidium, inactivation and atrazine oxidation in a lime softening plant, 20:177
Cryptosporidium, inactivation during disinfection and bromate formation, 26:247
Crystal Modification, of calcium carbonate during ozonation of cooling waters, 15:47
Crystallinity of Kraft pulp after ozone bleaching, 25:523
Crystallization of phosphorus in ozonated sludge, 30:136
Csepel Water Treatment Plant, Budapest, Hungary, recommended ozone treatment process for, 16:29
C-Sparge impinging jet contactors, 32:99
C-Sparge™ Process, 30:88
CSTR (Completely Stirred Tank Reactor) ozone contactor, kinetic modeling of; impact on bromate ion formation, 18:87
CSTR Model for ozone bubble columns, 23:313
CT Analysis in system design for inactivation of *Cryptosporidium*, 27:129
CT Approach, to *Giardia* cyst inactivation vs.

32 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

kinetics, 13:451

CT Calculations, using a static mixer ozone contactor, 16:455

CT Concept and Chick-Watson Law in drinking water treatment, 22:227

CT Concept applied to turbine ozone contactor, 22:351

CT Concept in bromate formation, 24:293

CT Concept in inactivation of *Bacillus subtilis* with ozone, 24:145

CT Concept, for ozone disinfection, 14:391; 14:427; 14:439

CT in design of ozone contactors at Lake Washington Surface Water Treatment Plant, 31:262

CT in disinfection, 34:243

CT in wastewater ozonation, 35:501

CT predicted b axial dispersion reactor model, 36:100

C-t Protocol in cyanogen chloride kinetics, 23:15

CT Ratio at Portland, ME Sebago Lake WTP, 19:255

CT requirements for *Cryptosporidium* inactivation, 27:335

CT Requirements, in ozone contactors, 12:133

CT Value for ozonation of bottled water, 25:167

CT Values during Ozone Disinfection, 15:213

CT Values, at Los Angeles Aqueduct Filtration Plant, CA, 13:711

CT Values, for inactivation of *Giardia* cysts with ozone or PEROXONE, 14:71

CT Values, for ozone, 10:123

Cucumber leaves, treated with electrolytically ozonated water, 31:10

Cucumber, infection by powdery mildew and control by ozone, 24:463

Cucumbers treatment with ozone, 39:188

Cumene removal with ozone and PFOA, 24:63, 25:185

Current Limitation in ozone generators, 24:215

Cut Vegetables treated with ozone, 31:309

Cyanate Treatment, during ozonation destruction of cyanide wastewater, 3:61

Cyanazine, Degradation By Advanced Oxidation Processes, 17:237

Cyanazine, degradation by ozone and UV radiation, 16:213

Cyanidation for gold extraction, 33:42

Cyanidation of Gold-Silver Pyritic Minerals, 29:101, 29:307

Cyanidation, 40:284

Cyanide Destruction with ozone in the USA, 21:99

Cyanide in jewelry manufacturing effluent, 36:196

Cyanide in ozone treatment of Gold-Silver Pyritic Minerals, 29:307

Cyanide removal in coal coking processing wastewater, 25:273

Cyanide removal with ozone and activated carbon, 37:240

Cyanide Wastewater, destruction of by ozonation, 3:61

Cyanide, ozone destruction of, 7:327; 15:343

Cyanides, elimination of by ozone and biological treatments, 7:85

Cyanobacteria oxidation by ozone, 20:233; 23:161

Cyanogen Chloride Kinetics, 23:15

Cyanuric Acid catalytic ozonation, 38:233

Cyanuric Acid, formation during oxidation of Fluorescent Brightener 28, 19:129

Cyclam reagents in ozone treatment of lignin compounds, 21:53

Cycles of Concentration, in Cooling Towers, Prediction of Maximum, 17:71

Cycloalkenes oxidation with ozone, 28:329

Cyclodecane, in ozone oxidation of cycloalkanes to cycloalkanones, 20:91

Cyclodecanol, in ozone oxidation of cycloalkanes to cycloalkanones, 20:91

Cyclododecene oxidation with ozone, 28:329

Cyclohexane catalytic ozonation, 38:482

1,3-Cyclohexanedione, kinetic regime changes during ozonation of, 13:397; 13:421

Cyclohexane, in ozone oxidation of cycloalkanes to cycloalkanones, 20:91

Cyclohexanoic acid as model for oil sands water treatment, 37:45

Cyclohexanol as oxidation produce of cyclohexane, 38:482

Cyclohexanol, in ozone oxidation of cycloalkanes to cycloalkanones, 20:91

Cyclohexanone as oxidation produce of cyclohexane, 38:482

Cyclohexanone, in ozone oxidation of cycloalkanes to cycloalkanones, 20:91

Cyclooctene oxidation with ozone, 28:329

Cyclophosphamide oxidation by ozone, 35:125

Cysteic Acid, formation of during ozonation of cysteine and cystine in aqueous solution, 19:145

Cysteine, ozonation of in aqueous solution, 19:145

Cystine, ozonation of in aqueous solution, 19:145

Cystinedisulfoxide, formation of during ozonation of cystine in aqueous solution, 19:145

Cysts, inactivation with ozone, 10:123

Cytarabine removal with ozone, 21:69

Cytosine, kinetics of ozonolysis of, 9:207

Cytosine, ozonation of, 13:265

Cytostatic Drugs removed by ozone, 28:353

Cytostatics treatment with ozone, 21:69

- Cytotoxicity** analysis of ozonated olive oil, 40:37
Cytotoxicity of Herpes Virus, 36:249
Cytotoxicity of ozonated sunflower seed oil, 39:139
Cytotoxicity, variations in during ozonation of substituted aromatics, 2:25
- Danckwerts Theory**, in ozonation of organic compounds, 20:403
Daphnia magna in water treated by ultrasonic irradiation, 33:194
Daphnia magna toxicity of treated imazalil water, 33:308
Daphnia Magna, toxicity of ozonized humic and fulvic acids to, 8:37
Daytona Beach, FL, WTP, operating experiences of, 14:501
DC Negative Corona Discharge in presence of halomethane impurities, 24:329
DDT and its Metabolites, negative impact on ozone or ozone/H₂O₂ treatment of dicofol and tetradifon wastewaters, 16:487
DDT contaminated soil, 36:166, 38:272
Debarking byproducts and treatment with ozone, 22:575
Decamethylcyclopentasiloxane and ozone solubility 36:110
Decamethylcyclopentasiloxane (D5) as ozone-loaded solvent, 39:343
Decanedioic Acid, in ozone oxidation of cycloalkanes to cycloalkanones, 20:91
Decay Control of citrus fruit by ozone, 32:122
Decay of ozone in water, 34:233
Decay Rate in ozone for food preservation, 39:115
Decay Rate of gas in rice grains, 37:450
Dechlorination, of Pulp Mill Effluents by Ozone, 17:419
Decolorization of azo dyes, 37:420
Decolorization of brown chito oligomers, 37:489
Decolorization of dyes mixture with electron beam irradiation, 35:49
Decolorization of dyestuff waters by Fenton's Reagent, 22:195
Decolorization of leather, 39:455
Decolorization of molasses wastewater, 27:365
Decolorization of pyrolysis wastewater by ozone, 32:349
Decolorization of reactive dyes by advanced oxidation processes, 39:14
Decolorization of synthetic (dye) wastewater, 33:23
Decolorization of textile wastewaters with ozone, 22:535
Decolorization of Textile Wastewaters, with ozone in Poland, 18:73
Decolorization of Tropaeolin O solutions with ozone and UV, 28:9
Decolorization of wastewater containing azo dyes, 27:475
Decolorization, of Combined Municipal-Industrial Effluent by Treatment with Ozone, 17:345
Decolorization, of Drinking Water humic Acids, 17:511
Decolorization, of Pulp Mill Effluents by Ozone, 17:419
Decolorization, of synthetic dyes by ozone, 9:153
Decolorizing, of textile dye baths by ozone, 15:189
Decomposition by manganese carbonate, 40:21
Decomposition Enthalpy of oleate and ethyl elaidate ozonides, 37:431
Decomposition Kinetics of natural organic matter with ibuprofen, 35:472
Decomposition of aqueous naphthalene-1,5 disulfonic acid, 28:437
Decomposition of benzaldehyde, 35:489
Decomposition of endocrine disruption chemicals, 27:389
Decomposition of ozone in water, kinetics, 5:37, 10:89, 11:59
Decomposition of Ozone, gas phase analysis by, 14:91
Decomposition of Ozone, in basic aqueous solutions, kinetics, mechanisms, and effect of carbonate ion on, 11:49
Decomposition of Ozone, in highly concentrated aqueous solutions under semi commercial conditions, 4:45
Decomposition of Ozone, in natural waters, 14:185
Decomposition of Ozone, on α -Fe₂O₃, 14:277
Decontamination by electric discharge, 27:469
Decontamination of a civil facility with ozone, 23:285
Decontamination of rooms with ozone, 31:216
Decontamination with chlorine dioxide, 27:203
Deep U-tube Contactor, in ozone oxidation and disinfection design, 7:63, 14:427
Deep U-Tube ozone contacting in gold mine, 16:261
Deep U-Tube Ozone Contactors, modeling of, 15:213
Deethylatrazine, formation during ozonation of atrazine, 15:227
Deethylatrazine, formation of during treatment of atrazine by UV/H₂O₂, 19:395
Deethyldeisopropylatrazine, formation of during treatment of atrazine by UV/H₂O₂, 19:395
Definition of Terms, 20:433
Defrost Wastewater, 35:273

34 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- De-Gas Vessel** for side-stream ozone system, 29:231
- Degassing Separators** in sidestream injection process, 29:297
- Degradation** of patulin with ozone, 31:22
- Degradation** in apples during cold storage, 40:482
- Degradation** in Kraft effluent treated with ozone, 29:47
- Degradation Kinetics** of organophosphate pesticide degradation, 40:473
- Degradation Mechanism** of 1,4 Dioxane with ozone/electrolysis, 29:13
- Degradation** of 2,5-dichlorophenol by ozone and ozone-UV, 38:181
- Degradation** of acid black 210 by advanced oxidation, 40:372
- Degradation** of antibiotics, 30:175
- Degradation** of biological macromolecules with ozone, 28:317
- Degradation** of C. I. Disperse Blue 56, 31:37
- Degradation** of dimethyl sulfoxide by ozone, 29:391
- Degradation** of free fatty acids by sonication/ozone/argon, 37:93
- Degradation of Micropollutants** and process control, 35:168
- Degradation** of N-Methyl-2-Pyrrolidone with ozone, 29:177
- Degradation** of pesticides in natural waters using UV and H₂O₂, 32:329
- Degradation** of phenol by catalytic ozonation, 40:173
- Degradation** of phenol by ozonation and adsorption, 34:259
- Degradation Pathway** for anthraquinone ozonation, 39:219
- Degradation Pathways** in ozonation of benzophenone-2, 40:122
- Degradation Products** in ozonation of pharmaceutical compounds, 32:305
- Degradation**, kinetics for treatment of Kraft effluent, 26:317
- Dehydroabietic Acid** oxidation by ozone, 24:83, 27:397
- Dehydro-di-isoeugenol**, reactivity with ozone, 21:53
- Deisopropylatrazine**, formation during ozonation of atrazine, 15:227
- Deisopropylatrazine**, formation of during treatment of atrazine by UV/H₂O₂, 19:395
- Delayed Chick-Watson Model** in MS2 inactivation, 36:86
- Delignification** of Kraft Pulp, 25:523
- Demanganization**, of drinking waters in Belgium with ozone, 7:327
- Demetalization** by Ozone or Advanced Oxidation, 17:149
- Denaturation** of biological macromolecules with ozone, 28:317
- Denim** bleaching, 38:175
- Denim** color fading ozonation 40:377
- Denim** fading, 38:395
- Denitrification** at South Caboolture Water Reclamation Plant, 25:107
- Denitrification** in moving-bed biofilm system for treatment of landfill leachate, 32:313
- Density Functional Theory** calculations for bromide oxidation, 30:339
- Density** of ozonized sunflower oil, 34:293
- Dental Applications** – root canal infections, 36:264
- Dental Applications** with ozone and flowable copomer restorative material 27:219
- Dental Applications**, 36:206, 37:555, 37:563
- Dental Caries** reduced by ozone treatment, 37:563
- Dental Medicine**, use of ozone, 7:259; 14:165
- Dental Surgery**, ozone in – current status and prospects, 19:387
- Dental Trauma**, 34:484
- Dental Treatment Units** and ozone in water heater, 21:629
- Dental Treatment Units** using ozonated water, 19:527,22:441, 23:255, 24:479
- Dental Treatment Units**, and ozone present in dental room air, 20:251
- Dental Unit Water Systems**, 31:436
- Dentistry**, 33:417
- Denver, CO**, treatment of wastewater for reuse by ozone and biological activated, 21:99
- Deodorization** accomplished by small ozone generator, 24:215
- Deodorization**, comparison of the action of chlorine and ozone on odors from the rendering of carcasses, 2:261
- Deodorization**, of gases by ozone, 13:331
- Depletion Factor** in malefic acid ozonation, 25:13
- Depuration** in degradation of azoxystrobin by ozone fumigation, 37:479
- Depuration**, bacterial, of the Mexican scallop, *Argopecten circularis*, with ozone or chlorine, 4:121
- Depuration, Shellfish**, seawater ozonation, 1:147
- Dermatological Gel** from ozonated sunflower seed oil, 39:139
- Desethylatrazine**, Byproduct of Ozonation of Atrazine Pesticides in Water, 17:673
- Design and Operation**, of ozone disinfection facilities for municipal wastewater treatment, 6:87

- Design Considerations**, ozone feed gas alternatives, 14:13; 14:276
- Design Guidelines** for contacting of high concentration ozone in drinking water treatment plants, 15:245
- Design Model**, for calculating bubble diffuser contactor ozone transfer efficiency, 10:173
- Design of Experiments** for parabens removal from water, 39:233
- Designer's Role in Ozone Water Treatment**, 10:55
- Destabilization**, influence of ozone treatment prior to flocculation processes, 5:21
- Destruction Mechanisms** in radiation chemistry, 30:58
- Destruction of Ozone** in off-gases, by thermal catalytic method, 2:367
- Detection Limit** of ozone concentration measurement, 38:352
- Detergents Decomposition** by advanced oxidation, 33:301
- Detergents**, Degradation of by Ozonation in a Combined Municipal-Industrial Wastewater, 17:345
- Detergents**, ozone oxidation of, 13:639
- Determination** of effect of ozonated water on olives, 39:91
- Detoxification** of Jatropha Seedcake with ozonation and solar irradiation, 37:29
- Detroit River Water** treated with ozone, 28:415
- Detroit River**, 34:325
- Developing Countries**, recent developments in the role of ozone in water purification and its implications in, 2:241
- Dewaterability** of sludge treated with ozone, 25:73
- Dewatering** of sludge by ozonation, 32:252
- DFT Calculation** in ozonation of nitrite ion, 32:430
- DFT Calculation** in reaction with bisulfide, 33:37
- Diabetic Foot**, 34:438
- 3',6'-Diacetylfluorescein**, to determine damages to microorganism cell membranes and loss of metabolic activity upon ozonation, vital-fluorochromization of microorganisms, 18:173
- Diagnostic Ratios** in soil ozonation, 35:366
- Diamond Electrode** in electrolytic ozone generator, 33:114
- Diatom** removal assisted by pre-ozonation, 33:66
- Diatomaceous Earth Filtration**, following ozonation in New York City, 15:131
- Diazinon**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673
- Dibromochloromethane**, oxidation of by ozone/UV radiation, 9:391
- Dibromochloromethane**, ozone destruction of in distilled and drinking water, 9:265
- Dicamba**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673
- Dicarboxylic Acids**, formed during ozone or ozone/H₂O₂ treatment of dicofol and tetradifon wastewaters, 16:487
- Dichloroacetic Acid**, reduction in levels after ozonation, 10:153
- Dichloroacetonitrile**, ozone destruction of in distilled and drinking water, 9:265
- Dichlorobenzene**, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487
- Dichlorobromomethane**, ozone destruction of in distilled and drinking water, 9:265
- 1,1-Dichloroethane**, ozone destruction of in distilled and drinking water, 9:265
- 1,2-Dichloroethane**, as model substrate in UV-enhanced ozonation of organic compounds, 8:339
- 1,2-Dichloroethane**, oxidation of, 14:197
- 1,2-Dichloroethane**, ozone destruction of in distilled and drinking water, 9:265
- 1,1-Dichloroethylene (also cis- and trans-)**, ozone destruction of in distilled and drinking water, 9:265
- Dichloromaleic Acid** ozonation, 31:301
- Dichloromethylisothizolone (DCMI)** treatment with ozone, 33:31
- Dichlorophenol** degradation by catalytic ozonation, 38:14
- Dichlorophenol** degradation by ozone and ozone-UV, 38:181
- Dichlorophenols** ozonation, 24:123
- 2,4 Dichlorophenol** degradation by ozone, 27:381
- 2,4-Dichlorophenol** removal by activated carbon, Zeolite and ozone, 32:391
- 2,4-Dichlorophenol**, decomposition in aqueous solution by a UV/O₃ process, 18:443
- 2,4-Dichlorophenol**, degradation of by advanced oxidation, 19:75
- 2,4-Dichlorophenol**, Nitration of During Ozonation in Water, 17:627
- 2,4-Dichlorophenol**, preozonation of in wastewater for subsequent biological treatment, 16:13
- 2,4-Dichlorophenol**, treatment of solutions with ozone, 8:247, 20:259; 20:283
- 2,6-Dichlorophenol**, preozonation of in wastewater for subsequent biological treatment, 16:13
- 3,4-Dichlorophenol**, kinetics of ozonolysis of, 9:207
- 3,5-Dichlorophenol**, kinetics of ozonolysis of, 9:207
- 2,4-Dichlorophenoxyacetic Acid** removal by ozone/gamma process, 33:50
- 2,4-D (2,4-Dichlorophenoxyacetic acid)** degradation by ozone and UV light, 16:235

36 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

2,4-D and Its Chlorine and Ozone By-Products, non-genotoxic effects of on gap functional intercellular communication, 19:351

2,4-D, degradation by ozone, 14:283

2,4-D, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673

1,2-Dichloropropane, ozone destruction of in distilled and drinking water, 9:265

1,1-Dichloropropene, oxidation of, 14:197

Diclofenac oxidation by ozone, 28:85; 32:91, 32:230

Diclofenac ozonation modeling, 32:424

Diclofenac removal with advanced oxidation, 34:3

Dicofol Pesticide Wastewaters, ozone and ozone/H₂O₂ treatment of, 16:487

Dielectric Barrier Discharge (DBD) in Japan, 33:93

Dielectric Barrier Discharge and effect of SF₆, 32:444

Dielectric Barrier Discharge efficiency, 28:119

Dielectric Barrier Discharge for ozone generation, 28:207

Dielectric Barrier Discharge in a high frequency generator, 24:321

Dielectric Barrier Discharge in air with inert gas, 36:526

Dielectric Barrier discharge in humid oxygen, 23:467

Dielectric Barrier Discharge in oxygen and air fed systems, 27:59

Dielectric Barrier Discharge in packed bed reactors, 28:111

Dielectric Barrier Discharge in presence of nitrogen, 40:313

Dielectric Barrier Discharge optimization, 37:221

Dielectric Barrier Discharge Reactor with catalytic ozonation, 38:156

Dielectric Barrier Discharge with argon-oxygen mixtures, 35:134

Dielectric Barrier Discharge with ultrasonic irradiation, 33:483

Dielectric Barrier Discharge, 34:378; 35:22; 35:448, 40:228, 40:294

Dielectric Barrier Discharge, modeling, 26:551

Dielectric Barrier Discharges, ozone generation *via*, 19:241; 29:107

Dielectric Materials for ozone generation in Poland, 21:177

Dielectric Packing effect on ozone synthesis from oxygen-nitrogen mixtures, 25:63

Diesel Particulate Filter, in diesel emission exhaust, 37:518

Diesel-Contaminated Soil treatment with ozone,

28:37

Diethyl Phthalate ozonation, 32:238

Diethylphthalate, ozonation of in aqueous solution, 5:151

Differential Optical Absorption Spectroscopy, 38:352

Differential Pressure Flowmeters, 22:1

Differential Pressure Method (Isothermal), for ozone analysis, 10:337

Differential Turbidity for control of iron and manganese removal, 32:286

Diffuser Type Contactor for ozone treatment of dyestuff solutions, 34:196

Diffusion Coefficient of ozone in a cylindrical tube, 33:106

Diffusion Coefficient, of ozone to chamber wall, 26:487

Diffusion Contactors, design engineering aspects of, 14:487

Digested Sludge treated with ozone, 39:148

Dihydrogen Sulfide reaction with ozone, 33:37

Dihydroquinone formation decomposition with ozone, VUV and TiO₂/UV, 24:49

3,4-Dihydroxy-5-methoxybenzaldehyde, Byproduct of Ozonation of Coniferyl Alcohol and/or Ferulic Acid in Water, 17:687

Dihydroxyfumaric Acid as oxidation product of catalytic ozonation of dichlorophenol, 38:14

Dikegulac, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673

Dimensional Analysis in wire-to-plate corona discharge, 35:31

Dimer cleavage by ozone, 23:139

Dimethoate, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673

2,3-Dimethylphenol, Destruction by Ozone and Advanced Oxidation, 17:527

2,4-Dimethylphenol removal by combined ozonation, 36:221

2,5- and 2,6-Dimethylphenols Destruction by Ozone and Advanced Oxidation, 17:527

Dimethyl Sulfoxide (DMSO) oxidation with ozone, 29:391

Dinan (France) Water Treatment Plant, ozone + flotation in, 15:465

2,4-Dinitro-6-alkylphenols, (sec-butyl, cyclohexyl, ethyl, methyl, i-propyl, n-propyl) ozonolysis rates as function of steric factors, 9:207

Dinitrogen Pentoxide and Nitrous Oxide, determination in the output of air-fed ozone generators of high power density, 9:195

Dinitrogen Pentoxide, formation of during ozone generation, 10:241

- Dinitrotoluene Wastewater** treated by Fenton-like process, 38:225
- Dinitrophenylhydrazine** derivitization for disinfection byproducts analysis, 22:653
- Diode Laser** for dental cavity disinfection, 36:206
- 1, 4-Dioxane** removal by ozone and ultrasound, 39:244
- 1,4 Dioxane** treatment in groundwater, 38:413
- 1,4 Dioxane** removal by ozone AOP, 39:424
- 1,4, Dioxane** removal with ozone and electrolysis, 29:13
- 1,4-Dioxane** removal, 33:396; by advanced oxidation, 35:331
- 1,4-Dioxane** treated with IX-UF and UV/H₂O₂, 32:383
- 1,3-Dipolar Addition of Ozone**, to unsaturated fatty acids, 11:143
- Direct Arsenic (III) Method**, for measurement of residual ozone, 5:203
- Direct Blue 1**, ozonation of, 11:391
- Direct Blue 80 (Copper)**, Destruction by Ozone and Advanced Oxidation, 17:149
- Direct Current Corona Discharge**, generation of ozone by, 8:107
- Direct Filtration** after ozonation, 24:239
- Direct Filtration Process**, in ozone drinking water treatment, 12:355
- Direct Ozone Reactions**, selectivity and rate of oxidation of solutes in water, 1:73
- Direct Viable Count Methodology**, with ozonation in drinking water treatment, 12:1
- Direct Yellow 27**, ozonation of, 11:391
- Discharge Analysis** method applied to rotating electrode ozonizer, 22:563
- Discharge Arrangements**, 28:119
- Discharge Development** in oxygen and air fed surface discharge arrangements, 27:59
- Discharge Dynamics** of ozone generation in coplanar discharge, 25:431
- Discharge** effect in ozone production with inert gases as catalysts, 22:53
- Discharge Gap Width**, effect on ozone generation, 12:255
- Discharge inside Bubbles in Water**, 24:471
- Discharge Mode** in coaxial cylinder pulse streamer corona discharge reactors, 25:127
- Discharge Phenomena**, parasitic, in ozonizers filled with glass dielectric tubes, and their elimination, 6:123
- Discharge Physics**, and reaction mechanisms, of ozone generation, 10:351
- Discharge Power** in dielectric barrier discharge, 35:448
- Discharge Simulation** of ozone production in coplanar discharge, 25:431
- Discoloration** of landfill leachate treated with activated carbon and ozone, 35:55
- Discolysis**, 34:461
- Discoradicular Conflict** 34:461
- Discorea**, 36:435
- Discrete-Bubble Model** in ozone bubble column, 39:44
- Disease Control** with electrolytically ozonated water, 31:10
- Disinfectant**, 7:275
- Disinfection** with monochloramine, 34:243
- Disinfection** and process control, 35:168
- Disinfection** by ozone of water in water heater in dental chairs, 21:629
- Disinfection By-Product Formation** in ozonation of natural organic matter, 30:321
- Disinfection Byproduct Formation Potential (DBPFP)** in ozonation of model compounds, 24:357
- Disinfection Byproducts** analysis by DNPH derivitization, 22:653
- Disinfection Byproducts Analysis**, 22:551
- Disinfection By-Products** and NDMA formation, 36:215
- Disinfection By-Products** and trihalomethane formation, 30:356
- Disinfection Byproducts Control**, evaluation of ozone/BAC for, 15:95
- Disinfection Byproducts** for NOM removal by advanced oxidation, 33:267
- Disinfection Byproducts** formation by pre- and intermediate ozonation, 25:453
- Disinfection By-Products** formation in ozonation of high bromide water, 27:19
- Disinfection Byproducts Formation** in ozone treated wastewater, 22:151
- Disinfection Byproducts** formation in processes using chlorine dioxide, 22:215
- Disinfection By-products Formation Potential**, reduction by ozonation processes, 26:153
- Disinfection Byproducts Formation**, in ozonation of amino acids, 20:381
- Disinfection Byproducts** in advanced oxidation processes, 33:136
- Disinfection Byproducts** in drinking water treatment with ozone/chlorine dioxide, 21:433
- Disinfection Byproducts** in drinking water treatment, 21:465
- Disinfection Byproducts** in humic acid oxidation, 40:93
- Disinfection Byproducts** in ozone treatment of natural waters, 20:361, 21:239

38 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Disinfection By-products** in ozone-BAC drinking water plant, 37:257
- Disinfection Byproducts** in treatment of colored groundwater by ozone and pressurized biologically-active filtration, 23:393
- Disinfection Byproducts** in treatment of natural water, 34:213
- Disinfection By-Products** in treatment of Seoul, Korea drinking water, 27:69
- Disinfection Byproducts** in two Paris water treatment plants, 23:229
- Disinfection Byproducts** of Coquitlam water supply, 30:3
- Disinfection By-Products of Pesticides**, non-genotoxic effects of on gap junctional intercellular communication, 19:351
- Disinfection Byproducts** removal by biological filtration, 22:393
- Disinfection Byproducts**, from ozonation at Los Angeles, CA, 13:711
- Disinfection Byproducts**, of ozonation/post-chlorination of drinking water, 14:51
- Disinfection Byproducts, Organohalogen**, effects of bromide on formation of during ozonation, 18:349
- Disinfection Byproducts**, Precursors of, 17:449
- Disinfection** calculations for *Cryptosporidium* inactivation, 27:335
- Disinfection Capacity** affected by anion exchange, 35:283
- Disinfection Design Approach** by computational fluid dynamics, 29:449
- Disinfection Design Parameters**, 12:157;
- Disinfection Design**, principles of ozone oxidation and, 7:63
- Disinfection Efficacy** of removal of biofilms by ozone water, 31:3
- Disinfection** efficiency of ozone, 39:408
- Disinfection** in dentistry by ozonated water/ultrasound, 37:84
- Disinfection** in ozone contactors, 30:49
- Disinfection** in recirculating aquaculture systems, 33:345
- Disinfection Kinetics**, effects of ozone concentration and temperature on, 10:123
- Disinfection Kinetics**, in bactericidal effects of high airborne ozone concentrations on *Escherichia coli* and *Staphylococcus aureus*, 20:205
- Disinfection Monitoring** in ozone dissolution systems, 22:329
- Disinfection** of ballast water, 34:174, 40:399
- Disinfection** of cooling water with UV and hydrogen peroxide, 36:440
- Disinfection** of dental water, 33:417
- Disinfection** of drinking water by UV light, 30:70
- Disinfection** of drinking water containing *Cryptosporidium*, 23:259
- Disinfection** of drinking water with ozone and chlorine dioxide, 21:477
- Disinfection** of drinking water, 13:623, 14:1; 14:439, 21:433
- Disinfection** of Dutch drinking water, 29:273
- Disinfection** of egg surfaces, 33:374
- Disinfection** of gastrointestinal endoscopes, 38:346
- Disinfection** of greenhouse effluents with ozone, 23:385
- Disinfection** of high bromide water, 27:19
- Disinfection** of malting barley with ozone, 38:115
- Disinfection** of municipal wastewater for reuse in agriculture, 22:151
- Disinfection** of natural waters using UV and H₂O₂, 32:329
- Disinfection of Natural Waters**, and ozone decay, 20:361
- Disinfection** of ozonized sunflower oil, 31:232
- Disinfection** of papaya treated with ozone, 34:151
- Disinfection** of Paşaköy wastewater treatment plant effluent, 32:209
- Disinfection** of poultry processing wastewater, 23:53
- Disinfection** of seawater with UV and ozone, 35:63
- Disinfection** of sludge with ozone, 30:238
- Disinfection** of swimming pool water, 37:456
- Disinfection** of Swiss drinking water and formation of bromate, 25:159
- Disinfection** of synthetic treated urban wastewater, 37:467
- Disinfection** of UASB effluent, 29:485
- Disinfection** of wastewater containing pharmaceuticals, 30:387
- Disinfection** of wastewater with ozone and kinetics modeling, 22:113
- Disinfection** of wastewater, 35:501
- Disinfection** of water containing *Bacillus subtilis* spores, 28:335
- Disinfection** of water for dental treatment units, 22:441
- Disinfection** of waters containing *cryptosporidium* and atrazine 20:177
- Disinfection Performance**, for treatment of *Bacillus subtilis* with ozone, 26:207
- Disinfection** systems design for inactivation of *Cryptosporidium*, 27:129
- Disinfection** with chlorine dioxide, 27:203
- Disinfection** with ozone and membrane contactors, 27:209
- Disinfection** with ozone and ultrasound, 36:138

- Disinfection** with ozone at Lake Washington Surface Water Treatment Plant, 31:262
- Disinfection** with ozone in BENELUX, 21:139
- Disinfection** with ozone in proposed membrane facility, 29:281
- Disinfection** with ozone in the food processing industry, 29:113
- Disinfection** with ozone in the USA, 21:99
- Disinfection with Ozone**, and "CT" values, 15:213
- Disinfection with Ozone**, use of MS2 coliphage as surrogate, 15:279
- Disinfection**, by ozone in municipal wastewater, 13:179
- Disinfection**, by ozone in U. S. municipal wastewater plants, 32:43
- Disinfection**, by ozone of *E. coli*, effects of mixing on, 13:593
- Disinfection**, by ozone of sewage in a static mixer contactor, 13:313
- Disinfection**, by ozone, 8:187; 8:261; 12:157; 12:393; 12:423
- Disinfection**, design and efficiency of ozone contactors for, 14:391
- Disinfection**, inactivation of *Escherichia coli* and *Staphylococcus aureus* in airborne systems, 20:205
- Disinfection**, of ballast water with ozone, 26:389
- Disinfection**, of biologically treated wastewater with ozone, 9:63
- Disinfection**, of dental treatment units with ozone, 19:387; 19:327
- Disinfection**, of dilute, low-temperature wastewater using ozone, 1:91
- Disinfection**, of drinking water with ozone in Belgium, 7:327
- Disinfection**, of drinking water, combined application of ozone and chlorine or chloramine to reduce production of chlorinated organics in, 5:79
- Disinfection**, of fish hatchery waters, 2:203
- Disinfection**, of *Giardia muris* with ozone and ozone/H₂O₂, 16:67
- Disinfection**, of household wastewater, optimizing with ozone, 3:19
- Disinfection**, of municipal wastewater with ozone, 1:281; 6:87
- Disinfection**, of municipal wastewater with ozone, state-of-the-art, 3:239
- Disinfection**, of municipal wastewater, ozone for high level, 3:3
- Disinfection**, of seawater containing the potential shrimp pathogens *Vibrio Sp.* and *Fusarium Solani*, preliminary results of, 1:329
- Disinfection**, of seawater effluent from a shellfish quarantine unit, preliminary tests of an ozone system for, 2:5
- Disinfection**, of surface water with ozone at Purton Water Works (U.K.), 18:57
- Disinfection**, of surface waters by ozone and PEROXONE, 14:71
- Disinfection**, of swimming pools and hot whirlpools, 12:393
- Disinfection**, of swine manure slurry via ozonation, 20:35
- Disinfection**, ozone and wastewater treatment; importance of interface action, 2:139
- Disinfection**, steady state, of water by ozone and sonozone, 2:13
- Disinfection**, wastewater, elimination of fecal bacteria and enteric viruses by ozone, 4:91
- Disinfection**, wastewater, optimizing operational control of ozone, 4:131
- Disinfection**, wastewater, with ozone, 10:173
- Disinfection**, with ozone at Wiggins Water Works, Durban, South Africa, 16:247
- Disinfection**, with ozone in Budapest Waterworks pilot plant, 16:29
- Disintegration** of hazardous biosludge with ozone, 34:334
- Disperse Blue 56** dye ozonation, 31:294
- Disperse Dye** and PET fibers, 35:196
- Disperse Dye**, 35:196
- Dispersion Coefficient** for ozone self-decomposition in a semi-batch bubble column reactor, 27:409
- Dispersion Coefficient** in in-line multi-jets contactor, 33:449
- Dispersion**, in ozone contactors, 12:133
- Dissipation** of ozone in fumigation, 37:479
- Dissolved Organic Carbon (DOC)** decrease during ozonation of C.I. Reactive Yellow 3, 27:273
- Dissolved Organic Carbon (DOC)** of ozone treated dyestuff solutions, 34:196
- Dissolved Organic Carbon (DOC)** removed by ozonation of dyestuffs, 28:141
- Dissolved Organic Carbon** in humic acid ozonation, 32:435
- Dissolved Organic Carbon** of dyeing wastewater, 30:439
- Dissolved Organic Carbon** removal affected by MIEX[®] resin, 27:371
- Dissolved Organic Matter** and treatment with ozone 23:351
- Dissolved Organic Matter** during ozonation of wastewater, 32:323
- Dissolved Organic Matter** effect on ozone decomposition model, 35:338
- Dissolved Organic Matter** in ozonation of a lake

40 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

water, 38:100

Dissolved Organic Matter in textile effluents, 35:7

Dissolved Organic Matter in UF-membrane flux, 35:208

Dissolved Oxygen in methyl orange ozonation, 36:244

Dissolved Oxygen in water treated by ultrasonic irradiation, 33:194

Dissolved Oxygen, effects on GAC adsorption characteristics in water, 19:1

Dissolved Ozone Concentration during formation of bromate ion, 29:3

Dissolved Ozone Concentration in ozone treatment of fruit-vegetable seedlings, 33:179

Dissolved Ozone Concentration in promotion of adventitious roots in *Chrysanthemum*, 31:15

Dissolved Ozone Concentration, in bromate ion formation in a continuous flow reactor, 26:573

Dissolved Ozone Concentration, in ozone-treated spray water, 26:511

Dissolved Ozone Consumption, effects of background organic matter, pH, and carbonate species on in natural waters, 10:277

Dissolved Ozone decay, 29:379

Dissolved Ozone Measurement, 20:433

Dissolved Ozone, effects on GAC performance in drinking water, 19:1

Distillery Wastewater Ozonation, kinetics of, 14:303

Distillery Wastewaters, Ozonation of, 17:355; 17:379;

Distribution System effects on ozone treatment, 25:473

Distribution system formation of TTHM, 33:14

Distribution Systems for drinking water, 21:465

Distribution Systems, Effect of Ozone on Water Quality In, 17:283

Distribution Systems, effects on easily assimilable carbon in drinking water, 11:297

Distribution, Granulometric, of materials in suspension, impact of preozonation on, 7:107

Dithiodiglycolic Acid, formation of during ozonation of thioglycolic acid in aqueous solution, 19:145

Diuron removal in presence of humic and fulvic acids, 25:399

Diuron Treatment with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19

Diuron, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673

Diuron, ozone degradation of, 15:457

DNA degradation with ozone, 28:317

DNAPL treatment with perozone, 32:130

Dobson ozone trend, 33:489

DOC (Dissolved Organic Carbon), influence of preozonation on activated carbon adsorption equilibrium of, 8:277

DOC influencing decomposition of ozone in wastewater, 28:247

DOC of ozone treated dyeing wastewater, 29:139

DOC removal in dyeing wastewater, 28:199

Dog ticks, 40:183

DOM effect on hydroxyl radical ozone ratios, 22:123

DOM influencing decomposition of ozone in wastewater, 28:247

Domestic Wastewater ozonation, 23:219

Domestic Wastewater, improvement of primary sedimentation by ozonation, 21:605

Domestication of Cactaceae family, 39:104

Dominant Oxidant Pathway in semiconductor processing with ozone, 25:445

Dordrecht, the Netherlands, drinking water treatment plant design, 9:93

Dormancy alleviation of wild and domesticated *Opuntia* Cactaceae, 39:104

Dose for ozone therapy 34:408

Dose-Response Model to predict effect of bromate ion in simulated gastric juices, 28:165

Dose-Response Relationships, in ozone disinfection, 12:157

Double Bonds Analyzer used with ozone, 25:145

Double Weibull Model for *B. cereus* inactivation with ozone, 38:124

Doubling Time in aerobic sludge digestion, 36:57

Downflow Bubble Contactor, ozone and oxygen absorption in, 9:217

Downflow UV/O₃ Reactor for destruction of toxic organics, 21:539

Downstream Static Mixer, for ozone treatment of lake water, 26:227

DPD Colorimetric Method, to measure bromate formation during ozonation in presence of ammonia, 26:267

DPD Method, for measurement of residual ozone, 5:203; 10:337

Draft Tube Reactor for ozone reactions, 21:277

Dried Chili ozone fumigation, 40:473

Drilling Wastewater, treatment with ozone, 26:309

Drinking Water and bromate formation, 35:465

Drinking Water and distilled water, ozone destruction of volatile organic contaminants in, 9:265

Drinking Water bromate control, 35:438

Drinking Water bromate control, 37:127

Drinking Water containing *clostridium perfringens*, 30:431

Drinking Water containing endocrine disruptors

- and pharmaceuticals treated with ozone, 28:445
- Drinking Water** containing humic and fulvic acids, 25:399
- Drinking Water** containing natural organic matter, 30:321
- Drinking Water** containing pharmaceuticals treated with ozone, 28:415
- Drinking Water** contamination by pharmaceuticals, 35:249
- Drinking Water Disinfection** by UV irradiation, 30:43
- Drinking Water** disinfection efficiency, 39:408
- Drinking Water Disinfection** with ozone and chlorine dioxide, 21:433
- Drinking Water Disinfection**, 7:63
- Drinking Water Disinfection**, combined application of ozone and chlorine or chloramine to reduce production of chlorinated organics in, 5:79
- Drinking Water Distribution Systems**, influence of temperature on bacterial regrowth in, 7:205
- Drinking Water Distribution Systems**, remobilization of polynuclear aromatic hydrocarbons from coal tar linings in, 18:517
- Drinking Water** in Hanshin Water Supply Authority, 39:398
- Drinking Water** in Switzerland and presence of bromate, 25:159
- Drinking Water Mains** disinfection, 34:243
- Drinking Water** ozonation in a confined plunging liquid jet contactor, 25:1
- Drinking Water** ozonation with biofiltration, 37:227
- Drinking Water Ozonation**, improvement in effectiveness through the use of hydrogen peroxide, 7:241
- Drinking Water** plant modeling, 34:280
- Drinking Water Plants**, operating experiences of, 14:501
- Drinking Water**, pilot plant studies in Finland, 16:367
- Drinking Water** prediction of bromate formation, 29:353
- Drinking Water** purification in developing countries, recent developments and the role of ozone in, 2:241
- Drinking Water Quality** affected by anion exchange, 35:283
- Drinking Water** sand filter improvement by pre-ozonation, 33:66
- Drinking Water Treatment** and bacteria survival, 22:65
- Drinking Water Treatment** and bromate formation factors, 22:267
- Drinking Water Treatment** and contactor design, 23:369
- Drinking Water Treatment** and *Cryptosporidium* inactivation, 22:99
- Drinking Water** treatment and formaldehyde formation during ozonation, 25:41
- Drinking water Treatment** and humic acid removal, 40:321
- Drinking Water Treatment** and inactivation of *Cryptosporidium*, 23:259
- Drinking Water** treatment and microorganism inactivation with ozone, 21:293
- Drinking Water Treatment** and natural organic matter, 36:73
- Drinking Water Treatment** and oxidation of micropollutants, 21:207
- Drinking Water Treatment** and ozonation of alicyclic amines, 21:23
- Drinking Water Treatment** and ozone dissolution systems, 22:329
- Drinking Water Treatment** and ozone oxidation with metal oxide catalysts, 25:25
- Drinking Water Treatment** and ozone-induced changes in NOM structure, 21:551
- Drinking Water Treatment** and pesticides, 27:83, 27:173
- Drinking Water Treatment** and removal of humic acids, 23:41
- Drinking Water Treatment** and salicylic acid and peptides removal, 21:261
- Drinking Water Treatment** and the R_{ct} concept, 21:239
- Drinking Water** treatment at Sebago Lake, Portland, Maine, USA, start-up and optimization, 19:255
- Drinking Water Treatment** by ozonation followed by slow sand filtration for the removal of humic color, an experimental study of, 6:3
- Drinking Water** treatment by ozone in Huron river water, 23:105
- Drinking Water** treatment by UV light, 30:70
- Drinking Water Treatment** containing Cinnamic Acid, 23:177
- Drinking Water Treatment** containing gasoline compounds, 27:301
- Drinking Water Treatment** containing gram positive bacteria and yeast, 23:183
- Drinking Water Treatment** for NOM removal, 33:267
- Drinking Water Treatment in Florence, Italy**, influence of H_2O_2 in ozonation treatment of, 18:117
- Drinking Water Treatment** in London and Oxford, UK, 25:409
- Drinking Water Treatment in Montreal, Canada**, 15 years experience, 18:299

42 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Drinking Water** treatment in presence of adsorbable organic halides, 38:452
- Drinking Water Treatment** in presence of PFOA, 24:63
- Drinking Water Treatment** of water containing dissolved manganese, 23:149
- Drinking Water Treatment** of water containing Microcystin-LR by ozone, 23:161
- Drinking Water Treatment Plants** using multiple stage ozonation, cellular toxicity and mutagenicity assays from on-site sampling in, 9:179
- Drinking Water Treatment Plants**, Optimization of Ozone for in Switzerland, 17:1
- Drinking Water Treatment** preozonation, 29:317
- Drinking Water Treatment** under Chick-Watson Law and CT concept, 22:227
- Drinking Water Treatment** using ozone and granular activated carbon, 28:237
- Drinking Water Treatment** using ozone for Atrazine removal, 21:39
- Drinking Water Treatment** using photocatalysis, 27:311
- Drinking Water Treatment** via catalytic ozonation with Co(II), 25:261
- Drinking Water Treatment** with advanced oxidation processes, 22:305
- Drinking Water** treatment with advanced oxidation, 32:217, 32:295
- Drinking Water** treatment with nano-metal oxides, 36:549
- Drinking Water Treatment** with ozonation in presence of titanium dioxide catalyst, 22:447
- Drinking Water Treatment** with ozone and byproduct formation/removal, 21:79
- Drinking Water Treatment** with ozone and chlorine dioxide, 21:465
- Drinking Water Treatment** with ozone and membrane contactors, 27:209
- Drinking Water Treatment** with ozone and PFOA, 25:185
- Drinking Water** treatment with ozone in Canada, 21:119
- Drinking Water Treatment** with ozone in colored upland water, 21:615
- Drinking Water Treatment** with ozone in Germany, 21:163
- Drinking Water Treatment** with ozone in Japan, 10:309, 13:623, 21:127
- Drinking Water Treatment** with ozone in Poland, 21:177
- Drinking Water Treatment** with ozone in presence of bicarbonate, 25:285
- Drinking Water Treatment** with ozone in Switzerland, 21:187
- Drinking Water Treatment** with ozone in the United Kingdom, 15:515, 21:201
- Drinking Water Treatment** with ozone in the USA, 21:99
- Drinking Water Treatment** with ozone, 8:49; 8:77; 8:151; 8:217; 8:235; 8:261;
- Drinking Water Treatment with Ozone**, formation of chloropicrin in, 10:241
- Drinking Water Treatment** with ozone, microbial growth, 20:303
- Drinking Water Treatment** with plunging liquid jet contactor, 28:131
- Drinking Water Treatment**, application of ozonation schemes of organophosphorus pesticides in, 6:207
- Drinking Water Treatment**, at Budapest, and Debrecen, Hungary, 13:479
- Drinking Water Treatment**, at Los Angeles, CA, "The Big Switch", 13:711
- Drinking Water Treatment**, at Monroe, MI, costs of ozonation, 13:161
- Drinking Water Treatment**, by multiple stage ozonation, 9:37
- Drinking Water Treatment**, by ozone, 9:93; 12:157; 12:217; 12:231; 12:355
- Drinking Water Treatment**, criteria for selection for ozone generation for, 18:57
- Drinking Water Treatment**, effects on coagulation of ozone. oxalic acid, and organic matter molecular weight, 18:311
- Drinking Water Treatment**, efficiency of manganese oxidation by ozone in, 15:331
- Drinking Water Treatment**, in New York City with ozone/DE filtration, 15:131
- Drinking Water Treatment**, in Paris, France Suburbs, costs of, 13:607
- Drinking Water Treatment**, influence of preozonation on clarification by flotation for, 5:3
- Drinking Water Treatment**, modeling of ozone treatment of, 15:149
- Drinking Water Treatment**, mutagenicity testing after ozone treatment, 11:245
- Drinking Water Treatment**, ozonation design considerations, 9:109; 9:125
- Drinking Water Treatment**, ozonation with ultrafiltration, 22:637
- Drinking Water Treatment**, ozone application for, in the United Kingdom, 7:11
- Drinking Water Treatment**, ozone case history at Potsdam, NY, 5:51
- Drinking Water Treatment**, ozone decay kinetics in natural waters, 20:361

- Drinking Water Treatment**, ozone flocculation effects in, 16:55
- Drinking Water Treatment**, ozone vs. chlorine, 22:249
- Drinking Water Treatment**, threshold levels for bromate ion formation in, 19:323
- Drinking Water Treatment**, with ozone + BAC treatment, 13:91
- Drinking Water Treatment**, with ozone at Zürich, Switzerland, 13:41
- Drinking Water Treatment**, with ozone in presence of nonpolar alumina phases, 26:367
- Drinking Water Treatment**, With Ozone, 17:1; 17:15; 17:25; 17:53; 17:97; 17:283; 17:297; 17:311; 17:449; 17:485; 17:587; 17:607; 17:647; 17:673;
- Drinking Water Treatment**, with ozone, direct viable count methodology in, 12:1
- Drinking Water Treatment**, With Ozone/Hydrogen Peroxide, 17:25; 17:97
- Drinking Water Treatment**, with UV radiation, ozone/UV, and UV/hydrogen peroxide, 9:299
- Drinking Water**, advantages of preozonation at Mont Valérien (France) plant, 13:437
- Drinking Water**, byproducts from ozonation/post-chlorination of humic acid in, 14:51
- Drinking Water**, byproducts of ozonation in, quantitated using fractionated natural organic matter, 16:1
- Drinking Water**, containing detergents and/or surfactants, with ozone, 13:639
- Drinking Water**, disinfection, 14:1; 14:123
- Drinking Water, European**, survey of bromate ion in, 18:325
- Drinking Water**, facilities using ozone, 12:95; 12:199
- Drinking Water**, formation characteristics of formaldehyde by boiling and ozonation in, 14:153
- Drinking Water**, impact of preozonation on GAC quality and performance, 19:1
- Drinking Water**, new pilot plant studies at the Budapest Waterworks, 16:29
- Drinking Water**, ozonated, impact of support media on biological treatment of, 19:97
- Drinking Water**, ozone demand of, 19:339, 20:513
- Drinking Water**, ozone treatment, comparison of two ozone plants -- one with low and the other with medium high frequency, 1:107
- Drinking Water, Surface Water, Ozonation of**, effects of various parameters on bromate ion formation, 18:1
- Drinking Water, Surface Water**, ozone/GAC treatment of at 11 Anglian Water
- Drinking Water**, treatment and minimizing bromate formation, 26:381
- Drinking Water**, treatment with ozone in Yugoslavia, 14:101
- Drinking Waters, Switzerland**, treatment with ozone, 1:357, during ozonation, 18:1
- Drought** conditions and ozone plant operations, 39:203
- Dry and Humidified Gaseous Ozone** for inactivation of vegetative and sporulated bacteria, 32:180
- Dry Cleaner** wastes remediated with ozone, 32:130
- DSC** (differential scanning calorimetry) in ozonation of oleate and ethyl elaidate ozonides, 37:431
- Durability** test results for ozone construction materials, 24:249
- DV-X_a Calculation** of pyrrolidone derivatives ozonation, 33:470
- Dye C. I. Acid Blue 193** treated with ozone/hydrogen peroxide, 33:23
- Dye Decolorization**, with ozone in Kraft paper machine whitewater, 19:549
- Dye** degradation by advanced oxidation, 36:244
- Dye Manufacture** and ozonation of sulfosalicylic acid, 24:117
- Dye Ozonation**, 30:344, 38:291
- Dye Ozonation**, in a gas-inducing reactor, 26:165
- Dye Removal** by ozonation, 31:294
- Dye Removal** using ozone-loaded solvent, 25:485
- Dye** treatment with electron beam irradiation, 35:49
- Dye Waste**, multi-stage ozonation of, 13:11
- Dye Wastewater Treatment**, by Ozone and Advanced Oxidation, 17:149
- Dye Wastewater**, ozone treatment, 20:111, 22:535
- Dye-Bath Effluents**, treatment with ozone, 24:413
- Dye-finishing Wastewater**, treatment with ozone/UV, 26:239
- Dyeing Wastewater** treatment with ozone, 28:199; 29:139; 30:439
- Dyes** color removal with ozone and hydrogen peroxide, 27:265
- Dyes** degradation by advanced oxidation, 40:372
- Dyes**, kinetics of ozonolysis of, 9:153
- Dyestuff Decolorization** by ozone, 23:295
- Dyestuff Removal** by ozonation and post-biodegradation, 27:273
- Dyestuff Removal** with ozone, 24:413
- Dyestuff** treated with ozone, 34:196
- Dyestuff** water decolorization with Fenton's Reagent, 22:196
- Dyestuffs** treatment with ozone in injection-type downflow UV/O₃ oxidation reactor, 21:539
- Dyestuffs** treatment with ozone, 21:487; 28:141

44 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

Dynamic Simulation for ozone treatment of nonionic surfactants in bubble column reactor, 29:65

E. coli in sugarcane juice, 40:198

***E. coli* Disinfection**, by ozone, effects of mixing on, 13:593

E. coli in ozone laundry systems, 31:369

E. Coli, decay in presence of ozone, 20:205

Earth Probe of stratospheric ozone, 33:489

East Bay Municipal Utility District, prequalification of ozone equipment suppliers, 13:249

EC 50 of Tropaeolin O solutions treated with ozone and UV, 28:9

Ecoclear® Process, at full-scale installations, 19:297

Eco-design Model for treatment of bath water, 25:345

Eco-Friendly Method for treatment of raw animal skins with ozone, 32:449

E-coli in swimming pool water, 37:456

Economic Aspects, and engineering aspects of wastewater disinfection with ozone under stringent bacteriological standards, 2:159

Economic Benefits of ozone in treating laundry, 29:85

Economic Benefits of ozone laundering, 31:339, 31:348

Economic Comparisons, of ozone generation processes, 12:401

Economic Efficiency of ozone treatment of paper mill effluents, 31:452

Economical Evaluation of ozone and advanced oxidation treatment of pulp and paper industry wastewater, 27:27

Economics of Ozonation, at Monroe, MI, 5:245; 13:161

EDCs treatment with ozone, 30:65

Eddy Diffusion Theory, in ozonation of 1,3-cyclohexanedione, 13:421

EDTA removal from pulp mill effluents with ozone, 22:279

EEF-enhanced Micro-electrolysis for pretreatment of oil refinery wastewater, 38:472

Effect of Ozone/gamma process for 2,4-D removal, 33:50

Effect of Temperature, in ozone generation with air, oxygen or air + oxygen, 20:191

Effective Absorption Cross-Section, 35:229

Effective Lifetime of ozone in a cylindrical tube, 33:106

Efficiency Index in treatment of MTBE with ozone, 24:56

Efficiency of advanced oxidation of recalcitrant and toxic wastewater concentrate, 34:163

Efficiency of electrochemical generation, 33:389

Efficiency of Ozone Generation, 28:119

Efficiency of Ozone Synthesis in coplanar discharge, 25:431

Efficiency of ozone-electrolysis process, 33:463

Efficiency of patulin degradation with ozone, 31:224

Efflorescence Microscopy and inactivation of *Cryptosporidium* with ozone, 23:1

Effluent Characterization, of ozone-bleached eucalypt Kraft pulps, 19:481

Effluent Organic Matter effect on decomposition of ozone, 34:42

Effluent Organic Matter effect on ozone demand, 34:26

Effluent Quality in paper deinking, 35:381

Egg Shells treated with ozone, 29:147

Elastomers resistance to liquid and gas phase ozone, 24:249

Electric Arc Discharge, and UV irradiation, destruction of bromate ion of by, 18:271

Electric Charge, passes through the silent electric ozone generator discharge chamber and electric field, calculation of, 18:127

Electric Conductivity effect on pulsed electric discharges, 35:22

Electric Discharges for bio-decontamination, 27:469

Electrical Discharge enhanced by gas flow in needle to plate discharge, 24:221

Electrical Energy per Order (EEO) for IX-UF treated water, 32:383

Electrical Energy per Order (E_{EO}) in treatment of natural waters using UV and H₂O₂, 32:329

Electrical Energy per Order (EEO), of treatment of membrane concentrate, 32:16

Electroanalysis of Trace Copper in Blood, 39:61

Electrocatalysis in electrochemical ozone generation, 31:287

Electrocatalysis, 33:389; 35:149

Electrochemical Cell, 35:149

Electrochemical Generation of High Concentration Ozone, for small-scale application, 6:29

Electrochemical Generation, 30:113; 33:389

Electrochemical Ozone Generation, 31:287; 34:49; 35:149

Electrochemical Systems and production of gas diffusion electrode with ozone, 25:307

Electrode Arrangement in ozone generation, 29:215

- Electrode Materials** in production of gas diffusion electrode with ozone, 25:307
- Electrodes** in electrochemical ozone generation, 34:49; 35:149
- Electrodes** in electrochemical ozone generation, 35:149
- Electrolysis** and ozone for 1,4 Dioxane removal, 29:13
- Electrolysis** for in-situ ozone generation, 33:463
- Electrolysis** of ballast water, 36:515
- Electrolysis** of night soil, 30:282
- Electrolysis** to remove bromides, 34:269
- Electrolysis/Ozonation**, 12:115
- Electrolyte** in electrochemical ozone generation, 35:149
- Electrolyte Solutions** and ozone solubility, 39:69
- Electrolytic Ozone Generator** for preparation of gas diffusion electrode 25:307
- Electrolytic Ozone Generator**, 33:114
- Electrolytic Reactor** for bromide removal, 34:269
- Electrolyzed Oxidizing Water** for powdery mildew infection control, 31:10
- Electrolyzed Water** and ozone used for treating fruit and vegetables, 32:144
- Electrolyzed water** for crop treatment, 30:210
- Electrolyzed Water**, and ozone used in sushi factory, 32:71
- Electron Beam Irradiation** of aqueous naphthalene-1,5 disulfonic acid, 28:437
- Electron Beam** irradiation of dyes mixture, 35:49
- Electron Beam Irradiation** of phenol, 25:377
- Electron Transfer** in reaction of ozone with tertiary butanol and formate ion, 36:532
- Electron-Donating Group Effects**, on Formation of Azo- and Azoxybenzenes during Ozone Reactions with Anilines, 17:619
- Electronic Chip Manufacturing**, ozone in, review, 18:477
- Electron-Molecule Collisions During Silent Electric Discharge**, chemical reactions involved in oxygen, 18:141; chemical reactions involved in various mixtures of oxygen, argon, nitrogen or carbon monoxide, 18:159
- Electron-Withdrawing Group Effects**, on Formation of Azo- and Azoxybenzenes During Ozone Reactions with Anilines, 17:619
- Electroozonation** in degradation of methylene blue, 24:159
- Electroozonation**, 23:467
- Electrophilic Addition** in ozonation of dimer lignin compounds, 23:139
- Electroplating Wastewater Treatment with Ozone**, review of, 18:477
- Electrospray Ionization Tandem Mass Spectrometry (ESI/MS)**, 30:189
- Electrostatic Precipitators**, with back-corona effect, 26:11
- Electrostatic Spraying Ozonation** of BTEX, 23:77
- Electrosynthesis** in wire-to-cylinder ozone generator, 20:317
- Elemental Chlorine-Free Pulp Bleaching Sequences**, 18:566
- Elimination** of antibiotics with membrane bioreactors and advanced oxidation processes, 31:428
- Elizabethtown Water Company**, 22:249
- Emerging Contaminants** and ozonation of ethynlestradiol, 31:422
- Emerging Contaminants** and water reuse 36:123
- Emerging Contaminants** clofibric acid, 38:425
- Emerging Contaminants** in Great Lakes Basin wastewater effluent, 37:36
- Emerging Contaminants** in U. S. municipal wastewater plants, 32:43
- Emerging Contaminants** oxidation with ozone, 37:509
- Emerging Contaminants**, 35:263, 40:251, 40:338
- Emission Control** of NO_x by ozonation, 34:252
- Emission Modeling** in light attenuating media, 27:459
- Endocrine Disrupters** removal by ozonation, 32:204
- Endocrine Disrupting Chemicals (EDCs)** removal with ozone-loaded solvent, 39:343
- Endocrine Disrupting Chemicals** and water reclamation, 36:153
- Endocrine Disrupting Chemicals** degradation by ozone/AOP, 29:153
- Endocrine Disrupting Chemicals** in wastewater, 30:238
- Endocrine Disrupting Chemicals** of ozonation byproducts of 4-nonylphenol, 30:120
- Endocrine Disrupting Chemicals** ozonation modeling, 36:289
- Endocrine Disrupting Chemicals** treatment with ozone, 27:389; 28:445; 30:65, 32:388
- Endocrine Disrupting Compounds** in Paşaköy wastewater treatment plant effluent, 32:209
- Endocrine Disrupting Compounds** treated with ozone in wastewater plants, 31:415
- Endocrine Disrupting Compounds** treated with UV oxidation, 34:354
- Endocrine Disrupting Compounds** treated with UV, 35:38
- Endocrine Disrupting Compounds** treatment with advanced oxidation, 32:217, 32:238

46 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Endocrine Disrupting Compounds**, 34:16
- Endocrine Disrupting Compounds**, o-phenylphenol, 34:300
- Endocrine Disruption** of tank cleaning generated concentrate, 34:32
- Endocrine Disruptors** in Detroit River water treated with ozone, 28:415
- Endocrine-Disrupting Compounds (EDCs)** removal, 33:253
- Endocrine-Disrupting Compounds** removed with ozone, 37:154
- Endogeneous Activity** in biological wastewater treatment, 31:247
- Endoscopes** disinfection, 38:346
- α -Endosulfan**, Removal by Ozone and Advanced Oxidation in Drinking Water, 17:183; 17:657
- Endospores** as indicators of microbial treatment efficiency, 22:501
- Energy** consumption of electrochemical generation, 33:389
- Energy Conversion** in pulsed discharge ozone generator, 39:33
- Energy Conversion**, 40:361
- Energy Costs** for ozonation at Monroe, MI, 13:161
- Energy Efficiency** in ozone generation, 38:86
- Energy Efficiency** of pulsed corona discharge, 35:116
- Energy Efficiency** of serpentine shape ozone generator, 39:209
- Energy Efficiency** of treating cut vegetables with ozone, 31:309
- Energy Flow** in an ozone generator, 15:371
- Energy Utilization Efficiency**, exergy identification of during ozone generation, 19:201
- Engineering Aspects** and economic aspects of wastewater disinfection with ozone under stringent bacteriological conditions, 2:159
- Engineering Aspects** of ozone generation from oxygen and air, 10:351
- Engineering Aspects**, of ozone contacting systems, 14:487
- Engineering Design** for ozone self-decomposition, 29:55
- Enhanced Coagulation** affected by pre- and intermediate ozonation, effect on enhanced coagulation of DBT precursors, 25:453
- Enhanced Membranes**, 39:310
- Enhanced Ozone**, in upper troposphere, 26:181
- Enhancement Factor** in maleic acid ozonation, 25:13
- Enhancement Factor** in oxidation of cycloalkenes with ozone, 28:329
- Enhancement Factor** in ozonation of stabilized landfill leachates, 28:309
- Enhancement Factor** in ozone treatment of Kraft pulp mill effluents, 23:479
- Enhancement Factor** in treatment of Kraft Pulp Mill effluents with ozone, 24:307
- Enhancement Factor**, in ozonation of C.I. Reactive Black 5 and Indigo, 29:493
- Enhancement Factor**, in ozone treatment of wastewater containing azo dye, 26:539
- Enhancement** of biodegradability of 2,4-dichlorophenol and nitrobenzene solutions, 27:381
- Enteric Viruses** in sewage effluent, factors influencing the ozone inactivation of, 6:235
- Enteric Viruses**, and fecal bacteria, elimination of by ozone during wastewater disinfection, 4:91
- Enteric Viruses**, disinfection of with ozone in surface waters, 15:279
- Enterococcus faecalis*** in ozone laundry systems, 31:369
- Enterococcus sp.*** inactivation by ozone, 37:467
- Enterococcus sp.*** inactivation by ozone, 38:443
- Enthalpy Change** during ozone generation, 32:153
- Environmental Benefits** of ozone laundering, 31:339, 31:348
- Environmental Catalysis** of phenolic acids, 31:403
- Environmental Fungi and Bacteria** with air purifier ozone generator, 34:225
- Environmental Fungi** removal via ozone gas treatment, 31:326
- Environmental Preservation**, 38:25
- Environmentally Friendly** bleaching processes, 35:316
- Enzymatic Polymerization**, for removal of aromatic compounds from water in conjunction with ozonation, 8:247
- EOX** in pulp and paper industry, 35:109
- Equipment Problems**, in ozonation facilities, 12:95
- Erhlich Ascitic Tumor** and ozone therapy, 30:398
- Erwinia carotovora subsp. Carotovora*** inactivated by ozone, 39:127
- Escherichia coli*** inactivation with ozone, 21:293
- Escherichia coli***, growth media for recovery of from ozone-treated water by membrane filtration, 11:383;
- Escherichia coli***, inactivation in Amsterdam water supply, 26:465
- Escherichia coli***, ozone disinfection of, 12:157
- Escherichia coli***, vital-fluorochromization of using 3',6'-diacetylfluorescein to determine damages of cell membranes and loss of metabolic activity in upon ozonation, 18:173
- Esculetin** oxidation by ozone, 27:317
- ESR** (electric spin resonance) in ozonation of oleate and ethyl elaidate ozonides, 37:431

- 17 β -Estradiol**, decomposition by ozone, 26:563; 30:376; by ozone/AOP, 29:153
- 17 α -Ethinylestradiol** degradation by ozone/AOP, 29:153; 30:230
- Estriol** degradation by advanced oxidation, 38:358
- Estrogenic Activities** of sewage effluent, 27:389
- Estrogenic Activity** of ozonation byproducts of 4-nonylphenol, 30:120
- Estrogenic Activity** of tank cleaning generated concentrate, 34:32
- Estrogenicity**, decrease by ozonation of 17 β -estradiol, 26:563
- Estrogens** treated with ozone, 28:353
- Estrone** degradation by ozone/AOP, 29:153
- Estrone** degradation with ozone, 30:249
- ETBE** removal by catalytic ozonation, 27:301
- Ethanol Withdrawal** and ozone therapy, 34:425, 34:432
- Ether Oxidation**, 30:165
- Ethyl Alcohol**, 12:1
- Ethyl Elaidate Ozonide**, 37:420
- Ethyl Malonate** synthesis by catalytic ozonation, 38:36
- Ethyl Mercaptan**, ozonation of, 13:331
- Ethyl Oleate Ozonide**, 37:420
- Ethyl tert. Butyl Ether**, oxidation by ozone and combined ozone/H₂O₂, 16:41
- Ethylbenzene** removal by ozonation, 23:77
- Ethylbenzene**, ozone destruction of in distilled and drinking water, 9:265
- Ethylbenzenes**, ozonation of in aqueous solution, 5:151
- Ethylene Abatement** in citrus storage, 32:122
- Ethylene Glycol**, oxidation in water by ozone, then ozone/UV radiation, 9:369
- Ethylene Glycol**, oxidation with ozone/electrolysis, 12:115
- Ethylene Glycol**, ozonation and oxidation products of, 12:1
- Ethylene Removal** in stored fruits and vegetables, 32:144
- Ethylene Vinyl-Acetate Waste**, 30:275
- Ethylenediaminetetra (methylenephosphonic Acid) Oxidation**, 20:99
- Ethylenediaminetetraacetic Acid**, ozone destruction of metal complexes of in radioactive wastewaters, 1:133
- Ethinylestradiol** catalytic ozonation, 31:422
- Eucalyptus** Kraft pulp bleaching with ozone, 25:523
- Eucalyptus**, Kraft pulp bleached with ozone in TCF process, 26:443
- European Drinking Water**, survey of bromate ion in, 18:325
- European Experience** in drinking water treatment and Chick Watson Law, 22:227
- European Use of Ozone**, 21:465
- Evidence-Based Medicine**, 38:322
- Excess Sludge** generation in phenolic wastewater treatment, 32:417
- Excess Sludge** reduction by ozone, 29:415; 30:238
- Excilamp**, 30:99
- Excimer** in ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583
- Excimer lamps** for ozone generation, 30:228
- Excitation-emission Matrix Fluorescence Spectroscopy**, 34:109
- Excited Ozone Species**, during ozone generation, 15:167
- Excited States of Ozone**, in cold plasma reactor for ozone synthesis, 9:247
- Excystation**, of cysts by ozone or PEROXONE, 14:71
- Exergetic Model**, of ozone generation, 19:201
- Exergy Losses**, during ozone generation, 19:201
- Exergy**, in energy utilization efficiency during ozone generation, 19:201
- Exhaust Air Treatment** with ozone in Germany, 21:163
- Exhaust Gas from Ozone Reactor** during sludge reduction via ozonation, 33:171
- Exhaust Gas** treated with ozone for nitrogen oxides reduction, 28:105
- Exhaust Ozone**, destruction of by injection into activated sludge tank, 6:199
- Exopolysaccharides**, influence of on bacterial resistance to ozone, 9:259
- Expanded Mesh Dielectric Barrier Discharge**, 24:321
- Experimental Design** for bleaching of linen fabrics, 35:316
- Experimental Design** of ozone generator, 37:3
- Experimental Design**, for bleaching of Kraft pulp in TCF process, 26:443
- Experimental Design**, in disinfection of drinking water to reduce bromate formation, 26:247
- Exponential Relationship** in ozone bubble column, 39:44
- Extended CSTR** calculational methods for *Cryptosporidium* inactivation, 27:335
- External Model Evaluation** in ozonation of micropollutants, 36:289
- Extracellular Polysaccharides** removal in biofilms, 31:3
- Extracorporeal Circulation**, in ozonation of blood, 26:195
- Extraction** of tetracycline from water, 37:405

48 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

Extruded Food, 40:487

Fabrication Methods, of ozone generator electrodes, 19:169

Factorial Design (2^k) in modeling of synthetic wastewater ozonation, 33:23

FACTS (Syringaldazine) Method, for ozone analysis, 10:337

Fading of ozone bleached denim, 38:175; 38:395

Fairfax County system design for inactivation of *Cryptosporidium*, 27:129

Falling Film Ozone Reactor, 17:527

Farmoor (UK) Water Treatment Plant, 25:417

Fatty Acids ozonation, 31:301

Fatty Acids, byproducts from ozonation of, 11:143

Fe₃O₄ for catalytic oxidation of Ciprofloxacin Hydrochloride, 40:457

Fecal Bacteria, and enteric viruses, elimination of by ozone during wastewater disinfection, 4:91

Fecal Coliforms Inactivation, in full-scale ozone bubble diffuser contactors, 15:295

Feed Gas Alternatives, for ozone generation, 14:13; 14:276

Feed Gas for ozone generation in Switzerland, 21:187

Feed Gas Selection for ozone generation, criteria for, 18:57

Feline Calicivirus inactivation with ozone, 35:217

Fenofibric Acid catalytic ozonation, 33:434

Fenton Oxidation for landfill leachate treatment, 33:294

Fenton Oxidation of semiconductor wastewater, 27:225

Fenton Oxidation Process for treatment of raw sugar beet juice 40:54

Fenton process cost, 33:211

Fenton Process for dyes color removal, 27:265

Fenton Process for treatment of landfill leachate, 31:28

Fenton Process, for treatment of surfactants in wastewater, 26:327

Fenton Reaction for remediation of diesel fuel contaminated soil, 28:37

Fenton Reaction with nitroaromatics, 23:343

Fenton Reagent for treatment of dye wastewaters, 23:295

Fenton Reagent for treatment of graphical industry wastewater, 35:16

Fenton's Oxidation of pulp and paper industry wastewater, 27:37

Fenton's Reagent for decolorization of molasses wastewater, 27:365

Fenton's Reagent for oxidation of herbicides in groundwater, 22:607

Fenton's Reagent for Treatment of Hazardous Wastes, 17:119

Fenton's Reagent treatment of esculetin, 27:317

Fenton's Reagent used in decolorization of dyestuff waters, 22:196

Fenton's Reagent, for Removal of Triazines from Water, 17:183

Fenton-Based Treatment for textile wastewater, 33:285

Fenton-like Advanced Oxidation Process for treatment of blood, 39:61

Fenton-like catalyst for 2,4-dichlorophenol degradation, 37:494

Fenton-like process for treating dinitrotoluene wastewater, 38:225

Ferric Ion, coagulation, effects of ozonation on, 12:295

Ferric Oxide for catalytic ozonation of oxalic acid, 40:448

Ferrous Oxidation in Xylenol Orange, 28:181

Ferrous Sulfate, Coagulation with Ozone or Ozone/Hydrogen Peroxide, 17:25

Ferulic Acid, Byproducts from Ozonation of in Water, 17:687

Fiber Reactive Dyes, treatment with ozone, 24:413

Field Distribution in ozone generation, 29:215

Field Irrigation wastewater treatment, 30:367

Field Trials for decontamination of rooms with ozone, 31:216

Filament Discharge, 37:221

Filamentous sludge bulking with ozonation, 20:1

Filamentous Sludge reduction by ozonation, 36:238

Film for food packaging, 30:81

Film Model for sludge reduction by ozone, 29:415

Film Theory applied to ozonation of food processing wastewater, 22:167

Film Theory in domestic wastewater ozonation, 23:219

Film Theory in ozonation of C.I. Reactive Black 5 and Indigo, 29:493

Film Theory in ozonation of organic compounds, 20:403

Film Theory in ozone advanced oxidation reaction mechanisms, 19:13

Film Theory Utilization, for kinetic study, during ozonation of azo dyes, 11:391

Film Theory, application to ozonation of 1,3-cyclohexanedione, 13:397

Film Theory, application to ozonation of Malathion, 13:487

Film Theory, of gas/liquid reactions of ozone,

14:303

Film Treatment with ozone, 24:1

Filter Run Time, extension of, by ozone/DE filtration, 15:131

Filterability Index applied to direct filtration after ozonation, 24:239

Filters, swimming pools and hot whirlpools, ozone effects on, 12:393

Filtration of complexed iron, 30:73

Filtration of drinking water with ozone treatment in presence of bicarbonate, 25:285

Filtration of manganese in water after ozonation, 27:147

Filtration of ozonated groundwater containing iron, 28:269

Fine Bubble Contactors for ozone contact, 22:369

Fine Bubble Diffuser Ozone Contactor for treatment of Kraft Pulp Mill effluents, 24:307

Fine Bubble Diffusers vs. membranes for ozone contacting, 27:209

Fine Bubble Diffusion, 38:245

Fine Bubble Type Contactor for ozone treatment of dyestuff solutions, 34:196

Fine Wire Electrode type of ozone generator, 10:137

Finishing of cotton fabrics, 29:325

Finite Element Analysis of Ozone Contactors, 17:587

Finland Groundwater containing iron treated with ozone, 28:269

Fipronil degradation with ozone and TiO₂, 37:186

First-Order Reactions, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methyl-isoborneol, 15:1

Fish and Seafood treatment with ozone, 32:137

Fish Culture recycling system, ozonation in, 1:319

Fish Culture, ozonation unit applied for, 7:179

Fish Disease Control with ozone, 1:295

Fish Hatcheries, ozone treatment of sea water for cultivation, 13:697

Fish Hatcheries, pilot plant results of ozonation of water for, 1:183

Fish Hatchery Water, ozone disinfection of, 2:203; 9:141

Fixed Bed Biofilm Reactor (FBBR), 37:227

Fixed Bed catalytic ozonation of fenofibric and clofibric acids, 33:434

Flash UV Irradiation, 14:215

Floc Strength in humic acid ozonation, 32:435

Floc Structure Ozonation, 39:80

Flocculation in humic acid ozonation, 32:435

Flocculation of domestic wastewater by ozonation, 21:605

Flocculation Processes, benefits of ozone treatment prior to, 5:21; 16:55

Florence, Italy, Influence of H₂O₂ in ozone treatment of drinking water in, 18:117

Florescence Intensity of ozonated secondary effluents, 30:376

Flotation Deinking, 35:381

Flottazone process in France, 21:153

9-Fluorenone, ozonation of and fluorene, 1:249

5-Fluorouracil removal with ozone, 21:69

Flow Cytometry in inactivation of *Cryptosporidium* with ozone, 23:1

Flow Injection Analysis techniques for chemical reactor kinetic studies, 28:17

Flow Measurement, 22:1

Flow Operation in electrochemical generation, 33:389

Flow Operation in electrochemical ozone generation, 31:287

Flow Systems for detergent removal, 33:301

Flow-through Electrochemical Reactor, 30:113

Flow-through Photoreactor, 30:99

Fluconazole Resistance in ozonated olive oil, 39:455

Flue Gas oxidation with ozone, 29:207

Flue Gas treatment by ozone, 40:29

Flue Gas Treatment with ozone, 34:204

Flue Gas Treatment, 38:382

Fluence as a measure of UV dosage, 23:239

Fluence Rate, 34:306

Fluidization of DDT contaminated soil, 36:166

Fluidized Bed Filtration, for ozone residual control, 24:429

Flume Water Treatment and Recycling, in treatment of fresh cut salad mixes with ozone, 32:66

Fluorene, ozonation of and 9-fluorenone, 1:249

Fluorene, treatment with ozone, 26:453

Fluorescence in wastewater ozonation, 35:501

Fluorescence Microscope to evaluate bacterial cells in tooth decay, 35:456

Fluorescence of ozone treatment groundwater, 35:438

Fluorescent Brightener 28, removal by ozonation or advanced oxidation (O₃/H₂O₂), 19:129

Fluorinated Solvent and ozone for degradation of pharmaceuticals, 28:85

Fluoroalkenes, ozonation of, 8:27

Flux parameters of ozonated water, 30:152

Flyback Inverter for ozone generator in Colombia, 30:202

Foaming Systems with ozone generation, 24:181

Fog of ozonated water for malting barley disinfection, 38:115

Food Applications – patulin decomposition, 30:189

50 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Food Applications** and *Aspergillus niger* treatment with ozone, 28:347
- Food Applications** for ozone in seafood processing plants, 28:171
- Food Applications** for ozone, 24:1
- Food Pathogens** treatment with UV light, 30:93
- Food Processing** and ozonation of wastewater, 22:167, 23:53
- Food Processing** and ozone in Japan, 28:425
- Food Processing and Packaging**, 32:137
- Food Processing** and use of ozone in the USA, 21:99
- Food Quality** treated with ozone, 29:113
- Food Safety** in cut vegetables treated with ozone, 31:309
- Food Spoilage** reduced with ozone treatment, 30:81
- Food Storage**, review of applications of ozone for increasing storage times of perishable food, 4:147
- Food** treatment with UV light, 30:93
for treatment of landfill leachate, 32:313
- Forced Convection** in cooling water systems design, 39:188
- Forest Industry** wastes treatment by ozone, 24:369
- Formaldehyde Degradation**, with Ozone/Hydrogen Peroxide, Hydrogen Peroxide/UV Radiation, or Hydrogen Peroxide/Fe(II), 17:119
- Formaldehyde** formation during ozonation of drinking water, 17:53, 25:41
- Formaldehyde Formation** in ozonation of amino acids, 20:381
- Formaldehyde** in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Formaldehyde**, analysis by PFBOA method, 11:127
- Formaldehyde**, formation in drinking water by boiling and by ozonation, 14:153
- Formaldehyde**, formation of during ozonation of natural waters, 19:179
- Formaldehyde**, identification during ozonation of organic compounds in water, 2:251; 12:1 12:115; 12:231; 16:1
- Formamide**, formation by ozonation of amitrole, 9:233
- Formate Anion**, effects of hydrogen peroxide residuals on removal of in biologically active filters, 19:371
- Formate Anion**, formation of during ozonation of natural waters, 19:179
- Formate Ion** reaction with ozone, 36:532
- Formate** removal by biologically active filters, 22:77
- Formic Acid** decomposition by ozone and advanced oxidation, 27:11
- Formic Acid Formation** during catalytic ozonation, 33:158
- Formic Acid** formation during oxidation of Fluorescent Brightener 28, 19:129
- Formic Acid** in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Formic Acid Solution** oxidation with ozone, 22:241
- Formic Acid**, Formation during Ozonation of Drinking Water, 17:511
- Formic Acid**, formation of by ozonation of glyoxylic acid, 9:13
- Formic Acid**, formation of by ozonation, 8:199; 12:1; 12:115, 16:1
- 4-Formyl-2-methoxyfuran**, Byproduct of Ozonation of Coniferyl Alcohol or Ferulic Acid in Water, 17:687
- 2-Formylcinnamaldehyde**, formation of by ozonolysis of naphthalene and 1-methyl-naphthalene, 9:23
- Formyloxaluric Acid**, formation of by ozonation, 8:199
- 4-(N-Formyl)-amino-4-oxo-2-butenoic Acid**, from ozonation of 2-hydroxypyridine, 14:177
- Fort Collins WTP**, 23:149
- Fossil Fuel Utility Stations**, ozonation of cooling systems, 15:81
- Fouling** inhibition of membrane separation, 38:163
- Fouling** of reverse osmosis membranes, 33:379
- Foundry Applications**, 29:461
- Fourier Analysis** to predict ground level ozone concentrations, 40:237
- Fourier Transform Method** for ozone concentration measurement, 38:352
- Fourier Transform near Infrared** used for evaluating strawberry treatment, 36:43
- Fraction** of DOM in UF-membrane flux, 35:208
- Fractionation** of natural organic matter by ozone and chlorine, 22:249
- France** ozone installations, 34:64
- France**, use of ozone, 21:153
- Free Bromine** removal by activated carbon filtration, 33:224
- Free Chlorine** removal by activated carbon filtration, 33:224
- Free Fatty Acids** degradation by sonication/ozone/argon, 37:93
- Free Radical Chain Reactions**, enhancement of in presence of aquatic fulvic acid, 13:349
- Free Radical Inhibition** in oxidation of micropollutants in water, 21:207
- Free Radical Intermediate Reactions**, selectivity and rate of oxidation of solutes, 1:73
- Free Radical Scavengers**, catalytic effects of in ultraviolet light and/or ultrasound ozone oxidation of humic acid and trihalomethane precursors, 7:47

- French Drinking Waterworks** and bromate formation, 24:293
- Freon Effect** on ozone generation from oxygen, 24:29
- Fresh Cooling Water**, ozone treatment of, 11:325
- Fresh Cut Salad Mixes**, treatment with ozone, 32:66
- Fresh Produce** treated with ozonated water, 40:216
- Freshwater Fish** species, acute toxicity of dissolved ozone to eggs and larvae of, 2:177
- Frontier electron Density** in ozonation of benzophenone-2, 40:122
- Froth Flotation** separation of polyvinyl chloride, 29:373
- Fruit Industry**, 35:273
- Fruit Juice** treatment with ozone, 32:166
- Fruit** preservation enhanced by ozone, 39:115
- Fruit Vegetable Seedlings** treated with ozone, 33:179
- Fruits** treatment with ozone, 32:137
- F-Specific Bacteriophages**, as indicators of disinfection efficiency of secondary effluent with UV radiation, 9:353
- FTIR** in ozonation of oleate and ethyl elaidate ozonides, 37:431
- FT-IR Spectroscopy** in ozonation of terpenes, 32:274
- FTIR** to analyze leather bleached with ozone, 39:455
- Full-Scale Design** for *Cryptosporidium* inactivation, 22:99
- Fullerene** degradation by ozone, 28:177
- Full-Scale** distribution system formation of THM, 33:14
- Full-scale** evaluation in Quebec (Canada) drinking water facilities, 37:294
- Full-Scale Ozone Water Plant**, start-up and optimization at Portland, Maine, 19:255
- Full-Scale** reduction of filamentous sludge by ozonation, 36:238
- Full-scale testing** of Coquitlam water supply, 29:287
- Full-Scale** testing of EDC removal, 33:253
- Fulvic Acid (Soil)**, degradation by ozone in aqueous medium, 15:19
- Fulvic Acid Solutions**, ozonation of, 10:39; 14:185; 14:269
- Fulvic Acid, Aquatic**, rate constants of ozone consumption of, 13:349
- Fulvic Acid**, chlorine reaction with after ozonation, effects of bicarbonate ion on, 13:349
- Fulvic Acid**, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methyl-isoborneol, 15:1
- Fulvic Acid**, ozonation of extracted aquatic; chlorination of, 11:69
- Fulvic Acid**, ozonation of in natural waters, product identifications, 2:55, 2:75
- Fulvic Acids** effect on diuron adsorption, 25:399
- Fulvic Acids** treatment with ozone, 21:551
- Fulvic Acids**, Byproducts from Ozonation of in Water, 17:647
- Fulvic Acids**, ozonation of, 8:37; 12:295, 16:1
- Fulvic Acids**, products from ozonation and chlorination, 10:153
- Fumaric Acid** ozonation, 31:301
- Fumigation** and ozone for food preservation, 39:115
- Fumigation** of Green Gram bulks by ozonation, 39:54
- Fumigation** of rice grains, 37:450
- Fumigation** with ozone, 24:1
- Fumigations** for rice grain bulks, 40:191
- Functional Groups**, of NOM and effect on ozonation, 26:153
- Fungi** in barley seeds, 38:115
- Fungi** in extruded dog food, 40:487
- Fungi** in papaya treated with ozone, 34:151
- Fungi** removal via ozone gas treatment, 31:326
- Fungi** removed with ozone, 36:144
- Fungicide** degradation by ozone, 27:83, 27:173
- Fungicide** oxidation by ozone fumigation, 37:479
- Fungus** in Wastewaters, Ozone Treatment of, 17:499
- Furan Carboxylic Acids** as byproducts from catalytic ozonation of humic substances in water, 18:195
- Furan**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Furfural**, Byproduct of Ozonation of Coniferyl Alcohol or Ferulic Acid in Water, 17:687
- Furfural**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Fusarium** disinfection with ozone, 38:115
- Fusarium oxysporum** removal with electrolytically ozonated water, 31:10
- Fusarium oxysporum**, inactivation with ozone, 26:517; 28:125
- Fuzzy Logic** in three phase VSI-driven single-phase ozone generator, 37:9
- GAC Adsorbability**, effect of preozonation of micropollutants on biodegradability and, 8:11; 8:277
- GAC Adsorbability**, of organic substances in activated sludge effluent, influence of ozonation on, 8:355
- GAC Adsorption**, of organics after ozonation of

52 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

atrazine, 15:227

GAC Adsorption, purification of polluted source water with ozonation and biological activated carbon, 6:245

GAC and ozone at 11 Anglian Water (U.K.) surface water treatment plants, 18:19

GAC Filtration, for ozone residual control, 24:429

GAC Properties, after reactivation, 14:123

GAC Regeneration by advanced oxidant, for controlling air-phase VOCs, 18:417

GAC Treatment of Glyoxal, 15:39

GAC treatment of Seoul, Korea drinking water, 27:69

Gallic Acid ozonation in food processing wastewater, 22:167

Gamma Hom Model in *Cryptosporidium* inactivation with ozone, 23:259

Gap Junctional Intercellular Communication, non-genotoxic effects of pesticides and their disinfection byproducts on, 19:351

Gap Volume in ozone generation, 38:86

Gas Bubble size effect on ozone/UV treatment, 33:396

Gas Chromatography for ozone concentration measurement, 25:155

Gas Diffusion analytical methods, 21:447

Gas Diffusion Electrode production with ozone, 25:307

Gas Diffusion Flow Injection Analysis, for ozone, 10:89; 10:337

Gas Diffusion of ozone across egg shells, 29:147

Gas Diffusion, in ozone formation during salt brine electrolysis, 20:239

Gas Flow Measurement, 22:1

Gas Hold-Up in impinging jet contactors, 32:99

Gas Hold-up in impinging jet ozone bubble column, 29:245

Gas Hold-up in ozone bubble column, 29:343

Gas Induced Ozone Reactor, 21:277

Gas Induction in ozone reactor, 21:277

Gas Phase Deodorization, by aqueous washing, then ozonation, 13:331

Gas Phase Ozone Analysis, 10:337; 17:329

Gas Phase Ozone Analysis, guideline for in process gas from an ozone generator, 18:209

Gas Phase Ozone Analysis, New Device for, 14:91

Gas Phase Ozone Concentration Analysis, comparisons from a commercial UV meter and KI wet-chemistry tests, 18:231

Gas Phase Ozone Decomposition, during ozone generation, 15:167

Gas Phase Ozone Measurement via an indirect gas chromatography method, 25:155

Gas/Liquid Ozone Reactors, modeling of, 15:213

Gaseous Ozone for root canal infections, 36:264

Gaseous Ozone/heat Treatment, 34:315

Gas-Induced Reactor for ozonation of semiconductor wastewater, 27:225

Gas-Inducing Reactor for ozonation of phenolic solutions, 25:323; 28:77

Gas-Inducing Reactor, for RB-19 Dye ozonation, 26:165

Gas-Liquid Equilibrium Coefficient, of ozone into water, 32:3

Gas-Liquid Mass Transfer Modeling, 20:513

Gas-Liquid Mixing in gas induced ozone reactor, 21:277

Gas-Liquid Mixing in ozone dissolution systems, 22:329

Gas-Liquid Reaction Kinetic Theory, applied to tomato plant wastewater ozonation, 19:281

Gas-Liquid Reaction with ozone in impinging zone reactor, 21:501

Gas-Liquid Reactor modeled with Continuous Flow Analysis, 28:17

Gasoline Compounds treatment by catalytic ozonation, 27:301

Gastric Juices effect on bromate ion, 28:165

GC/MS in soil ozonation, 35:366

GC/MS to analyze byproducts in ozone-BAC drinking water plant, 37:257

GC/MS to analyze ozonation of sunflower oil, 23:121

GC/MS; LC/MSⁿ of ozonated tannery wastewater, 39:159

GC-MS for analysis of ozone treatment of lignin compounds, 21:53

GC-MS of ozonation within activated sludge, 31:279

GC-MS of ozonized sunflower oil, 34:293

Gel Permeation Chromatography to analyze decolorization of molasses wastewater, 27:365

Gelatinization in ozone treatment of wheat and corn starches, 37:71

Generalized Kinetic Models for ozonation of semiconductor wastewater, 27:225

Generation Efficiency, 40:356

Generation of chlorine dioxide, 21:433; 21:447

Generators for chlorine dioxide, 21:433

Genotoxic Potency of Night Soil, Reduction of by Ozone, 17:195

Genotoxicity affected by UV treatment, 35:38

Genotoxicity in ozone biofiltration processes, 37:143

Genotoxicity of Bromate Ion, inactivation of by -SH compounds, 16:443

- Genotoxicity of Bromate Ion**, produced upon ozonation, evaluation of, 16:443
- Genotoxicity Testing** of Netherlands drinking water, 34:92
- Geometric Mean** calculational methods for *Cryptosporidium* inactivation, 27:335
- Geosmin** oxidation by ozone, 29:185
- Geosmin** oxidized by ozone in surface water, 28:277
- Geosmin** removal by ozone/hydrogen peroxide process, 33:121
- Geosmin**, experiences with ozone in Japan, 3:219; 10:309
- Geosmin**, kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methylisoborneol, 15:1
- Geosmin**, oxidation with ozone at Los Angeles, CA, 10:255; 13:711
- German Association for Gas and Water (DVGW)**, 30:43
- Germany** ozone installations, 34:64
- Germany Water Treatment** with chlorine dioxide, 22:215
- Germicidal** properties of building materials with ozone, 31:316
- Germicidal Properties** of ozonized sunflower oil, 31:232
- Germination** inactivation by ozonation in a bubble column, 38:62
- Germination** of seeds treated with ozone, 30:427
- Germination** seed protocols for *Opuntia* genus, 39:104
- Giardia Cysts**, effects of ozonation on in Colorado River water, 13:127
- Giardia Cysts**, kinetics of ozone inactivation vs CT approach, 13:451
- Giardia** inactivation with ozone, 22:501
- Giardia** inactivation, CT requirements, 27:335
- Giardia lamblia**, inactivation of in drinking water, 14:71; 14:439
- Giardia muris** cysts, MS2 coliphage as surrogate for ozone disinfection of, 15:279
- Giardia muris**, inactivation of in drinking water, 14:1; 14:71
- Giardia muris**, inactivation of using ozone and ozone/H₂O₂, 16:67
- Giardia spp.** removed by ozonation, 36:138
- Gibbs Energy** in ozonation of nonionic polyethoxylated surfactants, 28:295
- Glass and Silica**, ozone decomposition on, 18:385
- Glass Beads** in packed bed reactors for ozone generation, 28:111
- Glass** cylindrical tube for ozone generation, 33:106
- Glass Melting Furnace** flue gas treatment, 38:211
- Gliding Arc Discharge** for bio-decontamination, 27:469
- Global Rate Coefficients** in wire-to-cylinder ozone generator, 36:65
- Glow-discharge Electrolysis** in degradation of methylene blue, 24:159
- Glucosamine**, Kinetics of Ozonation of in Water, 17:463
- Glucose** ozonation in pulp, 22:447
- Glucose**, ozonation byproducts from, 13:265
- Glutaraldehyde** for disinfection of gastrointestinal endoscopes, 38:346
- Glutaric Acid**, 12:1
- Glycerol**, oxidation in water by ozone, then ozone/UV radiation, 9:369
- Glycerol's Oxygenated Derivatives**, 31:445
- Glycine**, experimental study of ozone action on, 2:105
- Glycol** removal process cost, 33:211
- Glycolaldehyde**, 12:1; 12:115
- Glyoxal Formation** in ozonation of amino acids, 20:381
- Glyoxal Formation** in ozonation of p-hydroxybenzoic acid solution 20:343
- Glyoxal** in photocatalytic oxidation with ozone; 24:75
- Glyoxal**, 12:1; 12:115
- Glyoxal**, analysis by PFBOA method, 11:127
- Glyoxal**, behavior during GAC treatment, 15:39
- Glyoxal**, Formation of During Ozonation in Water, 17:53
- Glyoxal**, from ozonation of natural organic matter, 16:1
- Glyoxal**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Glyoxal**, ozonation of, kinetics of and oxidation products, 11:271
- Glyoxalate Anion**, formation of during ozonation of natural waters, 19:179
- Glyoxylic Acid**, as a model compound in water/wastewater ozonation, 15:149
- Glyoxylic Acid**, Byproduct of Ozonation of Coniferyl Alcohol and/or ferulic Acid in Water, 17:687
- Glyoxylic Acid**, byproduct of ozonation of drinking water, 14:269
- Glyoxylic Acid**, Formation during Ozonation of Drinking Water, 17:511; 17:647
- Glyoxylic Acid**, formation of by ozonation, 8:199; 12:1; 12:115; 16:1
- Glyoxylic Acid**, formation of during ozonation of glyoxal, 11:271
- Goat Skin** unhairing with ozone treatment, 28:341

54 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Goethite**, effect on ozonation of natural organic matter, 26:141
- Gold and Silver Extraction** using ozone, 29:101
- Gold** extraction with ozone, 33:42
- Gold** minerals treated with ozone, 29:307
- Gold Recovery**, 40:284
- Gradient-Descent Algorithm**, 32:56
- Gram positive** bacteria inactivation by ozone, 23:183
- Gram-Negative Bacteria** survival after ozonation, 22:65
- Gram-Positive Bacteria** survival after ozonation, 22:65
- Granada**, Spain air quality, 33:80
- Granular Activated Carbon** and ozone byproducts, 21:79
- Granular Activated Carbon** following ozonation, 25:351
- Granular Activated Carbon** for removal of ozone and chlorine DBP, 22:393
- Granular Activated Carbon** plus ozone for model compound removal, 24:357
- Granular Activated Carbon** with preozonation treatment of drinking water, 10:309
- Granular Activated Carbon**, and ozone for tertiary wastewater treatment, 7:1
- Granular Activated Carbon**, as support media for biofiltration, 19:97
- Granular Activated Carbon**, effects of dissolved oxygen on adsorption characteristics of, 19:1
- Granular Activated Carbon**, effects of residual dissolved ozone on performance, 19:1
- Granular Activated Carbon**, filtration after preozonation of extracted aquatic fulvic acid, 11:69
- Granular Activated Carbon**, Following Ozonation in Drinking Water Treatment, 17:449
- Granular Activated Carbon**, following ozonation of drinking water, 11:245
- Granular Activated Carbon**, following ozonation of drinking water, to eliminate mutagenicity, 9:179
- Granular Activated Carbon**, for ozone residual control, 24:429
- Granular Activated Carbon**, quality and performance, impact of preozonation of drinking water on, 19:1
- Granular Activated Carbon**, removal of residual oxidants in ozonated sea water by, 13:697
- Granular Activated Carbon**, with manganese for advanced oxidation with ozone, 26:1
- Granulated Activated Carbon** at South Caboolture Water Reclamation Plant, 25:107
- Granulation Tissue Formation**, 29:501
- Granulometry**, impact of preozonation on, 7:107
- Grapes** treated with ozone and UV Radiation, 32:144
- Graphene** for membranes, 39:310
- Graphical Industry Wastewater**, 35:16
- Great Lakes** basin municipal wastewater effluent, 37:36
- Great Lakes** water treatment, 35:249
- Green Gram** reaction with ozone, 37:309, 39:54
- Greenhouse Conditions**, and inactivation of *Fusarium oxysporum* with ozone, 26:517
- Greenhouse Cultivation**, 33:179
- Greenhouse Wastewater** treatment with ozone and static mixers, 23:385
- Greenhouses** treated by ozonation and photo-Fenton processes, 32:259
- Ground Level Ozone**, 39:287
- Groundwater** and MTBE treatment with ozone, 24:56
- Groundwater** containing aromatic compounds, oxidation by ozone, 28:287
- Groundwater** containing elevated bromide, 35:438
- Groundwater** containing trichloroethylene, treated with ozone, 30:127
- Groundwater** contaminated with 1,4 dioxane, 38:413
- Groundwater Remediation** for 1,4 dioxane removal, 39:424
- Groundwater** treatment by ozone and pressurized biologically-active filtration, 23:393
- Groundwater Treatment** in Finland, 35:86
- Groundwater Treatment** with ozone of water containing manganese, 27:147
- Groundwater** treatment with ozone, 30:73
- Groundwater Treatment** with ozone, containing iron, 28:269
- Groundwater Treatment**, by the Ecoclear® Process, 19:297
- Groundwater Treatment**, in-line with ozone, 13:559
- Groundwater Treatment**, of 2,4-Xylidine by ozone, 26:499
- Groundwater Treatment**, with ozone, 13:109; 17:297
- Groundwater Treatment**, with ozone/H₂O₂, 12:281
- Groundwater Treatment**, with photochemically generated ozone, 10:323
- Groundwater**, ozone treatment of in Belgium, 7:327
- Groundwater**, treatment by UV-enhanced ozone oxidation, 8:339
- Growth Media**, evaluation of for recovery of *E. coli* from ozone-treated water by membrane filtration, 11:383
- Growth Potential** in a distribution system with

ozonated water, 25:473

Guaiacol production by ozone, 23:139

Guaiacyl degradation by ozone, 23:139

Guanine, ozonation of, 13:265

Guar Gum, in textile baths during ozone decolorization of, 15:189

Guidelines for ozone therapy, 34:408

Guidelines, for cooling tower water ozonation systems, 16:501

H₂O₂/Silver Ion, disinfection of dental units, comparison with ozone, 19:527

H-Abstraction in reaction of ozone with tertiary butanol and formate ion, 36:532

Hair Removal (Unhairing) from goat skin with ozone treatment, 28:341

Half Life for ozone transfer in rice grain bulks, 40:191

Half Life green gram reaction with ozone, 37:309

Half Life Period in ozone fumigation of dried chilies, 40:473

Half-Life in ozone treatment of Green Gram bulks, 39:54

Half-life of ozone gas in rice grains, 37:450

Half-life of ozone in food preservation, 39:115

Haloacetic Acid (HAA) formation during ozonation, 33:14

Haloacetic Acid Formation Potential (HAAFP) in ozonation of p-hydroxybenzoic acid solution 20:343

Haloacetic Acids (HAA) in Quebec (Canada) drinking water facilities, 37:294

Haloacetic Acids removal by biological activated carbon, 22:393

Haloacetic Acids removal by pre- and intermediate ozonation, 25:453

Haloacetic Acids, control of with ozone in Montreal, Canada drinking water treatment plant, 18:299

Halogenated Organic Compounds, produced in drinking water after treatment with chlorine or chlorine dioxide, 8:217

Halogens, organic compounds, and ozone, interactions between, 10:153

Halomethane Compounds and effect on ozone generation from oxygen, 24:329

Hammett-relationships and effect of salts during ozonation, 27:287

Hank, 38:395

Hanshin Water Supply Authority, 39:398

Hard COD in paper mill effluent, 30:310

Hatching Eggs, 33:374

Haworth Water Treatment Plant with turbine ozone contactor, 22:351

Hazardous Waste Site Reclamation, using photochemically generated ozone, 10:323

Hazardous Waste Treatment, by Advanced Oxidation Processes, 17:119

Hazardous Wastes Treatment With Ozone, review of, 18:477

HCB, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:657

Health Care, 35:399

Healthcare and ozone treatment for mold removal, 31:326

Heat Conduction in cooling water systems design, 39:188

Heat Transfer Model, Practical, for oxygen-fed ozone generators, 18:461

Helium influence in ozone production, 22:53

Helminth Eggs degraded in wastewater treatment, 36:570

Helminth Eggs, disinfection with ozone, 26:359

Hemicellulose, ozone attack of, 11:217

Hemoglobin degradation with ozone, 28:317

Hemotherapy, and ozone treatment of blood, 23:207,26:195

Henrico County, VA Water Treatment Plant, design of high concentration ozone contactors for, 15:245

Henrico County, Virginia system design for inactivation of *Cryptosporidium*, 27:129

Henry Coefficients in ozonation of wastewaters, 19:281

Henry's Coefficient, with ozone in water in a bubble column, 26:277

Henry's Law Constant determination in buffered solutions, 37:106

Hepatitis C (HCV), 34:451

Heptanal, byproducts from ozonation of, 11:143

2-Heptanone, byproducts from ozonation of, 11:143

Heptanoic Acid, byproducts from ozonation of, 11:143

Heptatoxins destruction with ozone, 20:223

Herbicide Control with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19

Herbicide degradation by ozone, 27:83, 27:173

Herbicide Formation during ozonation of ethylenediaminetetra methylenephosphonic acid), 20:99

Herbicides and Their Chlorine and Ozone By-Products, non-genotoxic effects of on gap junctional intercellular communication, 19:351

Herbicides oxidation with ozone and the Fenton process, 22:607

Herbicides, degradation by ozone and ozone-hydrogen peroxide in a lowland surface water,

56 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

18:251

Herbicides, degradation by ozone, 14:283, 25:227

Herbicides, Non-Agricultural, ozone degradation of, 15:457

Herniated Lumbar Disc, 34:461

Herpesviridae inactivation by ozone, 36:249

Herzberg Bands in ozone formation, 21:229

Heteroaromatics oxidation with ozone, 24:271

Heterogeneous Catalysis of agro-industrial wastewaters, 36:3

Heterogeneous Catalysis of oxalic acid, 25:393

Heterogeneous Catalyst for catalytic ozonation of dichlorophenol, 38:14

Heterogeneous Catalyst regeneration by ozone, 39:366

Heterogeneous Catalysts for degradation of *m*-Dinitrobenzene, 27:359

Heterogeneous Catalytic Ozonation with supported titanium dioxide, 22:185, 22:471

Heterogeneous Photocatalysis in phenol decomposition, 24:49

Heterogeneous Photocatalysis, 35:73, 36:560

Heterogeneous Photocatalysis, water treatment combined with ozonation, 26:585

Heterotrophic Bacteria grown in distribution system, 25:473

Heterotrophic Bacteria in treatment of drinking waters with ozone, 20:303

Heterotrophic Bacteria survival after ozonation, 22:65

Heterotrophic Degradation of 3-methyl-pyridine, 23:189

Heterotrophic Plate Counts, effect of ozonation on in Colorado River Water, 13:127

Heterotrophic Plate Counts, Effects of Ozonation On, 17:283

Hexachlorobenzene, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487

Hexanal, byproducts from ozonation of, 11:143

9-Hexadecenoic Acid, byproducts from ozonation of, 11:143

Hexanoic Acid, byproducts from ozonation of, 11:143

Higbie Penetration Theory in ozonation of dyes, 30:344

High Concentration Ozone (19% w/w), for Drinking Water Treatment, 17:485

High Concentration Ozone Contactors for drinking water treatment, 15:245

High Concentration ozone generation, 37:221

High Concentration Ozone Generator, 26:429

High Concentration Ozone Measurement, 20:489

High Frequency Model for ozone generation, 25:363

High Frequency ozone generation and effect of SF₆, 32:444

High Frequency ozone generation in Colombia, 30:202

High Frequency Ozone Generation System, 23:171; 24:321; 25:363

High Frequency Pulse Train Ozone Generation, 23:171

High Pressure reactor for ozonolysis of 2-ethynylpyridine, 39:418

High Resolution MS to identify oxidation products of ozone-treated imazalil, 33:308

High Salinity of coal gasification wastewater, 40:275

High Voltage Source in three phase VSI-driven single-phase ozone generator, 37:9

High-Pressure Liquid Chromatography, and bioscreening, of oxidant effects on complex mixtures of nonvolatile organics in polluted waters, 1:31

HiPOx Process, 36:153

¹H NMR analysis of ozonated sunflower oil, 28:59; 34:293

¹H NMR analysis of reaction products of ozonation of coconut oil, 27:153

¹H-NMR and methyl linoleate ozonation, 25:121; 26:189

¹H-NMR Spectroscopy in ozonolysis of olive oil, 37:55

¹H-NMR to determine ozonides, 23:35

History of Ozone in the USA, 21:99

Homogeneous Catalysis of oxalic acid, 25:393

Homogeneous Catalysis with ozone and Co(II), 25:261

Homogeneous Catalysts for degradation of *m*-Dinitrobenzene, 27:359

Homogeneous Reactor to study ozone decay, 37:330

Hong Kong Urban Ozone, 25:213

Hormesis, 34:408

Hospital Energy Savings of ozone laundry system, 35:399

Hot Whirlpools, ozone treatment of, 12:393

House Dust Mites exposed to ozone, 28:191

Household Wastewater, optimizing ozone disinfection of, 3:19

HPC Bacteria, after ozone and PEROXONE treatment, 14:71

HPC Bacteria, MS2 coliphage surrogate for ozone disinfection of, 15:279

HPLC Analysis of patulin decomposition, 30:189

HPLC to analyze catalytic ozonation of Fipronil, 37:186

- Humic Acid** catalytic ozonation, 38:203
- Humic Acid** oxidation by ozonation and photocatalysis, 25:497
- Humic Acid** ozonation, 23:41; 30:120, 40:93
- Humic Acid** ozonation, 32:435
- Humic Acid** removal by ozonation, 40:321
- Humic Acid** removal process cost, 33:211
- Humic Acid** treatment with ozone/GAC, 24:357
- Humic Acid**, a model for predicting disinfection byproducts from ozonation/post-chlorination of, 14:51
- Humic Acid**, and trihalomethane precursors, catalytic effects of ultraviolet light and/or ultrasound on the ozone oxidation of, 7:47
- Humic Acid**, degradation by ozonation in presence of nonpolar bonded alumina phases, 26:367
- Humic Acid**, effects on ozonation of volatile organic chemicals, 13:287
- Humic Acid**, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methylisoborneol, 15:1
- Humic Acid**, influence of process conditions in the effect of ozone treatment of, in water, 1:61
- Humic Acid**, ozonation of in natural waters, product identifications, 2:75
- Humic Acids** degradation by catalytic ozonation, 37:371
- Humic Acids** degradation by UV₂₅₄ and H₂O₂/UV₂₅₄, 34:101
- Humic Acids** effect on diuron adsorption, 25:399
- Humic Acids** in cooling water, 36:440
- Humic Acids** in stabilized landfill leachates, 28:309
- Humic Acids** ozonation with perfluorooctylalumina, 32:265
- Humic Acids**, benefits of ozonation prior to flocculation processes, 5:21
- Humic Acids**, effects on advanced oxidation of 1,3,5-trichlorobenzene, 18:535
- Humic Acids**, elimination of, 4:79
- Humic Acids**, in models of water/wastewater ozonation, 15:149
- Humic Acids**, ozonation of, 8:11; 8:37; 8:129; 8:199, 16:1; 17:511; 17:64725:551
- Humic Acids**, products from ozonation and chlorination, 10:153
- Humic Color**, removal from water by ozonation followed by slow sand filtration, an experimental study of, 6:3
- Humic Material** and effect on formaldehyde formation during ozonation, 25:41
- Humic Materials**, elimination of, 4:79
- Humic Materials**, reduction in molecular weight of by ozone treatment, 7:121
- Humic Substances** affected by preozonation, 33:185
- Humic Substances** in Huron river water, 23:105
- Humic Substances** removal by ozone treatment of colored upland water, 21:615
- Humic Substances** removal with ozone, 21:261; 34:213; 34:342
- Humic Substances**, catalytic ozonation of in water and their ozonation byproducts, 18:195
- Humic Substances**, effects on ozone removal of atrazine, 14:263
- Humic Substances**, iron and manganese removal during ozonation of, 11:93
- Humic Substances**, ozonation of, effects on molecular weight distributions of organic carbon and trihalomethane formation potential, 10:39
- Humic Waters**, treatment by ozone, 7:121
- Humid Gas Mixtures**, effect on ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583
- Humid Oxygen** and production of ozone via electroozonation, 23:467
- Humidity** effect on decontamination of rooms with ozone, 31:216
- Humidity** effect on wire-to-plate corona discharge, 35:31
- Humidity** in odor treatment, 35:390
- Huron River Water** treatment by ozone, 23:105
- HVAC Systems**, ozonation in, 15:81
- Hybrid Discharge** in ozone generation, 29:107
- Hydraulic Pressure** in treatment of landfill leachate, 38:367
- Hydraulics** in modeling of bromate and ozone concentration, 34:280
- Hydraulics of Ozone Contactors**, impact of on bromate ion formation, 18:87
- Hydraulics of Ozone Contactors**, modeling of, 15:213
- Hydraulics**, in ozone contactors, 12:133;
- Hydrazine Compound** and NDMA formation, 36:215
- Hydride Transfer** in reaction of ozone with tertiary butanol and formate ion, 36:532
- Hydrocarbons**, as byproducts from catalytic ozonation of humic substances in water, 18:195
- Hydrodynamic Cavitation** in ozone mass transfer, 35:482
- Hydrodynamic Model** for turbine ozone contactor, 22:351
- Hydrodynamics** and axial dispersion reactor model, 36:100
- Hydrodynamics and Mass Transfer Parameters**, modeling of in a continuous ozone bubble column,

58 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

18:99

Hydrodynamics in impinging jet ozone bubble column, 29:245

Hydrodynamics of in-line multi-jets contactor, 33:449

Hydrodynamics of ozone bubble columns, 23:313

Hydrodynamics of reactor design for

Cryptosporidium inactivation, 22:99

Hydrodynamics of removal of *Bacillus subtilis* spores with ozone, 24:91

Hydrodynamics, influence on ozone inactivation of *Giardia* cysts, 13:451

Hydrodynamics, of ozone contacting, 19:307

Hydrogen Peroxide in ozone treatment of agro-industrial wastewaters, 34: 387

Hydrogen Peroxide – Ozone, oxidation of refractory organics, 1:119

Hydrogen Peroxide (Activated), Treatment of Hazardous Wastes, 17:119

Hydrogen Peroxide and catalytic ozonation of acetic acid, 38:194

Hydrogen Peroxide and degradation of humic acid, 34:101

Hydrogen Peroxide and oxidation of micropollutants in water, 21:207

Hydrogen Peroxide and ozone applied to foundries, 29:461

Hydrogen Peroxide and ozone compared to ozone/activated carbon, 28:237

Hydrogen Peroxide and ozone degradation of estrone, 30:249

Hydrogen Peroxide and ozone for 1,4 dioxane removal, 39:424

Hydrogen Peroxide and ozone for bleaching of soybean fabric, 37:195

Hydrogen Peroxide and ozone for bromate control in Yellow River water, 37:127

Hydrogen Peroxide and ozone for degradation of aqueous nitrophenols, 23:333

Hydrogen Peroxide and ozone for greenhouse effluent treatment, 23:385

Hydrogen Peroxide and ozone for oxidation of toluene and 2,4,6-trinitrotoluene, 22:519

Hydrogen Peroxide and ozone for removal of carboxylic acids, 28:53

Hydrogen Peroxide and ozone for removal of EDTA from pulp mill waters, 22:279

Hydrogen Peroxide and ozone for removal of MTBE, 27:27

Hydrogen Peroxide and ozone for treatment of dye wastewaters, 23:295

Hydrogen Peroxide and ozone for treatment of textile wastewater, 22:535

Hydrogen Peroxide and ozone in advanced oxidation of pesticides, 32:25

Hydrogen Peroxide and ozone in decomposition of trichloroethylene, 30:127

Hydrogen Peroxide and ozone in degradation of nitroaromatics, 23:343

Hydrogen Peroxide and ozone in oxidation of MTBE, 24:56

Hydrogen Peroxide and ozone in treatment of landfill leachate, 31:28

Hydrogen Peroxide and ozone inactivation of *Bacillus subtilis* spores, 28:335

Hydrogen Peroxide and ozone treatment of wastewater from painting processes, 27:279

Hydrogen Peroxide and Su-FeOOH for degradation of 2,4-dichlorophenol, 37:494

Hydrogen Peroxide and UV for cooling water treatment, 36:440

Hydrogen Peroxide decomposition by UV and ozone, 24:281

Hydrogen Peroxide effect on bromate formation, 34:325

Hydrogen Peroxide effect on ozone decomposition in “pure water, 30:300

Hydrogen Peroxide efficiency in acetic acid degradation, 35:359

Hydrogen Peroxide for disinfection of dental treatment units’ water, 22:441

Hydrogen Peroxide for *enterococcus* sp. inactivation, 38:443

Hydrogen Peroxide for inactivation of Anthrax by ozone, 24:151

Hydrogen Peroxide for treatment of jewelry manufacturing effluent, 36:196

Hydrogen Peroxide formation during ozonation processes, 27:431

Hydrogen Peroxide formation during ozone generation in presence of foam, 24:181

Hydrogen Peroxide formation to model ozone/UV process, 27:421

Hydrogen Peroxide in advanced oxidation water treatment processes, 32:295

Hydrogen Peroxide in oxidation of N-Methyl-2-Pyrrolidone, 29:177

Hydrogen Peroxide in ozone decomposition of phenol, 33:143

Hydrogen Peroxide in tank cleaning generated concentrate, 34:32

Hydrogen Peroxide in treating soybean fibers, 34:143

Hydrogen Peroxide in treatment of colored aqueous solutions, 37:62

- Hydrogen Peroxide** in treatment of industrial wastewater, 36:229
- Hydrogen Peroxide** inactivation of *clostridium perfringens*, 30:431
- Hydrogen Peroxide** influence on biological acetate and formate removals, 22:77
- Hydrogen Peroxide** ozone for degradation of sulfamethoxazole, 37:509
- Hydrogen Peroxide** –ozone reaction model, 28:95
- Hydrogen Peroxide Residuals**, effects on biologically active filters, 19:371
- Hydrogen Peroxide** to remove pharmaceutical products, 34:16
- Hydrogen Peroxide** treatment of o-nitrotoluene, 23:127
- Hydrogen peroxide** treatment of propylene glycol methyl ether acetate, 30:332
- Hydrogen Peroxide** with ozone for dyes color removal, 27:265
- Hydrogen Peroxide** with ozone for removal of endocrine disruptors and pharmaceuticals, 28:445
- Hydrogen Peroxide** with ozone treatment and ceramic raschig rings, 37:22
- Hydrogen Peroxide**, chemistry of with ozone and UV radiation in water treatment processes, 9:335
- Hydrogen Peroxide**, effects on ozone decomposition, 14:33
- Hydrogen Peroxide**, following ozone treatment of drinking water in Florence, Italy, control of bromate ion and brominated organic byproducts by, 18:117
- Hydrogen Peroxide**, for treatment of surfactants in wastewater, 26:327
- Hydrogen Peroxide**, formation during ozone generation, 12:19; 12:41
- Hydrogen Peroxide**, formation in UV/ozone systems, 14:215
- Hydrogen Peroxide**, formation of by ozonation of glyoxylic acid, 9:13
- Hydrogen Peroxide**, in control of filamentous sludge bulking, 20:1
- Hydrogen Peroxide**, in sludge bulking control, 12:145
- Hydrogen Peroxide**, oxidation of organic compounds through the combination with ozone, 6:163
- Hydrogen Peroxide**, photolysis of, 14:215
- Hydrogen Peroxide**, plus ozone, 12:281
- Hydrogen Peroxide**, plus UV radiation, 12:73; 12:177
- Hydrogen Peroxide**, to improve the effectiveness of drinking water ozonation, 7:241
- Hydrogen Peroxide**, use in automated UV absorption method for monitoring ozone oxidation reactions of organic materials, 8:321
- Hydrogen Peroxide**, with ozone for disinfection of surface waters, 14:71
- Hydrogen Peroxide**, with ozone for reduction of trihalomethane formation potential in surface water, 10:103
- Hydrogen Peroxide**, with ozone in treatment of landfill leachate, 26:287
- Hydrogen Peroxide/Fe(II) Treatment**, of Hazardous Wastes, 17:119
- Hydrogen Peroxide/ozone** and Ti(IV) for catalytic ozonation, 33:441
- Hydrogen Peroxide/Ozone** process for treatment of synthetic wastewater, 33:23
- Hydrogen Peroxide/Ozone Ratio**, effects on bromate ion formation during ozonation of drinking water, 18:1
- Hydrogen Peroxide/UV Oxidation**, of organic compounds, 8:339
- Hydrogen Peroxide/UV** peroxidation for membrane fouling inhibition, 38:163
- Hydrogen Peroxide/UV System** for reduction of n-butylparagen, 34:354
- Hydrogen Peroxide/UV Treatment**, of Cyanazine, 17:237
- Hydrogen Peroxide/UV Treatment**, of Hazardous Wastes, 17:119
- Hydrogen Peroxide/UV**, for oxidation of chlorinated organics, 14:197
- Hydrogen Peroxide/UV**, oxidation processes, 14:367
- Hydrogen Peroxide-Enhanced Ozonation**, of organic compounds, 8:339
- Hydrogen Peroxide-Ozone and Ozone**, degradation of selected herbicides in a lowland surface water, 18:251
- Hydrogen Sulfide** in odor control, 35:375
- Hydrogen Sulfide** removed by wet scrubbing and ozone, 32:199
- Hydrogen Sulfide**, gas phase deodorization of, 13:331
- Hydrolysis** of activated sludge, 29:201
- Hydroperoxides** in fatty acids ozonation, 31:301
- Hydroperoxides** in ozonized sunflower oil, 28:181
- Hydrophilic** fractions in Dissolved Organic Matter (DOM), 22:249
- Hydrophilic** functional groups in treatment of plastic mixture with ozone, 29:373
- Hydrophobic Compounds** degradation by sonication/ozone/argon, 37:93
- Hydrophobic** fractions in Dissolved Organic Matter (DOM), 22:249
- Hydrophobic** functional groups in treatment of

60 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

plastic mixture with ozone, 29:373

Hydrophobic/Hydrophilic Fraction in textile effluents, 35:7

Hydrophobicity, of aquatic natural organic matter upon ozonation, 16:89

Hydroponic Greenhouse, and inactivation of *Fusarium oxysporum* with ozone, 26:517

Hydroponics and ozone treatment, 31:21

Hydroquinone removal by ozone/GAC treatment, 24:357

Hydroquinone, ozonation of, 8:129 ; 23:139

Hydroxyatrazine, formation of during treatment of atrazine by UV/H₂O₂, 19:395

4-Hydroxybenzaldehyde, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

Hydroxyl Free Radical Mechanisms, during ozonation of 2-hydroxypyridine, 14:177

Hydroxyl Free Radical Reactions, in oxidation of chlorinated organics, 14:197

Hydroxyl Free Radical Scavengers, effect on efficiency of ozone/UV oxidation of aromatic compounds, 11:281

Hydroxyl Free Radicals, for Removal of Triazines from Water, 17:183

Hydroxyl Free Radicals, formation of from ozone/hydrogen peroxide, ozone/UV radiation, and hydrogen peroxide/UV radiation during water treatment, 9:335

Hydroxyl Free Radicals, from ozone, 8:199; 12:73; 12:115; 12:177

Hydroxyl Free Radicals, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methyl-isoborneol, 15:1

Hydroxyl Free Radicals, in oxidation of organic pollutants in water, 14:185

Hydroxyl Free Radicals, initiation of: Oxidation of organic compounds through the combination ozone-hydrogen peroxide, 6:163

Hydroxyl Free Radicals, presence during ozonation of waters and "oxidation-competition values" in Swiss waters, 1:357

Hydroxyl Radial formation during ozonation of drinking water, 21:465

Hydroxyl Radical /ozone ratios during ozonation processes, 22:123

Hydroxyl Radical 32:424 formation in wastewater ozonation, 32:424

Hydroxyl Radical and ozone self-decomposition, 29:55

Hydroxyl Radical and pulsed corona discharge, 36:94

Hydroxyl Radical and radiation chemistry, 30:58

Hydroxyl Radical applied to foundries, 29:461

Hydroxyl Radical effect in ozone for Atrazine removal, 21:39

Hydroxyl Radical effect on inactivation of *Bacillus subtilis* with ozone, 24:145

Hydroxyl Radical formation during electroozonation, 23:467

Hydroxyl Radical formation during ozone generation in presence of foam, 24:181

Hydroxyl Radical formation in degradation of methylene blue, 24:159

Hydroxyl Radical formation in injection-type downflow UV/O₃ oxidation reactor, 21:539

Hydroxyl Radical formation in oxidation of nitrobenzene with ozone, 32:113

Hydroxyl Radical Formation in ozonation of Korea river waters, 25:251

Hydroxyl Radical Formation in ozonation of o-nitrotoluene, 23:127

Hydroxyl Radical Formation in ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583

Hydroxyl Radical formation in ozone treatment of natural waters, 21:239

Hydroxyl Radical formation in photochemical ozone generator, 30:228

Hydroxyl Radical formation in treatment of poultry processing wastewater, 23:53

Hydroxyl Radical formation in wastewater ozonation, 34:42

Hydroxyl Radical formation modeled by hydrogen peroxide formation in an ozone/uv process, 27:421

Hydroxyl Radical formation, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421

Hydroxyl Radical generation by hydroxylamine, 38:150

Hydroxyl Radical in 1,4-Dioxane removal, 33:396

Hydroxyl Radical in acetic acid degradation, 35:359

Hydroxyl Radical in advanced oxidation of night soil, 30:282

Hydroxyl Radical in catalytic ozonation of nitrobenzene, 31:45

Hydroxyl Radical in catalytic ozonation of *p*-chloronitrobenzene, 38:42

Hydroxyl Radical in catalytic ozonation of sulfamethoxazole, 39:25

Hydroxyl Radical in catalytic ozonation with Ti(IV), 33:441

Hydroxyl Radical in catalytic ozone decomposition, 38:434

Hydroxyl Radical in decomposition of trichloroethylene, 30:127

- Hydroxyl Radical** in degradation of *meta*-Chloronitrobenzene, 36:496
- Hydroxyl Radical** in estriol degradation, 38:358
- Hydroxyl Radical** in Fenton process treating dinitrotoluene wastewater, 38:225
- Hydroxyl Radical** in odor control, 35:375
- Hydroxyl Radical** in ozonation of nitrite ion, 32:430
- Hydroxyl Radical** in ozonation of secondary municipal wastewater, 40:441
- Hydroxyl Radical** in ozone oxidation of MIB and Geosmin, 28:277
- Hydroxyl Radical** in ozone-hydrogen peroxide reaction model, 28:95
- Hydroxyl Radical** in phenol decomposition, 35:350
- Hydroxyl Radical** in presence of bicarbonate, 35:302
- Hydroxyl Radical Oxidation Capacity** and influence of carbonate, 22:305
- Hydroxyl Radical** pathway during bromate ion formation, 29:3
- Hydroxyl Radical Probe** in ozone treatment of natural waters, 21:239
- Hydroxyl Radical Probe**, for measuring hydroxyl radical reaction kinetics, 26:345
- Hydroxyl Radical Scavenger** in ozone treatment in presence of bicarbonate, 25:285
- Hydroxyl Radical Scavenger**, effect on ozone decomposition kinetics, 26:345
- Hydroxyl Radical**, decomposition kinetics, 26:345
- Hydroxyl Radical**, formation by pulse discharge in water, 24:471
- Hydroxyl Radical**, in carbon-catalyzed conversion of aqueous O₃ into OH-radicals, 20:67
- Hydroxyl Radical**, pathway for bromate ion formation in a continuous flow reactor, 26:573
- Hydroxyl Radicals** effect on ozone decomposition in wastewater, 28:247
- Hydroxyl Radicals** for NO_x removal, 38:382
- Hydroxyl Radicals** formed during ozone decomposition of phenol, 33:143
- Hydroxyl Radicals** generation in flow-through electrochemical reactor, 30:113
- Hydroxyl Radicals** in catalytic ozonation of chlorobenzoic acid, 37:527
- Hydroxyl Radicals** in catalytic ozonation of fenofibric and clofibric acids, 33:434
- Hydroxyl Radicals** in catalytic ozonation processed, 25:25
- Hydroxyl Radicals** in modeling of bromate and ozone concentration, 34:280
- Hydroxyl Radicals** in ozonation of a lake water, 38:100
- Hydroxyl Radicals** in ozone oxidation of cyclophosphamide, 35:125
- Hydroxylamine** for hydroxyl radical generation, 38:150
- Hydroxynitrotoluene**, as chloropicrin precursor during ozone treatment of drinking water, 10:241
- Hydroxynitroxylyene**, as chloropicrin precursor during ozone treatment of drinking water, 10:241
- 2-Hydroxypyridine**, aqueous ozonation of, 2:177
- Hydroxypyruvic Acid**, formation of by ozonation, 8:199
- Hymenolepis nana* eggs, 35:201
- Hyphae** death after ozone treatment, 36:144
- Hypobromite** formation in ozonation, 30:339
- Hypobromite Ion**, effects on fish larvae, 13:697
- Hypobromite Ion**, formation by interactions of ozone with bromide ion, 7:313
- Hypobromous Acid**, photodecomposition of, 8:63
- Ibuprofen** catalytic ozonation, 38:203
- Ibuprofen** oxidation by ozone, 32:91, 35:472
- IDBP(Inorganic disinfection By-Products)** in ozonation of drinking water, 21:447
- "Ideal Method" of Analysis for Ozone**, 10:89; 10:337
- IDUOR** injection-type downflow UV/O₃ oxidation reactor, 21:539
- Imazalil** removal with ozone, 33:308
- Imazapyr Degradation**, with ozone and ozone-hydrogen peroxide in a lowland surface water, 18:251
- Imazapyr**, ozone degradation of, 15:457
- Immediate Ozone Demand** in Quebec (Canada) drinking water facilities, 37:294
- Immersed Biological Filtration**, elimination of humic materials, 4:79
- IMO** (International Marine Organization), 34:174
- Impinging Jet Ozone Bubble Column**, 29:245
- Impinging Jets** for ozone contacting, 32:99
- Impinging Zone Reactor** for wastewater treatment, 21:501
- Impinging-Jet Ozone Contactor** for treatment of Kraft Pulp Mill effluents, 24:307
- Impregnation Method Kinetic Study** in ozone decomposition, 39:436
- Improved Laundry Quality**, 35:399
- Improved Product Quality**, in treatment of fresh cut salad mixes with ozone, 32:66
- Improvement of the Shelf Life** of apples in cold storage, 40:482
- In Vitro Growth** of *Plasmodium Falciparum*, 23:89

62 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- In Vitro Propagation**, 36:435
- Inactivation** in ozone treated laundry, 29:85
- Inactivation Kinetics**, of Helminth eggs with ozone, 24:359
- Inactivation of *Cryptosporidium parvum*** with ozone in a static mixer, 25:295
- Inactivation of *Cryptosporidium*** using full-scale reactors, 22:99
- Inactivation of *Cryptosporidium*** with ozone and chlorine dioxide, 21:477
- Inactivation** of house dust mites by ozone, 28:191
- Inactivation** of seedborne viruses, 36:422
- Inactivation Rate** in MS2 inactivation, 36:86
- Inactivation**, of *Clostridium perfringens* in Amsterdam water supply, 26:465
- Inactivation**, of *cryptosporidium* in a lime softening plant, 20:177
- Inactivation**, of *Giardia lamblia* and *Giardia muris* cysts by ozone and PEROXONE, 14:71
- Incomplete Gammon Hom** model for inactivation of *Cryptosporidium parvum* with ozone, 23:1, 23:411
- Indeno (1,2,3-c,d) Pyrene** ozonation, 21: 571
- Indian Meal Moth** on Kabob Dates, 36:269
- Indianapolis, IN**, startup and operation of Belmont and Southport wastewater treatment plant, 10:173, 10::215
- Indianapolis, Indiana**, wastewater disinfection with ozone, 15:497
- Indicator Microorganisms** to monitor ozone disinfection efficiency, 39:408
- Indicators**, of disinfection efficiency of secondary effluent with UV radiation, F-specific bacteriophages as, 9:353
- Indigo Blue Method** for ozone analysis in buffered solutions, 37:106
- Indigo Blue** used for ozone measurement compared to gas chromatography, 25:155
- Indigo Carmine Disulfonate-Manganese Reaction**, As a Function of pH, 17:135
- Indigo Dye** ozonation 29:493; 38:395
- Indigo Method (Modified) for Ozone Analysis**, 17:329
- Indigo Method** for determination of ozone in nonaqueous solutions, 36:110
- Indigo Method**, for measurement of residual ozone, 5:203; 10:89; 10:337
- Indigo Method**, of determining ozone; submitted standard method, 4:169
- Indigo Sensitivity Coefficient Adjustment** in ozone analysis, 24:17
- Indigo Trisulfonate Analysis of Ozone in Solution**, computerized continuous monitoring of, 18:469
- Indigo Trisulfonate** for determination of ozone in nonaqueous solutions, 36:110
- Indigo Trisulfonate Method**, for analysis of ozone in gas phase, 11:115
- Indigotrisulfonate** for analysis of disinfection byproducts, 21:447
- Indigotrisulfonate** in egg shells treated with ozone, 29:147
- Indigotrisulfonate Method** for measurement of ozone residual, 32:33
- Indirect Analysis** of ozone via gas chromatography, 25:155
- Indirect Potable Reuse**, 32:43
- Indium Tin Oxide** treatment by UV, 34:129
- Indole**, ozonation of in swine manure waste odors, 19:425
- Industrial Applications** of ozone in the USA, 21:99
- Industrial Liquid Wastes** treated with ozone, 38:219
- Industrial Spill** treated with sparged ozone, 30:88
- Industrial Wastewater** and chlorobenzenes removal, 22:415
- Industrial Wastewater** and ozonation of dyestuffs, 21:487
- Industrial Wastewater** and treatment of paper mill circulation water, 23:401
- Industrial Wastewater** containing 2,4 Dichlorophenol and nitrobenzene solutions, 27:381
- Industrial Wastewater** containing 3-methyl-pyridine treated by ozone, 23:359
- Industrial Wastewater** from painting processes, ozone treatment, 27:279
- Industrial Wastewater** from tannery operations, 34:397
- Industrial Wastewater** ozonation of food processing wastewater, 22:167
- Industrial Wastewater Ozonation**, Henry and mass transfer coefficients in, 19:281
- Industrial Wastewater** treated with ozone, 28:3
- Industrial Wastewater Treatment** by Ozone, 17:355; 17:379; 17:399; 17:419; 17:527;
- Industrial Wastewater** treatment containing pesticides by ozone/biomass sequence, 27:317
- Industrial Wastewater** treatment from pharmaceutical manufacture, 21:69
- Industrial Wastewater Treatment** from pulp mills, 21:53
- Industrial Wastewater** treatment of phenols with ozone and coagulation, 25:323
- Industrial Wastewater** treatment with ozone in Canada, 21:119
- Industrial Wastewater Treatment** with ozone in the USA, 21:99

Industrial Wastewater Treatment with Ozone, Review of Applications, 18:477

Industrial Wastewater Treatment, with ozone in Japan, 10:309

Industrial Wastewater Treatment, with ozone, kinetics of, 14:303

Industrial Wastewater with phenols ozonation over CuO-Al₂O₃ catalyst, 25:335

Industrial Wastewater, from production of organochlorine plaguicides derived from DDT and trichlorobenzene, ozone and ozone/H₂O₂ treatment of 16:487

Industrial Wastewater, ozonation of chlorophenol solutions, 20:259; 20:283

Industrial Wastewater, treatment of dyestuff waters with Fenton's Reagent, 22:196

Industrial Wastewater, treatment with ozone, 10:363, 36:16

Industrial Water Cooling, application of ozone to eliminate tertiary treatment of wastewater used for, 3:121

Inert Gas effect on dielectric barrier discharge, 23:95, 35:448, 35:526

Infectivity, of animals by *Giardia muris*, 14:1

Infectivity, of *Giardia muris* cysts treated with ozone and ozone/H₂O₂, 16:67

Influence Factors in MS2 inactivation in water, 36:86

Influence Factors in nano-metal oxides ozonation, 36:549

Influence of Chemical Structure and Degree of Protonation, 21:23

Influence of inert gases on ozone production, 22:53

Infrared Absorption Spectroscopy, to determine nitrous oxide and dinitrogen pentoxide in output of air-fed ozone generators of high power density, 9:195

Inhibition effect of ozone on leaf blight disease, 27:495

Inhibition of *Aspergillus* species by ozone, 30:423

Inhibition of electrochemical generation, 33:389

Inhibition of ozonation of wastewaters by residual oxidant, 25:95

Inhibitors, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methylisoborneol, 15:1

Initial Ozone Demand (IOD) of secondary effluents, 30:376

Initiator influence on ozonation of ibuprofen, 35:472

Injection of ozone into water, 38:245

Injectors, sidestream, 29:297

In-Line Ozone Injection Contactor for primary disinfection, 15:245

In-Line Treatment, of drinking water with ozone, 13:559

Inorganic Carbon effect on ozone self-decomposition, 29:31

Inorganic Compounds in ozonation of natural waters, 20:361

Inorganic Ions in acetic acid degradation, 35:359

Inorganics Oxidation with ozone, 24:1

Input Energy, 40:494

Insect Disinfestations on Kabob Dates, 36:269

Insecticide degradation by ozone, 27:83, 27:173

In-Situ Chemical Oxidation, 32:130

Instantaneous Ozone Demand for control of ozone dosage, 25:383

Instantaneous Ozone Demand in Korea river waters, 25:251

Instantaneous Ozone Demand in wastewater, 28:247

Instantaneous Ozone Demand of a lake water, 38:100

Instantaneous Ozone Demand, 20:513

Integrated Chemical-Biological Oxidation of olive wastewater, 22:617

Integrated Disinfection Design Framework (IDDF) Method, 26:125

Interface Action, importance of during ozone disinfection during wastewater treatment, 2:139

Interfacial Area in static mixers, 32:399

Interfacial Resistance of Aqueous Solutions, combined absorption and self-decomposition of ozone in, 18:183

Interference in UV Ozone Analysis, 20:495

Interferences with Other Oxidants, importance of ozone on oxidation processes for the treatment of potable water, 4:59

Intermediate Ozonation effect on enhanced coagulation of DBT precursors, 25:453

Intermediate Ozonation, of drinking water in Switzerland, 8:151

Intermediate Ozonation, of drinking water in Yugoslavia, 14:101

Intermediate Products in ozonation of benzophenone-2, 40:122

Intermediate Stage Ozonation, 10:55

Intermediates in humic acid oxidation, 40:93

Intermittent Disinfection of dental water systems, 31:436

Intermittent Ozonation, system for antibiofouling of fresh water cooling circuits, 2:327

Intermittent Ozone Operation for pesticide control, 25:417

64 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

International Marine Organization (IMO),

34:174

Invercannie Water Treatment Works, 21:615

Iodine Value during ozonolysis of palm olein, 37:503

Iodometry for ozone analysis in buffered solutions, 37:106

Iodometric Assay of ozonized sunflower oil, 28:181

Iodometric Methods, for measurement of residual ozone, 5:203; 10:89; 10:337, 20:433

Iodometric Wet Chemistry Ozone Analysis, in process gas from an ozone generator, guideline for, 18:209

Iodometry, comparison with indigo trisulfonate method for measuring ozone in gas phase, 11:115

Ion Chromatography in semiconductor processing, 24:391

Ion Chromatography, Analysis of Bromide and Bromate Ions by, 17:561

Ion Exchange followed by UV/H₂O₂, 32:383

Ion Exchange for preparation of gas diffusion electrode 25:307

Ion Mobility in ozone generation, 29:399; 30:145

Ionizing Radiation for detergent removal, 33:301

Ionizing Radiation of phenol, 25:377

Iron (II) Method for ozone analysis in buffered solutions, 37:106

Iron and Manganese Oxidation, by ozone at Wiggins Water Works, Durban, South Africa, 16:247

Iron and Manganese removal monitored by differential turbidity, 32:286

Iron and Manganese Removal, from drinking water by ozone in Hungary, 13:479

Iron and Manganese Removal, from drinking water by ozone, 13:675; 17:297

Iron and Manganese Removal, purification of polluted source water with ozonation and biological activated carbon, 6:245

Iron Catalyst for landfill leachate treatment, 33:294

Iron in leachate treated with activated carbon and ozone, 35:55

Iron in tomatoes treated with ozone, 31:21

Iron Oxide (Fe₂O₃) Catalyst, for ozone decomposition, 14:277

Iron Oxide coated membranes and ozone for removal of *Escherichia coli*, 29:75

Iron Oxide, effect on ozonation of natural organic matter, 26:141

Iron present in Finnish groundwater, 28:269

Iron removal by ozone treatment, 8:49,30:73

Iron Removal, by ozonation in the presence of humic materials, 11:93

Iron Removal, from drinking water at Budapest

Waterworks pilot plant, 16:29

Iron-Organic Complexes, 30:73

Irradiance Distribution, 34:306

172 nm Irradiation of organic compounds, 30:99

Irrigation Water treatment with ozone, 23:65

Isatin-5-Sulfonic Acid and determination of ozone in nonaqueous solutions, 36:110

Isatin-Disulfonic Acid and determination of ozone in nonaqueous solutions, 36:110

Isobarbituric Acid, ozonation of, 8:199

Isobutyraldehyde, formation during drinking water ozonation, 12:231

Isoproturon Treatment with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19

Isoproturon, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:657; 17:673

Isothermal Differential Pressure Method, for ozone analysis, in the gas phase, 10:337; 14:91

Isotherms of ozone adsorption on silica gel, 25:315

Ivry Water Treatment Plant (Paris), 23:229

Jadreski Water Treatment Plant, Pula, Yugoslavia, with ozone, 14:101

Jago and Stanfield Method, for AOC determination, 12:377

Japan, use of ozone, 21:127

Jatropha treatment with ozonation and solar irradiation, 37:29

Jeddah, Saudi Arabia, water reclamation plant design, 9:93

Jet Downflow Gas-Liquid Contactor, in ozonation, 20:17

Jet-Pump Gas-Liquid Contactor, in ozonation, 20:17

Jewelry Manufacturing Effluent, 36:196

Joint Sealants resistance to liquid and gas phase ozone, 24:249

Joret and Lévi Method, for AOC determination, 12:377

Joshi Effect in ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583

Juice solutions treated by ozone, 39:255

Juice treatment by Fenton Process, 40:54

Juices treatment with UV light, 30:93

Juvabiones, removal of in chemical and mechanical pulp mill effluents by ozonation, 18:363

Kabab Date, 36:269

Kamloops Water, 30:321

- Kaolin Bleaching** with ozone, 24:1
- Kappa Number** of ozone bleached wheat straw pulp, 40:148
- Kathon** products group, 33:31
- k-Coefficient** in degradation of textile wastewater, 40:465
- Keitz Formula**, 34:306, 34:310
- Kempton Park (UK) Water Treatment Plant**, 25:417
- Kerosene Films**, ozonolysis of naphthalene derivatives in, 9:23
- Ketoacids** formed during ozone treatment of drinking water, 21:79
- Ketoacids** removal by biological activated carbon, 22:393
- Ketoacids**, as Byproducts of Ozonation of Natural Organic Matter in Water, 17:647
- Ketoacids**, formation of during ozonation of drinking waters, 14:269
- Ketoacids**, formation of during ozonation of natural waters, 19:179
- Ketomalonic Acid**, byproduct of ozonation of drinking water, 14:269: 16:1
- Ketomalonic Acids**, Formation of By Ozonation of Natural Organic Matter in Water, 17:647
- Ketones** in ozone treatment of drinking water, 25:53
- Ketones**, as byproducts from catalytic ozonation of humic substances in water, 18:195
- Ketoprofen** removed by ozone/BAC process, 37:343
- Kidney Ischemia/Reperfusion** treatment with ozone, 25:233
- Kinetic Absorption Model**, of ozone in 1,3-cyclohexanedione solutions, 13:397
- Kinetic Competition** in removing pharmaceutical water contaminants, 40:251
- Kinetic Constants**, for ozonation of crotonic acid solutions, 26:415
- Kinetic Information Reconstruction** in ozonation of dyes, 30:344
- Kinetic Model** for decomposition of ozone in aqueous alkaline solution, 22:287
- Kinetic Model** for ozone decomposition of endocrine disruption chemicals, 27:389
- Kinetic Model** for treatment of olive wastewater with ozone, 22:617
- Kinetic Model** of ozone treatment of biomethanated distillery effluent, 37:411
- Kinetic Modeling** for *B. cereus* inactivation with ozone, 38:124
- Kinetic Modeling** in catalytic ozonation with Co(II), 25:261
- Kinetic Modeling** of catalytic ozonation process, 38:3
- Kinetic Modeling** of diethyl phthalate ozonation, 32:238
- Kinetic Modeling** of domestic wastewater ozonation, 23:219
- Kinetic Modeling**, of ozone contactor hydraulics, impact on bromate ion formation, 18:87
- Kinetic Rate Constant Determination** of azo dyes ozonation, 35:423
- Kinetic Scheme** for pulsed discharge ozone generation, 36:253
- Kinetic Studies** of olive mill wastewater catalytic ozonation, 38:261
- Kinetics and Products of the Reactions of Ozone**, with various forms of chlorine and bromine in water, 6:103
- Kinetics** in ozonation of C.I. Reactive Black 5 and Indigo, 29:493
- Kinetics** in ozone/oxygen reactive flotation, 35:381
- Kinetics Modeling** in ozone disinfection of wastewater, 22:113
- Kinetics** of Acid Red B. catalytic ozonation, 37:287
- Kinetics** of bromate formation, 29:429
- Kinetics** of catalytic ozonation of refinery wastewater, 37:546
- Kinetics** of catalytic ozonation, 33:441, 34:359
- Kinetics** of *Cryptosporidium* inactivation with ozone, 23:259
- Kinetics** of degradation of estrone, 30:249
- Kinetics** of degradation of *meta*-Chloronitrobenzene, 36:496
- Kinetics** of dye ozonation, 38:291
- Kinetics** of estriol degradation, 38:358
- Kinetics** of flue gas treatment by ozone, 40:29
- Kinetics** of glycerol ozonation, 31:445
- Kinetics** of heterogeneous catalytic ozone decomposition on activated carbon, 24:227
- Kinetics** of inactivation of *Cryptosporidium* in a static mixer with ozone, 25:295
- Kinetics** of MS2 inactivation, 36:86
- Kinetics** of ofloxacin ozonation, 35:186
- Kinetics** of oxalate ion decomposition by UV irradiation, 29:473
- Kinetics** of oxidation of Microcystin-LR by ozone, 23:161
- Kinetics** of ozonation of a lake water, 38:100
- Kinetics** of ozonation of alicyclic amines, 21:23
- Kinetics** of ozonation of dichlorophenols, 24:123
- Kinetics** of ozonation of Great Lakes Basin wastewater effluent, 37:36
- Kinetics** of ozonation of Indeno (1,2,3-c,d) Pyrene, 21: 571
- Kinetics** of ozonation of liginsulfonate, 25:505
- Kinetics** of ozonation of MIB and Geosmin, 29:185

66 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Kinetics** of ozonation of o-phenylphenol, 34:300
- Kinetics** of ozonation of pharmaceutical effluent, 37:538
- Kinetics of Ozonation** of wastewater in a Chemical Sequential Reactor, 15:201
- Kinetics of Ozonation**, for water and wastewater treatment, modeling of, 15:149
- Kinetics of Ozonation**, of cresol isomers in aqueous solution, 15:267
- Kinetics** of ozone decolorization of sugar industry liquors, 28:261
- Kinetics** of ozone decomposition in wastewater, 28:247
- Kinetics** of ozone decomposition model, 35:338
- Kinetics of Ozone Decomposition**, 11:49; 11:59
- Kinetics** of ozone gas reacting with rice grains, 37:450
- Kinetics** of ozone generation, 38:86
- Kinetics** of ozone in food preservation, 39:115
- Kinetics** of ozone oxidation of amino acids, peptides and proteins, 32:81
- Kinetics** of ozone treatment of natural organic matter, 36:73
- Kinetics** of p-chlorobenzoic acid treatment with ozone, 27:3
- Kinetics** of phenol ozonation, 31:201
- Kinetics** of pulp bleaching with ozone, 25:523
- Kinetics** of pyrrolidone derivatives ozonation, 33:470
- Kinetics** of removal of BPA and NPnEOs from secondary effluents via ozonation, 32:204
- Kinetics** of removal of VOCs with ozone, 31:393
- Kinetics** of TRIC and PERC elimination, 38:302
- Kinetics**, disinfection, effects of ozone concentration and temperature on, 10:123
- Kinetics**, of Advanced Oxidation of Cyanazine, 17:237
- Kinetics**, of aromatic compounds reaction with ozone, 32:61
- Kinetics**, of atrazine oxidation, modeling of, 19:395
- Kinetics**, of biological oxidation of primary municipal wastewater, 19:513
- Kinetics**, of competitive first reactions of ozone during advanced oxidation, 19:13
- Kinetics**, of Competitive Ozone Reactions in Water, 17:163
- Kinetics**, of Cyanazine degradation by ozone, ozone/UV, and UV radiation, 16:213
- Kinetics**, of Detergent Oxidation During Ozone Treatment of Combined Municipal-Industrial Effluent, 17:345
- Kinetics**, of oxidation of 2,4-D by ozone and UV light, 16:235
- Kinetics**, of Ozonation and Advanced Oxidation of Phenols, 17:527
- Kinetics**, of ozonation of chlorophenol solutions, 20:259; 20:283
- Kinetics**, of Ozonation of Glucosamine and N-Acetyl Glucosamine, 17:463
- Kinetics**, of ozonation of glyoxylic acid in water, 9:13
- Kinetics**, of ozonation of industrial wastewaters, 10:363
- Kinetics**, of ozonation of pentachlorophenol in aqueous solutions, 20:163
- Kinetics**, of Ozonation of Pulp Mill Effluents. 17:419
- Kinetics**, of ozonation of tomato plant wastewaters, 19:281
- Kinetics**, of ozonation, 14:303; 17:355
- Kinetics, of Ozonation**, correlations between chemical structure and, 9:207
- Kinetics**, of ozone decay in natural waters, 20:361
- Kinetics**, of ozone decomposition in dilute aqueous solutions, 9:165
- Kinetics**, of ozone decomposition in water, 5:37; 14:33
- Kinetics**, of ozonolysis of synthetic dyes, 9:153
- Kinetics**, of reaction of benzene + ozone in liquid and vapor phases, 19:109
- Kinetics**, of standard neutral ozone decomposition model, 26:345
- Kiwi** treated with ozone and UV Radiation, 32:144
- Knitted Fabric** bleached by ozone, 37:170
- Knitted Fabrics** from soybean fibers treated with ozone, 34:143
- Kolkata** ozone, 36:181
- Kraft Effluent** treatment with ozone, 29:47
- Kraft Mill Wastewater**, treatment with ozone, 26:317
- Kraft Paper Machine Whitewater**, ozone decolorization of residual direct paper dyes in, 19:549
- Kraft Process Pulp Mill Effluent Treatment**, with ozone; 14:461
- Kraft Pulp Mill Effluent** treatment with ozone, 24:307, 28:453
- Kurobuku Soil** treated with ozone, 28:125
- La³⁺/WO₃/TiO₂/sep** photocatalyst, 38:291
- Labor Savings**, in treatment of fresh cut salad mixes with ozone, 32:66
- Laboratory-scale** evaluation in Quebec (Canada) drinking water facilities, 37:294
- Lactic Acid Bacteria** in food processing plants treatment by ozone, 28:425

- Lactic Acid Bacteria**, 30:81
Lactic Acid for preservation of sugarcane juice, 40:198
Lag Time, 12:107
Lake Huron water treatment with advanced oxidation, 32:217, 32:295
Lake Huron water treatment, 34:16
Lake Water, contacting with ozone in a static mixer, 26:227
Lake Water, ozone treatment of, 12:437
Lake Zurich Water treated with ozone and granular activated carbon, 28:237
Lake Zurich Water treatment, 22:123
Laminar flow in UV reactor, 30:448
Landfill Leachate catalytic ozonation, 38:133
Landfill Leachate ozonation, 32:313
Landfill Leachate preozonation, 36:427
Landfill Leachate treated by catalytic ozonation, 37:371
Landfill Leachate treated by ozone and Fenton process, 31:28
Landfill Leachate treatment by advanced oxidation, 24:369; 33:294
Landfill Leachate treatment with activated carbon and ozone, 35:55
Landfill Leachate treatment with ozone and ceramic raschig rings, 37:22
Landfill Leachate treatment with ozone, 15:433; 18:477, 21:1; 26:287
Landfill Leachate, 38:367
Landfill Leachate, treatment by the Ecoclear® Process, 19:297
Landfill Treatment, with Ozone/Hydrogen Peroxide, Hydrogen Peroxide/UV Radiation, or Hydrogen Peroxide/Fe(II), 17:119
Landfill, stabilization with ozone, 20:121
Langranian Actinometry and UV reactor performance, 34:81
Laser flow map of in-line multi-jets contactor, 33:449
Laser Granulometry, impact of preozonation on, 7:107
Lateral Root properties in of adventitious roots in *Chrysanthemum*, 31:15
Laundering with ozone, 31:339
Laundries and ozone in the USA, 21:99
Laundries use of ozone, 29:85
Laundry Applications for ozone, 24:1; 31:357; 35:196; 35:399
Laundry Systems, 31:348
Laundry Wastewater treatment with ozone, 22:535
LC/MS for analysis of disinfection byproducts, 22:653
LCMS and –MSⁿ to identify oxidation products of ozone-treated imazalil, 33:308
L-Cysteine Inactivation of Bromate Ion Genotoxicity, 16:443
Leachate treatment optimization with ozone, 37:279
Leachate Treatment using ceramic ozone contactors, 22:379
Leachate Treatment with ozone in Germany, 21:163
Leachate Treatment with ozone, 21:1
Lead Dioxide anode, 30:113
Lead Removal, by Ozone in Drinking Water, 17:297
Leaf Blight controlled by ozone, 27:495
Leather bleached with ozone, 39:455
Leather Dyeing Wastewater, 40:133
Leather Making and ozone treatment, 32:449
LED for ozone concentration measurement, 35:229
Leek (UK) STW, use of ozone for treatment of dye wastewater, 20:111
Legionella in swimming pool water, 37:456
Legionella presence in bath water, 25:345
Lengg Drinking Water Plant, Zürich, Switzerland, use of ozone in, 13:41
Lewis' Lung Carcinoma and ozone therapy, 30:398
Light Attenuating Media, 27:459
Light Manufacturing Industries, ozonation of cooling systems, 15:81
Lignin degradation by ozone, 23:139, 24:83
Lignin Model Compounds and ozone treatment, 21:53
Lignin Model Compounds, Comparison of Ozone Byproducts From in Water, 17:687
Lignin oxidation by ozone in presence of transition metal ions, 25:505
Lignin removal process cost, 33:211
Lignin, ozone attack of, 11:217
Lignin, Poplar, ozone degradation of, 13:239
Lignocelluloses degradation by ozone, 23:139
Lime Softening Plant, for *cryptosporidium* inactivation and atrazine oxidation, 20:177
Lindane and Its Chlorine and Ozone By-Products, non-genotoxic effects of on gap junctional intercellular communication, 19:351
Lindane, Removal by Ozone or Ozone/Hydrogen Peroxide from Drinking Water, 17:97; 17:657
Linear Alkylbenzene Sulfonates, treatment by ozone, 26:327
Linear Discriminant Analysis in ozonation of micropollutants, 36:289
Linen bleaching with ozone and hydrogen peroxide, 35:316
Linomycin, treatment with ozone, 26:525
Linurion catalytic ozonation, 33:434

68 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Linuron**, Destruction by Ozone or Ozone/Hydrogen Peroxide in Drinking Water, 17:657; 17:673
- Lipid Peroxidation** by ozone in a bubble column, 38:62
- Lipid Peroxidation** in ozone therapy, 25:223
- Lipid Stability**, 40:487
- Lipophilic Wood Extractives** removal with ozone, 22:585, 23:401
- Liquid Axial Dispersion Coefficient** in impinging jet contactors, 32:99
- Liquid Height** effect on oxidation of landfill leachate, 38:367
- Liquid Ozone**, 28:149
- Liquid Phase Ozone Decomposition**, 15:167
- Liquid Phase Plasma** in methyl orange ozonation, 36:244
- Liquid/Liquid Extraction Ozone (LLO)** for EDC removal, 39:343
- Liquor Decolorization** by ozone, 28:261
- Lithium Tracing**, in ozone contactor testing, 8:261
- Liver Ischemia/Reperfusion** and ozone treatment, 25:241
- Local Mass Transfer Coefficient** in ozone bubble column, 29:343
- Logit-response** in inactivation of *Cryptosporidium* with ozone, 23:1
- Logyard Waste** treatment with ozone, 24:83
- London Water Quality**, 25:409
- Long Beach, CA**, pilot plant study, in-line ozone treatment of groundwater, 13:559
- Long Chain Fatty Acids** in ozonation of waste-activated sludge, 37:316
- Long-Term Enhanced Surface Water Treatment Rule**, 30:70
- Long-Term Stability** of silver-coated perlite, 37:252
- Los Angeles Aqueduct Filtration Plant**, operating strategy to meet the Surface Water Treatment Rule requirements, 14:439
- Los Angeles, CA**, drinking water treatment plant, 8:77; 9:93; 10:255;
- Los Angeles, CA**, drinking water treatment with ozone, "The Big Switch", 13:711
- Loss Probability of Ozone at the Wall**, 26:487
- Loss Rate** of ozone in a cylindrical tube, 33:106
- Loss Rate of Ozone**, influenced by surface material, 26:487
- Low Carbon Source** in sludge ozonation, 33:410
- Low Frequency Ozonation Systems**, comparison with medium high frequency system for drinking water treatment, 1:107
- Low Pressure Mercury Vapor Lamp** efficiency in phenol decomposition, 35:350
- Low Pressure Mercury Vapor Lamps (LPMVL)** for irradiation of bromine species, 28:217
- Low Pressure UV** for treatment of natural waters, 32:329
- Low Pressure UV Lamp**, effect on bromate ion destruction, 18:271
- Low Pressure UV Lamps**, 35:38
- Low Temperature Oxidation** of flue gas with ozone, 29:207
- Low-pressure UV** for degradation of *N*-Nitrosodimethylamine, 34:115
- LT2ESWTR** and system design for inactivation of *Cryptosporidium*, 27:129
- LT2ESWTR** effect of design of Melbourne, FL surface water treatment plant, 31:262
- Lychee Pesticide** treatment with ozone, 33:232
- Lye Wastewater** treatment with ozone, 24:105
- Lyocell** yarns color fading ozonation 40:377
- Magnesium Cation** assistance on ozonation of refractory organic pollutant, 32:113
- Magnetic Frequency Multipliers**, for generating ozone, 14:139
- Magnetic Frequency Triplers**, for generating ozone, 14:139
- Magnetic Ion Exchange Resin (MIEX®)** pretreatment to reduce bromate formation, 27:371
- Major Autochemotherapy**, 38:322
- Makis Water Treatment Plant, Belgrade, Yugoslavia**, using ozone, 14:101
- Malathion**, absorption kinetics of ozone in aqueous solutions of, 13:487
- Malathion**, Destruction by Ozone or Ozone/Hydrogen Peroxide in Drinking Water, 17:657
- Maleic Acid** decomposition by ozone and advanced oxidation, 27:11
- Maleic Acid** ozonation, 31:301
- Maleic Acid** ozonation, reactor modeling and rate constants determination, 25:13
- Malonic Acid**, 12:1
- Manganese (Dissolved) Analysis**, 17:135
- Manganese** and ozone treatment of Arlington, Texas water, 29:261
- Manganese based Catalysts** for catalytic ozonation of phenolic acids, 31:403
- Manganese Carbonate** as ozone decomposition catalyst, 40:21
- Manganese** complex, catalytic effect on ozone treatment of lignin compounds, 21:53
- Manganese** in tomatoes treated with ozone, 31:21
- Manganese Ore** catalytic ozonation, 38:133
- Manganese** oxidation by ozone, 21:465; 23:149
- Manganese Oxidation**, by ozone at Wiggins Water

- Works, Durban, South Africa, 16:247
- Manganese Oxide** catalytic ozonation of fenofibric and clofibric acids, 33:434
- Manganese Oxides** for ozone decomposition, 29:41, 35:308
- Manganese Oxides** on titanium dioxide, 38:156
- Manganese Removal**, after preozonation of extracted aquatic fulvic acid, 11:69
- Manganese Removal**, by ozonation in the presence of humic substances, 11:93
- Manganese Removal**, by ozone, 8:49
- Manganese Removal**, compromise between bromate ion formation and/or pesticides destruction, 19:39
- Manganese Removal**, from drinking water at Budapest Waterworks pilot plant, 16:29
- Manganese** size fractions affected by ozone, 27:147
- Manganese(II)** as catalyst during ozonation of humic substances in water, byproducts therefrom, 18:173
- Manganese, Oxidation in Drinking Water**, 13:623; 13:675; 15:331;
- Manganese, Ozone Oxidation in Drinking Water**, 17:297
- Manganese-Catalysis**, of atrazine destruction, 19:227
- Manganese-Loaded GAC**, for catalytic ozonation, 26:1
- Manganese-Ozone Reaction**, As a Function of pH, 17:135
- Manganous Ion Polarography**, 17:135
- Mannheim Water Treatment Plant**, 23:15
- Manure storage**, and ozonation, 20:35
- Manure treatment with ozone**, 30:290
- Mariculture with Ozone**, closed loop system for, 15:311
- Mariculture**, 33:368
- Marine Aquaria Water** treatment with ozone in the USA, 21:99
- Marine Aquaria**, closed-cycle, ozonation as a critical component of, 1:11
- Marine Aquaria**, ozone treatment of, 18:477
- Marine Aquaria**, the practical use of ozone in, 2:225
- Marine Diesel Engine** exhaust treated with ozone, 37:518
- Marine Species**, toxicity and effects of bromoform on five, 1:47
- Marine Vessels Wastewater** treatment with ozone, 25:177
- Mass and Tandem Mass Spectrometry** used in ozonation of pharmaceutical compounds, 32:305
- Mass Balance Analysis**, of ozone in bubble contactors, 9:289
- Mass Spectrometry** for detection ozone oxidation of fullerene, 28:177
- Mass Spectrometry** to analyze catalytic ozonation of Fipronil, 37:186
- Mass Transfer Characteristics**, for ozone in spinning disk contactor, 13:501
- Mass Transfer Coefficient** for a microporous diffuser reactor system, 27:45
- Mass Transfer Coefficient** in impinging jet ozone bubble column, 29:245
- Mass Transfer Coefficient** in ozonation of stabilized landfill leachates, 28:309
- Mass Transfer Coefficient** in static mixers, 32:399
- Mass Transfer Coefficient of Ozone**, relationship to bacterial inactivation effect, 11:169
- Mass Transfer Coefficient** with ozone in impinging zone reactor, 21:501
- Mass Transfer Coefficient**, of ozone in water, 9:1; 9:289
- Mass Transfer Coefficient**, of ozone, 13:205; 13:421; 13:487; 13:501
- Mass Transfer Coefficient**, with ozone in water in a bubble column, 26:277
- Mass Transfer Coefficients** in ozonation of wastewaters, 19:281
- Mass Transfer Coefficients** of ozone in a stirred vessel, 6:17
- Mass Transfer Coefficients**, for oxygen and ozone, comparison of, 10:321
- Mass Transfer Devices**, energy requirements for the mass transfer of ozone into water -- state of the art, 3:181
- Mass Transfer Efficiency** in ozone dissolution systems, 22:329
- Mass Transfer Enhancement** by acoustic and hydrodynamic cavitation, 35:482
- Mass Transfer Enhancement** with ozone in impinging zone reactor, 21:501
- Mass Transfer** in circular conduits, 36:191
- Mass Transfer** in full-scale reactors for *Cryptosporidium* inactivation, 22:99
- Mass Transfer** in in-line multi-jets contactor, 33:449
- Mass Transfer** in maleic acid ozonation, 25:13
- Mass Transfer** in oxidation of cycloalkenes with ozone, 28:329
- Mass Transfer** in ozonation of C.I. Reactive Black 5 and Indigo, 29:493
- Mass Transfer** in ozonation of Kraft pulp mill effluents, 23:479
- Mass Transfer** in ozonation of sludge, 29:415
- Mass Transfer** in ozone bubble column, 23:369, 39:44
- Mass Transfer** in ozone gas-liquid reactors, 28:17
- Mass Transfer** in treatment of pulp mill

70 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

wastewaters with ozone, 22:31

Mass Transfer Modeling in a cocurrent jet pump, 20:17

Mass Transfer Models, for ozone treatment of crotonic acid solutions, 26:415

Mass Transfer of ozone in a confined plunging liquid jet contactor, 25:1

Mass Transfer of ozone in plunging liquid jet contactor, 28:131

Mass Transfer of ozone into water, 32:3

Mass Transfer of ozone, in a stirred vessel, 6:17

Mass Transfer of Ozone, in UV/ozone systems, 14:215

Mass Transfer of Ozone, into Water, Kinetics of, 17:205, 17:163

Mass Transfer of ozone, into water: Energy requirements -- state of the art, 3:181

Mass Transfer of Ozone, nitrophenols as model compounds in the design of ozone contacting and reacting systems, 6:143

Mass Transfer of ozone, to water: A fundamental study, 2:337

Mass Transfer Parameters and Hydrodynamics, modeling of in a continuous ozone bubbling column, 18:99

Mass Transfer, in ozone treatment of wastewater containing azo dye, 26:539

Mass Transfer, of ozone in bubble contactor, computer simulation of, 13:535

Mass Transfer, of ozone in downflow bubble contact columns, 9:217

Mass Transfer, of ozone into water, 9:1; 9:125; 9:289; 12:269; 12:341

Materials of Construction, for diffusion contactors, 14:487

Materials of ozone generator electrodes, corrosion resistance of, 19:169

Mathematical Model for ozone in impinging zone reactor, 21:501

Mathematical Modeling in ozonation of pulp mill wastewaters, 22:31

Mathematical Modeling of azo dyes ozonation, 35:423

Mathematical Modeling, of ozone treatment of lake water in a static mixer, 26:227

Mathematical Models, for ozone oxidation, 12:217

Matrix Organic Compounds, 40:338

Maximum Containment Level Goal for bromate risk, 36:419

Maximum Contaminant Level in drinking water treatment, 21:465

Maximum Product of Spacings, 39:273

MCF-7 cell proliferation assay, 34:32

MCPA, degradation by ozone, 14:283

MCPA, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673

m-Dinitrobenzene degradation by catalytic ozonation, 27:359

m-Dinitrobenzene, removal from water by ozonation, 10:1

Meal Packaging and treatment with ozone, 32:137

Mean Electron Energy in dielectric barrier discharge, 35:448

Measurement of ozone concentration in processing water, 28:171

Measurement of ozone decay in stopped-flow reactor, 29:121

Measurement of ozone gas glow, 22:1

Measurement System for surface loss rate of ozone, 34:370

Measurement, of ozone residual by Indigotrisulfonate Method, 32:33

Meats treatment with ozone, 32:137

Mechanical and Chemical Pulp Mill Effluent Treatment, by ozonation, 18:363

Mechanical Effect in ozone mass transfer, 35:482

Mechanical Properties of cucumbers treated with ozone. 39:188

Mechanical Properties of ozone bleached denim, 38:175

Mechanical Properties, of ozone-treated paper pulps, 7:229

Mechanically Stirred Gas-Liquid Ozone Reactor, assessment of optimal operating conditions, 16:181

Mechanism for removal of VOCs with ozone, 31:393

Mechanism of degradation of anthraquinone, 39:219

Mechanism of ozone degradation of non-ionic surfactants, 27:437

Mechanism of Reaction, of ozone with soluble aromatic pollutants, 2:39

Mechanisms of Ozone Decomposition, 11:49; 11:59

Mechanisms, of Ozone Decolorization of Pulp Mill Effluents, 17:419

Mechanisms, of ozone decomposition in aqueous solution, 14:33

Mechanisms, Reaction, of organophosphorus pesticides, application in drinking water treatment, 6:207

Mecoprop Treatment, with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19

Mecoprop, degradation by ozone, 14:283

Medical Applications of ozone in France, 21:153

Medical Applications of ozone, 2:275, 7:259, 12:65, 25:223, 25:233, 23:207, 25:241; 29:501

- Medical Applications**, 38:322
- Medical Applications**, 40:3
- Medium Frequency Pulse** train ozone generation, 21:635
- Medium High Frequency Ozonation System**, comparison with low frequency system for drinking water treatment, 1:107
- Medium Pressure Lamps**, 34:310
- Medium Pressure UV** for treatment of natural waters, 32:329
- Medium Pressure UV Lamp**, effect on bromate ion destruction, 18:271
- Medium Pressure UV Lamps**, 35:38
- Medium-pressure UV** for degradation of *N*-Nitrosodimethylamine, 34:115
- Melamine**, oxidation byproducts by ozone or ozone advanced oxidation, 19:129
- Melbourne, FL** ozone contactor, 31:262
- Melon** seeds affected by ozone processing, 40:209
- Melun Arvigny Water Treatment Plant**, use of static mixer ozone contacting in, 16:455
- Membrane Bioreactor (MBR)** with advanced oxidation processes for antibiotics removal, 31:246
- Membrane Cleaning** with ozone, 40:64
- Membrane Cleaning**, 39:310
- Membrane Concentrate** oxidized by ozone and magnesium cations, 32:113
- Membrane Concentrate**, treatment with ozone, 32:16
- Membrane Filtration** and ozone for removal of *Escherichia coli*, 29:75
- Membrane Filtration Methods**, for recovery of injured *E. coli* from ozone-treated water, 11:383
- Membrane Fouling** in ultrafiltration systems, 22:637
- Membrane Fouling** of ozonated water, 30:152
- Membrane fouling**, 33:379
- Membrane Fouling**, 33:379,39:310, 40:64
- Membrane Method of Ozone Analysis**, 17:329
- Membrane Ozone Diffuser** for UV-ozone applications, 22:427
- Membrane Reactors** for ozone contacting, 27:209
- Membranes** and ozone for water reclamation, 36:485
- Membranes** for ozone contacting, 27:209
- Mercaptan Compounds**, inactivation of genotoxicity of bromate ion by, 16:443
- Mercaptans**, deodorization by water washing then ozonation, 13:331
- Mercaptans**, from rendering of carcasses, action of chlorine and ozone on, 2:261
- Mercury Free** UV lamps. 35:38
- Mercury lamp** for ozone generation, 34:129
- Mercury** oxidation in flue gas, 40:29
- Méry-sur-Oise Water Treatment Plant**, economics of ozone in, 13:607
- Metabolic Activity Loss**, in microorganisms and cell membrane damages upon ozonation, vital fluorochromization of microorganisms using 3',6'-diacetylfluorescein to determine, 18:173
- Metabolic Identification**, of microorganisms in ozonized drinking waters, 8:95
- Meta-Chloronitrobenzene** degradation by ozone, 36:496
- Metal Ion** effect on patulin degradation with ozone, 31:224
- Metal Ions** in catalytic ozonation, 34:359
- Metal Mesh Electrode** for ozone generation, 34:378
- Metal Oxide** effect on catalytic ozonation, 25:25
- Metal-Complex Dyes**, Treatment by Ozone and Advanced Oxidation, 17:149
- Metallic Ions** in removal of carboxylic acid by ozone and hydrogen peroxide, 28:53
- Metallic ions** influence on advanced oxidation, 22:415
- Metallic Ions** present in treatment of citric acid with ozone, 27:499
- Metals Removal Control** monitored by differential turbidity, 32:286
- Metals** resistance to liquid and gas phase ozone, 24:249
- Metastasis** and ozone therapy, 30:398
- Meteorology**, 40:237
- Methabenzthiazuron**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673
- Methacrylic Acid** ozonation, 31:301
- Methane Production** from digested sludge, 39:148
- Methane Production** in anaerobic digestion, 29:201
- Methane**, in relation to tropospheric ozone, 12:177
- Methanol**, Influence on Degradation of AOX by Advanced Oxidation, 17:119
- Methicillin-Resistant *Staphylococcus aureus*** in ozone laundry systems, 31:357, 31:369
- Methomyl** removal in advanced greenhouses, 32:259
- Methotrexate** removal with ozone, 21:69
- Methoxybenzene**, Nitration of During Ozonation of Water, 17:627
- Methoxybenzene**, ozonation of, 8:129, 32:61
- Methyl Alcohol**, 12:1
- Methyl Glyoxal**, Formation during Ozonation in Water, 17:53
- Methyl Glyoxal**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

72 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Methyl Glyoxylate**, Byproduct of Ozonation of Coniferyl Alcohol and/or Ferulic Acid in Water, 17:687
- Methyl Isobutyl Ketone**, control of in air phase by GAC, regeneration by advanced oxidant, 18:417
- Methyl Linoleate** ozonation and ¹HNMR, 25:121
- Methyl Mercaptan**, ozone oxidation of, 13:331
- Methyl Oleate Ozonation**, 23:35
- Methyl Orange Dye** ozonation with multiwalled carbon nanotubes, 37:269
- Methyl Parathion**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:657; 17:673
- Methyl tert.-Butyl Ether**, oxidation of by ozone and combined ozone/H₂O₂, 16:41
- Methyl tert-Butyl Ether** removal process cost, 33:211
- Methylbenzene**, reaction with ozone, 32:61
- 1-Methylbenzotriazole**, ozonation of aqueous solutions of, 9:233
- 5-Methylbenzotriazole**, ozonation of aqueous solutions of, 9:233
- 2-Methylfuran**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- 3-Methylindole**, ozonation of in swine manure waste odors, 19:425
- 5-Methylcytosine**, kinetics of ozonolysis of, 9:207
- 2-Methylisoborneol (2-MIB)** removal by ozone/hydrogen peroxide process, 33:121
- 2-Methylisoborneol**, kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methylisoborneol, 15:1
- 2-Methylisoborneol**, oxidation with ozone, 10:309
- 2-Methylisoborneol**, ozonation of at Los Angeles Aqueduct Filtration Plant, 13:711
- 1-Methylnaphthalene**, ozonolysis of to produce methylated isomers of 2-formylcinnamaldehyde, 9:23
- Methylene Blue** degradation with ozone, 24:159
- Methylene Blue** removed by catalytic ozonation using zeolite, 32:344
- Methylene Chloride**, ozone destruction of in distilled and drinking water, 9:265
- Methylglyoxal**, analysis by PFBOA method, 11:127
- Methylglyoxal**, identification of during ozonation of organic compounds in water, 2:251
- Methylisothiazolone** treatment with ozone, 33:31
- 3-Methylphenol**, kinetics of ozonolysis of, 9:207
- 4-Methylphenol**, kinetics of ozonolysis of, 9:207
- 5-Methylresorcinol**, Oxidation of in Water by Ozone, Ozone/UV Radiation, Ozone/-Hydrogen Peroxide, Ozone/Hydrogen Peroxide/UV Radiation, Ozone/Titania, Ozone/Titania/UV Radiation, and Oxygen/Titania/UV Radiation, 17:399; 17:527; 8:299; 10:55; 10:255
- 3-Methyl-pyridine** degradation by ozone, 23:189, 23:359
- Methyl-tert-butylether** treatment with ozone, 27:27
- Metobromuron**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673
- Metoxuron**, Destruction of in Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:673
- Metropolitan Water District**, 39:203
- MIB** oxidation by ozone, 29:185
- MIB** oxidized by ozone in surface water, 28:277
- Micro/Nanobubble** ozonated water for airborne disease prevention, 37:78
- Microalgae** biomass harvesting, 39:264
- Microbial Count** of ozonated wheat flour, 30:413
- Microbial Growth**, in drinking waters treated with ozone, 20:303
- Microbial IAQ**, bactericidal effects of high airborne ozone concentrations on *Escherichia coli* and *Staphylococcus aureus*, 20:205
- Microbial Inactivation** in fruit juices, 32:166
- Microbial Inactivation** of domestic well drinking water, 38:25
- Microbiologic Control** with air purifier ozone generator, 34:225
- Microbiological Benefits** of ozone laundering, 31:339, 31:357
- Microbiological Control**, by ozone in cooling tower water treatment, 13:375
- Microbiological Parameters**, in Colorado River water, effects of ozonation on, 13:127
- Microbiological Stability**, of ozonated colored groundwater, 13:109
- Microbubble effect on ozonation rate**, 23:77
- Microbubble** formation for site remediation, 32:130
- Micro-Bubble** producer in treatment of pyrolysis wastewater by ozone, 32:349
- Microconstituents**, in U. S. municipal wastewater plants, 32:43
- Microcystin-LR** oxidation by ozone, 23:161
- Microcystins**, destruction with ozone, 20:223
- Micro-Discharge Emissions** in ozone formation, 21:229
- Microdischarge Modeling**, in ozone generation, 12:255
- Microelectronics Industry** and use of ozone, 24:379
- Microfibre Mops and Wiping Cloths** in ozone laundry systems, 31:357
- Microflocculation Effects of Ozone**, 16:55
- Microflocculation**, 10:39; 10:255
- Microflocculation**, by ozone at the Los Angeles, CA

water treatment plant, 8:77

Microflocculation, With Ozone or Ozone/Hydrogen Peroxide, 17:25

Microorganism Control, with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19

Microorganism Inactivated Mechanisms for inactivation of vegetative and sporulated bacteria, 32:180

Microorganism Inactivation by ozone in aqueous solution, 37:119

Microorganism Kills in ozone laundry systems, 31:369

Microorganism Reduction in drinking water mains, 34:243

Microorganism Reduction with ozone, 24:91

Microorganisms associated with food spoilage, 30:81

Microorganisms in dental water, 33:417

Microorganisms in disinfection of explants, 36:435

Microorganisms in ozone pretreatment of colored upland water, 21:615

Microorganisms in root canal infections, 36:264

Microorganisms in tooth decay, 35:456

Microorganisms inactivation by UV, 23:239

Microorganisms inactivation in ozone in water, 21:277, 23:183

Microorganisms, isolated in ozonized drinking waters, and their metabolic identification 8:95

Microorganisms, vital-fluorochromization of using 3',6'-diacetylfluorescein to deter-mine damages to cell membranes and loss of metabolic activity upon ozonation, 18:173

Micropollutant Oxidation, with ozone in natural waters, 14:185

Micropollutant Removal from water with ozone, 17:97

Micro-pollutants degradation by UV advanced oxidation, 30:34

Micropollutants in ozonation of secondary municipal wastewater, 40:441

Micropollutants in treatment of Seoul, Korea drinking water, 27:69

Micropollutants in water and oxidation with ozone, 21:207

Micropollutants oxidation by UV/H₂O₂, 34:120, 34:125

Micropollutants ozonation in presence of natural organic matter, 36:73

Micropollutants ozonation modeling, 36:289

Micropollutants removal by ozone oxidation and biodegradation, 39:296

Micropollutants removed in collimated beam UV

reactor, 37:134

Micropollutants treated with ozone in wastewater plants, 31:415

Micropollutants treated with UV, 35:38

Microporous Diffuser for an ozone reactor, 27:45

Microstructure Characterization of polymers with ozone, 25:145

Microtox Assay after ozone/BAC process, 37:343

Microwave treatment of canned maize production sludge, 31:257

MIEX[®] pretreatment to reduce bromate formation, 27:371

Milham Soil dispersion after treatment with ozone, 23:65

Mineral Oil, 38:253

Mineral Removal, by reverse osmosis prior to ozone treatment of cooling water, 14:231

Mineral Scale, formed during ozonation of cooling waters, 15:47

Mineralization in ozone degradation of aqueous nitrophenols, 23:333

Mineralization in reactive dyes advanced oxidation, 39:14

Mineralization of acid black 210, 40:372

Mineralization of azo dyes, 37:420

Mineralization of humic acid and ibuprofen by catalytic ozonation, 38:203

Mineralization of ozonated activated sludge, 29:191

Mineralization of phenol by catalytic ozonation, 40:173

Mineralization rate of caffeine degradation by advanced oxidation, 37:379

Minerals treated with ozone, 29:307

Minimal Inhibition Concentration (MIC) of ozonized sunflower oil, 31:232

Minimum Chlorine Dioxide Dosage in water treatment, 22:215

Mining Effluent treated with ozone and activated carbon, 37:240

Minocycline, 34:484

Mixed Oxidants in ozone formation during salt brine electrolysis, 20:239

Mixing Effects, on ozone disinfection of *E. coli*, 13:593

Mixing Energy and ozone treatment of Arlington, Texas water, 29:261

Mixing in in-line multi-jets contactor, 33:449

Mixing Nozzles with impinging jets, 32:99

Mixing role in ozone dissolution systems, 22:329

Mode of Action of bromate in male rats, 36:419

Model Calibration for ozonation in presence of natural organic matter, 36:73

Model for dissolved ozone dosing, 29:379

74 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Model** for ozone decomposition in wastewater, influencing decomposition of ozone in wastewater, 28:247
- Model** of ozone self-decomposition, 29:31, 29:55
- Model Systems** in evaluating ozone treatment of natural waters, 21:239
- Model**, for ozone mass transfer in semibatch stirred vessel, 19:439
- Model**, of ozone concentration, 32:56
- Modeling Atrazine Oxidation** by UV/H₂O₂, 19:395
- Modeling** of 3-methyl pyridine degradation by ozone, 23:359
- Modeling** of active sludge treated with ozone, 36:451
- Modeling** of bromate and ozone concentration, 34:280
- Modeling** of bromate formation in drinking water, 24:923; 29:3; 29:353, 29:429; 34:465
- Modeling** of dehydroabiatic acid oxidation, 27:397
- Modeling** of fine-bubble diffusion reactors, 22:369
- Modeling** of full-scale reactors for *Cryptosporidium* inactivation, 22:99
- Modeling** of inactivation of *Cryptosporidium* in a static mixer with ozone, 25:295
- Modeling** of maleic acid ozonation, 25:13
- Modeling** of oxygen and air fed surface discharge arrangements, 27:59
- Modeling** of ozone bubble column, 29:343
- Modeling** of ozone contactors using CFD, 31:262
- Modeling** of ozone decomposition, 35:338
- Modeling** of ozone gas-liquid reactors with continuous flow analysis, 28:17
- Modeling** of ozone generator, 37:3
- Modeling** of ozone-hydrogen peroxide treatment, 28:95
- Modeling** of trihalomethane formation, 33:14
- Modeling** of UV oxidation of micropollutants, 34:120
- Modeling** of wastewater ozonation, 32:424
- Modeling Ozonation**, in Bubble Contactors, 17:355; 17:379; 17:469;
- Modeling**, of ozonation of chlorophenol solutions, 20:259; 20:283
- Modeling**, of ozone contactors by computational tank dynamics, 26:403
- Modeling**, of ozone contactors, 15:213, 17:15
- Modeling**, of ozone decomposition, 26:345
- Modeling**, of ozone generation, 7:299; 15:371
- Modeling**, Ozone Contactors for Industrial Wastewater Treatment, 17:355 17: 379;
- Modeling**, Ozone Contactors for Micropollutant Removal, 17:97
- Models** for ozone generation, 32:372
- Models**, for predicting bromate ion formation during ozonation of drinking water, 19:323
- Models**, ozone decomposition, applications of, 19:55
- Modesto Irrigation District** pipeline contactor, 29:291
- Modification** of granular activated carbon, 37:357
- Modification** of polyvinyl chloride with ozone, 29:373
- Modification** of potato starch by ultrasonication and aqueous ozonation, 40:105
- Modified Air Packaging** for restaurant food processing, 32:137
- Modified Iodometric Technique**, for analysis of ozone in aqueous solutions, using As(III), 2:183
- Modifying** carbon nanotube evaluation, 36:465
- Molar Absorption Coefficient** in electrolyte solutions, 39:69
- Molar Absorptivity** in analysis of ozone, 24:17
- Molasses Wastewater** decolorization by ozone, 27:365
- Mold** and food spoilage, 30:81
- Mold** removal via ozone gas treatment, 31:326
- Molecular Sieve** in dielectric barrier discharge, 35:134
- 13X Molecular Sieve** for catalytic oxidation of cyclohexane, 38:482
- Molecular Size Distribution**, during ozone treatment of landfill leachate, 26:287
- Molecular Size Fractionation**, of aquatic natural organic matter upon ozonation, 16:89
- Molecular Weight Distribution** after ozonation, 34:342
- Molecular Weight Distribution** in textile effluents, 35:7
- Molecular Weight Distribution** of byproducts in ozone-BAC drinking water plant, 37:257
- Molecular Weight Distribution of Humic Acids**, Effects of Ozonation on, 17:511
- Molecular Weight Distribution** of pulp and paper wastewater, 30:105
- Molecular Weight of Organic Matter, Ozone, and Oxalic Acid**, effects on coagulation, 18:311
- Molecular Weight Reduction**, of humic materials by ozonation, 7:121
- Moments**, 40:330
- Monitoring** of air quality, 33:80
- Monitoring Process Design** of ozone-biofiltration treatment systems, 36:276
- Monitoring**, of ozone oxidation reactions of organic materials, automated UV absorption method for, 8:321
- Monochloramine Addition** in drinking water, 23:15

- Monochloramine** effect on biofilms, 34:243
- Monochloramine** in a full-scale distribution system, 25:473
- Monochloroacetic Acid** removal by photocatalysis with TiO_2 and O_3 , 27:311
- Monroe, Michigan**, 10-year ozonation costs at, 13:161
- Mont Valérien Water Plant**, advantages of preozonation in upgrading of, 13:437
- Montreal WWTP**, 30:387
- Montreal, Canada**, 15 years experience in ozonation for drinking water treatment, 18:299
- Mont-Valérien Plant, France**, preozonation for algae removal in, 15:445
- MOPAC** for analysis of ozone clusters, 25:211
- Mordants** in treatment of cotton fabrics, 40:44
- Morpholine** removal with ozone, 21:23
- Mortality** of fungi treated with ozone, 36:144
- Moving-bed Biofilm System** for treatment of landfill leachate, 32:313
- MS2 Coliphage Surrogate**, for ozone disinfection, 15:279
- MS-2 Coliphages**, effects of ozone on in Colorado River water, 13:127
- MS2** inactivation, 36:86
- MS2** phage inactivation of natural waters using UV and H_2O_2 , 32:329
- MSRA** inactivation by ozone, 29:85
- MTBE Oxidation** with ozone; 24:56, 27:27
- MTBE** removal by catalytic ozonation, 27:301
- MTT Assay** of ozonated olive oil, 40:37
- Muconic Acid** ozonation, 31:301
- Muconic Acid**, Byproduct of Ozonation of Coniferyl Alcohol and/or Ferulic Acid in Water, 17:687
- Multi linear regression** to predict bromate formation, 24:293
- Multi-Channel Stopped-Flow Reactor**, 29:121
- Multi-linear Regression** and modeling of bromate formation in drinking water, 29:353
- Multiphase** computational fluid dynamics for contactor design, 29:449
- Multiphase Inactivation Model**, 40:79
- Multi-Phase** mass transfer, 38:245
- Multiphase Reactions** in oxidation of cycloalkenes with ozone, 28:329
- Multiphase Reactors** for catalytic ozonation of phenolic acids, 31:403
- Multi-Pin-to-Plane Discharge** for ozone generation, 27:239
- Multiple Linear Regression** in modeling of bromate formation, 29:429
- Multiple Needles** barrier discharge, 33:98
- Multiple Stage Ozonation**, cellular toxicity and mutagenicity assays from drinking water treatment plants using, 9:179
- Multiple Stage Ozonation**, rationales for in drinking water treatment plants, 9:37
- Multi-Pollutant Removal** in flue gas by ozone oxidation, 29:207
- Multi-Stage Ozonation**, at Lengg drinking water plant, Zürich, Switzerland, 13:41
- Multi-Stage Ozonation**, at Mont Valérien water plant, Paris suburbs, 13:437
- Multi-Stage Ozonation**, of dye waste, 13:11
- Multi-Stage Ozone Application** effect on bromate formation, 22:267
- Multivariate H Function**, 40:330
- Multivariate Statistical Methods** to predict ground level ozone concentrations, 40:237
- Multiwalled Carbon Nanotube** for catalytic ozonation, 37:269
- Municipal Wastewater (Primary) Treatment**, with ozone, impacts on biological treatment, 19:495; 19:513
- Municipal Wastewater** and secondary treated municipal effluent, 37:323
- Municipal Wastewater Disinfection**, engineering and economic aspects of with ozone under stringent bacteriological standards, 2:159
- Municipal Wastewater Disinfection**, ozone for high level, 3:3
- Municipal Wastewater Disinfection**, with ozone, 1:281
- Municipal Wastewater Disinfection**, with ozone, design and operation, 6:87
- Municipal Wastewater Disinfection**, with ozone, state-of-the-art, 3:239
- Municipal Wastewater** ozonation, 34:3
- Municipal Wastewater** reuse for agriculture, 22:151
- Municipal Wastewater Reuse** with ozone in the USA, 21:99
- Municipal Wastewater Treatment** in Great Lakes Basin, 37:36
- Municipal Wastewater** treatment optimized by response surface method, 36:570
- Municipal Wastewater Treatment** with ozone in Canada, 21:119
- Municipal Wastewater Treatment** with ozone in the United Kingdom, 21:201
- Municipal Wastewater Treatment** with ozone in the USA, 21:99
- Municipal Wastewater** treatment with ozone, 10:291,32:204
- Municipal Wastewater Treatment** with ozone/biofiltration, 37:143

76 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Municipal Wastewater Treatment**, application of ozone to eliminate use of for industrial cooling water, 3:121
- Municipal Wastewater Treatment**, by ozone and UASB, 13:179; 13:195
- Municipal Wastewater Treatment**, comparative study of ozonation conditions in tertiary, 2:123
- Municipal Wastewater Treatment**, importance of interface action during ozone disinfection of, 2:139
- Municipal Wastewater Treatment**, ozone disinfection of *E. coli* in, 13:593
- Municipal Wastewater Treatment**, spinning disc ozone contacting, 13:501
- Municipal Wastewater Treatment**, with ozone in the U.S.A., 13:23
- Municipal Wastewater**, improvement of coagulation with ozone, 20:151
- Municipal Wastewater**, ozonation of chlorophenol solutions, 20:259; 20:283
- Municipal Wastewater**, preozonation of, containing chlorophenols, for subsequent biological treatment, 16:13
- Municipal Well Field**, treatment with ozone, 30:88
- Munitions Wastewater**, the high temperature treatment of trinitrotoluene (TNT) and cyclotrinitramine (RDX) with ozone and ultrasound, 6:275
- Murine Norovirus** inactivation with ozone, 35:217
- Mutagenic Compounds**, as byproducts of ozonation/post-chlorination of humic acid in drinking water, 14:51
- Mutagenicity Assays**, and cellular toxicity from on-site sampling of drinking water treatment plants using multistage ozonation, 9:179
- Mutagenicity of Glyoxal**, before and after GAC treatment, 15:39
- Mutagenicity** of ozonated cisplatin, 30:189
- Mutagenicity Testing**, of drinking water treated with ozone/GAC, 11:245
- Mutagenicity**, of Ozonated and BAC Treated Drinking Water 17:449
- Mutagenicity**, of ozonolysis products of naphthalenes, 9:23
- MX**, as byproduct of ozonation/post-chlorination of humic acid in drinking water, 14:51
- Mycotoxin** degradation with ozone, 31:224
- Mycotoxins** control in citrus storage, 32:122
- Mythe Water Treatment Plant, UK**, 17:15
- N-(4-hydroxyphenyl)Acetamide** oxidation by pulsed corona discharge, 35:116
- Nanocatalysts**, 37:269
- Nano-Fe₃O₄** and Fenton process, 38:225
- Nanofiltration** and ozone for removal of *Escherichia coli*, 29:75
- Nanomaterial**, 35:73
- Nanosheet** for photocatalytic ozonation, 38:312
- Nanosheet**, 35:308
- Nano-TiO₂** oxides ozonation, 36:549
- Naphthalene** ozonation, 32:161
- Naphthalene Sulfonic Acids** decomposition with ozone, 28:437
- Naphthalene**, Nitration of During Ozonation of Water, 17:627
- Naphthalene**, ozonation of in aqueous solution, 5:151
- Naphthalenes**, ozonolysis in water and in kerosene films, 9:23
- Naphthenic Acids** in oil sands water, 37:45
- 1-Naphthol**, Nitration of During Ozonation of Water, 17:627
- Naproxen** oxidation by ozone, 32:91
- Naphthalene-1,5-Disulfonic Acid** in photocatalytic oxidation with ozone; 24:75
- 2-Naphthalene Sulfonic Acid** treatment with ozone in tanning wastewaters, 27:351
- Natural Dyes** for casein fiber, 40:140
- Natural dyes** on cotton fabrics, 40:44
- Natural Manganese Ore** for ozone decomposition, 35:514
- Natural Microfloras** in food processing industry, 29:113
- Natural Organic Carbon**, Oxidation by Ozone in Water, 17:449; 17:647
- Natural Organic Material**, model for ozone oxidation of, 19:55
- Natural Organic Matter (NOM)** and ozone induced changes, 21:551
- Natural Organic Matter (NOM)** removal by ozonation and chlorination, 22:249
- Natural Organic Matter** adsorption affected by preozonation, 33:185
- Natural Organic Matter** and effect on ozonation of drinking water, 25:53
- Natural Organic Matter** and ibuprofen ozonation, 35:472
- Natural Organic Matter** and manganese oxidation by ozone, 23:149
- Natural Organic Matter** and ozone treatment, 34:213
- Natural Organic Matter** effect on modeling, 34:280
- Natural Organic Matter** effect on ozone oxidation of cyclophosphamide, 35:125
- Natural Organic Matter** in colored groundwater, 35:438

- Natural Organic Matter** in Huron river water, 23:105
- Natural Organic Matter** in membrane operations, 39:310
- Natural Organic Matter** in ozonation of Korea river waters, 25:251
- Natural Organic Matter** in Quebec (Canada) drinking water facilities, 37:294
- Natural Organic Matter** reduction by anion exchange, 35:283
- Natural Organic Matter** removal after ozonation, 34:342
- Natural Organic Matter**, aquatic, effect of ozonation on physical and chemical properties, 16:89
- Natural Organic Matter**, effects on formation of bromate ion during water ozonation, 18:1
- Natural Organic Matter**, fractionated, used to quantify organic ozone byproducts, 16:1
- Natural Organic Matter**, oxidation by ozone, O_3/H_2O_2 , and O_3/TiO_2 , 15:419
- Natural Organic Matter**, oxidation with ozone, 26:141
- Natural Organic Matter**, ozonation and DBPS reduction, 26:153
- Natural Organic Matter**, ozone decomposition modeling, 36:73
- Natural Organic Matter**, treatment by ozone + GAC in drinking water, 14:123
- Natural Organics** in water, effect of ozone on the biological degradation and activated carbon adsorption of and synthetic organics in water on, 1:263, 1:347
- Natural Organics**, removal by Biological Activated Carbon, 8:299
- Natural Ozone Measurement** with Semiconductor Based Sensor, 20:499
- Natural Water** contamination by pharmaceuticals, 35:249
- Natural Water** treatment by ozone followed by chlorine to remove *Cryptosporidium parvum*, 23:411
- Natural Waters** treatment with ozone, 21:239, 21:261
- Natural Waters**, and ozone decay kinetics, 20:361
- Natural Waters**, ozonation of, formation of filter-removable BOM during, 19:179
- Natural Waters**, ozonation of, product identifications, 2:55
- Natural Zeolite** for ozone decomposition, 33:279
- Naturally Occurring Organics**, and trihalomethane production, effect of ozonation on the apparent molecular weight of, 5:225
- Nauplii Inactivation** in ozone treatment of ballast water 33:3
- n-Butyl Alcohol**, 12:1
- n-Butylparaben** oxidation with ozone, 34:354
- n-Butyraldehyde**, formation during drinking water ozonation, 12:231
- n-Butyric Acid**, 12:1
- n-Dealkylation** of triazines with ozone, 25:81
- NDMA** degradation by UV advanced oxidation, 30:34
- NDMA** degradation by UV, 34:115
- NDMA** treated with IX-UF and UV/ H_2O_2 , 32:383
- Needle to Plain Ozone Generator**, 33:98
- Needle to Plate Electrodes** for ozone generation, 24:215
- Needle to Plate** discharge for production of ozone from air, 24:221
- Negatively charged water** for crop treatment, 30:216
- Neon** influence in ozone production, 22:53
- Nernst Equation** in perfluorooctylalumina ozonation, 32:265
- N-Ethyl-N-(o-tolyl) formamide** formation by ozonation of crotamiton, 37:385
- Neuilly-sur-Marne Water Treatment Plant**, economics of ozone in, 13:607
- Neurotoxins**, destruction with ozone, 20:223
- New York City**, drinking water treatment by ozone/DE filtration, 15:131
- New York City**, water treatment plant, 8:49
- N-Formyl-5-hydroxy-3-pyrrolinone**, from ozonation of 2-hydroxypyridine, 14:177
- N-Formyl-dioxalyimide**, from ozonation of 2-hydroxypyridine, 14:177
- N-Formyloxalic Acid**, from ozonation of 2-hydroxypyridine, 14:177
- n-Heterocyclic Compounds**, ozonation of, 12:329; 14:177
- Nickel Oxide** in catalytic ozonation of tequila industry vinasses, 38:279
- Night Soil Treatment**, with ozone, experiences in Japan, 3:219, 6:185, 10:309, 17:195, 21:127; 30:282
- Nitrate** effect on ozone-UV process, 35:302
- Nitrate Ion Removal**, by ozone/BAC process, 11:227
- Nitrate Ion**, formation during oxidation of Fluorescent Brightener 28, 19:129
- Nitrate Ion**, formation of during ozonation of cysteine and cystine in aqueous solution, 19:145
- Nitrate Reductase** in treatment of *Vigna unguiculata* with ozone, 36:36
- Nitration of Aromatic Compounds**, by Ozonation in Water in Presence of Nitrite Ion, 17:627
- Nitric Acid Corrosion**, of aluminum and stainless steel ozone generator electrodes, 19:169

78 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Nitric Acid Formation**, during ozone generation, 10:241; 12:41;
Nitric Oxide in exhaust gas treated with ozone, 28:105
Nitrification and ozone treatment of Arlington, Texas water, 29:261
Nitrification in moving-bed biofilm system for treatment of landfill leachate, 32:313
Nitrification of wastewater containing 3-methylpyridine, 23:189
Nitrification, in ozonated drinking water at Belle Glade, FL, 12:199
Nitrite effect on ozone demand, 34:26
Nitrite Ion Control, with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19
Nitrite Ion reaction with ozone, 32:430
Nitrite Ion Removal, by ozone/BAC process, 11:227
Nitrite Ion, masking during low level bromate ion determination in ozonated waters using chlorpromazine, 16:79
Nitrite Ion, Ozonation of Aromatic Compounds in Water in the presence of, 17:627
Nitrite Ion, ozone oxidation of, 7:179
Nitrites, ozone oxidation of in gold mining waters, 16: 261
Nitroaromatics degradation by ozone, 23:343
Nitroaromatics, destruction by ozone-loaded solvent, 26:475
Nitrobenzene degradation by ozone, 10:1; 27:381; 32:61
Nitrobenzene removal by catalytic ozonation, 31:45
Nitrobenzene removal with ozone and PFOA, 24:63
Nitrobenzene, as a model compound in water/wastewater ozonation, 15:149
Nitrobenzene, ozonation of aqueous solutions of, 6:115
Nitrobenzene, ozonation with Mn-loaded GAC, 26:1
Nitrobenzene, ozone oxidation of in industrial wastewaters, 10:363
Nitrobenzene, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487
Nitrobenzene, photocatalytic oxidation of, 14:367
4-Nitrocatachol formation in ozonation of p-nitrophenol, 23:303
Nitrogen and oxygen in wire-to-cylinder ozone generator, 36:65
Nitrogen Bases in ozone treatment of cytostatics, 21:69
Nitrogen Compounds effect on bromate and brominated organics formation, 22:23
Nitrogen Dioxide formation by ozone, 28:105
Nitrogen Dioxide levels in Granada, 33:80
Nitrogen effect in ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583
Nitrogen Effect on ozone generation from oxygen, 24:29
Nitrogen effect on ozone generation, 23:95; 32:153
Nitrogen Gas effect on ultrasonic irradiation, 33:194
Nitrogen Heterocyclic Compounds, ozonation of aqueous solutions of, 9:233
Nitrogen in ozone generation, 40:356
Nitrogen Oxide effect in pulsed electric discharges, 35:22
Nitrogen Oxide Formation in ozone generation, 28:207
Nitrogen Oxide Formation, in fine wire electrode ozone generator, 10:137
Nitrogen Oxides (NO_x) Removal by ozone, 29:207
Nitrogen Oxides effect on ozone concentration measurement, 35:229
Nitrogen Oxides Generation from needle to plate discharge in air, 24:221
Nitrogen Oxides in dielectric barrier discharge, 40:313
Nitrogen Oxides in wire-to-cylinder ozone generator, 20:317
Nitrogen Oxides ozonation, 34:252
Nitrogen Oxides removal from flue gas, 38:382
Nitrogen Oxides removal with ozone injection and wet absorption, 36:472
Nitrogen Oxides, 40:494
Nitrogen Oxides, deactivation of α -Fe₂O₃ ozone destruction catalyst by, 14:277
Nitrogen Oxides, generation during ozone generation from air, 10:351; 12:41; 12:255
Nitrogen Oxides, treatment with ozone, experiences in Japan, 3:219
Nitrogen Removal in industrial liquid wastes, 38:219
Nitrogen Removal in ozonation of night soil, 30:282
Nitrogen Removal in sludge ozonation, 33:410
Nitrogen/Oxygen mixtures in pulsed charge ozone generation, 36:253
Nitrogenous Compounds, effect of preozonation on, 7:137
Nitrogen-Oxygen mixtures, in a wire-to-cylinder ozone generator, 20:317
2-Nitrophenol, decomposition in aqueous solution by a UV/O₃ process, 18:443
3-Nitrophenol, kinetics of ozonolysis of, 9:207
4-Nitrophenol, kinetics of ozonolysis of, 9:207
4-Nitrophenol, ozonation in secondary effluent using

- spinning disc ozone contactor, 13:501
- Nitrophenols** oxidation by ozone, 23:333
- Nitrophenols** ozonation over CuO-Al₂O₃ catalyst, 25:335
- Nitrophenols**, ozonation of, as model compounds in the design of ozone contacting and reacting systems, 6:143
- Nitrosamines** degradation by UV advanced oxidation, 30:34
- Nitrosodimethylamine** effect on ozone demand, 34:26
- Nitrotrichloromethane (Chloropicrin)**, formation after ozonation of drinking water, 10:241
- Nitrous Acid**, during generation of ozone in air, 12:41
- Nitrous Oxide and Dinitrogen Pentoxide**, determination of in output of air-fed ozone generators of high power intensity, 9:195
- N-Methyl-2-Pyrrolidone** oxidation by ozone, 29:177
- NMR** analysis of ozonated sunflower oil, 27:247
- N-Nitrosamines** treated with Ozone, 36:174
- N-nitrosodimethylamine (NDMA)** and water reclamation, 36:153, 36:174
- N-nitrosodimethylamine (NDMA)** and water reuse, 36:123
- N-Nitrosodimethylamine** degradation by UV, 34:115
- N-Nitrosodimethylamine** formation from hydrazine compounds, 36:215
- Nodal Segment** in disinfection of explants, 36:435
- Nodularia**, destruction with ozone, 20:223
- Noise Signal** curves for Fourier transform method, 38:352
- NOM Removal** by advanced oxidation processes, 33:267
- Nonanedioic Acid**, byproducts from ozonation of, 11:143
- Non-Biodegradable BOD** in ozonation of textile wastewater, 40:465
- Nonbiodegradable Material**, 12:107
- Non-Genotoxic Effects**, of pesticides and their disinfection byproducts on gap junctional intercellular communication, 19:351
- Non-heading Chinese Cabbage** treated with ozonated water, 39:127
- Non-Ionic Surfactant** in laundry water treated with ozone, 30:256
- Nonionic Surfactant** treatment with ozone, 29:65
- Non-Ionic Surfactants** degradation by ozone, 27:437
- Nonionic Surfactants** oxidized by ozone, 28:295
- Nonionic Surfactants**, decomposition with ozone, 26:217
- Non-Ionic Surfactants**, review of aqueous ozonation of, 13:639
- Nonmethane Hydrocarbons**, in relation to tropospheric ozone, 12:177
- Non-Sporulated Bacteria**, Ozone Disinfection of, 17:499
- Nonthermal Plasma Catalysts**, 38:156
- Nonthermal Plasma** for flue gas treatment, 38:211
- Nonthermal Plasma** oxidation of marine diesel emission particulates, 37:518
- Non-thermal Plasma Reactor**, 25:127
- Nonthermal Plasma**, in a triggered dielectric barrier discharge, 20:51
- Nonthermal Plasmas**, in modeling ozone generation, 26:551
- Nonvolatile Organics**, oxidant effects on complex mixtures of in polluted waters; examination by HPLC and bioscreening, 1:31
- Non-Woven Fabric** and MnCO₃ for ozone decomposition, 40:21
- Nonylphenol** treatment with ozone, 32:204
- 4-nonyphenol** ozonation, 30:120
- Nopal** vegetable treatment with ozone, 39:104
- Norovirus** inactivation with ozone, 35:217
- North Bay Regional Water Treatment Plant**, Ozonation In, 17:283
- NO_x Control** with ozone injection and wet absorption, 36:472
- NO_x** removal from flue gas by ozone, 34:204
- NO_x** removal from glass melting furnace flue gas, 38:211
- NO_x Removal** with ozone, 24:1
- NPDOC (Non-Purgeable Dissolved Organic Carbon)** of ozone treated water from eutrophic lake, 28:29
- n-Phosphonomethylglycine**, in ozonation of ethylenediaminetetra (methylenephosphonic acid), 20:99
- n-Propyl Alcohol**, 12:1
- NSAID** oxidation by ozone, 32:91, 37:343
- Nuclear Laundry Water**, 30:256
- Nuclear Utility Power Stations**, ozonation of cooling systems, 15:81
- Nucleation**, during ozone treatment of cooling waters, 15:47
- Nucleic Acid Dye Test** for inactivation of *Cryptosporidium* with ozone, 23:1
- Nucleic Acids**, ozonation of, 14:407
- Nucleobases**, ozonation of, 14:407
- Nucleosides**, ozonation of, 14:407
- Numerical Simulation** of benzaldehyde ozonation, 35:489
- Numerical Simulation**, of ozone generation, 12:19;

80 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

12:41

Nutrient Solution Disinfection for tomatoes treated with ozone, 31:21

Nutrient-Responsive Cells, by direct viable count methodology, in drinking water, 13:165

n-Valeraldehyde, formation during drinking water ozonation, 12:231

o-, m-, p-Dichlorobenzene, ozone destruction of in distilled and drinking water, 9:265

o-Aminophenol, ozonation of, 8:129

Occupational Risk Precursor, 39:287

o-Chloronitrobenzene, oxidation of, 12:281

o-Chlorophenol, Kinetics of Ozone Degradation of, 17:163

o-Chlorophenol, ozonation of, 8:199

OCM Software for prediction of ozone decay, 36:100

o-Cresol, ozonation of, 12:341

9,12-Octadecadienoic Acid, byproducts from ozonation of, 11:143

2-Octanone, byproducts from ozonation of, 11:143

Odor Control in wastewater treatment plants, 32:199

Odor Control with ozone in catfish processing, 29:221

Odor Control with ozone, 24:1

Odor Control, 35:375, 35:390

Odor Control, in swine manure wastes by ozone, 19:425, 20:35

Odor Control, of waste gases with ozone, 5:183

Odor Control, with ozone in sewage treatment plants and pumping stations, applications and misapplications, 5:69

Odor Control, with ozone review of applications in food preservation, 4:147

Odor Control, with ozone, comparison of low and medium high frequency ozone systems for, 1:107

Odor of drinking water treated with ozone and chlorine dioxide, 21:465

Odor Removal with ozone in the United Kingdom, 21:201

Off-Gas Control in ozonation of pulp mill wastewaters, 22:31

Off-Gas Destruct Catalyst Poisoning, by chlorine, 16:247

Off-Gas Ozone Destruction, in Zürich, Switzerland Water Treatment Plant, 17:1

Ofloxacin ozonation, 35:186

OH Radical for treatment of SDS, 29:131

OH Radical in ozonation of MIB and Geosmin, 29:185

OH[•] Radical probe compound, 27:431

OH_{CT} of natural waters using UV and H₂O₂, 32:329

Ohio River Water disinfection with ozone and chlorine dioxide, 21:477

Ohio River Water treatment with ozone, 22:501

o-Hydroxybenzaldehyde, ozonation of, 8:129

o-Hydroxybenzoic Acid, ozonation of, 8:129

o-Hydroxycinnamic Acid ozonation, 20:403

Oil Field Wastewater Biorefractory Organic Substances, treatment with ozone, 26:309

Oil Fingerprinting in soil ozonation, 35:366

Oil Refineries, ozonation of cooling systems, 15:81

Oil Refinery Wastewater pretreated by enhanced micro-electrolysis, 38:472

Oil Sand Process-Affected Water, 37:45

Oil Shale processes, 32:408, 32:417

Oil Shale Wastewater Treatment, with Ozone; 17:399, 17:527

Oil Tanning, 29:405

Oil-refinery Wastewater, 33:403

Oleozón effect on *Staphylococcus aureus* and *Staphylococcus epidermis*, 22:207

OLEOZON[®] formation from ozonation of sunflower oil, 23:121

Oleozon[®], 23:35, 28:181

Olfactometry, in ozonation of swine manure slurry, 20:35

Olive Mill Wastewater catalytic ozonation, 38:261

Olive Mill Wastewater treatment by catalytic ozonation, 31:403

Olive Oil ozonation, 37:55, 39:455

Olive Oil Quality after washing olives with ozonated water, 39:91

Olive Oil Unsaturation, 37:55

Olive Stones, to produce granular activated carbon, 26:299

Olive washing with ozonated water, 39:91

Olive Wastewater treatment with ozone, 22:617

Olives water treatment with ozone, 24:105

On-board Wastewater treatment with ozone, 25:177

One-Phase Axial Dispersion Model applied to ozonation of Kraft pulp mill effluents, 23:479

Onion Skin dye sources and ozonation effects, 40:140

Onions treated with ozone and UV Radiation, 32:144

o-Nitrotoluene oxidation by ozone, 23:127

o-Nitrotoluene, efficiency of ozone/UV oxidation of, 11:281

Operating Conditions for treatment of antibiotics, 30:175

Operating Costs of injection-type downflow UV/O₃

oxidation reactor, 21:539

Operating Costs, of ozone treatment at Choisy-le-Roi, Méry-sur-Oise and Neuilly-sur-Marne drinking water treatment plants, 13:607

Operating Costs, of ozone treatment at Lengg drinking water plant, Zürich, Switzerland, 13:41

Operating Costs, of ozone treatment at Monroe, MI water treatment plant over 10 years, 13:161

Operating Data, at Lengg drinking water plant, Zürich, Switzerland, 13:41

Operating Experience With Ozone, 15 years of experience in Montreal, Canada for drinking water treatment, 18:299

Operating Experiences, at Budapest, Hungary, 13:479

Operating Problems, in ozone facilities, 12:95

Operation and Maintenance, problems in U.S. wastewater ozonation plants, 13:23

Operation of contacting systems, 40:159

Operations of plants for drinking water treatment, 21:433

o-phenyphenol ozonation, 34:300

Optical Filter for UV degradation of *N*-Nitrosodimethylamine, 34:115

Optical Rotatory Dispersion (ORD) in ozonation of terpenes, 32:274

Optimization of anthraquinone ozonation, 39:219

Optimization of fixed bed biofilm reactors and ozone, 37:227

Optimization of Henrico County VA Water Treatment Facility, 31:461

Optimization of leachate treatment using response surface treatment method, 37:279

Optimization, of Windsor, Ontario Water Treatment Plant, 26:125

Optimum Dosage for ozonation of landfill leachate, 36:427

Optimum Initial Molar Ratio (H₂O₂/O₃) oxidation of Acid Red-151 Aqueous Solutions, 28:155

Opuntia seeds modification by ozone treatment, 39:104

Oral Surgery, ozone in – current status and prospects, 19:387

Orange G catalytic ozonation, 38:48

Orange II dye ozonation, 31:279

Organic Acids formation during phenol ozonation, 31:201

Organic Bromine Compounds, formation of by interaction of ozone with bromide ion, 7:313

Organic Byproducts of Ozone, at Los Angeles, CA, 13:711

Organic Carbon, impact of preozonation on, 7:107

Organic Charge, of aquatic natural organic matter

upon ozonation, 16:89

Organic Compound catalytic ozonation, 38:133

Organic Compounds removed in sewage treatment, 30:263

Organic Compounds, cellular, ozonation of, 13:265

Organic Compounds, identification of products resulting from ozonation of in water, 2:251

Organic Compounds, investigations on the changes in biological degradability induced by ozonation, 5:137

Organic Compounds, naturally occurring, effect of ozonation on the apparent molecular weight, and trihalomethane production, 5:225

Organic Compounds, ozonation of, 12:1; 12:329

Organic Compounds, ozone, and halogens, interactions between, 10:153

Organic Compounds, Toxic, removal of by powdered activated carbon and ozone-assisted activated sludge, 7:191

Organic Contaminant Control of Dutch drinking water, 29:273

Organic Contaminant Control with ozone in BENELUX, 21:139

Organic Contaminants, oxidation by UV radiation and ozone in water, 9:369

Organic Fouling of reverse osmosis membrane process, 36:153

Organic Halide Formation Potential in dyestuff ozonation, 21:487

Organic Halides, formation in ozonation of secondary effluents, 20:133

Organic Materials, contribution of ozone to the removal of in a process including a slow filtration through sand and activated carbon, 4:33

Organic Materials, oxidation of with ozone in a Chemical Sequential Reactor, 15:201

Organic Matter after membrane filtration and ozonation, 35:243

Organic Matter characterization by excitation-emission matrix fluorescence spectroscopy, 34:109

Organic Matter in wastewater removed by advanced oxidation processes, 33:243

Organic Matter influence on membrane fouling, 33:379

Organic Matter Molecular Weight, Ozone, and Oxalic Acid -- effects on coagulation, 18:311

Organic Matter present in disinfection of seawater, 35:63

Organic Matter removal in wastewater treatment, 36:570

Organic Matter removal with catalytic ozonation, 38:3

Organic Matter Removal, from boiler feed water by

82 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

ozone, 19:471

Organic Matter, effects on ozone oxidation of iron and manganese, 13:675

Organic Matter, in ozonation of natural waters, 20:361

Organic Matter, in Phosphoric Acid, Removal of With Ozone, 17:637

Organic Matter, ozone oxidation of, 7:241

Organic Micropollutants, in drinking water, treatment by ozone + GAC, 14:123

Organic Nitrogen Compounds reacted with ozone, 33:470

Organic Nitrogen Compounds treated with catalytic ozonation, 34:359

Organic Oxidation Products, biodegradability of ozonized, removal of humic materials, 4:79

Organic Oxidation Products, of perfluoroalkenes, 8:27

Organic Oxidation Products, upon ozonation, 8:129; 8:199; 8:247

Organic Oxidation Products: oxidation of organic compounds through the combination ozone-hydrogen peroxide, 6:163

Organic Oxidation Reactions, automated UV method for monitoring ozone reactions of, 8:321

Organic Ozone Byproducts, quantitated by using fractionated natural organic matter, 16:1

Organic Pollutant removed by catalytic ozonation, 33:236

Organic Pollutants in ozone-BAC drinking water plant, 37:257

Organic Pollutants removal by catalytic ozonation, 27:115

Organic Pollutants, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421

Organic Production of crops treated with PhytoO₃ Tech Crop Protection Technology, 30:210

Organic Solvent for tetracycline, 37:405

Organic Substances in activated sludge effluent, influence of ozonation on GAC adsorbability of, 8:355

Organics Oxidation with ozone, 24:1

Organics removal from semiconductor processes, 25:445

Organics removal in coal coking processing wastewater, 25:273

Organics Removal, during ozonation for removal of iron and manganese in presence of humic substances, 11:93

Organics Removal; purification of polluted source water with ozonation and biological activated carbon, 6:245

Organics, Nonvolatile, oxidant effects on complex

mixtures of in polluted waters; examination by HPLC and bioscreening, 1:31

Organics, Refractory, oxidation with ozone-hydrogen peroxide, 1:119

Organo-Bromine Compounds, formation in ozonated groundwaters containing bromide ion, 8:63

Organochlorine in activated sludge process, 34:334

Organohalogen Compounds, during ozone-sludge bulking control, 12:145

Organohalogen Disinfection Byproducts, effects of bromide on formation of during ozonation, 18:349

Organonitrogen Pesticidal Compounds, aqueous ozonation of, 11:339

Organophosphorus Pesticidal Compounds, aqueous ozonation of, 11:339

Organophosphorus Pesticides, ozonation schemes of, application in drinking water treatment, 6:207

Orly Water Treatment Plant (Paris), 23:229

Orthophosphate, in ozonation of ethylenediaminetetra(methylenephosphonic acid), 20:99

Osteoarthritis and ozone therapy, 34:469

o-Tolidine Method, for ozone analysis, 10:337

Ovarial Carcinomas, effect of ozone on, 12:65;

Overall Mass Transfer Coefficient in ozone bubble column, 29:343

Owens River Water, raw water supply, ozonation of at Los Angeles, CA, 13:711

Oxalacetic Acid, from ozonation of natural organic matter, 16:1

Oxalate decomposition by UV Irradiation, 29:473

Oxalate Ion in reaction of ozone with Ag(1), 37:393

Oxalic Acid as oxidation product of catalytic ozonation of dichlorophenol, 38:14

Oxalic Acid catalytic ozonation, 25:393, 38:48, 40:448

Oxalic Acid decomposition by ozone and advanced oxidation, 27:11

Oxalic Acid degradation decomposition with strontium titanate, 33:74

Oxalic Acid formation during phenol decomposition with ozone, VUV and TiO₂/UV, 24:49

Oxalic Acid, as a model compound in water/wastewater ozonation, 15:149

Oxalic Acid, as model compound in UV/ozone systems, 14:215

Oxalic Acid, formation by ozonation, 8:199; 12:1; 12:115; 16:89, 17:511

Oxalic Acid, formation of by ozonation of glyoxylic acid, 9:13

Oxalic Acid, formation of from ozonation of glyoxal, 11:271

Oxalic Acid, Ozone, and Organic Matter

- Molecular Weight** -- effects on coagulation, 18:311
- Oxaluric Acid**, formation of by ozonation, 8:199
- Oxamic Acid**, from ozonation of 2-hydroxypyridine, 14:177
- Oxamide**, formation during ozonation of quinoxaline, 12:329
- Oxford Water Quality**, 25:409
- Oxidant Demand** of drinking water, 21:477
- Oxidant-Ozone Residuals**, reactivity with seawater components, 1:39
- Oxidants**, consumption of, influence of preozonation on, 7:137
- Oxidants**, effects of various on the performance of activated carbon used in water reclamation, 3:225
- Oxidants**, effects on complex mixtures of nonvolatile organics in polluted waters; examination by HPLC and bioscreening, 1:31
- Oxidants**, interactions of ozone with, 7:327
- Oxidation and Wastewater Treatment**, 38:181
- Oxidation Byproducts**, of detergents and surfactants with ozone, 13:639
- Oxidation Monitoring** in ozone dissolution systems, 22:329
- Oxidation** of alkanes and ethers with ozone, 30:165
- Oxidation** of AOC in humic Finnish groundwater, 35:86
- Oxidation** of azoxystrobin by ozone fumigation, 37:479
- Oxidation** of benzene, 35:375
- Oxidation of Bis (terpyridine)-iron (II)**, in acidic aqueous solution, by ozone 11:59
- Oxidation** of bromide, 34:269
- Oxidation** of chloramine, with ozone; Reaction kinetics, 3:139
- Oxidation** of cyanobacterial toxins, with ozone, 20:223
- Oxidation** of flue gas with ozone, 29:207
- Oxidation** of fullerene by ozone, 28:177
- Oxidation** of heterogeneous catalyst by ozone, 39:366
- Oxidation** of iron with ozone, 30:73
- Oxidation** of natural waters using UV and H₂O₂, 32:329
- Oxidation** of NO_x with ozone injection and wet absorption, 36:472
- Oxidation of Organic Compounds**, through the combination ozone-hydrogen peroxide, 6:163
- Oxidation** of ozone bleached denim, 38:175
- Oxidation** of phthalic anhydride, 32:161
- Oxidation** of potato starch by ultrasonication and aqueous ozonation, 40:105
- Oxidation** of SDS with ozone, 29:131
- Oxidation** of wastewater containing azo dyes, 27:475
- Oxidation Processes**, importance of ozone on for the treatment of potable water -interference with other oxidants, 4:59
- Oxidation Products**, of aromatic amines upon ozonation, 2:65
- Oxidation Products**, of chlorophenols by advanced oxidation, 19:75
- Oxidation Products**, of cysteine, cystine and thioglycolic acid in aqueous solution, 19:145
- Oxidation Products**, of Fluorescent Brightener 28, 19:129
- Oxidation Products**, of NOM formed during ozonation of natural waters, 19:179
- Oxidation Products**, of organic materials in drinking water treatment, 2:75; 12:1; 12:315; 12:329
- Oxidation Products**, of ozonation of glyoxylic acid in water, 9:13
- Oxidation Reduction Potential** in perfluorooctylalumina ozonation, 32:265
- Oxidation State** of manganese and cobalt oxides, 36:502
- Oxidation** using ozone and membrane contactors, 27:209
- Oxidation** with chlorine dioxide, 27:203
- Oxidation**, by preozonation, 7:137
- Oxidation**, of organic matter, 7:241
- Oxidation-Competition Coefficients**, of different types of waters used in Switzerland, 1:357
- Oxidation-Competition Values**, of different types of waters used in Switzerland, 1:357
- Oxidation-Reduction Potential (ORP)**, use of in ozonation of swimming pool waters, 13:63
- Oxidative Bleaching** of cotton with ozone, 29:325
- Oxidative Bleaching** of soybean fabric, 37:195
- Oxidative Chemicals** for unhairing of goat skin, 28:341
- Oxidative Coupling** in ozonation of p-nitrophenol, 23:303
- Oxidative Pretreatment**, with ozone and persulfate, improvement in activated carbon filter media, 5:113
- Oxidative Stress** and ozone therapy, 34:425, 34:432, 34:469
- Oxidative Stress** in promotion of plant growth, 40:415
- Oxidative Stress** of fungi treated with ozone, 36:144
- Oxidized Products** from ozonation of amino acids, peptides and proteins, 32:81
- Oxidizing Biocide**, effects of ozone during cooling water treatment, 15:47
- Oxoacid Disinfection Byproducts**, from ozonation of natural organic matter, 16:1

84 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- 9-Oxodecanoic Acid**, byproducts from ozonation of, 11:143
- Oxy-Dyes**, decomposition with ozone, 24:439
- Oxygen Actinometry**, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421
- Oxygen Activated Sludge**, treatment of wastewater, 12:107
- Oxygen Activated Sludge**, wastewater treatment process, with ozone disinfection, at Indianapolis, IN, 10:215
- Oxygen** and nitrogen in wire-to-cylinder ozone generator, 36:65
- Oxygen** and ozone treatment of corn seed, 30:427
- Oxygen and Ozone**, absorption in downflow bubble columns, 9:217
- Oxygen Consumption** during sludge reduction via ozonation, 33:171
- Oxygen Consumption of Sludge**, reduction of by ozonation, 6:199
- Oxygen Conversion** in multichannel dielectric barrier discharge, 40:228
- Oxygen Fed Ozone Generator** and micro-discharges, 21:229
- Oxygen Feed Gas**, for ozone generation, Criteria for selection of, 18:57
- Oxygen for Ozone Generation**, optimization in wire-to-cylinder ozone generator, 19:533
- Oxygen** in ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583
- Oxygen Insertion** in reaction of triazines with ozone, 25:81
- Oxygen Irradiation**, at 193 nm for generating ozone, 19:273
- Oxygen** or ozone, use of in first bleaching stage (of paper pulps), 4:109
- Oxygen Production On-Site**, for ozone generation, 12:401
- Oxygen Recycle**, in ozone generation, 12:401
- Oxygen** solubility in liquids, 30:13
- Oxygen Uptake Curve**, in wastewater, 12:107
- Oxygen Uptake Rate** in ozonation of activated sludge from phenolic wastewater, 32:408
- Oxygen**, and ozone mass transfer, comparison of on laboratory and pilot plant operation, 10:321
- Oxygen**, argon, nitrogen ratios and effect on ozone generation, 23:95
- Oxygen**, chemical reactions involving electron-molecule collisions in during ozone generation by silent electric discharge, 18:141; 18:159
- Oxygen**, effects on the performance of activated carbon used in water reclamation, 3:225
- Oxygen**, for generation of ozone at Lengg plant, Zürich, Switzerland, 13:41
- Oxygen**, for generation of ozone, 12:19; 12:355; 12:401
- Oxygen, High Purity**, for ozone generation, design considerations, 14:13; 14:276
- Oxygen**, ozone and chlorine, influence on biological activity on biological activated carbon, 7:287
- Oxygen**, photochemistry of, 9:315
- Oxygen/Silver Catalysis**, of disinfection, 15:533
- Oxygen-Enriched Air**, generation of ozone from, 7:327
- Oxygen-Fed Ozone Generators**, practical heat transfer model for, 18:461
- Oxygen-Nitrogen Mixtures** used in ozone synthesis in presence of silica packing, 25:63
- Oxygen-Ozone**, in ozone generation with air, oxygen or air + oxygen, 20:191
- Oxytetracycline** ozonation, 30:290
- 0-Oxodecanoic Acid**, in ozone oxidation of cycloalkanes to cycloalkanones, 20:91
- Ozoflotation** process in France, 21:153
- Ozoflotation**, at Tophill Low WTP, U.K., 15:481
- Ozoflotation**, for removal of algae and pesticides, *Correction*, 16:179
- Ozonated** and chlorinated condenser discharges, a comparative evaluation of effects on the white perch, *Morone americana*, 3:155
- Ozonated Mineral Oil**, 38:253
- Ozonated Oils** anti-inflammatory effect, 39:374
- Ozonated Olive Oil**, 29:501
- Ozonated Olive Oil**, 40:37
- Ozonated Sawdust**, hydrolysis of, 11:217
- Ozonated Sunflower Seed Oil**, 39:139
- Ozonated Water** for airborne disease prevention, 37:78
- Ozonated Water** for disinfection of gastrointestinal endoscopes, 38:346
- Ozonated Water** for powdery mildew infection control, 31:10
- Ozonated Water** for promotion of plant growth, 40:415
- Ozonated Water** for tomatoes treated with ozone, 31:21
- Ozonated Water** for treatment of food, 30:81
- Ozonated Water** for treatment of non-heading Chinese cabbage, 39:127
- Ozonated Water** for use in wine industry, 32:355
- Ozonated Water** to inactivate *Fusarium oxysporum*, 28:125
- Ozonated Water**, as a coolant for dental burrs and for rinsing wounds, 19:387
- Ozonation (Catalytic) Byproducts**, of humic substances in water, 18:195
- Ozonation + Coagulation**, for treatment of pulp &

- paper industry secondary effluent, 13:521
- Ozonation** and biological treatment of Arlington, Texas water, 29:261
- Ozonation Byproducts Analysis**, 22:551
- Ozonation By-Products of Pesticides**, non-genotoxic effects of on gap junctional intercellular communication, 19:351
- Ozonation Byproducts**, from treatment of lignin compounds, 21:53
- Ozonation ByProducts**, of 17 β -estradiol ozonation, 26:563
- Ozonation Byproducts**, of Lignin Model compounds in Water, 17:687
- Ozonation Byproducts**, of Natural Organic Matter in Water, 17:647
- Ozonation Byproducts**, organic, quantified using fractionated natural organic matter, 16:1
- Ozonation Costs**, in Belgium, 7:327
- Ozonation Dosage**, influence on the structure and biodegradability of pollutants in water, and its effect on activated carbon filtration, 4:15
- Ozonation Effect Index**, 10:1
- Ozonation Equipment**, reliability of, 10:215
- Ozonation Facilities**, 12:95
- Ozonation** for soil aquifer treatment, 39:385
- Ozonation** for washing apples, 39:97
- Ozonation** in Chamois making, 29:405
- Ozonation Kinetics**, and comparison of film and Danckwerts theories, 20:403
- Ozonation** of 2,4 dichlorophenol and nitrobenzene solutions, 27:381
- Ozonation** of 2-ethynylpyridine, 39:418
- Ozonation** of a complex industrial effluent, 28:3
- Ozonation** of activated sludge, 29:191, 29:201
- Ozonation** of aqueous sucrose solutions, 39:255
- Ozonation** of brown chitooligomers, 37:489
- Ozonation** of C.I. Reactive Yellow 3, 27:273
- Ozonation of Dichlorophenols**, 24:123
- Ozonation of Distillery Wastewaters**, 17:355; 17:379
- Ozonation** of drinking water under Chick-Watson Law and CT concept, 22:227
- Ozonation of Drinking Water**; a preliminary study of the efficiency and mechanism of THM removal on the ozonation and BAC process, 6:261
- Ozonation** of dyes, 30:344
- Ozonation** of dyestuffs, 28:141
- Ozonation of Fatty Acids**, byproducts from, 11:143
- Ozonation** of free fatty acids with sonication/argon, 37:93
- Ozonation** of micropollutants, 39:296
- Ozonation** of Netherlands drinking water, 34:92
- Ozonation** of nitrogen oxides, 34:252
- Ozonation** of o-phenylphenol, 34:300
- Ozonation** of organic pollutants in sewage, 30:263
- Ozonation** of Paşaköy wastewater treatment plant effluent, 32:209
- Ozonation** of textile wastewater, 40:465
- Ozonation of Tomato Wastewaters**, 17:355; 17:379
- Ozonation Plants**, operating experiences, 14:501
- Ozonation Plants**, safety problems in, 2:345
- Ozonation Process** for degradation of azo dye, 35:295
- Ozonation** process for greenhouses, 32:259
- Ozonation Processes**, water quality criteria for, 16:113; 16:121
- Ozonation Rate**, in ozonation of pentachlorophenol in aqueous solutions, 20:163
- Ozonation Reaction Mechanisms**, 12:329
- Ozonation Reactor**, mechanically stirred, assessment of optimal operating conditions, 16:181
- Ozonation System**, for intensive fish culture recycling, 1:319
- Ozonation Treatment**, for mechanical and chemical pulp mill effluents, 18:363
- Ozonation Unit**, efficiency of, applied to fish culture situations, 7:179
- Ozonation**, and biological activated carbon, optimization of in a water reclamation context, 5:171
- Ozonation**, as a critical component of closed marine system design, 1:11
- Ozonation**, at Wiggins Water Works, Durban, South Africa, 16:247
- Ozonation**, byproducts during ozonation-biofiltration treatment, 21:79
- Ozonation**, conditions, comparative study of in wastewater tertiary treatment, 2:123
- Ozonation**, continuous, influence of process conditions on the effect of ozone treatment of organic substances in water, 1:61
- Ozonation**, design considerations, 9:93
- Ozonation**, destruction of cyanide wastewater, 3:61
- Ozonation**, during ammonia removal with bromide, 22:23
- Ozonation, Economics of** at Monroe, Michigan, 5:245
- Ozonation**, effects of bromide ion on formation of organohalogen disinfection byproducts during, 18:349
- Ozonation**, effects on easily assimilable organic carbon in drinking water, 11:297
- Ozonation**, followed by slow sand filtration for the removal of humic color from water, an experimental study of, 6:3
- Ozonation**, in direct filtration, 24:239
- Ozonation**, influence of on GAC adsorbability of

86 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

organic substances in activated sludge effluent, 8:355

Ozonation, Intermittent, influence of process conditions on the effect of ozone treatment of organic substances in water, 1:61

Ozonation, its effect on the apparent molecular weight of naturally occurring organics and trihalomethane production, 5:225

Ozonation, multiple state, rationales for in drinking water treatment, 9:37

Ozonation, of alcohols and aliphatic amines, reaction patterns, 4:195

Ozonation, of aniline and anilinium ion in aqueous solution, 7:167

Ozonation, of aqueous solutions of nitrobenzene, 6:115

Ozonation, of aromatic compounds in aqueous solution: Styrene, benzaldehyde, naphthalene, diethylphthalate, ethyl and chlorobenzenes, 5:151

Ozonation, of aromatic hydrocarbon micropollutants: Effect on chlorination and biological filtration, identification of ozonation products, 3:33

Ozonation, of benzene in vapor and liquid states, 19:109

Ozonation, of biologically pretreated pulp mill wastewaters, 22:31

Ozonation, of colored upland water, 21:615

Ozonation, of cysteine, cystine and thioglycolic acid in aqueous solution, 19:145

Ozonation, of cytostatics, 21:69

Ozonation, of dissolved manganese, 23:149

Ozonation, of drinking water and DBP formation, 22:653

Ozonation, of drinking water and formaldehyde formation, 25:41

Ozonation, of drinking water, improvement in effectiveness through the use of hydrogen peroxide, 7:241

Ozonation, of dyestuffs, 21:487

Ozonation, of Extracted Aquatic Fulvic Acid, 11:69

Ozonation, of fluorene and 9-fluorenone, 1:249

Ozonation, of Fluorescent Brightener 28, 19:129

Ozonation, of glyoxylic acid in water, 9:13

Ozonation, of Indeno (1,2,3-c,d) Pyrene, 21: 571

Ozonation, of industrial wastewaters, 10:363

Ozonation, of molasses processing wastewater, 19:157

Ozonation, of natural waters, 21:239

Ozonation, of natural waters, product identifications, 2:55

Ozonation, of nitrophenols, as model compounds in

the design of ozone contacting and reacting systems, 6:143

Ozonation, of organic compounds in water, identification of products resulting from, 2:251

Ozonation, of organic compounds, investigations on the changes in biological degradability of single substances induced by, 5:137

Ozonation, of p-nitrophenol, 23:303

Ozonation, of primary municipal wastewater, impacts on biological treatment, 19:495; 19:513

Ozonation, of soluble organics in aqueous solutions using microbubbles, 23:77

Ozonation, of substituted aromatics, variations in cytotoxicity during, 2:25

Ozonation, of surfactants in wastewater, 26:327

Ozonation, of urban wastewater in a tourist zone, 5:103

Ozonation, of wastewater in impinging zone reactor, 21:501

Ozonation, of water for salmonoid fish rearing facilities, pilot plant results, 1:183

Ozonation/Electrolysis, oxidation of organics, 12:115

Ozonation/Post-Chlorination, of humic acid in drinking water, disinfection byproducts of, 14:512

Ozone decay accelerated by para-chlorobenzoic acid, 27:431

Ozone - Diatomaceous Earth Filtration, water treatment process, 8:49

Ozone - Direct Filtration, water treatment process, 8:49; 8:77

Ozone impact of degradation and toxicity of non-ionic surfactants, 27:437

Ozone synthesis from oxygen-nitrogen mixtures in presence of silica packing, 25:63

Ozone treatment of paper mill circulation water, 23:401

Ozone (Produced by UV Light) Treatment of Spa Water, 11:313

Ozone + Biotreatment, for textile wastewater treatment in Poland, 18:73

Ozone + Hydrogen Peroxide, with GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19

Ozone Absorber, packed column, design and application in water reclamation, 2:283

Ozone Absorption in ozonation of pulp mill wastewaters, 22:31

Ozone absorption in static mixers, 32:399

Ozone Absorption in Water, Kinetics of, 17:163

Ozone Absorption Kinetics, in aqueous solutions of Malathion, 13:487

Ozone Adducts in ozonation of nitrite ion, 32:430

- Ozone Adducts** in reaction with bisulfide, 33:37
- Ozone Adsorption** on silica gel, 24:171, 25:315
- Ozone Analysis 2.2'-azino-bis(3-ethylbenzothiazoin-6-sulfonate)**, 38:373
- Ozone Analysis** in buffered solutions, 37:106
- Ozone Analysis in Solution**, computerized continuous monitoring and, 18:469
- Ozone Analysis** via an indirect gas chromatography method, 25:155
- Ozone Analysis**, 35:229
- Ozone Analysis**, by the indigo method; A submitted standard method, 4:169
- Ozone Analysis**, in aqueous solution by ACVK method, 11:209
- Ozone Analysis**, in aqueous solution by bis(terpyridine)-iron(II), 11:59
- Ozone Analysis**, in Gas and Liquid Phases, 17:329
- Ozone Analysis**, in gas phase, comparisons from a commercial UV meter and KI wet-chemistry tests, 18:231
- Ozone Analysis**, in process gas from an ozone generator, guideline for, 18:209
- Ozone Analysis**, in the gas phase by the indigo trisulfonate method, 11:115
- Ozone Analysis**, in the gas phase, 14:91
- Ozone** and biological treatment of Arlington, Texas water, 29:261
- Ozone** and biological treatment of industrial wastewater, 39:357
- Ozone and Biological Treatments**, effects on elimination of cyanides, 7:85
- Ozone** and bromate control, 29:363
- Ozone** and bromate surveys in French Drinking Waterworks, 24:293
- Ozone** and chlorine dioxide for drinking water treatment, 21:433, 21:465
- Ozone** and chlorine dioxide, similar chemistry and measurement issues, 21:447
- Ozone** and cyanogen chloride kinetics, 23: 15
- Ozone and fixed bed biofilm reactors**, 37:227
- Ozone** and free radical oxidation of micropollutants in water, 21:207
- Ozone** and hydrogen peroxide for dyes color removal, 27:265
- Ozone** and hydrogen peroxide processes for treatment of synthetic wastewater, 33:23
- Ozone** and hydrogen peroxide treatment of secondary effluent, 29:23
- Ozone and Hydrogen Peroxide**, in drinking water treatment, 9:299
- Ozone** and iron removal, 30:73
- Ozone and Oxygen**, absorption in downflow bubble columns, 9:217
- Ozone and Ozone-Hydrogen Peroxide**, advanced oxidation of chlorobenzenes in water, 18:291
- Ozone and Ozone-Hydrogen Peroxide**, degradation of selected herbicides in a lowland surface water, 18:251
- Ozone and PEROXONE**, production and removal of assimilable organic carbon, 16:197
- Ozone** and radiation chemistry, 30:58
- Ozone** and recirculation in stabilization of landfills and leachates, 20:121
- Ozone** and TiO₂ for monochloroacetic acid removal, 27:311
- Ozone** and UV disinfection of Coquitlam water supply, 29:287
- Ozone** and UV for treatment of emerging contaminants, 35:263
- Ozone and UV Radiation**, in drinking water treatment, 9:299; 9:391
- Ozone and UV Radiation**, oxidation of organic contaminants dissolved in deionized and raw mains water by, 9:369
- Ozone** and UV treatment of Tropaeolin O, 28:9
- Ozone** application during coagulation of wastewater, 32:323
- Ozone Application Methods**, 17:205
- Ozone Application Systems**, control of fully automated 7:77; 7:155
- Ozone** applications in Catfish Processing, 29:221
- Ozone** applications in the photoprocessing industry, 1:235
- Ozone Applications** survey, 33:329
- Ozone Applications**, 40:3
- Ozone Applications**, in OS&E, 24:399
- Ozone** applied to foundries, 29:461
- Ozone** as a cleaning agent of stainless steel surfaces, 28:303
- Ozone** as sanitizers in the food processing industry, 29:113
- Ozone Assisted Catalysis** with Zeolite and toluene, 33:158
- Ozone** at ground level, 40:237
- Ozone** barrier discharge parameters, 28:119
- Ozone** bleaching of knitted cotton fabric, 37:170
- Ozone Bleaching of Paper Pulps**, evolution of, 18:566
- Ozone** bleaching of pulp, 25:523
- Ozone Bleaching** of wheat straw pulp, 40:148
- Ozone Bubble Column** design, 23:369
- Ozone** bubble column modeling, 29:343
- Ozone Bubble Column, Continuous**, modeling hydrodynamics and mass transfer parameters in, 18:99
- Ozone** byproducts during ammonia removal with

88 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- bromide, 22:23
- Ozone** byproducts during ozonation-biofiltration treatment, 21:79
- Ozone Byproducts** in drinking water treatment (formaldehyde) 25:41
- Ozone Byproducts of Atrazine**, 15:227
- Ozone Byproducts**, formed during degradation of soil fulvic acid, 15:19
- Ozone Byproducts**, formed during ozonation, followed by BAC, 15:95
- Ozone Byproducts**, from ozone degradation of lignin, 13:239
- Ozone Byproducts**, in drinking water: ketoacids, 14:269
- Ozone Byproducts**, of 2-hydroxypyridine, 14:177
- Ozone Byproducts**, of advanced oxidation of chlorobenzenes in water, 18:291
- Ozone Byproducts**, of nucleic acid constituents, 14:407
- Ozone Capacity Worldwide**, 34:64
- Ozone Capital Cost**, 40:266
- Ozone** catalytic oxidation of aqueous reactive dye, 27:257
- Ozone** cleaning of carbon nanotubes, 40:64
- Ozone Clusters**, 25:211
- Ozone** combined with granular activated carbon, 28:237
- Ozone Concentration** and effect of SF₆ during ozone generation, 32:444
- Ozone Concentration** at Henrico County VA Water Treatment Facility, 31:461
- Ozone Concentration** in dielectric barrier discharge, 35:448
- Ozone** concentration measured in processing water, 28:171
- Ozone Concentration Measurement** in process gas from an ozone generator, guideline for, 18:209
- Ozone Concentration Measurement**, 20:433
- Ozone Concentration**, and temperature effects on disinfection kinetics, 10:123
- Ozone Conditioning** of cooling tower water, study of, 3:109
- Ozone** construction materials, 24:249
- Ozone Consumption Amount** in ozone bubble column, 39:44
- Ozone Consumption in Natural Waters**, effects of background organic matter, pH, and carbonate species on, 10:277
- Ozone Consumption Ratio** for Tropaeolin O, 28:9
- Ozone Contact Time**, and Destruction of Pesticides in Water, 17:657
- Ozone Contacting** by ceramic membranes, 22: 379
- Ozone Contacting** by static mixers, 32:399
- Ozone Contacting** in fine-bubble diffusion reactors, 22:369
- Ozone Contacting** with sidestream injection process, 29:297
- Ozone Contacting** with turbine contactor, 22:351
- Ozone Contacting**, 29:231
- Ozone Contacting, 2-Phase Reactor**, for high strength wastewaters, 14:381
- Ozone Contacting**, absorption efficiency data at Lengg drinking water plant, Zürich, Switzerland, 13:41
- Ozone Contacting**, countercurrent, 13:11
- Ozone Contacting**, design considerations, 9:109; 9:125
- Ozone Contacting**, design engineering aspects for bubble diffusers, 14:487
- Ozone Contacting**, designing high concentration ozone contactors for drinking water treatment plants, 15:245
- Ozone Contacting**, for Decolorizing Pulp Mill effluents
- Ozone Contacting**, for Disinfection of Drinking Water, 17:15; 17:607;
- Ozone Contacting**, for disinfection, 14:391
- Ozone Contacting**, in a deep U-tube, 8:235; 8:261; 14:427
- Ozone Contacting**, in bubble columns, 14:245
- Ozone Contacting**, in bubble diffuser and deep U-tube contactors, 15:213
- Ozone Contacting**, in conventional bubble contactors, mass balance analysis of, 9:289
- Ozone Contacting**, in disinfection of water and wastewater, 11:169; 11:189
- Ozone Contacting**, in Porous Diffuser, 17:97; 17:469; 17:587
- Ozone Contacting**, mathematical models of ozone disinfection with a static mixer, 11:189
- Ozone Contacting**, mechanism of ozone transfer, 11:169
- Ozone Contacting**, modeling of for water and wastewater treatment, 15:149
- Ozone Contacting**, ozone and oxygen absorption in downflow bubble columns, 9:217
- Ozone Contacting**, techniques, 7:327
- Ozone Contacting**, two-stage design for optimizing mass transfer and disinfection, 13:593
- Ozone Contacting**, with a static mixer, 16:455
- Ozone Contacting**, with lake water in a static mixer, 26:227
- Ozone Contactor** for predicting ozone decay, 36:100
- Ozone Contactor Hydraulics** and operating conditions, impacts on bromate ion formation, 18:87

- Ozone Contactor Hydrodynamics**, 19:307
- Ozone** contactor performance, 29:449
- Ozone** contactor residence time distribution, 30:49
- Ozone Contactors** for treatment of Kraft Pulp Mill effluents, 24:307
- Ozone Contactors** using membranes, 27:209
- Ozone Contactors**, Hydraulic Efficiencies in, 17:587
- Ozone Contactors**, Modeling of, 17:607
- Ozone Contactors**, T₁₀ Optimization of, 17:587
- Ozone Control Loops** in Montreal, Canada drinking water plant, 15 years of experience with, 18:299
- Ozone Cotton**, 40:44
- Ozone Data Needs**, in cooling water treatment, 14:329
- Ozone Data**, 40:330
- Ozone Decay Coefficients**, computerized continuous monitoring and analysis of in solution, 18:469
- Ozone Decay** in homogeneous reactor, 37:330
- Ozone Decay** in stopped-flow reactor, 29:121
- Ozone** decay in water, 34:233
- Ozone** decay kinetics, in natural waters, 20:361
- Ozone** decay modeling, 29:379
- Ozone Decay** predicted by ADR Model, 36:100
- Ozone Decay Rate** affected by MIEX[®] resin, 27:371
- Ozone Decay Rate Constant**, 35:168
- Ozone Decay**, influenced by surface material, 26:487
- Ozone** decolorization of molasses wastewater, 27:365
- Ozone Decolorization**, of residual direct paper dyes in Kraft paper machine whitewater, 19:549
- Ozone Decomposition** (heterogeneous) in water on an activated carbon, 24:227
- Ozone Decomposition** in highly concentrated aqueous solutions under semi-commercial conditions, 4:45
- Ozone Decomposition** 34:370
- Ozone Decomposition** in aqueous alkaline solution, 22:287
- Ozone Decomposition** in homogeneous reactor, 37:330
- Ozone Decomposition** in presence of carbonate and hydrogen peroxide, 22:305
- Ozone Decomposition** in presence of natural organic matter, 36:73
- Ozone Decomposition** in semiconductor applications, 24:379
- Ozone Decomposition** in treatment of industrial wastewater, 36:229
- Ozone** decomposition in wastewater, 28:247
- Ozone Decomposition Model**, 15:167
- Ozone Decomposition Models**, applications of, 19:55
- Ozone** decomposition of antibiotics, 30:175
- Ozone** decomposition of aqueous naphthalene-1,5 disulfonic acid, 28:437
- Ozone** decomposition of carboxylic acids in water, 27:11
- Ozone** decomposition of patulin, 30:189
- Ozone** decomposition of trichloroethylene in groundwater, 30:127
- Ozone Decomposition** on Cu(110) surface, 24:39
- Ozone** decomposition over alumina-supported catalysts, 29:41
- Ozone Decomposition** over cobalt and manganese oxides, 36:502
- Ozone Decomposition** over cobalt/olive stones activated carbon, 39:436
- Ozone Decomposition** over α -alumina supported silver catalyst, 37:216
- Ozone Decomposition** with silver-coated perlite, 37:252
- Ozone Decomposition**, 17:205
- Ozone Decomposition**, 35:308
- Ozone Decomposition**, by granulated activated carbon, 24:429
- Ozone Decomposition**, during ozone generation, 15:167
- Ozone Decomposition**, in aqueous solution, numerical simulations of, 14:33
- Ozone Decomposition**, in basic aqueous solutions, 11:49
- Ozone Decomposition**, in presence of granular activated carbon in aqueous solutions, 26:299
- Ozone Decomposition**, in water, kinetics of 5:37
- Ozone Decomposition**, kinetics of in dilute aqueous solutions, 9:165
- Ozone Decomposition**, modeling of standard neutral model, 26:345
- Ozone Decomposition**, on glass and silica, 18:385
- Ozone Decomposition**, thermally and by UV radiation, 9:315
- Ozone Degradation in Soil**, 23:65
- Ozone** degradation of 4-chlorophenol, 30:447
- Ozone** degradation of aqueous nitrophenols, 23:333
- Ozone** degradation of aqueous pesticides, 27:83, 27:173
- Ozone** degradation of biological macromolecules, 28:317
- Ozone** degradation of diclofenac and clofibric acid, 28:85
- Ozone** degradation of endocrine disrupting chemicals, 29:153
- Ozone** degradation of estrone, 30:249
- Ozone** degradation of fullerene (C₆₀), 28:177

90 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Ozone** degradation of *m*-Dinitrobenzene, 27:359
Ozone degradation of nitroaromatics, 23:343
Ozone degradation of pharmaceutical products, 30:387
Ozone degradation of phenols and chlorinated phenols, 27:447
Ozone degradation of sulfosalicylic acid, 27:233
Ozone degradation, of RNA constituents and tobacco mosaic virus, 3:49
Ozone Demand affected by anion exchange, 35:283
Ozone Demand affected by MIEX[®] resin, 27:371
Ozone Demand in disinfection of wastewater, 22:113
Ozone Demand in Korea river waters, 25:251
Ozone Demand of Drinking Water, 19:339, 20:513
Ozone Demand, and aldehyde formation in ozonation of amino acids, 20:381
Ozone Demand, determined by the "Ozotest" method, 16:135
Ozone Demand, of Lignin Model Compounds in Water, 17:687
Ozone Demands, spontaneous, 1:357
Ozone Depletion, 23:437, 23:455
Ozone Design Specifications, 10:55
Ozone Destruction in atmosphere, 23:421
Ozone Destruction in Switzerland, 21:187
Ozone Destruction with zeolite, 33:279
Ozone Destruction, by granulated activated carbon, 24:429
Ozone Destruction, in contactor exhaust gases, 7:327
Ozone Destruction, in off-gas by thermal catalytic destruction, 2:367
Ozone Direct Reaction in Korea river waters, 25:251
Ozone Disinfection of Dental Units, 19:327;
Ozone Disinfection of Dental Units, comparison with H₂O₂/silver ion, 19:527
Ozone Disinfection of domestic well drinking water, 38:25
Ozone Disinfection of Drinking Water at Los Angeles Aqueduct plant, 10:255
Ozone Disinfection of Drinking Water at Portland, ME Sebago Lake WTP, 19:255
Ozone Disinfection of municipal wastewater, 1:281
Ozone Disinfection of municipal wastewater, state-of-the-art, 3:239
Ozone Disinfection of seawater, containing the potential shrimp pathogens *Vibrio* Sp. and *Fusarium solani*, preliminary results of, 1:329
Ozone disinfection of tomatoes, 32:361
Ozone Disinfection of urban storm drain water, 16:403
Ozone disinfection of wastewater with kinetics modeling, 22:113
Ozone Disinfection of wastewater, elimination of fecal bacteria and enteric viruses by, 4:91
Ozone Disinfection of wastewater, optimizing operational control, 4:131
Ozone Disinfection of Wastewater, process control by monitoring of ozone contactor off-gas concentrations, 10:215
Ozone Disinfection of wastewater, under stringent bacteriological standards, engineering and economic aspects, 2:159
Ozone Disinfection Process, mathematical models with a static mixer, 11:189
Ozone Disinfection, and disinfection design, 7:63
Ozone Disinfection, and wastewater treatment: importance of interface action, 2:139
Ozone Disinfection, for purification of fish hatchery waters, 2:203
Ozone Disinfection, high level, of wastewater for shellfish water discharges, 1:335
Ozone Disinfection, modeling of in a bubble column, 16:429
Ozone Disinfection, of bacterial fish pathogens, 1:295
Ozone Disinfection, of biologically treated wastewater, 9:63
Ozone Disinfection, of *Cryptosporidium parvum*, sequential with chlorine dioxide, 19:409
Ozone Disinfection, of dilute, low-temperature wastewater, 1:91
Ozone Disinfection, of Drinking Water, 17:15; 17:673
Ozone Disinfection, using a static mixer, 16:455
Ozone Dissolution Efficiency in 1,4-Dioxane removal, 33:396
Ozone Dissolution in Switzerland, 21:187
Ozone dissolution systems and role of mixing, 22:329
Ozone Dissolution with dielectric barrier discharge over the water surface, 24:159
Ozone Dosage in drinking water treatment, 17:1, 21:465
Ozone Dose at Henrico County VA Water Treatment Facility, 31:461
Ozone Dosing in Switzerland, 21:187
Ozone Drinking Water Treatment, 15 years experience in Montreal, Canada, 18:299
Ozone effect on cold water coagulation, 30:27
Ozone effect on house dust mites, 28:191
Ozone effect on size fractions of manganese, 27:147
Ozone effect on THM formation, 33:14
Ozone effects on BDOC formation, 15:389

- Ozone Effects** on vegetation, 24:69
- Ozone** enhanced drinking water, 29:317
- Ozone** enhanced particle removal in water treatment, 25:285
- Ozone Equipment**, supplier prequalification, 13:249
- Ozone Flotation**, for algae removal from drinking water, 15:465
- Ozone** for 1,4 dioxane removal, 39:424
- Ozone** for Atrazine removal, 21:39
- Ozone** for Decolorization of sugar industry liquors, 28:261
- Ozone** for enhanced DBP control and *Cryptosporidium* inactivation, 30:3
- Ozone** for food preservation, 39:115
- Ozone** for gold and silver recovery, 29:101
- Ozone** for gold extraction, 33:42
- Ozone** for inactivation of *Cryptosporidium* in a static mixer with ozone, 25:295
- Ozone** for leather bleaching, 39:455
- Ozone** for microalgae biomass harvesting from wastewater, 39:264
- Ozone** for nitrogen oxides reduction, 28:105
- Ozone** for photoresist removal, 27:139
- Ozone** for plant pathological applications, 27:495
- Ozone** for preparation of gas diffusion electrode 25:307
- Ozone** for remediation of diesel fuel contaminated soil, 28:37
- Ozone** for removal of antibiotic substances, 34:137
- Ozone** for removal of carboxylic acids, 28:53
- Ozone** for restaurant food processing, 32:137
- Ozone** for treatment of landfill leachate, 21:1
- Ozone** for unhairing goat skin, 28:341
- Ozone** formation in an oxygen-fed micro-discharge, 21:229
- Ozone** formation on the surfaces of electrodes, 32:153
- Ozone** Formation with (V)UV-Enhanced Barrier Discharges, 21:583
- Ozone Formation**, from reaction of O₂-activated N₂ molecules, 10:137
- Ozone Formation**, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421
- Ozone Free Radical Chain Reactions**, enhancement of in presence of aquatic fulvic acid, 15:349
- Ozone from Oxygen**, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421
- Ozone** gas flow measurement, 22:1
- Ozone Gas** for removal of fungi, 36:144
- Ozone** gas in rice grains, 37:450
- Ozone Generation**, *via* dielectric barrier discharges, 19:241
- Ozone Generation** and effect of SF₆, 32:444
- Ozone Generation** and field distribution, 29:215
- Ozone Generation** by a parallel plate barrier discharge, 23:467
- Ozone Generation** by carbon dioxide fed corona discharges, 29:399
- Ozone Generation** by high frequency discharge, 23:171, 24:321, 25:363
- Ozone Generation** by hybrid discharge and catalysis, 29:107
- Ozone** generation by medium frequency pulse train, 21:635
- Ozone** generation by pulsed dielectric barrier discharge, 28:207
- Ozone Generation** by pulsed discharge, 36:253
- Ozone Generation** by volume, surface and coplanar discharge, 24:193
- Ozone Generation**- cooling systems, 39:196
- Ozone Generation Efficiency** using plate rotating electrode, 22:563
- Ozone Generation Efficiency**, in a triggered dielectric barrier discharge, 20:51
- Ozone Generation** for water treatment in Colombia, 30:202
- Ozone Generation from Air** by needle to plate discharge, 24:221
- Ozone** generation from high intensity discharge mercury vapor lamps, 34:129
- Ozone Generation from Oxygen**, 34:378
- Ozone Generation** in air by a DC excited multi-pin-to-plane plasma source, 27:239
- Ozone Generation** in air with inert gas, 36:526
- Ozone Generation in Air**, compared to ozone generation with oxygen or air + oxygen, 20:191
- Ozone Generation** in coaxial cylinder pulse streamer corona discharge reactor, 25:127
- Ozone** generation in flow-through electrochemical reactor, 30:113
- Ozone Generation** in foam, 24:181
- Ozone Generation** in Japan, 33:93
- Ozone Generation in Oxygen**, compared to ozone generation with air, or air + oxygen, 20:191
- Ozone Generation** in packed bed reactors, 28:111
- Ozone Generation** in presence of carbon dioxide, 30:145
- Ozone Generation** in presence of halomethane impurities, 24:329
- Ozone Generation** in presence of inert gases, 23:95
- Ozone Generation** in surface and volume DBD generation, 38:70
- Ozone Generation** in Switzerland, 21:187
- Ozone Generation into Air-Water Mixtures**, 28:207
- Ozone Generation** optimization, 37:221

92 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Ozone Generation** optimized by response surface methodology, 32:372
- Ozone Generation** using dielectric barrier discharge in dry air, 35:448
- Ozone Generation** using plate rotating electrode, 22:563
- Ozone Generation** using pulsed discharge in oxygen, 39:33
- Ozone Generation** via serpentine shape ozone generator, 39:209
- Ozone Generation** with ceramic transformer, 24:215
- Ozone Generation** with cylindrical type of rotating electrode, 27:53
- Ozone Generation** with ultrasonic irradiation, 33:483
- Ozone Generation** with wire-to-plate corona discharge, 35:31
- Ozone** generation with Xenon Excimer Lamps, 30:228
- Ozone Generation**, 40:494
- Ozone Generation**, 9:109
- Ozone Generation**, at high concentration, from air or oxygen, 9:93
- Ozone Generation**, by alternative feed gas systems, 14:13; 14:276
- Ozone Generation**, calculation of electric charge passed through the discharge chamber and electric field, 18:127
- Ozone Generation**, catalytic properties of silica packings on, 18:41
- Ozone Generation**, chemical reactions involving electron-molecule collisions in oxygen during silent electric discharge, 18:141; ---- in various mixtures of oxygen with argon, nitrogen or carbon monoxide, 18:159
- Ozone Generation**, criteria for selection of feed gas for, 18:57
- Ozone Generation**, decomposition kinetics of by silent discharge, 15:167
- Ozone Generation**, effect of surface material, 26:487
- Ozone Generation**, energy distribution in, 15:371
- Ozone Generation**, exergy identification of energy utilization efficiency during, 19:201
- Ozone Generation**, From Air, 17:1; 17:259
- Ozone Generation**, from oxygen and air: discharge physics and reaction mechanisms, 10:351
- Ozone Generation**, from oxygen irradiated at 193 nm, 19:273
- Ozone Generation**, From Oxygen, 17:1; 17:485
- Ozone Generation**, from oxygen-enriched air in Belgium, 7:327
- Ozone Generation**, in a D.C. corona discharge, 8:107
- Ozone Generation**, in air (moist and dry), 12:41; 12:255; 12:401
- Ozone Generation**, in cold plasma reactor, 9:247
- Ozone Generation**, in oxygen, 12:19; 12:355; 12:401
- Ozone Generation**, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421
- Ozone Generation**, magnetic frequency triplers for, 14:139
- Ozone Generation**, modeling and optimizing of, 7:299
- Ozone Generation**, modeling via dielectric barrier discharges, 26:551
- Ozone Generation**, Polarity Effects in, 17:575
- Ozone Generation**, with narrow-band UV radiation, 13:365
- Ozone Generator Cooling**, 39:188
- Ozone Generator Design**, for coplanar discharge ozone generator, 26:429
- Ozone Generator Electrodes**, corrosion resistance of, 19:169
- Ozone Generator** for decontamination of rooms with ozone, 31:216
- Ozone Generator Maintenance** at Montreal, Canada water treatment plant, 15 years of experience in, 18:299
- Ozone Generator** modeling, 37:3
- Ozone** generator with cylindrical type of rotating electrode, 27:53
- Ozone Generator** with expanded metal electrodes, 32:153
- Ozone Generator**, cooling water power requirement, 12:355
- Ozone Generator, Wire-to-Cylinder**, optimization using oxygen, 19:533
- Ozone Generator**, with fine wire electrode, 10:137
- Ozone Generators** in presence of nitrogen, 40:313
- Ozone Generators**, 40:361
- Ozone Generators, Air Fed, Medium Density**, of high power intensity, determination of nitrous oxide and dinitrogen pentoxide in output, 9:195
- Ozone Generators**, new high-power and their application in industry, 4:207
- Ozone Generators, Oxygen-Fed**, practical heat transfer model for, 18:461
- Ozone Generators**, parasitic discharge phenomena in, filled with glass dielectric tubes and their elimination, 6:123
- Ozone** -hydrogen peroxide reaction model, 28:95
- Ozone** impacts on vegetation, 24:69
- Ozone Implementation** in wastewater treatment

- plants, 31:415
- Ozone** improvement of domestic wastewater primary sedimentation, 21:605
- Ozone** in a full-scale distribution system, 25:473
- Ozone** in Agriculture, 24:343
- Ozone in Ambient Air**, protection against in ozonation plants, 2:345
- Ozone** in atmosphere, 33:80
- Ozone** in bleaching of cotton fabrics, 29:325
- Ozone** in catalytic ozonation, 27:115
- Ozone** in Chamois making, 29:405
- Ozone in Dentistry**, 21:629
- Ozone** in food industry in Japan, 28:425
- Ozone** in food treatment, 30:81
- Ozone** in injection-type downflow UV/O₃ oxidation reactor, 21:539
- Ozone in Medicine** and use in dental chairs, 21:629
- Ozone in Medicine**, 23:207
- Ozone** in micro-electronics industry, 24:379
- Ozone** in Recirculating Aquaculture System, 33:345
- Ozone** in the laundry industry, 29:85
- Ozone** in water heater in dental chairs, 21:629
- Ozone** inactivation of *Aspergillus* spp., 30:423
- Ozone** inactivation of *Bacillus subtilis* spores, 28:335
- Ozone** inactivation of *clostridium perfringens*, 30:431
- Ozone** inactivation of *Cryptosporidium* – calculation methods, 27:335
- Ozone** inactivation of *Cryptosporidium* in continuous-flow contactors, 27:487
- Ozone** inactivation of *Cryptosporidium* in drinking water, 23:1 23:259
- Ozone** inactivation of *Cryptosporidium* in full-scale reactors, 22:99
- Ozone** Inactivation of *Cryptosporidium* in natural water, 23:411
- Ozone** inactivation of *Cryptosporidium*, 21:477, 22:501
- Ozone** inactivation of *Enterococcus* sp., 37:467
- Ozone** inactivation of *Fusarium oxysporum*, 28:125
- Ozone** inactivation of microorganisms in water, 23:183
- Ozone** inactivation of *Pseudomonas aeruginosa*, *Escherichia coli*, 21:293
- Ozone Inactivation**, of botulinum type E toxin, 6:229
- Ozone Inactivation**, of enteric viruses in effluent, factors influencing, 6:235
- Ozone Inactivation**, of viral fish pathogens, 1:295
- Ozone** induced changes in natural organic matter structure, 21:551
- Ozone** influence on the oxidation of flowable dental copomer restorative material, 27:219
- Ozone Injection** for nitrogen oxides reduction, 28:105
- Ozone Injection** for NO_x abatement, 36:472
- Ozone Injection** for oxidation of marine diesel emission particulates, 37:518
- Ozone Injection** in circular conduits, 36:191
- Ozone Injection** into flue gas, 29:207
- Ozone Installations**, 34:64
- Ozone Laundering**, 31:339
- Ozone Laundry Formulas**, 31:339
- Ozone Laundry Systems**, 31:357, 31:369
- Ozone Laundry**, 31:339, 31:369
- Ozone Layer Modeling**, 23:455
- Ozone Layer**, 23:421
- Ozone Leaching** of arsenopyrite, 40:284
- Ozone Lifetime**, in drinking water, 1:357
- Ozone Loaded Solvent** for oxidation of pharmaceuticals, 28:85
- Ozone Loaded Solvent**, 36:110
- Ozone Mass Transfer Coefficient**, in a static mixer contactor, 16:455
- Ozone** mass transfer in a confined plunging liquid jet contactor, 25:1
- Ozone** mass transfer in impinging jet ozone bubble column, 29:245
- Ozone** mass transfer in plunging liquid jet contactor, 28:131
- Ozone** mass transfer using a microporous diffuser reactor system, 27:45
- Ozone Mass Transfer**, in a stirred vessel, 6:17
- Ozone Mass Transfer**, in semibatch stirred vessel, model of, 19:439
- Ozone Mass Transfer**, into water: Energy requirements -- state of the art, 3:181
- Ozone Measurement** in treatment of egg shells, 29:147
- Ozone Measurement**, 12:355
- Ozone Measurement, at High Concentration**, 20:489
- Ozone Measurement**, residual, a detailed comparison of analytical methods for, 5:203
- Ozone Measurement**, with Semiconductor Based Sensor, 20:499, 20:507
- Ozone** membrane contactor system, see Ames, J.
- Ozone Molar Extinction Coefficient** in buffered solutions, 37:106
- Ozone Off-gas**, destruction by thermal catalytic method, 2:367
- Ozone** on activated sludge and micropollutant removal, 39:319
- Ozone Operating Cost**, 40:266
- Ozone Optimization** in side-stream ozone system,

94 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

29:231

Ozone Optimization Project, at Portland, ME, Sebago Lake WTP, 19:255

Ozone or oxygen, use of in the first bleaching stage (paper pulps), 4:109

Ozone over urban Kolkata, 36:181

Ozone oxidation in presence of inorganic salts, 27:287

Ozone Oxidation of 1,3,5-Trichlorobenzene, 18:535

Ozone oxidation of Acid Red-151 Aqueous Solutions, 28:155

Ozone oxidation of alkanes and ethers, 30:165

Ozone oxidation of aromatic compounds in groundwater, 28:287

Ozone oxidation of cycloalkenes, 28:329

Ozone oxidation of dehydroabietic acid, 27:397

Ozone oxidation of dimethyl sulfoxide, 29:391

Ozone oxidation of endocrine disruptors and pharmaceuticals, 28:445

Ozone oxidation of esculetin, 27:317

Ozone oxidation of liginsulfonate in the presence of transition metal ions, 25:505

Ozone oxidation of marine diesel emission particulates, 37:518

Ozone oxidation of MIB and Geosmin, 28:277

Ozone oxidation of Microcystin-LR, 23:161

Ozone oxidation of N-Methyl-2-Pyrrolidone, 29:177

Ozone oxidation of nonionic polyethoxylated surfactants, 28:295

Ozone oxidation of pharmaceuticals, 28:353

Ozone oxidation of pyruvic acid, 28:229

Ozone oxidation of salicylic acid, peptides and humic substances, 21:261

Ozone oxidation of theobroma oil, 28:187

Ozone Oxidation Processes in oxidation of micropollutants in water, 21:207

Ozone Oxidation Products, inhibiting effects on ozone/UV oxidation of aromatic compounds, 11:281

Ozone Oxidation Reactions, of organic materials, automated method for monitoring, 8:321

Ozone Oxidation, followed by ozone/UV oxidation of organic contaminants in water, 9:369

Ozone Oxidation, of Atrazine, 16:135; 16:455

Ozone oxidation, of chloramine; Reaction kinetics, 3:139

Ozone Oxidation, of natural organic matter, 15:419

Ozone Oxidation, of Phenanthrene, 16:475

Ozone Oxidation, of Simazine in a static mixer, 16:455

Ozone Oxidation, principles of, and disinfection design, 7:63

Ozone pipeline contactor design, 29:291

Ozone plant operations under drought conditions, 39:203

Ozone Preservation of Food, review of applications, 4:147

Ozone pretreatment prior to reverse osmosis, 30:152

Ozone Pretreatment, (or persulfate pretreatment) to improve activated carbon filter media, 5:113

Ozone Pretreatment, of activated sludge effluents, 7:287

Ozone Process Control, 38:79

Ozone production in an electrical discharge using inert gases as catalysts, 22:53

Ozone Production in multichannel dielectric barrier discharge, 40:228

Ozone production in packed bed reactors, 28:111

Ozone Production, automation of, 7:155

Ozone Production, by cold plasma reactor, 7:299

Ozone rate constants in maleic acid ozonation, 25:13

Ozone reaction in gas induced ozone reactor, 21:277

Ozone reaction with 4-nonyphenol, 30:120

Ozone reaction with Indeno (1,2,3-c,d) Pyrene, 21:571

Ozone reaction with SDS, 29:131

Ozone reactivity with lignin models, 21:53

Ozone Reactivity, in natural waters, 20:177

Ozone Reactivity, vs. Ozone Generator Efficiency, 17:267

Ozone reactivity, with seawater components, 1:39

Ozone Reactor Behavior, in a triggered dielectric barrier discharge, 20:51

Ozone reactor design, 29:121

Ozone Reactor Design, at Laval and Mont Valérien (France) water plants, 19:339

Ozone Reactor System, for Treating Pulp Mill Effluents, 17:205

Ozone Reactor, "well-mixed" model for a gas-liquid stirred, 13:205

Ozone Reactors with gas induction and narrow baffles, 21:277

Ozone Recirculation System, at Montreal, Canada drinking water treatment plant, 18:399

Ozone Related Conversion Tables, 20:433

Ozone removal of BPA and NPnEOs from secondary effluents, 32:204

Ozone removal of Pyruvic Acid, 27:159

Ozone Residual and ozone disinfection efficiency, 39:408

Ozone Residual Control, by granulated activated carbon, 24:429

Ozone Residual during *Cryptosporidium* inactivation, 22:99

Ozone residual impact on biologically active filters, 22:77

- Ozone Residual** in a confined plunging liquid jet contactor, 25:1
- Ozone Residual Stability** in ozone dissolution systems, 22:329
- Ozone Residual** using ABTS, 38:373
- Ozone Residual**, automated measurement of 7:155
- Ozone Residual**, measurement, 32:33
- Ozone Resistance** of construction and process materials, 24:249
- Ozone Saturation Concentration**, 28:119
- Ozone Scaling Index, Practical (POSI)**, for Cooling Water Treatment, 17:71
- Ozone Scavenging Reagents** in determination of aldehydes and ketones, 22:551
- Ozone** self-decomposition in a semi-batch bubble column reactor, 27:409
- Ozone** self-decomposition, 29:31, 29:55
- Ozone Self-Decomposition**, in aqueous solutions with interfacial resistance, combined absorption and, 18:183
- Ozone** side stream design, 29:231
- Ozone** sidestream injection process, 29:297
- Ozone Solubility** affected by salts, 27:287
- Ozone Solubility** in electrolyte solutions, 39:69
- Ozone** solubility in liquids, 28:67; 30:13
- Ozone Sparging** for site remediation, 32:130
- Ozone** sparging of a VOC spill site, 30:88
- Ozone Stability**, in drinking water, 1:357
- Ozone Standard Terms** of the IOA, 6:37
- Ozone Storage**, 25:211; 27:293; 28:149
- Ozone** synthesis in oxygen and air fed surface discharge, 27:59
- Ozone** synthesis of phthalic anhydride, 32:161
- Ozone Synthesis Rate** affected by power density, gap volume and residence time, 38:86
- Ozone** system design for inactivation of *Cryptosporidium*, 27:129
- Ozone Therapy** for Kidney Ischemia, 25:233
- Ozone Therapy** for protection against hepatic ischemic-reperfusion injury, 25:241
- Ozone Therapy** for Retinitis Pigmentosa, 25:223
- Ozone** therapy in cancer treatment, 30:398
- Ozone Therapy** with ozonated olive oil, 39:455
- Ozone Therapy**, 34:408, 34:425, 34:432, 34:438, 34:451, 34:461, 34:480, 34:484
- Ozone Therapy**, biochemical processes underlying, 7:275
- Ozone Therapy**, ozonation of methyl linoleate, 26:189
- Ozone Therapy**, the basic clinical applications of, 7:259
- Ozone** to remove pathogenic bacteria and amoebae, 30:367
- Ozone Tolerance** in medical applications of ozone, 23:207
- Ozone Toxicity**, 2:345
- Ozone Transfer Efficiency** into water with a static mixer, 16:455
- Ozone Transfer Efficiency** in Bubble Contactors, 17:469
- Ozone Transfer Efficiency**, 12:355
- Ozone Transfer Efficiency**, practical design model for calculating in bubble diffuser contactor, 10:173
- Ozone Transfer** in ceramic membranes, 22:379
- Ozone Transfer Mechanism**, related to type of ozone contacting, 11:169
- Ozone** treated water for olives washing, 39:91
- Ozone** treatment and biological oxidation of wastewaters, 25:95
- Ozone** treatment costs, 33:211
- Ozone** treatment of 2-chloro-4,6-dialkylamino-1,3,5-triazines, 25:81
- Ozone** treatment of 3-methyl-pyridine, 23:189
- Ozone** treatment of 3-methyl-pyridine, 23:359
- Ozone** treatment of acidic azo dyes, 27:475
- Ozone** treatment of alicyclic amines, 21:23
- Ozone** treatment of animal wastes, 30:290
- Ozone** treatment of *Aspergillus niger*, 28:347
- Ozone Treatment** of *B. cereus*, 38:124
- Ozone** treatment of ballast water 33:3
- Ozone** treatment of biocide-polluted wastewater, 33:31
- Ozone** treatment of biologically pretreated pulp mill wastewaters, 22:31
- Ozone** treatment of bottled water and bromate formation, 25:167
- Ozone** treatment of bromate containing waters in Paris, 23:229
- Ozone** treatment of bromide containing water, 22:487
- Ozone** treatment of C.I. Reactive Yellow 3, 27:273
- Ozone** treatment of Cellulose, 22:447
- Ozone** treatment of chlorpyrifos residues, 33:232
- Ozone Treatment** of chlorpyrifos residues, 33:232
- Ozone** treatment of Cinnamic Acid, 23:177
- Ozone** treatment of Cisplatin, 30:189
- Ozone** treatment of citric acid, 27:499
- Ozone** treatment of clofibric acid, 28:47
- Ozone Treatment** of coal coking processing wastewater, 25:273
- Ozone** treatment of coconut oil, 27:153
- Ozone** treatment of coffee effluent, 40:293
- Ozone** treatment of colored upland water, 21:615
- Ozone Treatment of Cooling Towers**, 15:47
- Ozone** treatment of corn seed, 30:427
- Ozone Treatment** of crops, 30:210, 30:216

96 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Ozone** treatment of cytostatics, 21:69
Ozone treatment of dissolved organic matter, 23:351
Ozone treatment of dye wastewaters, 23:295; 28:199; 29:139
Ozone treatment of dyestuffs, 21:487
Ozone treatment of EDCs and Pharmaceuticals, 30:65
Ozone treatment of egg shells, 29:147
Ozone Treatment of egg surfaces, 33:374
Ozone treatment of emerging organic pollutants, 30:21
Ozone treatment of endocrine disruption chemicals, 27:389
Ozone treatment of eutrophic lake water, 28:29
Ozone treatment of flue gas, 29:207
Ozone treatment of food processing wastewater, 22:167
Ozone treatment of forest industry landfill leachate, 24:369
Ozone treatment of fresh cut lettuce, 40:216
Ozone treatment of fruit juices, 32:166
Ozone treatment of gasoline compounds, 27:301
Ozone treatment of Gold-Silver Pyritic Minerals, 29:307
Ozone treatment of greenhouse effluents, 23:385
Ozone treatment of groundwater containing iron, 28:269
Ozone treatment of herbicides in groundwater, 22:607
Ozone treatment of high bromide water, 27:19
Ozone treatment of high-strength semiconductor wastewater, 27:225
Ozone treatment of humic acids, 23:41
Ozone Treatment of Industrial Wastewaters, Review of Applications, 18:477
Ozone treatment of irrigation water, 23:65
Ozone treatment of Kraft E₁ Effluent, 29:47
Ozone treatment of Kraft pulp mill effluents, 28:453
Ozone treatment of landfill leachate, 31:28
Ozone treatment of laundry water, 30:256
Ozone treatment of lignin structures, 23:139
Ozone treatment of lipophilic wood extractives, 22:585
Ozone treatment of MIB and Geosmin, 29:185
Ozone treatment of MIEX[®] pretreated water, 27:371
Ozone treatment of MTBE, 27:27
Ozone treatment of natural tannins, 29:443
Ozone treatment of natural waters, 21:239
Ozone treatment of night soil, 30:282
Ozone treatment of NOM, 30:321
Ozone treatment of nonionic surfactants, 29:65
Ozone treatment of o-nitrotoluene, 23:127
Ozone treatment of paper mill effluent, 30:310
Ozone treatment of p-chlorobenzoic acid, 27:3
Ozone treatment of peach juice, 40:305
Ozone treatment of pesticides by combined ozone/biomass sequence, 27:327
Ozone treatment of pharmaceuticals and pesticides in Detroit River water, 28:415
Ozone treatment of phenolic aqueous solution, 25:323
Ozone treatment of phenolic solutions using gas-inducing reactor, 28:77
Ozone treatment of Phoenix wastewater, 29:303
Ozone treatment of *Plasmodium Falciparum*, 23:89
Ozone treatment of polymer waste, 30:275
Ozone treatment of polyvinyl chloride, 29:373
Ozone treatment of poultry-processing chiller water, 23:53
Ozone treatment of propylene glycol methyl ether acetate, 30:332
Ozone treatment of pulp and paper industry wastewater, 27:37
Ozone treatment of pulp and paper wastewater, 30:105
Ozone Treatment of pulp mill effluents with EDTA removal, 22:279
Ozone treatment of raw animal skins, 32:449
Ozone treatment of Seoul, Korea drinking water, 27:69
Ozone treatment of sludge, 25:73; 29:415; 30:136; 30:238
Ozone treatment of sludge, 32:252
Ozone treatment of stabilized landfill leachates, 28:309
Ozone treatment of sunflower oil, 23:121; 27:247; 28:181
Ozone treatment of swimming pool water, 22:677
Ozone treatment of tanning wastewaters, 27:351
Ozone treatment of textile biocidal finishing agents, 29:335
Ozone treatment of textile dyeing wastewater, 23:199, 23:327
Ozone treatment of wastewater from painting processes, 27:279
Ozone treatment of wastewater in impinging zone reactor, 21:501
Ozone treatment of water in the presence of titanium dioxide, 22:185, 22:471
Ozone treatment of wheat and corn starches, 37:71
Ozone treatment system of bath water, 25:345
Ozone treatment with PhytoO₃ Tech Crop Protection Technology, 30:210
Ozone Treatment, of lake water in a static mixer, 26:227
Ozone Treatment, of potable water to minimize

- halogenous` compound formation, 2:305
- Ozone Treatment**, of radioactive wastewaters, 1:133
- Ozone treatment**, of surface water to provide high quality cooling water and process water, 2:229
- Ozone Trends** in stratosphere, 33:489
- Ozone Uptake** on vegetation, 24:69
- Ozone use** at SAMRO, Ltd., 32:144
- Ozone use** in BENELUX, 21:139
- Ozone use** in Canada, 21:119
- Ozone use** in Germany, 21:163
- Ozone use** in Japan, 21:127
- Ozone use** in Poland, 21:177
- Ozone use** in the United Kingdom, 21:201
- Ozone use** in the United States of America, 21:99
- Ozone used** in proposed membrane facility, 29:281
- Ozone used** in semiconductor applications, 24:391
- Ozone used** in wine industry, 32:355
- Ozone Utilization Efficiency** for 1,4 Dioxane removal, 29:13
- Ozone Utilization Efficiency** in 1,4-Dioxane removal, 33:396
- Ozone Utilization Rate** in gas induced ozone reactor, 21:277
- Ozone Utilization Rate** in gas-inducing reactor, 28:77
- Ozone Utilization Rate**, effects of background organic matter, pH, and carbonate species on, in natural waters, 10:277
- Ozone vs. chlorine** in removal of Natural Organic Matter (NOM), 22:249
- Ozone vs. Peroxone** for trihalomethane formation, 30:356
- Ozone Water Demand Test**, 16:355
- Ozone with electrolysis** for 1,4 Dioxane removal, 29:13
- Ozone Yield in dielectric barrier discharge**, 35:448
- Ozone Zero Phenomenon**, 33:93
- Ozone Zero Phenomenon**, 40:356
- Ozone**, absorption in water, 9:1
- Ozone**, analyses for, 7:327
- Ozone**, analysis of in aqueous solution using a modified iodometric technique with As(III), 2:183
- Ozone**, and activated carbon for tertiary wastewater treatment, 7:1
- Ozone**, and advanced oxidation of pesticides, 32:25
- Ozone**, and hydroxyl radical pathway in bromate ion formation, 26:573
- Ozone**, and oxygen mass transfer, comparison of on laboratory and pilot plant operation, 10:321
- Ozone**, anti-biofouling system for cooling water circuits, application to seawater, 7:31
- Ozone**, application in water treatment in the United Kingdom, 7:11
- Ozone**, application to eliminate tertiary treatment of wastewater used for industrial cooling water, 3:121
- Ozone**, applications in Japan, 10:309
- Ozone**, as oxidant, experiences in waste gas purification, 5:183
- Ozone**, bacterial depuration of the Mexican scallop, *Argopecten circularis* with, 4:121
- Ozone**, benefits of treatment prior to flocculation processes, 5:21
- Ozone**, bleaching of Kraft pulp in TCF process, 26:443
- Ozone**, chemical reactions of, with respect to improved analytical methods, 10:89
- Ozone**, combined application with chlorine or chloramine to reduce production of chlorinated organics in drinking water disinfection, 5:79
- Ozone**, comparison of action with that of chlorine on odors from rendering of carcasses, 2:261
- Ozone**, comparison of effectiveness with chlorine in condensers using fresh water as a coolant, 1:201
- Ozone**, comparison of film and Danckwerts theories, 20:403
- Ozone**, comparison with chlorine, chloramine, and chlorine dioxide in producing mutagenicity during drinking water disinfection, 11:245
- Ozone**, contribution of to the removal of organic materials in a process including a slow filtration through sand and activated carbon, 4:33
- Ozone**, control of condenser biofouling, 3:95
- Ozone**, control of odors at sewage treatment plants and pumping stations, applications and misapplications, 5:69
- Ozone**, DBPS reduction in humic acid ozonation, 26:153
- Ozone**, decay influenced by surface material, 26:487
- Ozone**, decomposition in aqueous solutions, 26:345
- Ozone**, decomposition of 17 β -estradiol, 26:563
- Ozone**, degradation of 2,4-Xylidine, 26:499
- Ozone**, degradation of aliphatic carboxylic acids with TiO₂ based photocatalysis, 26:585
- Ozone**, disinfection while limiting bromate formation, 26:247
- Ozone**, dissolved, acute toxicity of to eggs and larvae of selected freshwater fish species, 2:177
- Ozone**, effect on biological degradation and activated carbon adsorption of natural and synthetic organics in water, 1:263, 1:347
- Ozone**, effects on the performance of activated carbon used in water reclamation, 3:225
- Ozone**, experiences In Japan, 3:219
- Ozone**, experimental study of ozone action on, 2:105
- Ozone**, flocculation effects of, 16:55
- Ozone**, for control of filamentous sludge bulking,

98 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

20:1

Ozone, for *cryptosporidium* inactivation and atrazine oxidation in a lime softening plant, 20:177

Ozone, for destruction of cyanobacterial toxins, 20:223

Ozone, for disinfection of household wastewater, 3:19

Ozone, for dye waste color removal at Leek STW, 20:111

Ozone, for high level municipal wastewater disinfection, 3:3

Ozone, for oxidation of ethyl and methyl tert.-butyl ethers, 16:41

Ozone, for the disinfection of seawater effluent from a shellfish quarantine unit, preliminary tests, 2:5

Ozone, formation by pulse discharge in water, 24:471

Ozone, formation during salt brine electrolysis, 20:239

Ozone, generation in coplanar discharge ozone generator, 26:429

Ozone, generation in dielectric barrier discharges, 20:51

Ozone, generation with air, oxygen or air + oxygen, 20:191

Ozone, generator with back-corona effect, 26:

Ozone, high concentration, electrochemical generation for small-scale application, 6:29

Ozone, Hydrogen Peroxide, and UV Radiation, chemistry of in water treatment processes, 9:335

Ozone, importance of on oxidation processes for the treatment of potable water interference with other oxidants, 4:59

Ozone, improvement of wastewater coagulation, 20:151

Ozone, in atmosphere over Lin-An, China, 26:181

Ozone, in carbon-catalyzed conversion of aqueous O₃ into OH-radicals, 20:67

Ozone, in combination with adsorption procedures, experiments with for wastewater treatment, 3:169; 4:3

Ozone, in dental room air, 20:251

Ozone, in formation of glyphosate and AMPA during ozonation of waters containing ethylenediaminetetra (methylenephosphonic acid), 20:99

Ozone, in oxidation of cycloalkanes to cycloalkanones, 20:91

Ozone, in treatment of swine manure slurry, 20:35

Ozone, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421

Ozone, inactivation of *Escherichia coli* and *Staphylococcus aureus* in airborne systems, 20:205

Ozone, inactivation of *Fusarium oxysporum*, 26:517

Ozone, inactivation of *Giardia muris*, 16:67

Ozone, inactivation of Helminth eggs, 24:359

Ozone, influence on the treatability of secondary effluents, 20:133

Ozone, interactions between halogens, organic compounds, and, 10:153

Ozone, interactions with bromide ion and formation of organic bromine compounds, 7:313

Ozone, interactions with other oxidants, 7:327

Ozone, into sprayed water, 26:511

Ozone, kinetics of ozonation of pentachlorophenol in aqueous solutions, 20:163

Ozone, loaded solvent for destruction of organics in wastewater, 26:475

Ozone, mass transfer in a bubble column, 26:277

Ozone, mass transfer in a cocurrent jet pump, 20:17

Ozone, Mass Transfer to water: A fundamental study, 2:337

Ozone, mechanism of reaction with soluble aromatic pollutants, 2:39

Ozone, mutagenic activity of in drinking water, 8:217

Ozone, Operating Experiences With in Switzerland Water Plants, 17:1

Ozone, optimization of corona wire-to-cylinder ozonizer, 20:317

Ozone, Oxalic Acid and Organic Matter Molecular Weight -- effects on coagulation, 18:311

Ozone, oxidation of ammonia, 7:179

Ozone, oxidation of ammonium ion, 7:179

Ozone, oxidation of BOD, 7:179

Ozone, oxidation of bromide ion by, 10:153

Ozone, oxidation of COD, 7:179

Ozone, oxidation of humic acid and trihalomethane precursors, catalytic effects of ultraviolet light and/or ultrasound on, 7:47

Ozone, oxidation of natural organic matter, 26:141

Ozone, oxidation of nitrite ion, 7:179

Ozone, oxygen and chlorine, influence of on biological activity on biological activated carbon, 7:287

Ozone, Photochemical Generation of, current state-of-the-art, 9:315

Ozone, practical use in large marine aquaria, 2:225

Ozone, Rate Coefficient Determinations, 17:355

Ozone, reaction with linomycin and spectinomycin, 26:525

Ozone, role of in water purification and its implications in developing countries, 2:241

Ozone, shrinkproofing of wool, 1:219

Ozone, solubility in water, 32:3

Ozone, steady state disinfection of water and sonozone by, 2:13

Ozone, system for antibiofouling in fresh water

- cooling circuits, 2:327
- Ozone**, system reliability, and economics at Monroe, Michigan, 5:245
- Ozone**, tank design, 26:403
- Ozone**, to decompose nonionic surfactants, 26:217
- Ozone**, tolerance of the rotifer *Brachionus plicatilis* to and total oxidative residuals, 19:457
- Ozone**, treatment in presence of activated carbon, 26:299
- Ozone**, treatment in water with nonpolar bonded alumina phases, 26:367
- Ozone**, treatment of A. H. Weeks Water Treatment Plant, 26:125
- Ozone**, treatment of amino acids, 20:381
- Ozone**, treatment of Amsterdam water supply, 26:465
- Ozone**, treatment of *Bacillus subtilis* in a static mixer, 26:207
- Ozone**, treatment of ballast water, 26:389
- Ozone**, treatment of blood, 26:195
- Ozone**, treatment of bromide solutions in presence of ammonia, 26:267
- Ozone**, treatment of cherry stillage, 26:257
- Ozone**, treatment of chlorophenol solutions, 20:259, 20:
- Ozone**, treatment of crotonic acid solutions, 26:415
- Ozone**, treatment of drinking water minimizing bromate concentration, 26:381
- Ozone**, treatment of drinking water, microbial growth, 20:303
- Ozone**, treatment of drinking water, Potsdam, NY case history, 5:51
- Ozone**, treatment of drinking waters in Belgium, 7:327
- Ozone**, treatment of fresh cut salad mixes, 32:66
- Ozone**, treatment of humic waters, 7:121
- Ozone**, treatment of Kraft effluent, 26:317
- Ozone**, treatment of landfill leachate, 26:287
- Ozone**, treatment of membrane concentrate, 32:16
- Ozone**, treatment of methyl linoleate, 26:189
- Ozone**, treatment of oil field drilling wastewater, 26:309
- Ozone**, treatment of p-hydroxybenzoic acid solution 20:343
- Ozone**, treatment of polycyclic aromatic hydrocarbons, 26:453
- Ozone**, treatment of RB-19 dye in a gas-inducing reactor, 26:165
- Ozone**, treatment of surfactants in wastewater, 26:327
- Ozone**, treatment of swimming pool waters, 7:93
- Ozone**, treatment of wastewater containing azo dye, 26:539
- Ozone**, use of in the technology of bottled water, 5:95
- Ozone**, used in dental treatment units, 24:479
- Ozone**, used in sushi factory, 32:71
- Ozone**, utilization for treatment of recyclable papers, 7:229
- Ozone, UV Radiation, and Hydrogen Peroxide**, chemistry of in water treatment, 9:335
- Ozone/ hydrogen peroxide process** influenced by carbonate, 22:305
- Ozone/ γ -Irradiation**, treatment of molasses processing wastewaters, 19:157
- Ozone/Bromide Ion Process** for swimming pool water treatment, 22:677
- Ozone/Diatomaceous Earth Filtration**, for treatment of New York City drinking water, 15:131
- Ozone/GAC treatment** for model compound removal, 24:357
- Ozone/Gamma process** for 2,4-D removal, 33:50
- Ozone/Granular Activated Carbon**, in water treatment in the United Kingdom, 7:11
- Ozone/Granular Activated Carbon**, treatment of drinking water, 10:309
- Ozone/H₂O₂ Processes**, kinetics of first reactions of ozone in, 19:13
- Ozone/H₂O₂**, removal of Fluorescent Brightener 28, 19:129
- Ozone/H₂O₂**, treatment of primary municipal wastewater, impact on biological treatment of, 19:495; 19:513
- Ozone/H₂O₂**, treatment of molasses processing wastewaters, 19:157
- Ozone/Hydrogen Peroxide** in a rotating packed bed, 35:101
- Ozone/Hydrogen Peroxide** in oil sands water treatment, 37:45
- Ozone/Hydrogen Peroxide Process** for control of bromate ion formation, 33:121
- Ozone/Hydrogen Peroxide Process** for NOM removal, 33:267
- Ozone/Hydrogen Peroxide Process** for removal of emerging contaminants, 40:339
- Ozone/Hydrogen Peroxide Process** for removal of odorous algal-derived compounds, 33:121
- Ozone/Hydrogen Peroxide Process** for sewage treatment, 30:263
- Ozone/Hydrogen Peroxide** treatment of o-nitrotoluene, 23:127
- Ozone/Hydrogen Peroxide**, effects on bromate ion formation in European drinking waters, 18:325
- Ozone/Hydrogen Peroxide**, for Chromium and Copper Complex Dyes, 17:149
- Ozone/Hydrogen Peroxide**, for Destruction of Pesticides in Water, 17:657; 17:673

100 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Ozone/Hydrogen Peroxide**, for oxidation of ethyl and methyl tert-butyl ethers, 16:41
- Ozone/Hydrogen Peroxide**, for Particle Destabilization in Drinking Water, 17:25
- Ozone/Hydrogen Peroxide**, for Removal of Pesticides from Drinking Water, 17:97; 17:657
- Ozone/Hydrogen Peroxide**, for Removal of Triazines in Water, 17:183
- Ozone/Hydrogen Peroxide**, for Treatment of Hazardous Wastes, 17:119
- Ozone/Hydrogen Peroxide**, in destruction of cyanobacterial toxins, 20:223
- Ozone/Hydrogen Peroxide**, inactivation of *Giardia muris*, 16:67
- Ozone/Hydrogen Peroxide, Oxidation of 1,3,5-Trichlorobenzene**, 18:535
- Ozone/Hydrogen Peroxide**, oxidation of Atrazine, 16:135; 16:455
- Ozone/Hydrogen Peroxide**, oxidation of natural organic matter, 15:419
- Ozone/Hydrogen Peroxide**, oxidation of phenanthrene, 16:475
- Ozone/Hydrogen Peroxide**, oxidation of Simazine in a static mixer, 16:455
- Ozone/Hydrogen Peroxide**, treatment of dicofol and tetradifon wastewaters, 16:487
- Ozone/Hydrogen Peroxide**, treatment of potable water, 7:241
- Ozone/Hydrogen Peroxide/UV Oxidation of 1,3,5-Trichlorobenzene**, 18:535
- Ozone/hydroxyl radical ratios during ozonation processes**, 22:123
- Ozone/Oxygen Mixtures**, immunological examinations in patients with chronic conditions under administration of, 11:411
- Ozone/Peroxide** for Atrazine removal, 21:39
- Ozone/Peroxide Process** for 1,4-dioxane removal, 35:331
- Ozone/Peroxide Treatment**, in microbial growth in drinking waters treated with ozone, 20:303
- Ozone/Silver Catalysis**, for disinfection, 15:533
- Ozone/Slow Sand Filtration**, for water treatment in the United Kingdom, 7:11
- Ozone/TiO₂ oxidation of natural organic matter**, 15:419
- Ozone/UV advanced oxidation** for drinking water, 40:79
- Ozone/UV Degradation**, of chlorophenol solutions, 20:259; 20:283
- Ozone/UV** for treatment of coffee effluent, 40:293
- Ozone/UV** for treatment of graphical industry wastewater, 35:16
- Ozone/UV Oxidation of 1,3,5-Trichlorobenzene**, 18:535
- Ozone/UV Oxidation of Aromatic Compounds**, 11:281
- Ozone/UV Oxidation**, of organic compounds, 8:339
- Ozone/UV Process** for 1,4-dioxane removal, 35:331
- Ozone/UV process** for water containing adsorbable organic halides, 38:452
- Ozone/UV Process modeling**, 27:421
- Ozone/UV processes** for Atrazine removal, 21:39
- Ozone/UV Processes**, for chlorophenols degradation, 19:75
- Ozone/UV Processes**, kinetics of first reactions of ozone in, 19:13
- Ozone/UV Radiation Process**, 12:1; 12:73
- Ozone/UV Radiation**, and ozone/hydrogen peroxide for reduction of trihalomethane formation potential in surface water, 10:103
- Ozone/UV Radiation**, degradation of Cyanazine, 16:213
- Ozone/UV Radiation**, for Degradation of Cyanazine, 17:237
- Ozone/UV Radiation**, for Removal of Triazines from Water, 17:183
- Ozone/UV Radiation**, for Treatment of Chromium and Copper Complex Dyes, 17:149
- Ozone/UV Radiation**, oxidation of phenanthrene, 16:475
- Ozone/UV Treatment** in Japan, 10:309
- Ozone/UV treatment** of o-nitrotoluene, 23:127
- Ozone/UV treatment** of water, 23:245
- Ozone/UV Treatment**, of Dye-finishing wastewater, 26:239
- Ozone/UV**, oxidation of chlorinated organics, 14:197
- Ozone/UV**, oxidation processes in water, 14:367
- Ozone/UV/Peroxide** for Atrazine removal, 21:39
- Ozone/UVC System** for decomposition of phenylphenol isomers, 39:333
- Ozone: Science & Engineering**, the first 23 years, 24:399
- Ozone: Science & Engineering** 30 years of progress, 31:379
- Ozone: Science & Engineering** history, 40:3
- Ozone: Science & Engineering**, 33:329
- Ozone-Actinometry** to measure photonic flux in UV systems, 23:245
- Ozone-Assisted Activated Sludge Treatment**, and powdered activated carbon for removal of toxic organic compounds, 7:191
- Ozone-Assisted Biological Treatment** of industrial wastewaters containing biorefractory compounds, 4:177
- Ozone-assisted membrane cleaning**, 39:310
- Ozone-based technologies** for parabens removal from

- water, 39:233
- Ozone**-bromine treatment of swimming pool water, 37:456
- Ozone-Containing Water** for treatment of chlorpyrifos residues, 33:232
- Ozone-Dissolved Water** by electrolytic ozone generator, 33:114
- Ozone-Electrolysis** process, 33:463
- Ozone**-electron beam degradation of phenol, 25:377
- Ozone-Flotation**, 39:264
- Ozone-GAC Treatment**, of drinking water, 13:623; 14:123
- Ozone-Hydrogen Peroxide System**, 40:251
- Ozone-Hydrogen Peroxide**, 12:195; 12:281
- Ozone-Hydrogen Peroxide**, and ozone/UV radiation for reduction of trihalomethane formation potential in surface water, 10:103
- Ozone-Hydrogen Peroxide**, effects on BDOC formation, 15:405
- Ozone-Hydrogen Peroxide**, for disinfection of surface waters, 14:71
- Ozone-Hydrogen Peroxide**, for oxidation of chlorinated organics, 14:197
- Ozone-Hydrogen Peroxide**, in color removal from groundwater, 13:109; 13:559
- Ozone-Hydrogen Peroxide**, oxidation of herbicides, 15:227
- Ozone-Hydrogen Peroxide**, oxidation of organic compounds through the combination of, 6:163; 8:339
- Ozone-Hydrogen Peroxide**, oxidation of refractory organics, 1:119
- Ozone-Loaded Solvent**, for wastewater treatment, 26:475
- Ozone**-loaded solvents for use in water treatment, 25:485
- Ozone-produced Efficiency** and effect of SF₆, 32:444
- Ozone-Produced Oxidants**, 33:224
- Ozone-Promoted Biological Degradation**, of trihalomethane precursors, 7:85
- Ozone-Sterilized Ice**, preservation of fresh fish with, 4:147
- Ozone**-ultrafiltration for removal of *Escherichia coli*, 29:75
- Ozone-Ultrasonics**, the high temperature treatment of trinitrotoluene (TNT) and cyclotrimethylenetrinitramine (RDX) with, 6:275
- Ozone-UV** degradation of 2,5-dichlorophenol, 38:181
- Ozone-UV** in humic acid oxidation, 40:93
- Ozone-UV**, water treatment system for shellfish quarantine, 1:55
- Ozone-Water Rinsing**, of teeth, 14:165
- Ozonide Ion Radical**, 14:33
- Ozonides** of ozonated sunflower oil, 27:247
- Ozonides** formed during methyl linoleate ozonation, 25:121
- Ozonides** formed in ozonation of sunflower oil, 28:59
- Ozonides** from ozonation of coconut oil, 27:153
- Ozonides**, formation in methyl linoleate, 26:189
- Ozonides**, of perfluoroalkenes, 8:27
- Ozonization**, of aromatic amines in water, 2:65
- Ozonization**, of seawater for shellfish depuration, 1:147
- Ozonization**, of water, Belgian experiences, 7:327
- Ozonized Oil** effect on *Staphylococcus aureus* and *Staphylococcus epidermis*, 22:207
- Ozonized Sunflower Oil**, 31:232
- Ozonized Sunflower Oil**, 34:293
- Ozonized Sunflower Oil**, 38:143
- Ozonized Water** for dental applications, 34:484
- Ozonolysis** of crotonaldehyde, 37:385
- Ozonolysis** of landfill leachate, 35:55
- Ozonolysis** of olive oil, 37:55
- Ozonolysis** of palm olein, 37:503
- Ozonolysis** of patulin, 30:189
- Ozonolysis** of terpenes, 32:274
- Ozonolysis**, of naphthalene derivatives in water and in kerosene films, 9:2
- "Ozotest" Method**, for BDOC determination, 15:389; 15:405
- "Ozotest" Method**, to simulate ozonation effects, 16:135
- P. aeruginosa* biofilms treated with ozone, 31:3
- P. fluorescens* biofilms treated with ozone, 31:3
- Packed Bed Reactor** for ozone generation, 28:111
- Packed Column Ozone Absorber** in water reclamation, design and application of, 2:283
- Packing** materials in dielectric barrier discharge, 35:134
- PAH Destruction**, by ozone, 26:453
- Pain**, 34:469
- Painting Process Wastewaters**, treatment with ozone, 27:279
- Palm Oil** catalytic ozonation, 38:36
- Palm Olein** ozonolysis, 37:503
- Papaya** treatment with ozone, 34:57, 34:151
- Paper Mill Effluent Treatment**, by Advanced Oxidation, 17:119
- Paper Mill Effluent**, treatment with ozone, 26:317
- Paper Mill Industry Wastewaters**, ozonation, 20:403

102 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Paper Mill Water Circulation Water** and treatment with ozone, 23:401
- Paper Pulps**, treatment of with ozone, 7:229
- Paper Pulps**, use of ozone or oxygen in the first bleaching stage, 4:109
- Paper Recycling**, 35:381
- Papermaking** circulating water treatment with ozone, 22:575
- Papers, Recyclable**, ozone treatment of, 7:229
- Parabens** removal from water by ozonation, 39:233
- Paracetamol** oxidation by pulsed corona discharge, 35:116
- Para-Chlorobenzoic Acid** in evaluating ozone/carbon nanotube process, 36:465
- Para-chlorobenzoic Acid** removed by catalytic ozonation, 37:527
- Parallel-Plates** ozone generator and effect of SF₆, 32:444
- Paralytic Shellfish Poisons**, and destruction with ozone, 20:223
- Parameter Estimation**, of Henry's constant with ozone in a bubble column, 26:277
- Parasitic Discharge Phenomena**, in ozonizers filled with glass dielectric tubes, and their elimination, 6:123
- Partial Ozonation** of recalcitrant and toxic wastewater concentrate, 34:163
- Particle Counting** in direct filtration after ozonation, 24:239
- Particle Destabilization**, With Ozone or Ozone/Hydrogen Peroxide, 17:25
- Particle Dynamics Analyzer** for studying impinging jet contactors, 32:99
- Particle Image Velocimetry** of in-line multi-jets contactor, 33:449
- Particle Image Velocimetry**, 32:99
- Particle Removal** from sand filters, 33:66
- Particle Removal** with ozone in presence of bicarbonate, 25:285
- Particle Size Distribution** from sand filters, 33:66
- Particles** removal in Lake Huron water, 32:295
- Particulate Matter** in diesel emission exhaust, 37:518
- Paşaköy Wastewater Treatment Plant**, 32:209
- Passive Sampling** of atmospheric air, 33:80
- Pasteurization** with UV light, 30:93
- Pathogen Inactivation** with ozone in drinking water, 21:465, 23:53
- Pathogenic Bacteria**, 30:367
- Pathogens in Swine Manure Wastes**, reduction in levels of by ozonation, 19:425
- Pathogens Inactivation** in municipal wastewater for reuse in agriculture, 22:151
- Pathogens** regrowth potential in UASB effluent, 29:485
- Patulin** decomposition with ozone, 30:189; 31:224
- p-Chlorobenzoic Acid (pCBA)** removal predicted by R_{CT}, 32:244
- p-Chlorobenzoic Acid** as an ozone/hydroxyl radical probe compound, 27:431
- p-chlorobenzoic acid** removal by catalytic ozonation with metal oxides, 25:25
- p-chloronitrobenzene** catalytic ozonation, 38:42
- p-Cresol** in swine manure slurry, 20:35
- p-Cresol**, ozonation of in swine manure waste odors, 19:425
- PCU Removal** with ozone in impinging zone reactor, 21:501
- p-Dinitrobenzene**, removal from water by ozonation, 10:1
- Peach Juice**, 40:305
- Pears** treated with ozone and UV Radiation, 32:144
- Peclet Number**, correlation with Reynolds number at Tucson CAP WTP, 19:307
- Pentachlorophenol**, degradation of by advanced oxidation, 19:75
- Pentachlorophenol**, kinetics of ozonation of aqueous solutions, 20:163
- Pentafluorobenzylhydroxylamine** as ozone scavenging reagent, 22:551
- 0,2,3,4,5,6-Pentafluorobenzylhydroxylamine (PFBOA) Method of Carbonyl Group Analysis**, 11:127
- Pentafluorobenzylloxime** as ozone scavenging reagent, 22:551
- Pentafluorophenylmethyloxylamine** as ozone scavenging reagent, 22:551
- Pentafluorobenzyloxyamine** as ozone scavenging reagent, 22:551
- Peptides** removal with ozone, 21:261; 32:81
- Peptone** effect on ozone oxidation of cyclophosphamide, 35:125
- Perfluorooctylalumina (PFOA)** as ozonation catalyst, 25:185
- Perfluorooctylalumina** and ozone for treatment of drinking water, 24:63
- Perfluoroalkenes**, ozonation of, 8:27
- Perfluorooctylalumina (PFOA)**, with ozone in treatment of drinking water, 26:367
- Perfluorooctylalumina** for catalytic ozonation of gasoline compounds, 27:301
- Perfluorooctylalumina** ozonation, 32:265
- Performance Testing** and ozone gas flow measurement, 22:1
- Performic Acid** degradation of pharmaceutical products, 30:387

- Periodontology**, with ozone, 14:165
- Perlite** and silver for ozone decomposition, 37:216
- Permanganate** formation in oxidation of dissolved manganese, 23:149
- Permanganate Ion Polarography**, 17:135
- Perovskite Catalysts** for ozonation of pharmaceutical compounds, 32:230
- Peroxidase** reduction by ozonation of sugarcane juice, 40:198
- Peroxidase**, use in conjunction with ozonation to remove aromatic compounds from water by polymerization, 8:247
- Peroxidation**, of blood with ozone, 26:195
- Peroxide** and ozone for treatment of SDS, 29:131
- Peroxide Bleaching** of linen fabrics, 35:316
- Peroxide Value (PV)** of ozonized sunflower oil, 34:293
- Peroxide Value** during ozonolysis of palm olein, 37:503
- Peroxide Value** of ozonated olive oil, 40:37
- Peroxide Value** of ozonized sunflower oil, 28:181
- Peroxide-Coated** ozone for site remediation, 32:130
- Peroxone (H₂O₂/O₃)** treatment of biocide-polluted wastewater, 33:31
- Peroxone** and catalytic ozonation of landfill leachate, 38:133
- PEROXONE and Ozone**, production and removal of assimilable organic carbon, 16:197
- Peroxone** for *Helminth Hymenolepis nana* eggs, 35:201
- PEROXONE** oxidation of toluene and 2,4,6-trinitrotoluene, 22:519
- Peroxone Process** for oxidation of Acid Red-151 Aqueous Solutions, 28:155
- Peroxone** vs. ozone for trihalomethane formation, 30:356
- PEROXONE**, with ozone for disinfection of surface waters, 14:71
- "Peroxotest" Method**, to simulate to simulate ozone/H₂O₂ oxidation effects, 16:135
- Peroxynitrite** formation in ozonation, 32:430
- Peroxynitrite** formed in ozone-UV process, 35:302
- Persistent Substances** treated with ozone in wastewater plants, 31:415
- Persulfate** in estriol degradation, 38:358
- Pesticide** degradation by ozone, 27:83, 27:173
- Pesticide Disinfection By-Products**, non-genotoxic effects of on gap junctional intercellular communication, 19:351
- Pesticide** oxidation by ozone fumigation, 37:479
- Pesticide Oxidation** with ozone, 21:207
- Pesticide Removal** by combined ozone/biomass sequence, 27:317
- Pesticide Removal** in London and Oxford water, 25:409
- Pesticide Removal** in UK water treatment plants, 25:417
- Pesticide removal** with ozone in BENELUX, 21:139
- Pesticide Removal**, From Drinking Water by Ozone or Ozone/Hydrogen Peroxide, 17:97; 17:657; 17:673;
- Pesticide Residue** on dried chilies, 40:473
- Pesticide** residue removal from olives with ozonated water, 39:91
- Pesticide Residues** in citrus storage, 32:122
- Pesticides Control**, with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19
- Pesticides** degradation by ozone, 30:21
- Pesticides** degradation in natural waters using UV and H₂O₂, 32:329
- Pesticides Degradation**, compromise between bromate ion formation and/or manganese removal, 19:39
- Pesticides** in Detroit River water treated with ozone, 28:415
- Pesticides** in soil remediation 38:272
- Pesticides** removal in presence of humic and fulvic acids, 25:399
- Pesticides** removal with advanced oxidation, 22:415
- Pesticides Removal**, 33 :308
- Pesticides Residues** on apples, 39 :97
- Pesticides** treated with UV, 35:38
- Pesticides**, advanced oxidation by ozone, 32:16, 32:25
- Pesticides**, aqueous ozonation of, a review, 11:339
- Pesticides**, degradation by ozone, 14:283
- Pesticides**, effects of humic materials on ozone removal of atrazine, 14:263
- Pesticides, Organophosphorus**, ozonation schemes of, application in drinking water treatment, 6:207
- Pesticides**, oxidation of during Ozoflotation, 15:481
- Pesticides**, removal by Ozoflotation, *Correction*, 16:179
- PET** color fading ozonation 40:377
- Pet Food**, 40:487
- p-Ethylphenol**, in swine manure slurry, 20:35
- p-Ethylphenol**, ozonation of in swine manure waste odors, 19:425
- Petrochemical Wastewater** treated by ultrasonic irradiation, 33:194
- Petroleum Tank and Storage Facilities**, use of ozone in, 18:477
- Petrovaradinska Ada Water Treatment Plant, Novi Sad, Yugoslavia**, with ozone, 14:101
- PFBOA Method of Carbonyl Group Analysis**, 11:127

104 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- PFOA** and ozone for treatment of drinking water, 24:63
- PFR (Plug Flow Reactor)**, ozone contactor, kinetic modeling of; impact on bromate ion formation, 18:87
- pH**, high pH ozonation of *cryptosporidium* and atrazine, 20:177
- pH** and ozone disinfection efficiency, 39:408
- pH Dependence**, during oxidation of organic materials, 12:315
- pH Dependence**, on oxidative products of aromatic compounds during ozone/UV treatment, 11:281
- pH** effect in ampicillin degraded with ozone, 34:156
- pH Effect** in bromate formation during ozonation of natural water, 22:267
- pH Effect** in color removal from textile wastewater, 25:137
- pH Effect** in phenol decomposition, 35:350
- pH** effect on 1,4-Dioxane removal, 33:396
- pH effect** on hydroxyl radical ozone ratios, 22:123
- pH Effect** on ozonation of pentachlorophenol in aqueous solutions, 20:163
- pH** effect on ozone decay in water, 34:233
- pH Effect** on phenols and chlorophenols decomposition by ozone, 27:447
- pH effect** on pulsed electric discharges, 35:22
- pH** effect on selectivity of ozone bleaching, 25:523
- pH Effect**, in treatment of Dye-Bath waters with ozone, 24:413
- pH Effect**, in treatment of Kraft effluent, 26:317
- pH Effects** in ozone treatment of o-nitrotoluene, 23:127
- pH Effects**, on iron and manganese removal by ozonation in presence of humic substances, 11:93
- pH** of Arlington, Texas water, 29:261
- pH** of electrolytically ozonated water, 31:10
- pH** of nuclear laundry water, 30:256
- pH** of ozone bleached wheat straw pulp, 40:148
- pH** variation in catalytic ozonation of chlorobenzoic acid, 37:527
- pH**, effect on ozone decomposition kinetics in dilute aqueous solution, 9:165
- pH**, effects of background organic matter, carbonate species and, on ozone consumption in natural waters, 10:277
- pH**, effects on bromate ion formation during ozonation of drinking water, 18:1
- Pharmaceutical Compounds** in Great Lakes Basin wastewater effluent, 37:36
- Pharmaceutical Compounds** ozonation, 32:230, 34:3
- Pharmaceutical Effluent** treated with ozone and biological treatment, 37:538
- Pharmaceutical Industry**, use of UV radiation in, 10:25
- Pharmaceutical Manufacture**, of cytostatics and removal with ozone, 21:69
- Pharmaceutical** products in wastewater, 35:249
- Pharmaceutically Active Compounds**, 37:323
- Pharmaceuticals (Polar)** ozonation, 32:305
- Pharmaceuticals and Personal Care Products** and water reclamation, 36:153
- Pharmaceuticals and Personal Care Products** removed with ozone, 37:154
- Pharmaceuticals** and pulsed corona discharge, 36:94
- Pharmaceuticals** degradation by advanced oxidation processes, 34:137
- Pharmaceuticals** degradation by ozone, 28:47; 28:85; 28:445; 30:21; 30:65; 32:253; 35:186
- Pharmaceuticals** degradation in natural waters using UV and H₂O₂, 32:329
- Pharmaceuticals** degradation with ozone, 39:319
- Pharmaceuticals** in Detroit River water treated with ozone, 28:415
- Pharmaceuticals** removal by Ozone and Ozone/UV, 33:150
- Pharmaceuticals** removal with disinfection processes, 30:387
- Pharmaceuticals** removal with membrane bioreactors and advanced oxidation processes, 31:428
- Pharmaceuticals** removed by ozone/BAC process, 37:343
- Pharmaceuticals** treated with ozone, 37:323
- Pharmaceuticals** treatment with advanced oxidation, 32:217
- pH-Dependency of Ozone** on destruction of cyanobacterial toxins, 20:223
- Phenanthrene** remediation, 40:420
- Phenanthrene**, destruction by ozone advanced oxidation, 16:475, 19:13
- Phenanthrolines** oxidation with ozone, 24:271
- Phenanthrydine** oxidation with ozone, 24:271
- Phenazine** oxidation with ozone, 24:271
- Phenol** catalytic ozonation, 38:48
- Phenol Decomposition** by ozone, 21:487, 27:447
- Phenol** decomposition with ozone, VUV and TiO₂/UV, 24:49
- Phenol** degradation by catalytic ozonation, 40:173
- Phenol** degradation with ozone and electron beam irradiation, 25:377
- Phenol Oxidation** using a rotating packed bed, 35:101
- Phenol** ozonation kinetics, 31:201
- Phenol** removal by ozonation and adsorption, 34:259

- Phenol** removal process cost, 33:211
- Phenol Removal**, 33:143
- Phenol** treatment with ozone in tanning wastewaters, 27:351
- Phenol**, in swine manure slurry, 20:35
- Phenol**, ozonation and oxidation products of, 8:129; 12:1
- Phenol**, ozonation of in swine manure waste odors, 19:425
- Phenol**, preozonation of in wastewater for subsequent biological treatment, 16:13
- Phenol**, reaction with ozone, 32:61
- Phenolate Ion**, reaction with ozone, 32:61
- Phenolic Compounds** catalytic ozonation, 38:261
- Phenolic Compounds** in aqueous sucrose solutions removed by ozone, 39:255
- Phenolic Compounds** in swine manure slurry, 20:35
- Phenolic Compounds** removal in ozonation of food processing wastewater, 22:167
- Phenolic Compounds** treated with ozone in gas-inducing reactor, 28:77
- Phenolic Compounds**, formation during ozone and ozone/H₂O₂ treatment of dicofol and tetradifon wastewaters, 16:487
- Phenolic Pesticidal Compounds**, aqueous ozonation of, 11:339
- Phenolic** products reaction with ozone, 23:139
- Phenolic Wastewater**, 32:408. 32:417
- Phenolic Wastewaters** and catalytic ozonation, 31:403
- Phenols Oxidation By-Products**, 25:335
- Phenols**, Destruction of by Ozone and Advanced Oxidation, 17:527
- Phenols**, destruction of in aqueous solution by a UV/O₃ process, 18:443
- Phenols**, mechanism of reaction with ozone, 2:39
- Phenols**, removal of by polymerization by ozonation and peroxidase treatment, 8:247
- Phenols**, structure relationships and kinetics of ozonolysis of, 9:207
- Phenoxyacetic Acid Herbicides**, mechanism of reaction with ozone, 2:39
- Phenoxyacid Herbicides** removal by ozone/gamma process, 33:50
- Phenoxyalkyl Acid Pesticidal Compounds**, aqueous ozonation of, 11:339
- Phenylphenol Isomers**, 39:333
- Phenylurea herbicides** oxidation with ozone and the Fenton process, 22:607
- Phoenix WWTP**, 29:303
- Phorbol** removal by treatment with ozonation and solar irradiation, 37:29
- Phosphate Buffer** and ozone analysis, 37:106
- Phosphate Buffer** in studying ozone decomposition, 37:330
- Phosphate** effect on ozone decomposition in "pure water, 30:300
- Phosphate** effect on ozone oxidation of wastewater, 27:287
- Phosphonoformic Acid**, in ozonation of ethylenediaminetetra (methylenephosphonic acid), 20:99
- Phosphoric Acid Treatment With Ozone**, 18:477
- Phosphoric Acid**, Removal of color and Organic Matter from With Ozone, 7:637
- Phosphorus Recovery** during sludge reduction via ozonation, 33:171
- Phosphorus** removal efficiency of ozonated sludge, 30:136
- Photo Absorption** method for ozone concentration measurement, 35:229
- Photo-Assisted Ozonation (UV/O₃)** for degradation of carbamazepine, 40:113
- Photocatalysis** and ozonation of humic acid, 25:497
- Photocatalysis** of sulfosalicylic acid with ozone, 27:233
- Photocatalysis** of synthetic treated urban wastewater, 37:467
- Photocatalysis** with TiO₂ and O₃ for monochloroacetic acid removal, 27:311
- Photocatalysis**, water treatment combined with ozonation, 26:585
- Photocatalytic Degradation**, 38:291
- Photocatalytic Oxidation** with carbon nitride nanosheet, 38:312
- Photocatalytic Oxidation** of organic compounds with ozone, 24:75
- Photocatalytic Oxidation**, in the presence of natural organic matter, 14:367
- Photocatalytic Ozonation** of pharmaceutical compounds, 34:3
- Photochemical Decomposition** in ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583
- Photochemical Degradation**, of Cyanazine, 16:213
- Photochemical Generation of Ozone**, current state-of-the-art, 9:315
- Photochemical Generation**, of ozone, 10:323
- Photochemical Ozone Production**, 23:445; 30:228
- Photochemical Reactions**, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421
- Photodecomposition** of oxalate ion, 29:473
- Photodecomposition**, of HOBr/OBr⁻, 8:63
- Photodegradation** of antibiotic substances in wastewater, 34:137
- Photo-Fenton** processes for greenhouses, 32:259
- Photo-Fenton** treatment of wastewater from

106 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- painting processes, 27:279
- Photographic Bleach regeneration**, with ozone, 1:235
- Photographic Waste Treatment**, with ozone, 1:235
- Photolysis** and UV oxidation of micropollutants, 34:125
- Photolysis** efficiency in phenol decomposition, 35:350
- Photolysis** in 1,4-Dioxane removal, 33:396
- Photolysis** in a collimated beam UV reactor, 37:134
- Photolysis** modeling by measuring hydrogen peroxide formation, 27:421
- Photolysis** of oleate and ethyl elaidate ozonides, 37:431
- Photolysis of Ozone**, in gas and liquid phases, 14:215
- Photolysis**, in VUV measurement of a 172nm Xe Excimer Lamp, 20:421
- Photolytic Metal Deposition**, 20:421
- Photolytic Ozonation** in injection-type downflow UV/O₃ oxidation reactor, 21:539
- Photo-mineralization** of organic compounds, 30:99
- Photo-oxidation** of organic compounds, 30:99
- Photoprocessing Industry**, ozone applications in, 1:235
- Photoresist Removal** by ozone, 24:391; 27:139
- Photoresist Stripping** in UV-ozone applications, 22:427
- Phthalates** degradation by ozone/AOP, 29:153
- Phthalic Anhydride** formation by ozonolysis, 32:161
- Phthalocyanine Dyes**, in Kraft paper machine whitewater, ozone decolorization of, 19:549
- p-Hydroxybenzoic Acid** ozonation in food processing wastewater, 22:167
- p-Hydroxybenzoic Acid** removal by ozone/GAC treatment, 24:357
- p-Hydroxybenzoic Acid**, ozonation of, 8:129; 20:343
- Physical Treatment** of papayas, 34:57
- Physico-Chemical Treatment** of landfill leachate, 21:1
- Physico-Chemical Treatment** using ceramic ozone contactors, 22:379
- Physiochemical Properties** of ozonated milk, 39:448
- Physiochemical Treatment Plant** for removal of pharmaceuticals, 30:387
- Physiological Solution** ozonation, 37:119
- PhytoO₃ Tech Crop Protection Technology**, 30:210, 30:216
- Phytopharmaceutical factory**, 33:31
- Phytotoxic Effects** of ozone, 24:69
- Phytotoxicity** of micro/nanobubble ozonated water, 37:78
- Piecewise Linear Regression** in ozonation of micropollutants, 36:289
- Pigment Bleaching** in fungal colonies, 30:423
- Pilot Cooling Tower**, for studying ozonation of cooling waters, 15:47
- Pilot Plant Studies**, at the Budapest Waterworks, 16:29
- Pilot Plant Studies**, of herbicide ozonation, 15:227
- Pilot Plant Studies**, of ozone oxidation of manganese, 15:331
- Pilot Plant Study** for ozone decolorization of sugar industry liquors, 28:261
- Pilot Plant Study**, in microbial growth in drinking waters, 20:303
- Pilot Plant Study**, Ozone/GAC Treatment of Drinking Water, 17:449
- Pilot Plant Study**, with ozone and PEROXONE for disinfection of surface water supplies, 14:71
- Pilot Plant Testing**, of ozone, 8:49; 8:77
- Pilot Scale Study** to investigate bromate formation, 22:487
- Pilot Scale** testing of EDC removal, 33:253
- Pilot Study** for bromate control in Yellow River water, 37:127
- β-Pinene** ozonation, 32:274
- Pipeline Contactor**, 29:291
- Piperidine** removal with ozone, 21:23
- Piping Systems**, for ozone diffusion contactors, 14:487
- Piroxicam** removed by ozone/BAC process, 37:343
- Planar Laser Induced Fluorescence**, 33:449
- Planer Laser-Induced Fluorescence**, 32:99
- Plant Growth** stimulated by ozonated water, 40:415
- Plant Operations** under drought conditions, 39:203
- Plant Pathogenic Bacterium** affected by ozone, 27:495
- Plants** disinfected with ozone, 36:435
- Plants** effected by ozone, 24:69
- Plasma Chemistry**, generation of ozone, 12:19; 12:41
- Plasma Physics** in ozone generation, 27:239
- Plasma** with ultrasonic irradiation, 33:483
- Plasma**, in wire-to-cylinder ozone generator, 20:317
- Plasmodium Falciparum** inactivation with ozone, 23:89
- Plastic Media** in fixed bed biofilm reactors, 37:227
- Plastics** resistance to liquid and gas phase ozone, 24:249
- Plate Count** of cut vegetables treated with ozone, 31:309
- Plate Counts**, in ozonized cooling waters, 12:243
- Plates Exposition** with air purifier ozone generator,

34:225

Plating Waste Treatment, by ozonation, 3:61**Platinum Supported Catalyst** in ozone oxidation of formic acid solution, 22:241**Plug Flow** for inactivation of *Cryptosporidium* in a static mixer with ozone, 25:295**Plug Flow** in ozone contactors, 30:49**Plug Flow Reactor** and ozone dosing, 29:379**Plug Flow Reactor** for disinfection of *E. Coli*, 30:448**p-Methylaniline-3-sulfonic Acid**, efficiency of ozone/UV oxidation of, 11:281**p-Nitroaniline**, improvement in biodegradability of by preozonation, 11:155**p-Nitroaniline**, removal from water by ozonation, 10:1; 23:303**p-Nitrophenol** ozonation on activated carbon filter, 37:178**p-Nitrotoluene**, removal from water by ozonation, 10:1**p-Nitrotoluene-2-sulfonic Acid**, efficiency of ozone/UV oxidation of, 11:281**Point-to-Plane ozone generator**, with back-corona effect, 26:11**Polar Disinfection Byproducts** analysis by DNPH derivitization, 22:653**Polarity Effects** in Ozone Generation, 17:575**Poliovirus** inactivation with ozone, 22:501**Pollutant Removal** predicted by R_{CT} , 32:244**Polluted Water** treatment cost, 33:211**Poly (Ethylene Terephthalate)**, 35:196**Polyaluminum Chloride**, effects on AOC, 12:377**Polyamide Dyeing Process**, 29:443**Polyaromatic Hydrocarbons (PAH)** ozonation, 21:571**Polyazo Dyes**, in Kraft paper machine whitewater, ozone decolorization of, 19:549**Polybenzimidazole**, 40:392**Polycyclic Aromatic Hydrocarbons (PAHs)**, 40:420**Polycyclic Aromatic Hydrocarbons (PAHS)**, ozonation, 26:453**Polycyclic Aromatic Hydrocarbons**, ozonation of fluorene and 9-fluorenone, 1:249**Polydimethylsiloxane** as ozone-loaded solvent, 25:485; 26:475**Polyethylene Bottles**, UV sterilization of, 10:25**Polyethylene Glycol (Mol. Wt. 8,000)**, improvement in biodegradability of by preozonation, 11:155**Polyhydroxybenzene Polycarboxylic Acids**, formed during ozonation of soil fulvic acid, 15:19**Polymer Electrolyte Membrane**, 35:149**Polymer Structure Characterization** with ozone,

25:145

Polymeric Electroluminescent Device, 34:129**Polymerization Effects of Ozone**, in low level treatment of drinking waters and wastewaters, 16:55**Polymerization**, of aromatic compounds by ozonation and peroxidase, 8:247**Polynuclear Aromatic Hydrocarbons**, remobilization of from coal tar linings of water mains, 18:517**Polyoxyethylene Alkyl Ether** treatment with ozone, 29:65**Polypeptides**, in ozonation of amino acids, 20:381**Polyphenol Oxidase** in sugarcane juice, 40:198**Polyphenol**, reduction during ozone treatment of cherry stillage, 26:257**Polysaccharide** in ozone-BAC drinking water plant, 37:257**Polyvinylidene Fluoride (PVDF)** membranes, 39:310**Polyvinylpyrrolidone** degradation by photocatalytic ozonation, 36:560**Ponceau 4R Degradation**, 35:295**Pool Water Treatment**, 37:456**Poplar Cellulose**, enhancement of susceptibility to cellulose enzyme hydrolysis, 11:217**Poplar Sawdust**, ozone degradation of, 13:239**Porous dielectric**, for ozone generators, 26:11**Porous Diffuser Ozone Contacting**, 17:97**Porous Structure** for manganese oxide, 35:308**Porous/Non-Porous Coupons** in evaluating treatment of building materials with ozone, 31:316**Post Ozonation** of dyeing wastewater, 30:439**Post-Biodegradation** and ozone for dyestuffs, 28:141**Post-Harvest** of papaya treated with ozone, 34:151**Post-Ozonation** for humic acid removal, 40:321**Post-treatment** of composting leachate by ozonation, 36:540**Post-Treatment** of Dutch drinking water, 29:273**Potable Reuse**, 40:427**Potable Water Treatment**, 7:241**Potable Water Treatment**, importance of ozone on oxidation processes for the treatment of, and interferences with other oxidants, 4:59**Potable Water Treatment**, optimization for minimizing formation of halogenous chemicals during, 2:305**Potassium Sulfate** solution ozone solubility, 39:69**Potato Starch** treated with ultrasonication and aqueous ozonation, 40:105**Potatoes** treated with ozone and UV Radiation, 32:144**Potentiometric Titrations** in analyzing NOM

108 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

structure changes, 21:551

Poultry Processing Wastewater, 23:53

Powdered Activated Carbon in treatment of colored aqueous solutions, 37:62

Powdered Activated Carbon, and ozone-assisted activated sludge treatment for removal of toxic organic compounds, 7:191

Powdery Mildew control with electrolytically ozonated water, 31:10

Powdery Mildew, on cucumber, control by ozone, 24:463

Power Consumption in gas induced ozone reactor, 21:277

Power Costs, of ozonation, at Monroe, Michigan, 5:245

Power Electronics in three phase VSI-driven single-phase ozone generator, 37:9

Power Evaluation, during ozone generation, 12:355

Power Generation from municipal sludge, 33:164

Power Load Leveling by adsorption of ozone, 24:171

Power Load Leveling for ozone storage, 27:293

Power Plant Boiler Feed Water, organic matter removal by ozone in, 19:471

Power Plant Cooling Water Treatment, with ozone, 14:531

Power Plant Demineralization Wastewater, 22:23

Power Plant Wastewater ozonation, 22:23

Power Requirement, ozone generator cooling water requirement, 12:355

Power Supply, for ozone generation in a triggered dielectric barrier discharge, 20:51

Power Supply, to ozone generators, 14:139

PPCPs removed by Ozone and Ozone/UV, 33:150

***p*-Phenol Sulfonic Acid** treatment with ozone in tanning wastewaters, 27:351

Pre Ozonation of dyeing wastewater, 30:439

Prechlorination for drinking water, 7:137, 21:465

Precipitation by Ozone, in pulp bleaching wastewaters, 15:361

Pre-coagulation in ozone/hydrogen peroxide process for sewage treatment, 30:263

Pre-design of Coquitlam water supply, 29:287

Pre-exponential term in reaction of ozone with tertiary butanol and formate ion, 36:532

Preformed cup, 30:81

Preoxidation Treatment, with ozone and persulfate for improving activated carbon filter media, 5:113

Preoxygenation, in tertiary wastewater treatment, 7:1

Preozonation and Manganese Removal, during ozonation of extracted aquatic fulvic acid, 11:69

Preozonation effect on enhanced coagulation of

DBT precursors, 25:453

Preozonation effect on NOM adsorption and biodegradation processes, 33:185

Pre-Ozonation for humic acid removal, 40:321

Pre-ozonation of drinking water, 29:317

Pre-ozonation of dyeing wastewater, 28:199, 29:139

Preozonation of landfill leachate, 36:427

Preozonation of phenolic solutions plus coagulation, 25:323

Preozonation of tanning wastewaters, 27:351

Pre-ozonation to improve sand filtration performance, 33:66

Preozonation, 10:55; 10:255; 12:295;

Preozonation, advantages of at Mont Valérien (France) plant, 13:437

Preozonation, at the Los Angeles, CA water treatment plant, 8:77

Preozonation, at Wiggins Water Works, Durban, South Africa, 16:247

Preozonation, benefits of prior to flocculation processes, 5:21

Preozonation, effect on biodegradability and GAC adsorbability of micropollutants by, 8:11

Preozonation, effect on trihalomethane formation control, 8:129

Preozonation, for water treatment in the United Kingdom, 7:11

Preozonation, impact on granulometric distribution of materials in solution, 7:107

Preozonation, in tertiary wastewater treatment, 7:1

Preozonation, in treatment of drinking water with ozone + GAC, 14:123

Preozonation, influence of on adsorption equilibrium of DOC by activated carbon, 8:277

Preozonation, influence of on clarification by flotation for drinking water treatment, 5:3

Preozonation, influence of on the consumption of oxidants, 7:137

Preozonation, of chlorophenolic wastewater for subsequent biological treatment, 16:13

Preozonation, of drinking water in Switzerland, 8:129

Preozonation, of drinking water, impact of on GAC quality and performance, 19:1

Preozonation, of extracted aquatic fulvic acid, followed by GAC filtration, 11:69

Preozonation, of natural organics and their removal by adsorption and microbiological mechanisms in GAC columns, 8:299

Preozonation, of reservoir water, 15:465

Preozonation, prior to DE filtration for New York City water treatment, 15:131

- Preozonation**, promotion of biological activity by, 7:287
- Preozonation**, purification of polluted source water with ozonation and biological activated carbon, 6:245
- Preozonation**, with and without H₂O₂ to remove precursors of mutagenic compounds and AOX formation, 16:367
- Present Worth Analysis** of ozone wastewater disinfection, 29:303
- Preservative Efficiency** of ozonated sunflower seed oil, 39:139
- Pressure Drop** in static mixers, 32:399
- Pressure** in contacting systems, 40:159
- Pressure Ulcer** and ozone treatment, 29:501
- Pressure**, effects on ozone generation, 12:255
- Pressurized Biologically-Active Filtration** of colored groundwater with ozone treatment, 23:393
- Pressurized Reactor** for removal of 1, 4 dioxane by ozone and ultrasound, 39:244
- Pretreatment** analyzed by excitation-emission matrix fluorescence spectroscopy, 34:109
- Pretreatment of Blood Samples** by Fenton-like process, 39:61
- Pretreatment** of Kraft pulp mill effluent with ozone, 28:453
- Pre-treatment** of sludge, 38:465
- Pretreatment** of waste-activated sludge, 37:316
- Pretreatment** with ion exchange and ultrafiltration, 32:383
- Prevention** of dental caries by ozone treatment, 37:563
- Primary Settling Treatment** of wastewater after ozonation, 21:605
- Primary Sludge** ozonation, 39:148
- Principal Component Analysis** in *B. cereus* inactivation with ozone, 38:124
- Priority Contaminants**, 40:251
- Procedures**, for analysis of ozone, 20:433
- Process Control**, 35:168
- Process Control**, of wastewater disinfection at Indianapolis, IN, 15:497
- Process Management System**, 35:168
- Process Optimization** of ozone-biofiltration treatment systems, 36:276
- Process Simulation** in presence of natural organic matter, 36:73
- Process Water Treatment** with ozone in Germany, 21:163
- Process Water**, provision of by ozone treatment of surface water, 2:229
- Prometron**, ozonation of, 15:227
- Promoted Ozone Oxidation** for phenol removal, 33:143
- Promoter** influence on ozonation of ibuprofen, 35:472
- Promoters**, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methyl-isoborneol, 15:1
- Propanoic Acid**, from ozonation of natural organic matter, 16:1
- 2-Propanol**, ozonation in secondary effluent using spinning disc ozone contactor 13:501
- Propazine**, Destruction of in Drinking Water by Ozone or Ozone/Hydrogen Peroxide, 15:227,17:673
- Propionaldehyde**, 12:1; 12:231
- Propionic Acid**, 12:1
- Prostatic Adenocarcinoma** and ozone therapy, 30:398
- Protective Equipment** for ozone exposure in ozonation plants, 2:345
- Protein Desorption Kinetics** for ozone treatment, 28:303
- Protein Fiber** after ozonation, 40:140
- Proteins** degradation with ozone, 28:317
- Proteins** oxidation by ozone, 32:81
- Pseudomonas aeruginosa* in ozone laundry systems, 31:369
- Pseudomonas aeruginosa* inactivation with ozone, 21:293
- Pseudomonas aeruginosa*, removal in dental treatment units with ozone, 24:479
- p-Toluenesulfonic Acid** in photocatalytic oxidation with ozone; 24:75
- p-Toluenesulfonic Acid**, aqueous ozonation of, 13:639
- Pulp & Paper Mill Wastewater Treatment**, 14; 461; by 2-phase ozone reactor, 14:381
- Pulp and Paper Effluents** treatment by advanced oxidation processes, 27:27
- Pulp and Paper Industry**, 31:452
- Pulp and Paper Mill Wastewater** treatment with ozone, 13:251, 22:585
- Pulp and Paper Wastewater**, 30:105
- Pulp Bleaching** and dimer lignin model, 23:139
- Pulp Bleaching** and use of ozone in France, 21:153
- Pulp Bleaching** effluents and removal of EDTA with ozone, 22:279
- Pulp Bleaching Mill Wastewater** treatment with ozone, 15:361; 16:55; review of, 18:477; 21:53
- Pulp Bleaching** with ozone and degradation of cellulose models, 22:447
- Pulp Bleaching** with ozone in Germany, 21:163
- Pulp Bleaching** with ozone in the USA, 21:99
- Pulp Bleaching** with ozone, 18:566; 24:1; 25:523; 30:310

110 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Pulp Bleaching with Ozone**, characterization of wastewaters of eucalypt Kraft pulps, 19:481
- Pulp Mill Effluent** (Kraft) treatment with ozone, 23:479
- Pulp Mill Effluent Treatment**, (chemical and mechanical) by ozonation, 18:363
- Pulp Mill Wastewater** treatment with ozone, 17:205; 17:419; 22:31
- Pulp Mills** circulation water treatment with ozone, 22:575
- Pulp** of melon seeds affected by ozone processing, 40:209
- Pulse Frequency** ozone generation, 21:635; 23:171; 24:471
- Pulse Modes**, 40:494
- Pulse Ozonation** in aerobic sludge digestion, 36:57
- Pulse Streamer Corona**, 25:127
- Pulsed Corona Discharge** and formation of nitrates, 36:94
- Pulsed Discharge** for ozone generation, 36:253
- Pulsed Discharge** in ozone generation, 39:33
- Pumice Surface Composition** in hydroxyl radical initiation, 38:42
- Pump** design in contacting systems, 40:159
- Pumping Stations** and sewage treatment plants, application and misapplication of ozone for odor control in, 5:69
- Pure Water** ozonation, 30:300
- Purine Bases**, ozonation of, 13:265
- Purton Water Works (U.K.)**, treatment with ozone/GAC at, 18:57
- PVDF Membrane**, 40:64
- Pyrazine**, 12:329
- Pyrazinedicarboxylic Acid**, 12:329
- Pyrene** ozonation, 21:571
- Pyrex Bead** in dielectric barrier discharge, 35:134
- Pyrex Wool** in dielectric barrier discharge, 35:134
- Pyrimidine Bases**, ozonation of, 13:265
- Pyrimidines**, structure relationships and kinetics of ozonolysis of, 9:207
- Pyrite** and gold extraction, 33:42
- Pyrolysis** wastewater treated with ozone, 32:349
- Pyrrrole-2-Carboxylic Acid** in photocatalytic oxidation with ozone; 24:75
- Pyrrolidine** removal with ozone, 21:23
- Pyrrolidone Derivatives** reacted with ozone, 33:470
- Pyrrolidone Derivatives** treated with catalytic ozonation, 34:359
- Pyruvic Acid** removal by catalytic ozonation, 28:229
- Pyruvic Acid**, Formation of by Ozonation of Natural Organic Matter in Water, 17:647
- Pyruvic Acid**, formation of by ozonation, 8:199; 14:269; 16:1
- Pyruvic acid**, identification during ozonation of organic compounds in water, 2:251
- Pyruvic Acid** removal by ozone, 27:159
- Q-FISH**, 36:238
- Quality Assurance in Ozone Practice**, 20:433
- Quality Control**, during ozone generation, 12:355
- Quality** of Fenton treated raw sugar beet juice 40:54
- Quality** of fresh cut lettuce, 40:216
- Quality** of ozone treated melon seeds, 40:209
- Quality Parameters** in treatment of fruit juices, 32:166
- Quality Standards** for UV disinfection, 30:43
- Quantitative Microbial Risk Assessment**, 40:79
- Quantum Chemical Calculation** of removal of VOCs with ozone, 31:393
- Quantum Chemistry** in flue gas treatment by ozone, 40:29
- Quantum Chemistry**, of aromatic compounds reaction with ozone, 32:61
- Quantum Yield** in UV-Induced decomposition of ozone and hydrogen peroxide, 24:281
- Quantum Yield of Ozone** measured in UV system, 23:245
- Quarantine**, shellfish, ozone-UV water treatment system for, 1:55
- Quartz Sand** treated with ozone, 28:125
- Quaternary Ammonium**, surfactants treatment by ozone, 26:327
- Quench Flow System** for ozone treatment of wastewater, 28:247
- Quinone**, in ozonation of chlorophenol solutions, 20:259; 20:283
- Quinoxaline**, ozonation in aqueous solutions, 12:329
- Radial Basis Function Neural Network**, 32:56
- Radiation Measurement**, 34:306
- Radiation Modeling**, 34:306
- Radical Mechanism**, of ozone oxidation of glyoxal, 11:271
- Radical Pathway** during bromate ion formation, 29:3
- Radical Pathway**, formation for bromate ion formation in a continuous flow reactor, 26:573
- Radical Pool** in semiconductor processing with ozone, 25:445
- Radical Reaction Model** for ozone-hydrogen peroxide treatment, 28:95
- Radical Scavenger** in 1,4 Dioxane removal, 29:13
- Radicals** formation in semiconductor processing

with ozone, 25:445

Radioactive Wastewaters, ozone treatment of, 1:133

Radiotherapy, 30:398

Raman Spectroscopy for detection ozone oxidation of fullerene, 28:177

Ramona Soil dispersion after treatment with ozone, 23:65

Rapid Scan Spectrophotometry in ozone formation during salt brine electrolysis, 20:239

Rate Coefficient of ozone in a cylindrical tube, 33:106

Rate Constant in fatty acids ozonation, 31:301

Rate Constant modeled in ozone-hydrogen peroxide treatment, 28:95

Rate Constant of cisplatin ozonation, 30:189

Rate Constant of ozonation of Great Lakes Basin wastewater effluent, 37:36

Rate Constant of p-chlorobenzoic acid treatment with ozone, 27:3

Rate Constant, of direct ozone reaction with 1,3-cyclohexanedione, 13:421

Rate Constants for treatment of emerging contaminants, 35:263

Rate Constants in ozonation of maleic acid, 25:13

Rate Constants in ozonation of β -Triketone Pesticides, 39:3

Rate Constants of ozone decolorization of sugar industry liquors, 28:261

Rate Constants, for ozonation of linomycin and spectinomycin, 26:525

Rate Constants, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methylisoborneol, 15:1

Rate Constants, in ozone decomposition, 26:345

Rate Constants, of aromatic compounds reaction with ozone, 32:61

Rate-of-Production Analysis in pulsed discharge ozone generation, 39:33

Rate-Of-Production Analysis, 40:361

Raw Skin treatment with ozone for leather making, 32:449

Raw Sugar Beet Juice, 40:54

RBC Effluent, ozone disinfection of, 1:91

R_{CT} concept in ozonation processes, 22:123

R_{CT} in wastewater ozonation, 34:42

R_{CT} to evaluate drinking water processes, 32:244

R_{CT} Value in ozone treatment of natural waters, 21:239

RDX, the high temperature treatment of TNT and RDX with ozone and ultrasound, 6:275

Reaction Intermediates in Bisphenol A ozonation, 32:338

Reaction Kinetic Simulation of decomposition of ozone and hydrogen peroxide, 24:281

Reaction Kinetics in a collimated beam UV reactor, 37:134

Reaction Kinetics in ozone bubble column, 39:44

Reaction Kinetics of decomposition of ozone in "pure water", 30:300

Reaction Kinetics of green gram reaction with ozone, 37:309

Reaction Kinetics of imazalil oxidation with ozone, 33:308

Reaction Kinetics of ozone oxidation of chloramine, 3:139

Reaction Kinetics of ozone with natural organic matter, 23:105

Reaction Kinetics of UV oxidation of organic compounds, 30:99

Reaction Kinetics, of 2,4-Xylidine degradation by ozone, 26:499

Reaction Mechanism in ozonation of nitrite ion, 32:430

Reaction Mechanism of degradation of *meta*-Chloronitrobenzene, 36:496

Reaction Mechanism of reaction with bisulfide, 33:37

Reaction Mechanisms and discharge physics, of ozone generation, 10:351

Reaction Mechanisms in ozone generation from oxygen in presence of halomethane impurities, 24:329

Reaction Mechanisms of alkane and ether oxidation by ozone, 30:165

Reaction Mechanisms of ozone treatment of Cinnamic Acid, 23:177

Reaction Mechanisms, of organophosphorus pesticides during ozonation: Application in drinking water treatment, 6:207

Reaction Order for ozone self-decomposition in a semi-batch bubble column reactor, 27:409

Reaction Order of oxidation of Microcystin-LR by ozone, 23:161

Reaction Order of ozone decay in water, 34:233

Reaction Order, in ozonation of pentachlorophenol in aqueous solutions, 20:163

Reaction Product Formation in treatment of Netherlands drinking water, 34:92

Reaction Products in ozonation of dyestuffs, 21:487

Reaction Rate Coefficient Determinations with Ozone in Industrial Wastewater Treatment, 17:379; 17:527

Reaction Rate Constant of micropollutants, 36:289

Reaction Rate Constants for ozonation of o-

112 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

nitrotoluene, 23:127

Reaction Rate Constants, for oxidation of chlorinated organics, 14:197

Reaction Rate for ozone self-decomposition in a semi-batch bubble column reactor, 27:409

Reaction Rates of ozone in oxidation of micropollutants in water, 21:207

Reaction Selectivity in ozonation of paper mill circulation water, 23:401

Reactivation in Dutch drinking water, 29:273

Reactive Black (RB5), azo dye treatment with ozone, 26:539

Reactive Black 5 Dye ozonation, 29:493

Reactive Black removal with ozone, 37:420

Reactive Dye catalytic ozonation, 27:257

Reactive Dyeing and ozone bleaching of cotton fabric, 37:203

Reactive Dyes advanced oxidation, 39:14

Reactive Orange (RO96), azo dye treatment with ozone, 26:539

Reactive Oxygen Intermediates in ozone inactivation of *Plasmodium Falciparum*, 23:89

Reactive Oxygen Species in medical applications of ozone, 23:207

Reactor Design for a microporous diffuser, 27:45

Reactor Design for *Cryptosporidium* inactivation, 22:99

Reactor Design for electrolysis, 33:463

Reactor Design for multi-jet ozone contactors, 38:245

Reactor Design for ozonation of sludge, 29:415

Reactor Design for plunging liquid jet contactor, 28:131

Reactor Design, for RB-19 Dye ozonation, 26:165

Reactor Hydraulics and process control, 35:168

Reactor Hydrodynamics in domestic wastewater ozonation, 23:219

Real Waters containing emerging contaminants, 35:263

Recalcitrant Compounds in stabilized landfill leachates, 28:309

Recalcitrant Organic Matter in pulp and paper wastewater, 30:105

Recalibration, of standard neutral ozone decomposition model, 26:345

Recirculating Systems in aquaculture, 33:345

Recirculation, and ozone in stabilization of landfills and leachates, 20:121

Reclaimed Water after soil aquifer treatment, 39:385

Recombinant Yeast Bioassay of ozonation byproducts of 4-nonylphenol, 30:120

Recombination of Hydroxyl Radicals in photo-assisted ozonation, 40:113

Rectal Insufflation, 38:322

Rectal Ozone Application, 34:480

Recyclable Papers, ozone treatment of, 7:229

Recycle Operation in electrochemical generation, 33:389

Recycle Operation in electrochemical ozone generation, 31:287

Recycled Sea Water, ozonation of for fish hatchery cultivation, 13:697

Recycling System, for fish culture, ozonation in, 1:319

Red Mud Coagulation by ozonation, 31:294

Reduced Environmental Impacts of ozone laundry system, 35:399

Reduction Equivalent Fluence (REF), in UV treatment of waters containing *Bacillus subtilis*, 23:239

Reduction of biomass production, 39:80

Reductive Bleaching of soybean fabric, 37:195

Refineries (Petroleum) Wastewater Treatment, with ozone, review, 18:477

Refinery Wastewater catalytic ozonation, 37:546

Refinery Wastewater, 33:403

Refining, of paper, 7:229

Reflection Coefficient of ozone in a cylindrical tube, 33:106

Reflection Coefficient, and loss probability of ozone at the chamber surface, 26:487

Refractory Gold Ores extraction with ozone, 33:42

Refractory Gold Ores treatment with ozone, 29:101

Refractory Large Organic Molecules, in ozone treatment of landfill leachate, 26:287

Refractory Matters and bicarbonate, 35:302

Refractory Ores, 40:284

Refractory Organic Pollutant ozonation assisted by magnesium cations, 32:113

Refractory Organics in pulp and paper industry wastewater, 27:27

Refractory Organics, oxidation with ozone-hydrogen peroxide, 1:119

Refrigerator sterilization by small ozone generator, 24:215

Regeneration of heterogeneous catalyst by ozone, 39:366

Regression Analysis in catalytic ozonation of landfill leachate, 38:133

Regrowth in ozone systems in BENELUX, 21:139

Regrowth in UASB effluent, 29:485

Regrowth of biofilm in dental water systems, 31:436

Regrowth Potential, of ozonated groundwater, 13:109

- Regulations** for drinking water treatment, 21:465
Regulations for inactivation of *Cryptosporidium*, CT requirements, 27:335
Relative Humidity Effects on inactivation of Anthrax by ozone, 24:151
Relative Humidity in norovirus inactivation with ozone, 35:217
Remediation of DDT contaminated soil, 36:166
Remediation using a microporous diffuser reactor system and ozone, 27:45
Remediation with chlorine dioxide, 27:203
Remixing in sidestream contacting systems, 40:159
Removal of biofilms by ozone water, 31:3
Removal of pesticides from olives by ozonated water, 39:91
Removal of phenol by ozonation and adsorption, 34:259
Removal of tetracycline by ozonation, 37:405
Removal of VOCs with ozone, 31:393
Reservoir Waters, ozone treatment of, 12:295
Residence Time Distribution for ozone bubble columns, 14:245, 23:313
Residence Time Distribution in ozone contactors, 30:49
Residence Time ozone generation, 38:86
Residual Calibration, for Indigotrisulfonate Method, 32:33
Residual Measurement, for ozone, 32:33
Residual Oil in soil ozonation, 35:366
Residual Oxidants, in recycled ozonized sea water, 13:697
Residual Ozone measured during ozone treatment of drinking water and aldehyde formation, 25:53
Residual Ozone measurement, 24:17
Residual Ozone Measurement, a detailed comparison of analytical methods for, 5:203
Residual Ozone, 38:79
Residual Ozone, automated measurement of, 7:155
Resin Acid treatment with ozone, 22:575
Resonance in high frequency ozone generation, 23:171
Resorcinol, Destruction by Ozone and Advanced Oxidation, 17:527
Resorcinol, ozonation of, 8:129
Resorcinols removal by aerobic bio-oxidation combined with activated carbon and ozonation, 32:417
Respiratory Infections, bactericidal effects of high airborne ozone concentrations on *Escherichia coli* and *Staphylococcus aureus*, 20:205
Response Surface Method for optimization of leachate treatment with ozone, 37:279
Response Surface Method for wastewater treatment, 36:570
Response Surface Methodology for optimization of ozone generation, 32:372
Response Surface Methodology in ozonation of textile wastewater, 40:465
Response Surface Methodology in treatment of coffee effluent, 40:293
Response Surface Methodology, of anthraquinone ozonation, 39:219
Response Surface Modeling of ozone generator, 37:3
Retinitis Pigmentosa and ozone therapy, 25:223, 34:480
Retirement Community, 35:399
Retrofit of contactors for multi-jet, 38:245
Retrofit to pipeline contactor, 29:291
Return on Investment of ozone laundry system, 35:399
Reusability of cobalt incorporated MCM-41 catalyst, 37:527
Reuse of greenhouse effluents after ozone treatment, 23:385
Reuse in treatment of refinery wastewater, 33:403
Reuse of ozone-treated municipal secondary effluent, 33:243
Reuse of reverse membrane effluent, 33:379
Reverse Osmosis Brine quality after ozonation, 36:153
Reverse Osmosis membrane fouling, 33:379
Reverse Osmosis of ozonated water, 30:152
Reverse Osmosis Permeate quality after ozonation, 36:153, 36:174
Reverse Osmosis, to remove minerals prior to ozone treatment of cooling water, 14:231
Reversed Osmosis Concentrate in graphical industry wastewater, 35:16
Review of ozone decay in water, 34:233
Review, of wastewater ozonation in the U.S.A., 13:23
Reynolds Number, correlation with Peclet number at Tucson CAP WTP, 19:307
Rheological Properties of ozone treated peach juice, 40:305
Rheology of potato starch after ultrasonication and aqueous ozonation, 40:105
Rhipicephalus Sanguineus Sensu Lato, 40:183
Rice grains treated by ozone, 37:450
Rinsing Water containing ozone for washing apples, 39:97
Rio Vista WTP pipeline contactor, 29:291
Risk Assessment of bromate, 36:419
River Water treated by catalytic ozonation, 33:236
RNA Constituents, and tobacco mosaic virus,

114 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- degradation with ozone, 3:49
RNA degradation with ozone, 28:317
RO Concentrate from coal gasification wastewater, 40:275
Room Air Ozone Concentration, in dental rooms, 20:251
Room Temperature ozone decomposition, 35:514
Root Celery treated with ozone and UV Radiation, 32:144
Root Elongation promotion of adventitious roots in *Chrysanthemum*, 31:15
Root Surface in ozone-dental applications, 34:484
Roots of seedlings treated with ozone, 30:427
Rotating Electrode in an ozone generator, 27:53
Rotating Electrode Ozone Generator, 22:563
Rotating Packed Bed, 35:101
Rotifer (*Brachionus plicatilis*), tolerance to ozone and total oxidative residuals, 19:457
Ruthenium catalyst in oxidation of *p*-chlorobenzoic acid, 25:25
- S. Aureus*, decay in presence of ozone, 20:205
S. typhi degraded with ozone, 30:367
Saccharomyces cerevisiae **D7144-2**, to test for mutagenicity in drinking water treated with ozone/GAC, 11:245
Safety Devices, Problems and Regulations, in ozonation plants, 2:345
Safety in ballast water treatment, 40:399
Safety in lettuce processing, 40:216
Safety in sidestream contacting systems, 40:159
Salicylaldehyde, ozonation of, 8:129
Salicylic Acid removal with ozone, 21:261
Saline Effluents treated with ozone, 28:3
Saline Wastewater treatment with ozone, 25:177
Salinity effect on degradation of humic acid, 34:101
Salmon preservation, 33:368
Salmonella Enteritidis on egg surfaces, 33:374
Salmonella treatment with ozone, 23:53
Salmonella typhimurium inactivation with ozone, 21:293
Salmonella typhimurium inactivation with ozone, 38:124
Salmonella, ozone destruction of in municipal wastewater, 13:179
Salt Effect on ozone oxidation of wastewater, 27:287
Sand Filter for biofiltration, 37:143
Sand Filter Medium, viable bacteria counts in after ozonation, 13:1
Sand Filtration, of ozone treated colored upland water, 21:615
- Sanitation** of water in seafood processing plants with ozone, 28:171
Saprochaete spp in ozonated olive oil, 39:455
Sarcoma 37 and ozone therapy, 30:398
Saturation Mode, in a triggered dielectric barrier discharge, 20:51
Saturation Time for ozone transfer in rice grain bulks, 40:191
Saturation Time in ozone treatment of Green Gram bulks, 39:54
Saturation Time of ozone gas in rice grains, 37:450
Saturation Time of ozone in food preservation, 39:115
Saturation Time of reaction with ozone, 37:309
Sauter Mean Bubble Diameter in ozone bubble column, 29:343
Sauter Mean Diameter, in ozone-treated spray water, 26:511
SBA used as catalyst in ozonation, 38:48
SCADA System for Henrico County VA Water Treatment Facility, 31:461
Scale Control, during ozonation of cooling waters. 15:81
Scale Inhibitor in cooling tower treatment with low-concentration dissolved ozone, 31:53
Scale-Up, of RB-19 Dye ozonation in a gas-inducting reactor, 26:165
Scaling Control, in cooling waters treated with ozone, 14:531
Scallops, bacterial depuration of using ozone or chlorine, 4:121
Scanning Electron Microscope (SCM) to analyze leather bleached with ozone, 39:455
Scanning Electron Microscopy (SEM) of membrane surfaces, 29:75
Scanning Electron Microscopy, 35:201
Scavenger for hydroxyl radicals, 35:302
Scavenger in reaction of SDS with ozone, 29:131
Schmutzdecke, and ozone treatment of colored upland water, 21:615
Schumann-Runge Band in ozone formation, 21:229
Seafood Preservation, 33:368
Seafood processing plants water treatment, 28:171
Seawater disinfection, 35:63
Seawater for Cooling, ozone treatment of, 11:325
Seawater Intrusion, 35:465
Seawater Ozonation, 26:389, 36:515
Seawater Ozonation for shellfish depuration, 1:147
Seawater Parameters, 40:399
Seawater, anti-biofouling ozone system for cooling water circuits applied to, 7:31

- Seawater**, effluent from a shellfish quarantine unit, preliminary tests of an ozone system for the disinfection of, 2:5
- Seawater**, ozonation of for recycling fish hatchery cultivation, 13:697
- Seawater**, ozonation of, products of oxidation of bromide ion in, 6:103
- Seawater**, ozone reactivity with components, 1:39
- Sebago Lake Water Treatment Plant**, Portland, Maine, USA, start-up and optimization of, 19:255
- Second Half-Life of Ozone**, as a water quality parameter for ozonation processes, 16:121
- Second Order Rate Constants**, 35:168
- Secondary Effluent**, F-specific bacteria as indicators of disinfection with ultraviolet radiation, 9:353
- Secondary Effluent**, ozone disinfection of *E. coli* in, 13:593
- Secondary Effluent, Pulp & Paper Industry**, ozone treatment of in Poland, 13:521
- Secondary Effluent**, treatment with ozone, 12:107; 12:157; 17:195; 20:133; 22:113
- Secondary Effluent**, using spinning disk ozone contactor, 13:501
- Secondary Effluents** ozonation, 30:376
- Secondary Organic Aerosol**, 32:274
- Secondary Sludge** in anaerobic digestion, 37:316
- Secondary Treated Effluent**, 37:323
- Seed Treatment**, 36:422
- Seedborne Viruses**, 36:422
- Seedling** ozone treatment, 30:427
- Seeds** affected by ozone processing, 40:209
- Seeds** disinfection with ozone, 30:427, 38:115, 39:104,
- Segregated Flow Analysis** to model *Cryptosporidium* inactivation in continuous-flow contactors, 27:487
- Seine River Fulvic Acid**, effects of ozone and ozone/GAC on, 13:147
- Selective Oxidation** of cyclohexane, 38:482
- Selectivity** of ozone bleaching of Kraft pulp, 25:523
- Selectivity** of ozone in treating polyvinyl chloride, 29:373
- Selenastrum capricornium*** cultures inhibition, 38:425
- Self Decomposition** model for ozone, 29:31, 29:55
- Self-decomposition** of ozone in a semi-batch bubble column reactor, 27:409
- Self-Decomposition**, of ozone in water, 32:3
- Self-Organization** in ozone generation, 37:221
- Semiconductor Applications** and photoresist removal by ozone, 27:139
- Semiconductor Applications**, 24:1; 24:379, 24:391; 25:445
- Semiconductor Applications**, with UV-ozone, 22:427
- Semiconductor based Sensor for Ozone Measurement**, 20:499, 20:507
- Semiconductor Manufacture** and use of ozone in the USA, 21:99
- Semiconductor Processing** and use of ozone in Japan, 21:127
- Semiconductor Technology** and ozonation of propylene glycol methyl ether acetate, 30:332
- Semiconductor Wastewater** ozonation with ozone, 27:225
- Semi-dry Process** for flue gas treatment, 38:211
- Sensitivity Analysis** in pulsed discharge ozone generation, 39:33
- Sensitivity Analysis** of ozone decomposition model, 35:338
- Sensitivity Analysis**, 40:361
- Sensitivity Coefficient** in analysis of ozone, 24:17
- Sensitization of Organic Matter** in photo-assisted ozonation, 40:113
- Sensory Properties** of cucumbers treated with ozone. 39:188
- Sensory Quality** of tomatoes disinfected with ozone, 32:361
- Seoul Waterworks**, treatment of water with ozone, 27:69
- Separation** by membranes and fouling inhibition, 38:163
- Sequencing Batch Biofilm Reactor (SBBR)** for 4-chlorophenol ozonation, 30:447
- Sequencing Batch Reactor (SBR)** for treatment of wastewater containing 3-methyl-pyridine, 23:189
- Sequential Disinfection** of *Cryptosporidium parvum* by ozone and chlorine dioxide, 19:409
- Sequential Disinfection** of *Cryptosporidium parvum* by ozone followed by chlorine, 23:411
- Sequential Disinfection** of water containing *Bacillus subtilis* spores, 28:335
- Sequential** ozonation of recalcitrant and toxic wastewater concentrate, 34:163
- Serpentine Shape Ozone Generator**, 39:209
- Settleability** of sludge treated with ozone, 25:73
- Sewage Effluent**, factors influencing the ozone inactivation of enteric viruses in, 6:235
- Sewage Secondary Effluent** treated with ozone, 29:23
- Sewage Treatment** by ozone/hydrogen peroxide process, 30:263
- Sewage Treatment Plant Effluent Treatment**, by Advanced Oxidation, 17:119
- Sewage Treatment Plant Effluent Treatment**, by Ozone, 17:195

116 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Sewage Treatment Plants** and pumping stations, application and misapplication of ozone for odor control in, 5:69
- Sewage Treatment Plants**, using ozone, 12:95
- Sewage Treatment Process** for removal of emerging contaminants, 40:339
- Sewage Treatment With Ozone**, startup and operation of Indianapolis, IN wastewater treatment plants, 10:215
- Sewage Treatment**, use of ozonation in, 6:199;
- Sewage Treatment**, use of ozone in night soil treatment process, 6:185
- SF₆** effect on ozone generation, 32:444
- Sharon Fruits** treated with ozone and UV Radiation, 32:144
- Shelf Life** of fresh cut lettuce, 40:216
- Shelf Life** of strawberries, 36:43
- Shelf-Life** of tomatoes disinfected with ozone, 32:361
- Shellfish Depuration** and use of ozone in France, 21:153
- Shellfish Depuration**, by seawater ozonation, 1:147; 12:423
- Shellfish Quarantine Unit**, preliminary tests of an ozone system for the disinfection of, 2:5
- Shellfish Quarantine**, ozone-UV water treatment system for, 1:55
- Shellfish Waters**, high level ozone disinfection of wastewaters for discharge into, 1:335
- Shigella sonnei** inactivation with ozone, 21:293
- Ship Ballast Water**, treatment with ozone, 26:389
- Shipbuilding Industry** and use of ozone for wastewater treatment, 25:177
- Shoe Disinfection** with ozone, 24:1
- Shrimp Pathogens**, *Vibrio* Sp. and *Fusarium solani*, preliminary results of ozone treatment of seawater containing potential, 1:329
- Shrimp** preservation, 33:368
- Shrinkproofing of Wool** with ozone, 1:219
- Side Stream Injection**, of ozone for groundwater treatment, 13:559
- Sidestream injector** contacting systems, 40:159
- Side-Stream Ozone System**, 29:231, 29:297
- Sidestream Venturi Injection Reactor** for ozone dissolution systems, 22:329, 38:245
- Si-FeOOH** and peroxide for wastewater treatment, 37:494
- Silent Discharge** in cylindrical type of rotating electrode, 27:53
- Silent Discharge** in ozone generation by high frequency, 25:363
- Silica and Glass**, ozone decomposition on, 18:385
- Silica Gel** for adsorption of ozone, 24:171; 25:315
- Silica Gel** for storage of ozone, 25:211
- Silica Gel** in catalytic ozonation of nitrobenzene, 31:45
- Silica** packing effect on ozone synthesis from oxygen-nitrogen mixtures, 25:63
- Silica Packings**, Catalytic properties of on ozone synthesis conditions, 18:41
- Silica**, precipitation during ozonation of cooling waters, 15:47
- Silver Ion** reaction with ozone, 37:393
- Silver Recovery**, with ozone, 1:235
- Silver Sol** reaction with ozone, 37:393
- Silver(I)**, as catalyst during ozonation of humic substances in water, byproducts therefrom, 18:173
- Simazine Treatment**, with ozone/GAC at 11 Anglian Water (U.K.) surface water, 18:19
- Simazine**, degradation by ozone, 14:283; 15:227
- Simazine**, destruction by ozone advanced oxidation, 19:39
- Simazine**, oxidation by ozone and ozone/H₂O₂ in a static mixer, 16:455
- Simazine**, Removal from Drinking Water by Ozone and Ozone/Hydrogen Peroxide, 17:97; 17:673
- Simazine**, Removal from Drinking Water by Ozone/UV Radiation, 17:183
- Similar Distribution System- THM (SDS-THM)**, 29:317
- Simulation Model**, of Ozone Contactors, 17:607
- Simulation** of ozone decomposition in aqueous alkaline solution, 22:287
- Simulation** of ozone storage, 27:293
- Simulation** of ozone treatment of Green Gram bulks, 39:54
- Simulation** of surface discharge in oxygen and air fed systems, 27:59
- Single Bubble Model**, in Estimation of Ozone transfer Efficiency in Water, 17:469
- Singlet Dioxygen** in ozonation of nitrite ion, 32:430
- Singlet Oxygen** in ozone formation with (V)UV-Enhanced Barrier Discharges, 21:583
- Singlet Oxygen** in reaction with bisulfide, 33:37
- Singlet Oxygen**, in Generation of Ozone, 17:267
- β-Sitosterol**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Six-Cyclic Polyaromatic Hydrocarbons** ozonation, 21:571
- Size and Polar Fractionation** of natural organic matter, 30:321
- Size Exclusion Chromatography** for analysis of aldehyde formation, 25:53
- Skatole**, in swine manure slurry, 20:35
- Skilled Nursing Facility**, 35:399
- Slimes in Cooling Systems**, prevention of by

ozonation, 11:325

Slow Sand Filtration, contribution of ozone to the removal of organic materials in a process including slow filtration through activated carbon and, 4:33

Slow Sand Filtration, preceded by ozonation for the removal of humic color from water, an experimental study of, 6:3

Slower Ozone Decay Phase (kc) in control of ozone dosage, 25:383

Sludge Bulking Control, in wastewater treatment, 12:145; 16:385

Sludge development from canned maize production, 31:257

Sludge dewatering by ozone, 32:252

Sludge Digestion and ozone treatment, 38:465

Sludge Digestion, 36:57

Sludge Disintegration during ozonation, 39:80

Sludge Ozonation, 30:136, 33:410

Sludge Production Reduction with ozone treatment, 22:473

Sludge Reduction by ozone treatment, 25:73; 29:415; 33:171

Sludge Settling, improvement of by means of ozonation, 6:199

Sludge treatment with ozone and micropollutant removal, 39:319

Slurry Reactors for treatment of clofibric acid with ozone, 28:47

Snails fixed bed biofilm reactors, 37:227

Soaking Duration in promotion of adventitious roots in *Chrysanthemum*, 31:15

Sodium Acetate used in ozone-hydrogen peroxide reaction model, 28:95

Sodium Chloride solution ozone solubility, 39:69

Sodium Dithionite in bleaching of soybean fabric, 37:195

Sodium Dodecyl Sulfate (SDS) reaction with ozone, 29:131

Sodium Hypochloride for dental cavity disinfection, 36:206

Sodium Hypochlorite and UV for degradation of C. I. Disperse Blue 56, 31:37

Sodium Persulfate for catalytic oxidation of Ciprofloxacin Hydrochloride, 40:457

Sodium Sulfate solution ozone solubility, 39:69

Soft Sensor Model, of ozone concentration, 32:56

Soil Aquifer Treatment, 39:385

Soil contaminated with DDT, 36:166

Soil Disinfection with ozone, 28:125

Soil Fulvic Acid, degradation by ozone in aqueous medium, 15:19

Soil Properties in treatment of irrigation water with ozone, 23:65

Soil Remediation containing clofibric acid with ozone, 28:47

Soil Remediation with ozone, 38:272

Soil Residence Time, 38:465

Soil Treatment with ozone optimization using response surface treatment, 37:279

Soil Washing Surfactant, 40:420

Soils, effects on ozonation of volatile organic chemicals, 13:287

Solar Radiation and ozonation for treatment of Jatropha Seedcake, 37:29

Solid Phase Microextraction of ozonation products within activated sludge, 31:279

Solid Phase Ozone Decomposition, 15:167

Solid Waste ozonation, 36:540

Solubility of ozone in electrolyte solutions, 39:69

Solubility of ozone in liquids, 28:67; 30:13

Solubility of ozone in tap and saline water, 25:177

Solubility of ozone in VolasilTM245, 25:485

Solubility, of ozone in water, 9:1 ; 32:3

Solubilization of activated sludge, 29:201

Solvent Extraction, of ozone for wastewater treatment, 26:475

Solvents and ozone solubility, 30:13

Solvents Containing Ozone, 36:110

Sonication of free fatty acids with ozone/argon, 37:93

Sonication of petrochemical wastewater, 33:194

Sonoperoxone as applied to foundries, 29:461

Sonozone, steady state disinfection of water by ozone and, 2:13

Source Apportionment, 39:287

Source Term for pulsed discharge ozone generation, 36:253

Souring Process for cucumbers, 39:188

South-Central Regional Water Authority WTP, 32:286

SO_x removal from glass melting furnace flue gas, 38:211

Soy Beans treated with PhytoO3 Tech Crop Protection Technology, 30:210

Soybean Fibers treated with ozone, 34:143, 37:195

Spa Water, treatment with ozone produced by UV light, 11:313

Space Charge in multiple needles to plane configuration, 33:98

Sparging of a VOC spill site with ozone, 30:88

Spark in pulsed electric discharges, 35:22

Spas, ozone treatment of, 12:393

Specific Bubble Interfacial Area in impinging jet ozone bubble column, 29:245

Specific Interfacial Area in impinging jet contactors, 32:99

118 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Specific Ozone Dose** in color removal from textile wastewater, 25:137
- Specific Reduction Efficiency**, in ozonation of p-hydroxybenzoic acid solution 20:343
- Specific Resistance** of ultrafiltration media affected by ozone, 22:637
- Specific UV Absorbance (SUVA)**, 33:14
- Spectinomycin**, treatment with ozone, 26:525
- Spectral Sensitivity** of spores of *Bacillus subtilis*, 23:239
- Spectrophotometric Method** 38:373 in determination of ozone residual, 38:373
- Spectroscopy** used in ozone generation, 40:356
- Spent Brine** in industrial liquid wastes, 38:219
- Sphaerotheca fuliginea*, on cucumber, control by ozone, 24:463
- Spices** treatment with ozone, 32:137
- Spinal Degenerative Pathologies**, 34:461
- Degenerative Disc Disease**, 34:461
- Spinning Disc Ozone Contactor**, mass transfer in secondary effluent, 13:501
- Spoilage** of tomatoes disinfected with ozone, 32:361
- Spontaneous Ozone Demand**, of drinking waters, 1:357
- Spore Morphology** in *Aspergillus niger* treatment with ozone, 28:347
- Spore** removal in wastewater ozonation, 35:501
- Spore Structural Damage** during inactivation by ozone, 32:180
- Spores** inactivation with ozone, 23:285
- Sporulated Bacteria** inactivation by ozone, 32:180
- Sporulated Bacteria**, Ozone Disinfection of, 17:499
- Sporulation** in *Aspergillus niger* treatment with ozone, 28:347
- Spray Droplet Size**, in ozone-treated spray water, 26:511
- Spray Pyrolysis** to create silver-coated perlite, 37:252
- Spray** reactor for pyrolysis wastewater by ozone, 32:349
- Springfield, MO WWTP**, operating experiences of, 14:501
- Squid** preservation, 33:368
- Stability Constant** in catalytic ozonation, 34:359
- Stability** of ozonized sunflower oil, 38:143
- Stachyboltrys chartarium* removal via ozone gas treatment, 31:326
- Staelin, Buhler and Hoigné Mechanism**, for ozone decomposition, 26:345
- Staged Downflow Bubble Reactor**, design and modeling of, 12:437
- Stainless Steel** cylindrical tube for ozone generation, 33:106
- Stainless Steel** surfaces cleaned with ozone, 28:303
- Standard Ozone Terms**, of the IOA, 6:37
- Staphylococcus aureus* inactivation by ozone, 23:183
- Staphylococcus* inactivation by ozonized Sunflower oil, 22:207
- Starch Items** treatment with ozone, 32:137
- Starch** treatment with ozone, 37:71
- State-of-the-Art** of ozone in BENELUX, 21:139
- State-of-the-Art** of ozone in Canada, 21:119
- State-of-the-Art** of ozone in France, 21:153
- State-of-the-Art** of ozone in Germany, 21:163
- State-of-the-Art** of ozone in Japan, 21:127
- State-of-the-Art** of ozone in Poland, 21:177
- State-of-the-Art** of ozone in Switzerland, 21:187
- State-of-the-Art** of ozone in the United Kingdom, 21:201
- State-of-the-Art** of ozone in the United States of America, 21:99
- Static Mixer** effect on bromate formation during ozonation, 22:267
- Static Mixer** for inactivation of *Cryptosporidium parvum* with ozone, 25:295
- Static Mixer** mass transfer efficiency comparison, 32:399
- Static Mixer** used for ozone treatment of greenhouse effluent, 23:385
- Static Mixer**, ozone disinfection of sewage and swimming pool waters in, 13:313
- Static Mixer**, use of in disinfecting wastewater with ozone, 11:169; 11:189
- Static Mixers**, for ozone disinfection, 14:391:16:455
- Static Mixers**, for ozone treatment of *Bacillus subtilis*, 26:207
- Static Mixers**, in removal of *Bacillus subtilis* spores, 24:91
- Statistical Analysis**, of Ozone Decolorizing of Pulp Mill Effluents, 17:205
- Statistical Design** of ozone generation optimized by response surface methodology, 32:372
- Steel Mills**, ozonation of cooling systems, 15:81
- Steelhead Trout**, control of ceratomyxosis in, 9:141
- Sterilization** accomplished by small ozone generator, 24:215
- Sterilization** by ozone for food processing plants in Japan, 28:425
- Sterilization** of components contaminated with clumped and dirty spores of *Bacillus globigii*, 23:285
- Sterilization Power** in electrolytic ozone generator, 33:114
- Sterilization**, 7:275
- Sterilizing Machine using Ozone**, 30:81

- Stilbene Dyes**, in Kraft paper machine whitewater, ozone decolorization of, 19:549
- Stirred Reactor**, comparison of ozone and oxygen mass transfer in, 10:321
- Stochastic Ordering**, 39:273
- Stomatal Index** in treatment of *Vigna unguiculata* with ozone, 36:36
- Stone Fruit** treatment by ozone, 24:343
- Stopped-Flow Spectrophotometry**, to follow ozone destruction of lincomycin and spectinomycin, 26:525
- Storage of Ozone**, 24:171; 25:211; 27:293; 28:149
- Storage** of tomatoes disinfected with ozone, 32:361
- Storage Temperature** of ozonized sunflower oil, 38:143
- Storm Drain Water**, ozone disinfection of, 16:403
- Stratosphere** ozone, 33:489
- Stratosphere-Troposphere Exchange**, 26:181
- Stratospheric Ozone**, 12:177
- Stratospheric Ozone**, 12:177; 23:421; 23:429; 23:437; 23:455
- Strawberries** shelf life extended with ozone treatment, 36:43
- Strength** of ozone treated soybean fibers, 34:143
- Streptococcus faecalis*** inactivation by ozone, 23:183
- Streptococcus mutans*** in dentistry removed with ozonated water/ultrasound, 37:84
- Striped Jack Fish**, system for ozone mariculture of, 15:311
- Strontium Titanate** for catalytic ozonation, 33:74
- Structure** of ozone treated wheat and corn starches, 37:71
- Styrene**, ozonation of in aqueous solution, 5:151
- Submerging** lettuce in ozonated water, 40:216
- Substance-Specific Mass Spectrometric Analyses** of ozonated tannery wastewater, 39:159
- Substituted Aromatics**, variations in cytotoxicity during ozonation of, 2:25
- Subtropical Jet**, in ozone formation over Lin-An, China, 26:181
- Succinic Acid**, 12:1
- Sugar Industry**, 28:261
- Sugar** solutions treated by ozone, 39:255
- Sugarcane Juice**, 40:198
- Sugars**, from ozonation of municipal sludges, 16:385
- Sulfamethoxazole** catalytic ozonation, 39:25
- Sulfamethoxazole** removal with advanced oxidation, 34:3
- Sulfate** effect on ozone oxidation of wastewater, 27:287
- Sulfate Ion**, formation of during ozonation of cysteine and cystine in aqueous solution, 19:145
- Sulfate Radical** estriol degradation, 38:358
- Sulfinic Peracid**, 33:37
- Sulfoacetic Acid**, formation of during ozonation of cysteine, cystine and thioglycolic acid in aqueous solution, 19:145
- Sulfosalicylic Acid** degradation by ozone, 24:117; 27:233
- Sulfur Compounds** in odor treatment, 35:390
- Sulfur Dioxide** removal from flue gas by ozone, 34:204
- Sulfur Hexafluoride Effect** on ozone generation from oxygen, 24:29
- Sulfur Oxides**, treatment of with ozone, in Japan, 3:219
- Sulfur-Containing Aliphatic Compounds**, ozonation of, 12:315
- Sunflower Oil** and ¹HNMR, 25:121
- Sunflower Oil effect of ozonized oil on *Staphylococcus aureus* and *epidermis***, 22:207
- Sunflower oil** ozonation, 23:35, 23:121; 27:247; 28:59; 28:181
- Super-hydrophilicity of Stainless Steel**, 34:315
- Support Media**, impact of on biological treatment of ozonated drinking water, 19:97
- Surface Active Agents**, in water and wastewater, effects on ozone treatment of, 18:183
- Surface Active Sites** in catalytic ozonation of chlorobenzoic acid, 37:527
- Surface Carbon Content** in heat treatment with gaseous ozone, 34:315
- Surface Charge Density** of stainless steel surfaces cleaned with ozone, 28:303
- Surface DBD**, 39:209
- Surface Discharge** combined with catalysis, 29:107
- Surface Discharge** from oxygen-nitrogen mixtures in presence of silica packing, 25:63
- Surface Discharge** in oxygen and air fed systems, 27:59
- Surface Discharge** in ozone generation, 24:193, 38:70
- Surface Disinfection** of norovirus, 35:217
- Surface Disinfection**, of *Escherichia coli* and *Staphylococcus aureus* with ozone, 20:205
- Surface Free Energy**, 35:220
- Surface Hydroxyl Group** in heat treatment with gaseous ozone, 34:315
- Surface Hydroxyl Groups** in catalytic ozone decomposition, 38:434
- Surface Loss Rate** of ozone 34:370
- Surface Loss**, of ozone, 26:487
- Surface Modification** with ozone, 35:220
- Surface Oxidation** with ozone for preparation of gas diffusion electrode 25:307
- Surface Renewal Theory** in ozonation of C.I.

120 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Reactive Black 5 and Indigo, 29:493
- Surface Renewal Theory**, in ozonation of 1,3-cyclohexanedione, 13:421
- Surface Tension** of tannery wastewater, 34:397
- Surface treatment** with UV-ozone, 22:427
- Surface Water** containing endocrine disruptors, treated with ozone, 28:445
- Surface Water Treatment** and ozonation of colored upland water, 21:615
- Surface Water Treatment Rule**, operating strategy to meet, 14:439
- Surface Water Treatment** with ozone and reverse osmosis, 30:152
- Surface Water**, ozone treatment to provide high quality cooling water and process water, 2:229
- Surface Water**, treatment with ozone in Belgium, 7:327
- Surface Water**, treatment with ozone, 7:107
- Surface Waters**, disinfection of with ozone and PEROXONE, 14:71
- Surface Waters**, ozone disinfection of using MS2 coliphage as surrogate, 15:279
- Surfactant Treatment** using ceramic ozone contactors, 22:379
- Surfactants**, in textile wastewaters, treatment of by ozone, 18:73
- Surfactants**, ozonation of aqueous solutions of, 13:639
- Surfactants**, ozone destruction of in municipal wastewater, 13:179
- Surfactants**, treatment by ozone and advanced oxidation processes, 26:327
- Surplus Activated Sludge** ozonation, 29:191
- Surrogate Parameter** for organic micropollutants removal, 38:79
- Survival Curves** in bactericidal effects of high airborne ozone concentrations on *Escherichia coli* and *Staphylococcus aureus*, 20:205
- Surviving Bacteria** after ozonation of drinking water, 22:65
- Sushi Manufacture and Packaging**, 32:71
- Suspended Materials**, effect of preozonation on, 7:107
- SVOC** semi-volatile organic compounds, 38:413
- Swimming Pool** treatment ozone in the United Kingdom, 21:201
- Swimming Pool Water Treatment**, with ozone, 7:93; 7:327; 8:187; 10:377; 12:393; 13:63; 22:677
- Swimming Pool Water**, ozone disinfection of in a static mixer, 13:313
- Swimming Pools** and use of ozone in Canada, 21:119
- Swimming Pools** and use of ozone in the USA, 21:99
- Swimming Pools** treatment with ozone in Germany, 21:163
- Swimming Pools**, ozone treatment of Peck Aquatic Facility, Milwaukee, WI, 13:463
- Swine Blood** treated by Fenton-like process, 39:61
- Swine Manure Slurries**, ozone treatment of, 20:35
- Swine Manure Wastes**, ozonation of to control odors and reduce levels of pathogens and toxic fermentation metabolites, 19:425
- Swiss Ozone Measurements**, 23:461
- Swiss Water Works**, Optimization of Ozone in, 17:1
- Switzerland** drinking water and formation of bromate, 25:159
- Synergistic Effect** in ozonation and post-biodegradation of C.I. Reactive Yellow 3, 27:273
- Synergistic Effect** in photocatalytic ozonation of polyvinylpyrrolidone, 36:560
- Synergistic Effect** in photocatalytic ozonation with carbon nitride nanosheet, 38:312
- Synergistic Effect** of advanced oxidation of water containing *Bacillus subtilis* spores, 28:335
- Synergistic Effect** of ozone treatment and post-biodegradation, 28:141
- Synergistic Mechanism** in catalytic ozonation of *p*-chloronitrobenzene, 38:42
- Synovial Fluids**, 34:469
- Synthesis** from oxygen-nitrogen mixtures in presence of silica packing, 25:63
- Synthesis** of ethyl malonate by ozonation, 38:36
- Synthetic Air**, 40:361
- Synthetic Fuel Wastewater Treatment**, with ozonation, 10:291
- Synthetic Organics** in water, effect of ozone on the biological degradation and activated carbon adsorption of in water, 1:263, 1:347
- Synthetic Wastewater** treatment with ozone/hydrogen peroxide, 33:23
- Syringaldazine (FACTS)**, method for ozone analysis, 10:337
- Syringaldehyde**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- System Reliability**, ozone, economics at Monroe, Michigan, 5:245
- Systemic Acquired Resistance** of growing plants, 30:210, 30:216
- SYTO-9** and inactivation of *Cryptosporidium* with ozone, 23:1
- T₅₀ Ozone Contact Times**, during ozone/PEROXONE disinfection of surface waters, 14:71

- TA100**, to test for mutagenicity in drinking water treated with ozone/GAC, 11:245
- TA102**, to test for mutagenicity in drinking water treated with ozone/GAC, 11:245
- TA97**, to test for mutagenicity in drinking water treated with ozone/GAC, 11:245
- TA98**, to test for mutagenicity in drinking water treated with ozone/GAC, 11:245
- Table Grapes** treatment by ozone, 24:343
- Tailing**, in bactericidal effects of high airborne ozone concentrations on *Escherichia coli* and *Staphylococcus aureus*, 20:205
- Tank Truck Cleaning** concentrate, 34:32
- Tannery Wastewater** treated with ozone, 34:397
- Tannery Wastewater**, 39:159
- Tannic Acid** removal via advanced oxidation, 25:199
- Tannin Removal** via ozone, 24:83
- Tanning Wastewater** treatment with ozone, 27:351
- Taste & Odor Control**, with ozone in drinking water at Los Angeles, CA, 10:255
- Taste and Odor** affected by ozone treatment, 28:277
- Taste and Odor Control**, with ozone at Wiggins Water Works, Durban, South Africa, 16:247
- Taste and Odor Control**, with ozone, economics of at Monroe, Michigan, 5:245
- Taste and Odor Control**, with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19
- Taste and Odor Removal** with ozone in BENELUX, 21:139
- Taste and Odor Removal** with ozone, 8:77
- Taste and Odor Removal**, purification of polluted source water with ozonation and biological activated carbon, 6:245
- Taste and Odor Treatment**, by ozone, economics of at Monroe, MI, 13:161
- Taste and Odor** with ozone in proposed membrane facility, 29:281
- Taste Control**, comparison of low and medium high frequency ozone systems for, 1:107
- Taste** of drinking water treated with ozone and chlorine dioxide, 21:465
- Taylor-Coulette Flow** in UV reactor, 30:448
- t-Butanol** in ozonation of chlorophenol, 24:133
- t-butanol** removal with ozone in semiconductor applications, 27:139
- t-butanol**, effect of on ozonation of Uniblu-A, 24:439
- Techniques** for ozone therapy, 34:438
- Temperature** and ozone disinfection efficiency, 39:408
- Temperature Dependence** in pulsed discharge ozone generation, 39:33
- Temperature Dependence** of air fed ozone generators, 40:361
- Temperature Effect** in inactivation of *Cryptosporidium*, 21:477
- Temperature Effect** in ozone oxidation of marine diesel emission particulates, 37:518
- Temperature Effect** in UV oxidation of organic compounds, 30:99
- Temperature Effect** on hydroxyl radical ozone ratios, 22:123
- Temperature** effect on ozone decay in water, 34:233
- Temperature Effect**, in disinfection of drinking water to limit bromate formation, 26:247
- Temperature Effects** in lettuce processing, 40:216
- Temperature** of ozone bleached wheat straw pulp, 40:148
- Temperature**, and ozone concentration, effects on disinfection kinetics, 10:123
- Temperature**, effect on kinetics of ozonation of pentachlorophenol in aqueous solutions, 20:163
- Temperature**, effects on bromate ion formation during ozonation of drinking water, 18:1
- Temperature**, influence of on bacterial development in waters and distribution systems, 7:205
- Tensile Strength** of leather bleached with ozone, 39:455
- Tequila Vinasses** ozonation, 38:279
- Terbutryn**, Destruction of by Ozone and Ozone/Hydrogen Peroxide in Drinking Water, 17:657
- Terbutryn**, ozonation of, 15:227
- Terephthalic Acid** ozonation, 29:461
- Terms (recommended)**, of the International Ozone Association, 20:433
- Ternary Catalysts** for catalytic ozonation of dichlorophenol, 38:14
- Terpenes** ozonation, 32:274
- Tert.-Butyl Alcohol**, as byproduct of oxidation of ETBE and MTBE, 16:41
- Tertiary Butanol** reaction with ozone, 36:532
- Tertiary Treated Wastewater**, influence of preozonation on adsorption equilibrium of DOC by activated carbon, 8:277
- Tertiary Treatment** by catalytic ozonation, 38:3
- Tertiary Treatment** of paper mill effluent, 30:310
- Tertiary Treatment**, comparative study of ozonation conditions in wastewater, 2:123
- Tertiary Wastewater Treatment**, application of ozone to eliminate, for use in industrial cooling water, 3:121

122 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Tetrachloroethene**, treatment of in air stripping tower waste gases by photochemically generated ozone, 10:323
- Tetrachloroethylene** elimination from underground water, 38:302
- Tetrachloroethylene**, oxidation with ozone combined with hydrogen peroxide, and/or UV radiation, 9:335
- Tetrachloroethylene**, ozonation of in presence of humic acid and soils, 13:287
- Tetrachloroethylene**, ozonation of, 14:185
- Tetrachloroethylene**, ozone destruction of in distilled and drinking water, 9:265
- 2,3,4,6-Tetrachlorophenol**, degradation of by advanced oxidation, 19:75
- Tetrachlorvinphos**, Destruction of by Ozone and Ozone/Hydrogen Peroxide in Drinking Water, 17:673
- Tetracycline** removal by ozonation, 37:405
- Tetradifon Pesticide Wastewater**, ozone and ozone/H₂O₂ treatment of, 16:487
- Tetrahydrofuran** in contaminated groundwater, 38:413
- Tetrahydronaphthalene**, ozonolysis of to form 1-tetralone, 9:23
- Tetralone**, formation by ozonolysis of tetrahydronaphthalene, 9:23
- Textile Bleaching** with ozone, 24:1
- Textile Dye Solutions**, ozone decolorization of, 15:189
- Textile Dyeing Wastewater** treatment by ozone, 23:199, 23:327
- Textile Effluent** treatment by catalytic ozonation, 27:257
- Textile Industry Wastewater**, 29:335; 29:443; 29:493; 35:7
- Textile Wastes**, ozonation of azo dyes in, 11:391
- Textile Wastewater** advanced oxidation, 39:14
- Textile Wastewater** color removal with ozone treatment, 25:137
- Textile Wastewater** decolorization by ozone, 23:295
- Textile Wastewater** treatment with ozone, 9:153; 22:535; 24:413; 24:439; 26:217; 30:344
- Textile Wastewater Treatment**, by Ozone and Advanced Oxidation, 17:149
- Textile Wastewater Treatment**, with ozone in Poland, 18:73
- Textile Wastewater Treatment**, with ozone, review of, 18:477
- Textile Wastewater**, 39:357
- Textiles** decolorization of dyestuff waters with Fenton's Reagent, 22:196
- Textural Characteristics** of activated carbon filter after ozonation, 37:178
- Theobroma Oil** oxidation by ozone, 28:187
- Thermal Decomposition of Ozone**, gas phase analysis by, 14:91
- Thermal Resistance** in cooling water systems design, 39:188
- Thermal Treatment** of manganese and cobalt oxides, 36:502
- Thermochemistry** in ozonation of ethyl oleate and ethyl elaidate, 37:431
- Thermodynamic Approach** to ozone solubility in liquids, 28:67
- Thermodynamics** of ozonation of nitrite ion, 32:430
- Thermodynamics** of reaction with bisulfide, 33:37
- Thermomechanical Pulping Circulation Water** treatment with ozone, 22:585
- Thermomechanical Pulping** wastewater treatment with ozone, 22:575
- Thermotherapy**, 34:57
- Thiocyanate Ion** oxidation by ozone, 15:343
- Thiocyanate** removal in coal coking processing wastewater, 25:273
- Thiodiglycolic Acid**, ozonation of, 12:315
- Thioglycolic Acid**, ozonation of in aqueous solution, 19:145
- THM Control**, during ozonation for iron and manganese removal in presence of humic substances, 11:93
- THM Formation Potential**, evaluation of ozone/BAC for control of, 15:95
- THM Precursor Concentration Reduction**, 8:77
- THM Removal** with ozone in Japan, 21:127
- THMFP** affected by ozone treatment and ultrafiltration, 22:637
- THMFP** of dyeing wastewater, 29:139
- Three-dimensional Electrodes** for enhanced micro-electrolysis, 38:472
- Three-Stage Ozonation**, in drinking water treatment, 9:37
- Threshold Model** to predict effect of bromate ion in simulated gastric juices, 28:165
- Threshold Odor Number (TON)** in advanced oxidation process, 33:136
- Thymine**, ozonation of, 13:265
- Ticks**, 40:183
- Time** for ozone bleaching of wheat straw pulp, 40:148
- TiO₂** with ozone for degradation of Fipronil, 37:186
- Titania Bead** in dielectric barrier discharge, 35:134
- Titanium (IV)** efficiency in acetic acid degradation, 35:359

- Titanium Alloys**, 35:220
- Titanium Dioxide** adsorption of ozone, 25:315
- Titanium Dioxide** and manganese oxides, 38:156
- Titanium Dioxide** and ozone for degradation of sulfosalicylic acid, 27:233
- Titanium Dioxide** and ozone in advanced oxidation of pesticides, 32:25
- Titanium Dioxide** as catalyst in removal of humic substances with ozone, 21:261
- Titanium Dioxide** catalytic ozonation of fenofibric and clofibric acids, 33:434
- Titanium Dioxide** effect on ultrasonic irradiation, 33:194
- Titanium Dioxide** for advanced oxidation of monochloroacetic acid, 27:311
- Titanium Dioxide** for catalytic ozonation of polyvinylpyrrolidone, 36:560
- Titanium Dioxide** for catalytic ozonation, 33:236
- Titanium Dioxide** for drinking water treatment, 35:73
- Titanium Dioxide** for *enterococcus* sp. inactivation, 38:443
- Titanium Dioxide** in catalytic ozonation of nitrobenzene, 31:45
- Titanium Dioxide** in phenol decomposition, 24:49
- Titanium Dioxide** in photocatalysis and ozonation of humic acid, 25:497
- Titanium Dioxide** inactivation of *clostridium perfringens*, 30:431
- Titanium Dioxide** stability in ozonation processes, 22:185, 22:471
- Titanium Dioxide** with ozone for oxidation of natural organic matter, 15:419
- Titanium Dioxide**, with ozone for advanced oxidation of waters, 26:585
- Titanium (IV)** for catalytic ozonation, 33:441
- Titanium**, corrosion of in ozonized waters, 12:243
- TNT** degradation by ozone, 23:343
- TNT**, the high temperature treatment of TNT and cyclotrinitramine (RDX) with ozone and ultrasound, 6:275
- Tobacco Mosaic Virus** and RNA constituents, degradation by ozone, 3:49
- TOBr** formed in ozonation of secondary effluent, 29:23
- TOBr**, model for prediction of upon ozonation, 16:157
- TOC Removal** by catalytic ozonation, 27:115
- TOC** removal by catalytic ozonation, 38:203
- TOC** removal by ozonation, 29:317
- TOC Removal** during catalytic ozonation of chlorobenzoic acid, 37:527
- TOC Removal** during ozonation of 4-chlorophenol, 30:447
- TOC Removal** in advanced oxidation of propylene glycol methyl ether acetate, 30:332
- TOC Removal** in Bisphenol A ozonation, 32:338
- TOC Removal** in ozonation of N-Methyl-2-Pyrrolidone, 29:177
- TOC Removal** in ozonation of salicylic acid, peptides and humic substances, 21:261
- TOC**, removal of, 12:1; 12:115
- TOCCATA Process** for catalytic ozonation of organic pollutants in water, 27:115
- α -Tocopherol**, presence in ozonation of methyl linoleate, 26:189
- Toluene Decomposition** during catalytic ozonation, 33:158
- Toluene** oxidation with Peroxone process, 22:519
- Toluene** removal by ozonation, 23:77
- Toluene** removal with ozone and PFOA, 24:63; 25:185
- Toluene**, ozone destruction of in distilled and drinking water, 9:265; 12:217
- Toluene**, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487
- Toluidine**, as a model surrogate for COD in wastewater ozonation, 15:149
- Tomato** disease control with micro/nanobubble ozonated water, 37:78
- Tomato Plant Wastewater**, Henry and mass transfer coefficients in the ozonation of, 19:281
- Tomato** treatment with ozonated water, 31:21
- Tomato Wastewater Ozonation**, kinetics of, 14:303
- Tomato Wastewaters**, Ozone Treatment of, 17:355; 17:379
- Tomatoes** disinfection with ozone, 32:361
- Tomatoes treated** with ozone and UV Radiation, 32:144
- Tooth Decay**, 35:456
- Tophill Low Water Treatment Plant, U.K.**, Ozoflotation in, 15:481
- Total and Fecal Coliforms** degraded in wastewater treatment, 36:570
- Total Organic Carbon (TOC) Removal in drinking water treatment**, effects of ozone, oxalic acid, and organic matter molecular weight on, 18:311
- Total Organic Carbon** in advanced oxidation of night soil, 30:282
- Total Organic Carbon** in potable reuse applications, 40:427
- Total Organic Halide Formation Potential (TOXFP)** during ozonation of dyestuffs, 21:487
- Total Organic Halogen (TOH)**, during ozone-sludge bulking control, 12:145

124 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Total Organic Halogen Formation Potential**, effect of preozonation on, 8:129
- Total Oxidative Residuals**, tolerance of the rotifer *Brachionus plicatilis* to and ozone, 19:457
- Total Residual Oxidants (TRO)** in ozone treatment of ballast water 33:3
- Total THM Removal**, at Belle Glade, FL, 12:199
- Total Trihalomethanes (TTHM)** in Quebec (Canada) drinking water facilities, 37:294
- Total Unsaturation (TU)**, 39:374
- Total Unsaturation of Lipids (TUL)**, 39:374
- Total Unsaturation of Lipids**, 37:119
- Totally Chlorine Free (TCF)**, process with ozone bleaching of Kraft Pulp, 26:443
- Totally Chlorine-Free Pulp Bleaching Sequences**, 18:566
- ToxAlert@Test** for tannic acid oxidation, 25:199
- Toxic Fermentation Metabolites**, in swine manure wastes, reduction in levels of by ozonation, 19:425
- Toxic Organic Compounds**, removal of by powdered activated carbon and ozone-assisted activated sludge treatment, 7:191
- Toxicity Assessment** in parabens removal from water by ozonation, 39:233
- Toxicity Assessment** of decomposed phenylphenol isomers by ozone, 39:333
- Toxicity** in Kraft effluent treated with ozone, 29:47
- Toxicity** in ozonation of benzophenone-2, 40:122
- Toxicity** in recirculating aquaculture systems, 33:345
- Toxicity** NSAID ozonated solution, 32:91
- Toxicity** of agro-industrial wastewaters, 36:3
- Toxicity** of aqueous nitrophenols degraded by ozonation, 23:333
- Toxicity** of catalytic ozonation treated cyanuric acid, 38:233
- Toxicity** of EDC removal byproducts, 33:253
- Toxicity** of imazalil oxidation with ozone, 33:308
- Toxicity** of landfill leachate treated by ozone and Fenton process, 31:28
- Toxicity** of ozone treated recalcitrant and toxic wastewater concentrate, 34:163
- Toxicity** of ozone-treated textile wastewater, 39:357
- Toxicity** of products from degradation of 2,5-dichlorophenol, 38:181
- Toxicity Reduction** in wastewater treatment by ozone/biomass sequence, 27:317
- Toxicity Reduction**, by ozone in municipal wastewater treatment, 13:195
- Toxicity** removal in wastewater treated with ozone, 28:3
- Toxicity Test** of textile wastewater treated by ozone, 23:327
- Toxicity Test** used in ozonation processes for greenhouses, 32:259
- Toxicity Unit** of dyeing wastewater, 30:439
- Toxicity**, acute, of dissolved ozone to eggs and larvae of selected freshwater fish species, 2:177
- Toxicity, Cellular**, and mutagenicity assays from on-site sampling of drinking water treatment plants using multistage ozonation, 9:179
- Toxicity**, of chlorophenol advanced oxidation products to *Daphnia magna*, 19:75
- Toxicity**, of ozone, 2:345
- Toxicity**, of ozone-treated membrane concentrate, 32:16
- Toxicity**, of ozonized humic and fulvic acids to *Daphnia Magna*, 8:37
- Toxicity**, of secondary effluents treated with ozone, 20:133
- Toxins** formed in oxidation of Microcystin-LR by ozone, 23:161
- Trace Gases in Ozone**, in ozone generation with air, oxygen or air + oxygen, 20:191
- Trace Organic Chemicals** after reverse osmosis and ozonation, 36:174
- Trace Organic Compound** in potable reuse applications, 40:427
- Trace Organic Compounds** after soil aquifer treatment, 39:385
- Trace Organic Contaminant (TOC)** and water reuse, 36:123
- Trace Organic Contaminants** in advanced treatment in water reclamation, 36:485
- Trace Organics** effect on ozone demand, 34:26
- Tracer Analysis** in turbine ozone contactor, 22:351
- Tracer Studies**, in full-scale wastewater ozone bubble diffuser contactors, 15:295
- Tracer Study**, in ozone contactors, 12:133
- trans-Dichloroethylene**, ozonation of in presence of humic acid and soils, 13:287
- Transfer Coefficient**, of ozone, 16:135
- Transfer Efficiency** 40:159 in sidestream contacting systems, 40:159
- Transfer Efficiency** of removal of *Bacillus subtilis* spores with ozone, 24:91
- Transfer Efficiency, of Ozone**, 8:235
- Transformation By-products** in ozonation of phenylphenol isomers, 39:333
- Transformation Products** during ozone oxidation of drinking water, 37:441
- Transformation Products** in catalytic ozonation of cyanuric acid, 38:233
- Transformation Products** in ozonation of β -Triketone Pesticides, 39:3
- Transformation Products** of imazalil oxidation

- with ozone, 33:308
- Transient Back Flow Cell Model** for ozone bubble columns, 23:313
- Transition Metal Ion Catalysts** for carboxylic acid decomposition with ozone, 27:11
- Transition Metal Ions** and ozonation of liginsulfonate, 25:505
- Transition Metals** in leachate treated with activated carbon and ozone, 35:55
- Transmission Electron Microscopy**, 35:201
- Treatment Concepts** for ozone therapy, 34:408
- Treatment Cost** of diesel fuel contaminated soil with ozone and Fenton reagent, 28:37
- Treatment** of ballast water, 34:174
- Triazine Destruction**, by ozone advanced oxidation, 19:39; 19:129
- Triazine Herbicides**, treatment with ozone, 25:81
- Triazines**, degradation by ozone, 14:283
- Triazines**, Removal of by Advanced Oxidation, 17:183
- Trichloramine** removal in advanced oxidation process, 33:136
- Trichloroacetic Acid**, decrease in formation by ozonation, 10:153
- Trichlorobenzene**, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487
- 1,2,4-Trichlorobenzene**, ozone destruction of in distilled and drinking water, 9:265
- 1,3,5-Trichlorobenzene Oxidation**, using advanced oxidation processes, 18:535
- Trichloroethane**, ozonation of in presence of humic acid and soils, 13:287
- Trichloroethane**, treatment of in air stripping tower waste gases with photochemically generated ozone, 10:323
- 1,1,1-Trichloroethane (TCA)**, destruction by ozone advanced oxidation, 19:13
- 1,1,1-Trichloroethane (TCA)**, destruction by the Ecoclear® Process, 19:297
- 1,1,1-Trichloroethane**, oxidation with ozone/UV radiation, 9:391
- 1,1,1-Trichloroethane**, ozone destruction of in distilled and drinking water, 9:265
- 1,1,2-Trichloroethane**, ozone destruction of in distilled and drinking water, 9:265
- Trichloroethylene (TCE)** in groundwater treated with ozone, 30:127
- Trichloroethylene** destruction by the Ecoclear® Process, 19:297
- Trichloroethylene** elimination from underground water, 38:302
- Trichloroethylene**, as model substrate in UV-enhanced ozonation of organic compounds, 8:339
- Trichloroethylene**, oxidation of, 14:197
- Trichloroethylene**, oxidation with ozone combined with hydrogen peroxide, and/or UV radiation, 9:335
- Trichloroethylene**, ozonation of in presence of humic acid and soils, 13:287
- Trichloroethylene**, ozone destruction of in distilled and drinking water, 9:265
- Trichloroethylene**, treatment of in air stripping tower waste gases with photochemically generated ozone, 10:323
- 1,1,2-Trichloroethylene**, oxidation in water by ozone, then ozone/UV radiation, 9:369
- Trichoderma viride** removal via ozone gas treatment, 31:326
- Triclopyr Degradation**, with ozone and ozone-hydrogen peroxide in a lowland surface water, 18:251
- Triclopyr**, ozone degradation of, 15:457
- Trifluralin** treatment with ozone, 32:16
- Triggered Dielectric Barrier Discharge**, 20:51
- Trihalomethane (THM)** formation affected by ozone, 33:14
- Trihalomethane Concentrations**, in ozone-treated swimming pools and hot whirlpools, 12:393
- Trihalomethane Control in Montreal, Canada**, 15 years of experience with ozone for drinking water treatment, 18:299
- Trihalomethane Control**, with ozone/GAC at 11 Anglian Water (U.K.) surface water treatment plants, 18:19
- Trihalomethane** formation during ozonation of dyestuffs, 21:487
- Trihalomethane Formation** during treatment of water with chlorine dioxide, 22:215
- Trihalomethane Formation Potential (THMFP)** during ozonation of dyestuffs, 21:487
- Trihalomethane Formation Potential (THMFP)** in ozone/GAC processes, 24:357
- Trihalomethane Formation Potential (THMFP)**, in ozonation of p-hydroxybenzoic acid solution 20:343
- Trihalomethane Formation Potential** in natural water, 34:213
- Trihalomethane Formation Potential** of ozonated river water, 34:342
- Trihalomethane Formation Potential**, 7:241
- Trihalomethane Formation Potential**, effect of preozonation on control of, 8:129
- Trihalomethane Formation Potential**, effects on molecular weight distributions of organic carbon and upon ozonation of humic substances, 10:39
- Trihalomethane Formation Potential**, in surface

126 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

water, reduction of by the combination of ozone/hydrogen peroxide and ozone/UV radiation, 10:103

Trihalomethane Formation Potential, reduction in levels of by ozone and ozone/ H_2O_2 in colored groundwater, 13:109

Trihalomethane Formation, optimization of potable water treatment to minimize, 2:305

Trihalomethane Levels, reductions in by preozonation, 10:255

Trihalomethane Precursors, biological degradation of, promoted by ozone, 7:85

Trihalomethane Precursors, catalytic effects of ultraviolet light and/or ultrasound on the ozone oxidation of humic acid and, 7:47

Trihalomethane Precursors, ozonation of in drinking water treatment, 2:75

Trihalomethane Production, effect of ozonation on the apparent molecular weight of naturally occurring organics and, 5:225

Trihalomethane Removal, A preliminary study of the efficiency and mechanism of in the ozonation and BAC process, 6:261

Trihalomethanes and ozone in Switzerland, 21:187

Trihalomethanes in two Paris water treatment plants, 23:229

Trihalomethanes potential affected by ozone treatment, 37:154

Trihalomethanes removal by biological activated carbon, 22:393

Trihalomethanes removal by pre- and intermediate ozonation, 25:453

Trihalomethanes, 7:241

Trihalomethanes, control of in drinking water treatment with ozone, 2:75

Trihalomethanes, decrease in formation by ozonation, 10:153

Trihalomethanes, evaluation of ozone/BAC for control of, 15:95

Trihalomethanes, formed during ozone-sludge bulking control, 12:145

Triketone ozonation, 39:3

3,4,5-Trimethoxybenzaldehyde, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481

1,3,5-Trimethoxybenzene reaction with ozone, 32:61

2,4,6, Trinitrotoluene oxidation with Peroxone process, 22:519

Trioxotriazine, formation from ozonation of atrazine, 9:233

Triple Bond ozonation to synthesize 2,2'-Bypyridine, 39:418

Triple Zone Ozone Contactor, 19:339

Tropaeolin O treatment with ozone and UV, 28:9

Trophozoites, action of ozone on, 8:187

Tropics Ozone observations, 33:489

Tropopause Fold, in ozone formation over Lin-An, China, 26:181

Tropospheric Ozone, 12:177; 23:429, 23:445; 25:513

Trout Hatchery, control of ceratomyxosis in by ozone, 9:141

True Ozonation, 8:187

Tube in Tube Ozone Contactor, for water/wastewater ozonation, 15:149

Tucson CAP WTP, ozone contactor tracer tests at, 19:307

Tulare Clay dispersion after treatment with ozone, 23:65

Tumor Tissue, effect of ozone on, 12:65

Turbidity Levels, reduction in by preozonation, 10:255

Turbidity of ozonated wastewater, 35:243

Turbidity Reduction, by ozone, 8:49; 8:77 ; 16:367

Turbidity Removal in drinking water treatment, effects of ozone, oxalic acid, and organic matter molecular weight on, 18:311

Turbidity removal in Lake Huron water, 32:295

Turbidity Removal, in drinking water at Belle Glade, FL, 12:199

Turbine Contactor for ozone contacting, 22:351

Turbine Contactors, experiences with and modification of in Budapest, Hungary, 13:479

Turbulent flow in UV reactor, 30:448

Turbulent Flow, biofilm development and destruction in, 1:167

Turndown in sidestream contacting systems, 40:159

Two-Phase Ozonation of pharmaceuticals, 28:85

Two-Phase Ozonation, 36:110

Two-Phase Ozone Contactor, for high strength wastewaters, 14:381

Two-Port Ozone Injection Method, 30:127

Two-Stage Ozonation, 10:55

Two-Stage Ozonation, automation of process, 7:155

Two-Stage Ozonation, in drinking water treatment, 9:37; 12:199; 13:623

Tyrosol ozonation in food processing wastewater, 22:167

U.K. treatment plants, 18:19

Ultrafiltration rates influenced by ozone treatment, 22:637

Ultrafiltration, 35:208

Ultrapure Water and ozone in photoresist removal, 27:139

- Ultrapure Water** via ozonation and use in micro-electronics industry, 24:379.
- Ultrasonic Cavitation** in ozone mass transfer, 35:482
- Ultrasonication** and ozonation of potato starch, 40:105
- Ultrasonication**, to increase virucidal activity of ozone in water, 20:205
- Ultrasound** and ozonated water in dentistry, 37:84
- Ultrasound** and ozone for removal of 1,4 dioxane, 39:244
- Ultrasound** and ozone for removal of *Giardia*, 36:138
- Ultrasound** and ozone used for treating fruit and vegetables, 32:144
- Ultrasound** for restaurant food processing, 32:137
- Ultrasound** used with corona discharge, 33:483
- Ultrasound**, and ozone used in sushi factory, 32:71
- Ultrasound**, and/or ultraviolet light, catalytic effects of on the ozone oxidation of humic acid and trihalomethane precursors, 7:47
- Ultraviolet Absorption**, in analysis for ozone, 10:337
- Ultraviolet** and peroxide for cooling water treatment, 36:440
- Ultraviolet** as non selective barrier against micro pollutants, 32:383
- Ultraviolet** degradation of pharmaceutical products, 30:387
- Ultraviolet Irradiation** of bromine species, 28:217
- Ultraviolet Irradiation** of poultry processing wastewater, 23:53
- Ultraviolet** lamp output measurement, 34:306, 34:310
- Ultraviolet Light** in 1,4-Dioxane removal, 33:396
- Ultraviolet Light**, catalytic effects of and/or ultrasound on the ozone oxidation of humic acid and trihalomethane precursors, 7:47
- Ultraviolet Light, Generation of Ozone**, treatment of spa water with, 11:313
- Ultraviolet Light/Ozone Treatment**, of Dye-finishing wastewater, 26:239
- Ultraviolet Oxidation** of propylene glycol methyl ether acetate, 30:332
- Ultraviolet Radiation** and degradation of humic acid, 34:101
- Ultraviolet** radiation and ozone in presence of bicarbonate, 35:302
- Ultraviolet Radiation** and ozone used for treating fruit and vegetables, 32:144
- Ultraviolet Radiation** degradation of C. I. Disperse Blue 56, 31:37
- Ultraviolet Radiation** for treatment of jewelry manufacturing effluent, 36:196
- Ultraviolet** radiation in methyl orange ozonation, 36:244
- Ultraviolet Radiation** treatment of o-nitrotoluene, 23:127
- Ultraviolet Radiation**, combination with ozone, 12:1; 12:73
- Ultraviolet Radiation**, effect on decomposition of ozone, 9:165
- Ultraviolet Radiation**, use of in pharmaceutical industry, 10:25
- Ultraviolet** technologies for disinfection of seawater, 35:63
- Ultraviolet-Hydrogen Peroxide** effect on trihalomethane formation potential, 37:154
- UMUTest**, for measuring genotoxicity of bromate ion, 16:443, 17:195
- Unbalance Compensation** in three phase VSI-driven single-phase ozone generator, 37:9
- Uncertainty Analysis**, 40:79
- Underground Water Purification**, 38:302
- Unfiltered** water treatment system at Coquitlam, 29:297
- Uniblu A**, decomposition with ozone, 24:439
- Unit Volume Cost** of ozone at Henrico County VA Water Treatment Facility, 31:461
- United Kingdom**, development of ozone for potable water treatment within, 15:515
- United States** ozone installations, 34:64
- United Water Missouri WTP**, ozone treatment for *cryptosporidium* inactivation and atrazine oxidation, 20:177
- Unsaturated Fatty Acids**, 1,3-dipolar addition of ozone to, 11:143
- Unsettled Suspended Solids** in wastewater treatment and treatment with ozone, 23:351
- Upflow Anaerobic Sludge Blanket**, improvement of by ozonation, 13:179
- Upflow Filtration**, for ozone residual control, 24:429
- Upflow GAC Columns**; A preliminary study of the efficiency and mechanism of THM removal in the ozonation and BAC process, 6:261
- Upper Thompson Sanitation District, CO**, wastewater treatment plant, 10:173
- Uracil**, kinetics of ozonolysis of, 9:207
- Uracil**, ozonation of, 13:265
- Urban Airshed Model**, 36:181
- Urban Wastewater**, Ozone Demand, 20:513
- Urea Burning** in treatment of *Vigna unguiculata* with ozone, 36:36
- Urease** in treatment of *Vigna unguiculata* with ozone, 36:36

128 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- US Regulations** for drinking water treatment, 21:433
- U-Tube** ozone contactor, 8:235; 8:261
- UV Absorbance** after pre-and intermediate ozonation and enhanced coagulation, 25:453
- UV Absorbance Method of Ozone Analysis**, 17:329
- UV Absorbance Removal** in on-board wastewater, 25:177
- UV Absorption** as surrogate parameter in micropollutants removal, 38:79
- UV Absorption** for ozone analysis in buffered solutions, 37:106
- UV** advanced oxidation for destruction of micropollutants, 30:34
- UV Analysis of Ozone**, 20:495
- UV Analysis of Ozone**, in gas phase, comparisons from a commercial UV meter and KI wet-chemistry tests, 18:231
- UV Analysis of Ozone**, in process gas from an ozone generator, guideline for, 18:209
- UV** and ozone disinfection of Coquitlam water supply, 29:287
- UV** and ozone in degradation of nitroaromatics, 23:343
- UV Disinfection** and reactor performance, 34:81
- UV Disinfection** of *E.coli*, 30:448
- UV Disinfection** of Netherlands drinking water, 34:92
- UV Disinfection** of waters containing *Bacillus subtilis*, 23:239
- UV Disinfection**, of water, basic principles, 9:299, 9:315
- UV** efficiency in phenol decomposition, 35:350
- UV Fluence (Dose)** for drinking water disinfection, 30:43
- UV** for enhanced DBP control and *Cryptosporidium* inactivation, 30:3
- UV Generation of Ozone** using ArF irradiation at 193 nm, 19:273
- UV** in humic acid oxidation, 40:93
- UV Intensity** in treating water, 23:245
- UV Irradiation** and ozone treatment of Tropaeolin O, 28:9
- UV Irradiation** of oxalate ion, 29:473
- UV Irradiation**, and electric arc discharge, destruction of bromate ion by, 18:271
- UV Irradiation**, of membrane concentrate, 32:16
- UV Lamps** in oxidation of micropollutants, 34:120
- UV Lamps**, 34:306; 35:38
- UV Light** for processing foods, 30:93
- UV Light** for removal of antibiotic substances, 34:137
- UV Oxidation** for destruction of toxic organics in injection-type downflow UV/O₃ oxidation reactor, 21:539
- UV Oxidation** in a collimated beam UV reactor, 37:134
- UV Oxidation** of micropollutants, 34:120, 34:125
- UV** oxidation of n-butylparaben, 34:354
- UV Oxidation of Phenanthrene**, 16:475
- UV Photolysis** and decomposition of ozone and hydrogen peroxide, 24:281
- UV Radiation** and hydrogen peroxide for removal of carboxylic acids, 28:53
- UV Radiation** and oxidation of micropollutants in water, 21:207
- UV Radiation** and ozonation for treatment of Jatropha Seedcake, 37:29
- UV Radiation and Ozone**, degradation of Cyanazine, 16:213
- UV Radiation and Ozone**, oxidation of organic contaminants dissolved in deionized and raw mains water by, 9:369
- UV Radiation and Ozone**, use of in oxidation of natural water, 9:391
- UV Radiation** for landfill leachate treatment, 33:294
- UV Radiation** for restaurant food processing, 32:137
- UV Radiation** for treatment of emerging contaminants, 35:263
- UV Radiation** for treatment of textile wastewaters, 22:535
- UV Radiation** of N-Methyl-2-Pyrrolidone, 29:177
- UV Radiation** of water containing adsorbable organic halides, 38:452
- UV Radiation**, chemistry of with ozone and hydrogen peroxide in water treatment processes, 9:335
- UV Radiation**, F-specific bacteriophages as indicators of disinfection efficiency of secondary effluent with, 9:353
- UV Radiation**, generation of ozone by, 13:365
- UV Radiation**, with ozone, for reduction of trihalomethane formation potential in surface water, 10:103
- UV Reactors**, modeling of light intensity in, 13:221
- UV Sensor**, 30:43
- UV Treatment** of esculetin, 27:317
- UV** treatment of food, 30:81
- UV** treatment of water, 30:70
- UV** treatment of wheat flour, 30:413
- UV** treatment to remove pharmaceutical products, 34:16
- UV**, treatment of primary municipal wastewater, impact on biological treatment of, 19:495; 19:513

- UV/H₂O₂ Reactors**, modeling of, 13:221
- UV/H₂O₂**, degradation of chlorophenols, 19:75
- UV/H₂O₂**, modeling oxidation of atrazine by; estimation of kinetic parameters, 19:395
- UV/H₂O₂**, treatment of primary municipal wastewater, impact on biological treatment of, 19:495; 19:513
- UV/Hydrogen Peroxide Oxidation**, of organic compounds, 8:339
- UV/Hydrogen Peroxide** treatment of Dutch drinking water, 29:273
- UV/Hydrogen Peroxide** treatment of natural waters, 32:329
- UV/NaClO Photooxidation Process** for degradation of C. I. Disperse Blue 56, 31:37
- UV/O₃ Process**, for destruction of phenols in aqueous solution, 18:443
- UV/Ozone Reactors**, modeling of, 13:221
- UV/Ozone Systems**, gas-liquid reactions in, 14:215
- UV/Ozone** treatment of chlorophenol, 24:133
- UV₂₅₄ Absorbance**, in ozonated groundwater, 13:109
- UV₂₅₄** of ozone treated drinking water, 33:14
- UV₂₅₄** removal by ozonation, 29:317
- UV₂₅₄ Removal** of humic acid solutions by ozonation and photocatalysis, 25:497
- UV₂₅₄** values of ozonated secondary effluents, 30:376
- UV₅₄ Absorbance Reduction** of diesel fuel contaminated soil, 28:37
- UV-Absorption Method**, for monitoring ozone oxidation reactions of organic materials, 8:321
- UVC Radiation** combined with ozone for phenylphenol isomers, 39:333
- UV-C Radiation**, used in sushi factory, 32:71
- UV-Enhanced Ozonation** of poultry processing wastewater, 23:53
- UV-Enhanced Ozonation**, of organic compounds, 8:339
- UV-Ozone Stripper Cleaner**, 22:427
- UV-Ozone**, water treatment system for shellfish quarantine, 1:55
- UV-Radiation** and ozone for degradation of aqueous nitrophenols, 23:333
- UV-Radiation** in crop treatment, 30:210, 30:216
- UV-Radiation** in drinking water treatment, 23:239
- UVT** of treated Coquitlam water supply, 30:3
- UV-Vis-NIR Spectroscopy** in ozonation of terpenes, 32:274
- Úzquiza Reservoir Water** treatment, 33:185; 34:213, 34:342
- V. cholerae** degraded with ozone, 30:367
- Vacuum Ultraviolet (VUV) Photolysis** for phenol decomposition, 24:49
- Vacuum-Ultraviolet Radiation (VUV)**, in measurement of a 172nm Xe Excimer Lamp, 20:421
- Vadose** in soil aquifer treatment, 39:385
- Vail, CO**, wastewater treatment plant, 10:173
- Validation** of UV reactor performance, 34:81
- van der Kooij Method**, for AOC determination, 12:377
- Vanadium Catalyst** in ozonation of sulfosalicylic acid, 24:117
- Vanadium Pentoxide Nanoparticles** as catalysts for ozonation of palm oil, 38:36
- Vancouver Water District**, 30:3
- Vanillic Acid**, Byproduct of Ozonation of Coniferyl Alcohol and/or Ferulic Acid in Water, 17:687
- Vanillin** production by ozone, 23:139
- Vanillin** reactivity with ozone, 21:53
- Vanillin**, Byproduct of Ozonation of Coniferyl Alcohol and/or Ferulic Acid in Water, 17:687
- Vanillin**, in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Variability** of stratospheric ozone, 33:489
- Variable Gas Velocity** in ozone generation with metal mesh electrode, 34:378
- Vegetable Oil** ozone solubility 36:110
- Vegetable Oils** ozonation, 38:253
- Vegetables** treated with ozone, 36:422
- Vegetables** treatment with ozone, 32:137
- Vegetation** effected by ozone, 24:69
- Vegetative Bacteria** inactivation by ozone, 32:180
- Ventafresh Technologies** for restaurant food processing, 32:137, 32:144
- Veratraldehyde** in wastewaters of ozone-bleached eucalypt Kraft pulps, 19:481
- Vertical In-Line Diffusion Reactor** for ozone dissolution systems, 22:329
- Very High Voltage**, in a triggered dielectric barrier discharge, 20:51
- Very Steep Front Voltage** in a triggered dielectric barrier discharge, 20:51
- Viability Assay** and inactivation of *Cryptosporidium* with ozone, 23:1
- Viability** of activated sludge from phenolic wastewater treated by ozone, 32:408
- Viable Cell Enumeration**, in ozonated drinking water, 13:1
- Vibrio** bacteria in shrimp, 33:368
- Vibrio vulnificus**, ozone disinfection of in artificial seawater, 12: 423
- Vigna unguiculata** treated with ozone, 36:36
- Vinclozolin**, Destruction of by Ozone and Ozone/Hydrogen Peroxide in Drinking Water,

130 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

17:673

Viral Inactivation by Ozone, at Wiggins Water Works, Durban, South Africa, 16:247

Virucidal Activity of Herpes Virus, 36:249

Virus Inactivation in ozone treated laundry, 29:85

Virus Inactivation in Wastewater by Ozone, 17:499

Virus inactivation, CT requirements, 27:335

Virus Inactivation, in drinking water, 14:439

Virus removal in wastewater ozonation, 35:501

Viruses in rooms removed with ozone, 31:216

Viruses, effect of ozonation on in Colorado River water, 13:127

Viruses, inactivation by ozone, 10:123

Viscosity during ozonolysis of palm olein, 37:503

Viscosity of ozone bleached wheat straw pulp, 40:148

Visual Acuity, 34:480

Visual Field, 34:480

Vital-Fluorochromization, of microorganisms using 3',6'-diacetylfluorescein to determine cell membrane damage and loss of metabolic activity upon ozonation, 18:173

Vitamin C and UV light, 30:93

Vitamin C Content in ozone-treated papaya, 34:57

VOC Abatement via plasma discharge, 27:239

VOC in contaminated groundwater, 38:413

VOC Oxidation of benzaldehyde, 35:489

VOC Removal with ozone sparging, 30:88

VOCs (air-phase), advanced oxidant regeneration of GAC for controlling, 18:417

VolasilTM245 as ozone-loaded solvent, 25:485; 26:475

Volatile Fatty Acids, in kinetic analysis of the effects of dissolved inorganic and organic substances in raw water on the ozonation of geosmin and 2-methyl-isoborneol, 15:1

Volatile Organic Chemicals, in air stripping towers, treatment of using photochemically generated ozone, 10:323

Volatile Organic Chemicals, ozonation of in presence of humic acids and soils, 13:287

Volatile Organic Compounds (VOCs) treated with ozone, 31:393

Volatile Organic compounds in 1,4 dioxane removal, 39:424

Volatile Organic Compounds over urban Kolkata, 36:181

Volatile Organic Contaminants in drinking water, destruction of by ozone treatment, 9:265

Volatilization in ozonation of bromides in an electrolytic reactor, 34:269

Volume DBD, 39:209

Volume Discharge in ozone generation, 24:193

Volume Discharge in ozone generation, 38:70

(V)UV Dielectric Barrier Discharge and ozone formation, 21:583

VUV (Vacuum-Ultraviolet Radiation) in measurement of a 172nm Xe Excimer Lamp, 20:421

VUV efficiency in phenol decomposition, 35:350

VUV Irradiation, 30:99

VUV Oxidation of organic compounds, 30:99

VUV ozone generator, 30:228

Wall Material, effect on ozone generation, 26:487

Waste Activated Sludge, 31:247

Waste Gas Purification, experiences at plants using ozone, 5:183

Waste Gases from ozone decomposition over alumina-supported catalysts, 29:41

Waste Minimization in active sludge treated with ozone, 36:451

Waste Minimization in biological wastewater treatment, 31:247

Waste Treatment, Municipal, use of ozone in night soil treatment process, 6:185

Waste-Activated Sludge in anaerobic digestion, 37:316

Wastewater and hydrogen sulfide generation, 35:390

Wastewater and microalgae biomass harvesting, 39:264

Wastewater and ozone decomposition, influencing decomposition of ozone in wastewater, 28:247

Wastewater Characterization, from ozonation of eucalypt Kraft pulps, 19:481

Wastewater Concentrate from tank truck cleaning, 34:32

Wastewater containing antibiotics removed with membrane bioreactors and advanced oxidation processes, 31:428

Wastewater containing azo dyes, treatment with ozone, 27:475

Wastewater containing bicarbonate and ammonia, 33:425

Wastewater containing endocrine disruptors, treated with ozone, 28:445

Wastewater containing imazalil treated with ozone, 33:308

Wastewater containing of aqueous naphthalene-1,5 disulfonic acid treatment with ozone, 28:437

Wastewater Disinfection with Ozone, 7:63; 8:261; 10:173; 12:157; 17:499

Wastewater Disinfection with Ozone, enhancement of efficiency in full-scale diffuser contactors, 15:295

Wastewater Disinfection with Ozone, process

- control and operating results, 15:497
- Wastewater Disinfection**, elimination of fecal bacteria and enteric viruses by ozone, 4:91
- Wastewater Disinfection**, municipal, with ozone, state-of-the-art, 3:239
- Wastewater Disinfection**, optimizing operational control of ozone, 4:131
- Wastewater Disinfection**, with ozone, in a tourist zone, 5:103
- Wastewater Effluent** in Great Lakes Basin, 37:36
- Wastewater** from leather dyeing, 40:133
- Wastewater** ozonation modeling, 32:424
- Wastewater** ozonation, 34:42
- Wastewater Ozonation**, Henry and mass transfer coefficients in, 19:281
- Wastewater Process Optimization** by excitation-emission matrix fluorescence spectroscopy, 34:109
- Wastewater reuse**, 32:323
- Wastewater Reuse**, 35:243
- Wastewater** sludge ozonation, 33:410
- Wastewater Tertiary Treatment**, comparative study of ozonation conditions in, 2:123
- Wastewater** treated with ozone and ultrasound, 36:138
- Wastewater** treated with ozone, 31:415
- Wastewater** treated with ozone-based processes, 33:243
- Wastewater Treatment** and pesticides, 27:83, 27:173
- Wastewater Treatment** and sludge ozonation, 30:136
- Wastewater** treatment by advanced oxidation processes, 34:137
- Wastewater** treatment by advanced oxidation, 34:163
- Wastewater Treatment** by catalytic ozonation, 38:194
- Wastewater Treatment** by catalytic ozonation, 38:3
- Wastewater Treatment** by combined physicochemical treatment, 33:285
- Wastewater** treatment by ozonation and biodegradation, 39:296
- Wastewater** treatment by ozone in U. S. municipal wastewater plants, 32:43
- Wastewater** treatment by ozone in waters containing C.I. Reactive Yellow 3, 27:273
- Wastewater Treatment** by ozone of dyeing wastewater, 28:199
- Wastewater Treatment** containing antibiotics, 30:175
- Wastewater Treatment** containing dyes by ozone and hydrogen peroxide, 27:265
- Wastewater Treatment** containing pathogenic bacteria and amoebae, 30:367
- Wastewater Treatment** containing reactive dye, 27:257
- Wastewater Treatment** from food industry, 35:295
- Wastewater Treatment** in presence of sulfamethoxazole, 37:509
- Wastewater Treatment** of phenolic solutions in gas-inducing reactor, 28:77
- Wastewater Treatment** of synthetic treated urban wastewater, 37:467
- Wastewater Treatment Plants**, 31:415
- Wastewater Treatment Plants**, operating experiences of, 14:501
- Wastewater Treatment** removing tetracycline, 37:405
- Wastewater Treatment** via ozone and activated sludge, 39:319
- Wastewater Treatment** with clofibric acid, 38:425
- Wastewater** treatment with ozone (Phoenix), 29:303
- Wastewater Treatment** with ozone and membrane contactors, 27:209
- Wastewater Treatment** with ozone in pulp and paper industry, 31:452
- Wastewater Treatment** with ozone, 37:323
- Wastewater** treatment with Si-FeOOH, 37:494
- Wastewater Treatment**, 35:501
- Wastewater Treatment**, 36:244
- Wastewater Treatment**, and contactor design, 23:369
- Wastewater Treatment**, by ozonation and biological activated carbon, 8:355
- Wastewater Treatment**, by ozone in water containing surfactants, 26:327
- Wastewater Treatment**, by ozone of o-nitrotoluene, 23:127
- Wastewater Treatment**, by ozone-loaded solvent, 25:485
- Wastewater Treatment**, by preozonation, influence on adsorption equilibrium of DOC by activated carbon, 8:277
- Wastewater Treatment**, containing 3-methylpyridine, 23:189
- Wastewater Treatment**, containing dissolved organic matter with ozone, 23:351
- Wastewater Treatment**, effect of ozone on sludge solubilization and mineralization, 22:473
- Wastewater Treatment**, effects of surface active agents on ozone treatment of, 18:183
- Wastewater Treatment**, experiments for, with ozone in combination with adsorption procedures, 3:169; 4:3
- Wastewater Treatment**, from Kraft paper machine whitewater, ozone decolorization of residual direct

132 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- dyes in, 19:549
- Wastewater Treatment**, from molasses processing, by ozone and advanced oxidation, 19:157
- Wastewater Treatment**, in pulp mills, 22:575
- Wastewater Treatment**, modeling of ozone treatment of, 15:149
- Wastewater Treatment**, of forest industry landfill leachate by ozone, 24:369
- Wastewater Treatment**, of nitroaromatics with ozone, 23:343
- Wastewater Treatment**, of olive wastewater with ozone, 22:617
- Wastewater Treatment**, ozone flocculation effects in, 16:55
- Wastewater Treatment**, ozone treatment of cherry stillage, 26:257
- Wastewater Treatment**, pulp mill effluent, 14:461
- Wastewater Treatment, Pulp Mills**, chemical and mechanical, by ozonation, 18:363
- Wastewater Treatment**, tertiary, ozone and activated carbon for, 7:1
- Wastewater Treatment, Textiles**, ozone treatment of in Poland, 18:73
- Wastewater Treatment**, two-phase ozone reactor for, 14:381
- Wastewater Treatment**, using ozone-loaded solvent, 26:475
- Wastewater Treatment**, with ozone and effect on sludge, 25:73
- Wastewater Treatment**, with ozone in Germany, 21:163
- Wastewater Treatment**, with ozone in impinging zone reactor, 21:501
- Wastewater Treatment**, with ozone treatment and biological oxidation, 25:95
- Wastewater Treatment**, with ozone, 12:107; 12:217; a case history, 17:345
- Wastewater Treatment**, with ozone, dilute, low-temperature, 1:91
- Wastewater Treatment**, with ozone, in a Chemical Sequential Reactor, 15:201
- Wastewater Treatment**, with Ozone/Hydrogen Peroxide, Hydrogen Peroxide/UV Radiation, or UV Radiation/Fe(II) 17:119
- Wastewater**, containing detergents and/or surfactants, treatment of with ozone, 13:639
- Wastewater**, disinfection of ozone with kinetics modeling, 22:113
- Wastewater**, household, optimizing ozone disinfection of, 3:19
- Wastewater**, improvement of primary sedimentation by ozonation, 21:605
- Wastewater**, influence of ozonation conditions on treatability, 20:133
- Wastewater, Municipal**, ozone disinfection of, design and operation considerations, 6:87
- Wastewater, Municipal**, ozone treatment of, 6:199
- Wastewater, Municipal**, ozone treatment of, with biological activated carbon, 6:71
- Wastewater**, ozonation of food processing wastewater, 22:167
- Wastewater**, ozonation of Indeno (1,2,3-c,d) Pyrene, 21: 571
- Wastewater**, ozonation of pulp mill wastewaters, 22:31
- Wastewater, Ozone Demand**, 20:513
- Wastewater**, ozone for high level disinfection of, 3:3
- Wastewater, Synthetic**, improvement in biodegradability of by preozonation, 11:155
- Wastewater**, tertiary treated used for industrial cooling water, application of ozone to eliminate, 3:121
- Wastewater**, treatment and ammonia removal with presence of bromide, 22:23
- Wastewater**, treatment of dyestuff waters with Fenton's Reagent, 22:196
- Wastewater**, treatment of phenols with ozone and coagulation, 25:323
- Wastewater**, treatment with ozone in injection-type downflow UV/O₃ oxidation reactor, 21:539
- Wastewaters** containing pharmaceuticals, 30:387
- Water Absorption** of Chamois leather, 29:405
- Water Conditioning**, study of cooling tower with ozone, 3:109
- Water Conservation** in the fruit industry, 35:273
- Water Conservation**, of cooling water by ozonation with mineral removal, 14:231
- Water Contact Angle** in heat treatment with gaseous ozone, 34:315
- Water Disinfection** in dental treatment units, 24:479
- Water Disinfection** with *enterococcus* sp. inactivation, 38:443
- Water Disinfection** with ozone in dental rooms, 20:251
- Water Electrode** in electroozonation, 23:467
- Water Heater**, disinfection of water in dental chairs, 21:629
- Water Mains**, coal tar linings, remobilization of polynuclear aromatic hydrocarbons from, 18:517
- Water Ozonation** in Colombia, 30:202
- Water Ozonation**, 40:251
- Water Purification** by UV Irradiation, 29:473
- Water Quality Criteria**, for ozonation processes, 16:113; 16:121
- Water Quality Improvements** in Hanshin Water

- Supply Authority, 39:398
- Water Quality** of Arlington, Texas water, 29:261
- Water Quality** recirculating aquaculture systems, 33:345
- Water Reclamation** at South Caboolture Water Reclamation Plant, 25:107
- Water Reclamation**, design and application of a packed column ozone absorber in, 2:283
- Water Reclamation**, effect of various oxidants on the performance of activated carbon used in, 3:225
- Water Reclamation**, optimization of ozonation and biological activated carbon in, 5:171
- Water Reclamation**, with ozonation and biological activated carbon, 8:355
- Water Recycle** in the textile industry, 39:357
- Water Recycling** by ozone treatment of textile wastewaters in Poland, 18:73
- Water Reuse** after disinfection with ozone, 22:113
- Water Reuse** after ozone oxidation of endocrine disruptors, 28:445
- Water Reuse** after reverse osmosis and ozonation, 36:174
- Water Reuse** and advanced oxidation, 36:229
- Water Reuse** and EDC removal, 33:253
- Water Reuse** and membrane fouling, 38:163
- Water Reuse** in the fruit industry, 35:273
- Water Reuse** of treated wastewater for agriculture, 22:151
- Water Reuse**, 32:43, 36:123, 36:485, 40:3
- Water Reuse**, in Japan, 10:309
- Water Reuse**, treatment of with ozone and biological activated carbon, 6:71
- Water Treatment** and ozone decay, 20:361
- Water Treatment** by ozone adsorption on silica gel, 25:315
- Water Treatment** containing pyruvic acid, 28:229
- Water Treatment** costs, 40:266
- Water Treatment** in food processing industry, 29:113
- Water Treatment** in Hanshin Water Supply Authority, 39:398
- Water Treatment** of domestic well drinking water, 38:25
- Water Treatment** of Finnish groundwater, 35:86
- Water Treatment** using a microporous diffuser reactor system, 27:45
- Water Treatment** with ozone and p-chlorobenzoic acid, 27:3
- Water Treatment** with ozone and reverse osmosis, 30:152
- Water Treatment**, 35:186
- Water Treatment**, effects of surface active agents on ozone treatment of, 18:183
- Water Treatment**, ozonation of aniline and anilinium ion in aqueous solution, 7:167
- Water Treatment**, ozone for, in the United Kingdom, 7:11
- Water Treatment**, potable, to minimize halogenous compound formation, 2:305
- Water Treatment**, with ozone, kinetics of, 14:303
- Water Vapor** influence on photochemical ozone generator, 30:228
- Water Vapor**, effects on ozone generation, 12:19
- Water**, ozonation of, Belgian experiences in, 7:327
- Waterworks Study** for formation of oxamic acid, 37:441
- Wavelength** for UV degradation of *N*-Nitrosodimethylamine, 34:115
- Weak Ammonia Liquor**, treatment with ozone, 15:343
- Weighted CT** in dental water systems, 31:436
- Weighted Distribution**, 39:273
- Well Water** treatment with ozone, 38:25
- Werner Method**, for AOC determination, 12:377
- Wet Air Oxidation** of formic acid solution, 22:241
- Wet Chemistry Ozone Analysis**, in process gas from an ozone generator, guideline for, 18:209
- Wet Oxidation** of paper mill circulation water, 23:401
- Wet Ozonation**, 28:207
- Wet Scrubbing** with ozonated water for odor control, 32:199
- Wet-Chemistry KI Ozone Analysis**, comparisons with a commercial UV meter, in the gas phase, 18:231
- Wetted-Wall Column**, for 2,4-Xylidine degradation by ozone, 26:499
- Wetting Agent** in treatment of plastic mixture with ozone, 29:373
- Wheat Flour** ozonation, 30:413
- Wheat Straw Pulp**, 40:148
- Whiteness Index** of ozonated wheat flour, 30:413
- Whiteness** of ozone treated soybean fibers, 34:143
- Whitewater, Kraft Paper Machine**, ozone decolorization of residual direct paper dyes in, 19:549
- Wiggins Water Works, Durban, South Africa**, ozonation at, 16:247
- Windsor, Ontario Water Treatment Plant**, 26:125
- Wine Industry** and ozone applications, 32:355
- Wire-to-Cylinder Ozone Generator**, 20:317; 24:29
- Wire-to-Cylinder Ozone Generator**, effect of nitrogen and oxygen, 36:65
- Wire-to-Cylinder Ozone Generator**, modeling, 26:551

134 KEY WORD INDEX FOR VOLUMES 1-40 (1979-2018)

- Wire-to-Cylinder Ozone Generator**, optimization from oxygen, 19:533
Wire-to-Cylinder Ozone Generator, with back-corona effect, 26:11
Wire-to-Plate Corona Discharge, 35:31
Wood Processing and ozone treatment of wastes, 24:83
Wool Shrinkproofing, with ozone, 1:219
Worker Safety in catfish processing, 29:221
Worldwide Ozone Capacity, 34:64
Wound Care Nursing, 35:399
Wound Healing and ozone, 29:501
Wound Healing of ozonated vegetable oils, 39:374
- Xanthomonas oryzae* *pv. oryzae* treatment with ozone, 27:495
Xenobiotic Pollutants, 29:443
Xenon Excimer Lamp, 30:99
Xenon Excimers in VUV measurement of a 172nm Xe Excimer Lamp, 20:421
XPS Spectroscopy for analyzing α -alumina supported silver catalyst for ozone decomposition, 37:216
X-Ray Contrast Media removed by ozone, 28:353
X-Ray Photoelectron Spectroscopy, 40:392
XRD (x-ray diffraction) for measurement of pulp crystallinity, 25:523
Xylene removal by ozonation, 23:77
Xylene, partial or complete removal of from dicofol and tetradifon wastewaters during ozone or ozone/H₂O₂ treatment, 16:487
2,4-Xylidine, degradation by ozone, 26:499
Xylose, ozone byproducts from, 13:265
- Yarn** fading after ozone treatment, 38:395
Yarns color fading ozonation 40:377
Yeast and food spoilage, 30:81
Yeast Assay, to test for mutagenicity in drinking water treated with ozone/GAC, 11:245
Yellow River Water ozonation for bromate control, 37:127
Yellowing of ozone bleached denim, 38:175
Yellowing Tendency in ozone bleaching of cotton fabric, 37:203
Yield of ozone argon-oxygen mixtures, 35:134
Yield of photochemical ozone generator, 30:228
Yugoslavia, ozone treatment of drinking water in, 14:101
- Zeolite** and ozone in removal of 2,4-Dichlorophenol, 32:391
Zeolite catalyst regeneration by ozone, 39:366
Zeolite for catalytic ozonation of methylene blue, 32:344
Zeolite with ozone in toluene removal, 33:158
Zeolites and α -alumina supported silver catalyst for ozone decomposition, 37:216
Zeolites for removal of DMP, 36:221
Zero-Gap in electrochemical ozone generation, 35:149
Zinc Removal, During Ozonation of Drinking Water, 17:297
Zone treatment of wheat flour, 30:413
Zürich, Switzerland Water Treatment Plant, Optimization of Ozone In, 17:1