Jae-Hong Kim

List of Publications by Year
in descending order

186 papers	17,495 citations	15880 67 h-index	17373 126 g-index
189 all docs	189 docs citations	189 times ranked	16680 citing authors

#	Article	IF	Citations
1	Persulfate-Based Advanced Oxidation: Critical Assessment of Opportunities and Roadblocks. Environmental Science & Technology, 2020, 54, 3064-3081.	4.6	1,779
2	Natural Organic Matter Stabilizes Carbon Nanotubes in the Aqueous Phase. Environmental Science & Technology, 2007, 41, 179-184.	4.6	756
3	Challenges and prospects of advanced oxidation water treatment processes using catalytic nanomaterials. Nature Nanotechnology, 2018, 13, 642-650.	15.6	745
4	Oxidation of Organic Compounds in Water by Unactivated Peroxymonosulfate. Environmental Science & Technology, 2018, 52, 5911-5919.	4.6	576
5	Activation of Persulfates by Graphitized Nanodiamonds for Removal of Organic Compounds. Environmental Science & Technology, 2016, 50, 10134-10142.	4.6	546
6	The Technology Horizon for Photocatalytic Water Treatment: Sunrise or Sunset?. Environmental Science & Technology, 2019, 53, 2937-2947.	4.6	493
7	Natural Organic Matter (NOM) Adsorption to Multi-Walled Carbon Nanotubes: Effect of NOM Characteristics and Water Quality Parameters. Environmental Science & Technology, 2008, 42, 4416-4421.	4.6	428
8	The role of nanotechnology in tackling global water challenges. Nature Sustainability, 2018, 1, 166-175.	11.5	377
9	Porous Electrospun Fibers Embedding TiO₂ for Adsorption and Photocatalytic Degradation of Water Pollutants. Environmental Science & Technology, 2018, 52, 4285-4293.	4.6	286
10	Enhanced antibacterial activity through the controlled alignment of graphene oxide nanosheets. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9793-E9801.	3.3	275
11	Encapsulated Tripletâ€“Triplet Annihilation-Based Upconversion in the Aqueous Phase for Sub-Band-Gap Semiconductor Photocatalysis. Journal of the American Chemical Society, 2012, 134, 17478-17481.	6.6	267
12	Activation of Peroxymonosulfate by Surface-Loaded Noble Metal Nanoparticles for Oxidative Degradation of Organic Compounds. Environmental Science & Technology, 2016, 50, 10187-10197.	4.6	262
13	Surface-loaded metal nanoparticles for peroxymonosulfate activation: Efficiency and mechanism reconnaissance. Applied Catalysis B: Environmental, 2019, 241, 561-569.	10.8	260
14	Spatially separating redox centers on 2D carbon nitride with cobalt single atom for photocatalytic H ₂ O ₂ production. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6376-6382.	3.3	245
15	Facet-Dependent Photoelectrochemical Performance of TiO₂ Nanostructures: An Experimental and Computational Study. Journal of the American Chemical Society, 2015, 137, 1520-1529.	6.6	242
16	Mechanisms of Escherichia coli inactivation by several disinfectants. Water Research, 2010, 44, 3410-3418.	5.3	241
17	LED revolution: fundamentals and prospects for UV disinfection applications. Environmental Science: Water Research and Technology, 2017, 3, 188-202.	1.2	202
18	Reinventing Fenton Chemistry: Iron Oxychloride Nanosheet for pH-Insensitive H₂O₂ Activation. Environmental Science and Technology Letters, 2018, 5, 186-191.	3.9	202

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19	Mechanism of Heterogeneous Fenton Reaction Kinetics Enhancement under Nanoscale Spatial Confinement. Environmental Science & Technology, 2020, 54, 10868-10875.	4.6	188
20	Cobalt Single Atoms on Tetrapyridomacrocyclic Support for Efficient Peroxymonosulfate Activation. Environmental Science & Technology, 2021, 55, 1242-1250.	4.6	185
21	High Efficiency Low-Power Upconverting Soft Materials. Chemistry of Materials, 2012, 24, 2250-2252.	3.2	184
22	Comparative analysis of fouling characteristics of ceramic and polymeric microfiltration membranes using filtration models. Journal of Membrane Science, 2013, 432, 97-105.	4.1	181
23	Hydrophilic modification of polypropylene microfiltration membranes by ozone-induced graft polymerization. Journal of Membrane Science, 2000, 169, 269-276.	4.1	175
24	Photocatalytic hydrogen peroxide production by anthraquinone-augmented polymeric carbon nitride. Applied Catalysis B: Environmental, 2018, 229, 121-129.	10.8	171
25	Analysis of CaSO4 scale formation mechanism in various nanofiltration modules. Journal of Membrane Science, 1999, 163, 63-74.	4.1	170
26	Activation of Oxygen and Hydrogen Peroxide by Copper(II) Coupled with Hydroxylamine for Oxidation of Organic Contaminants. Environmental Science & Technology, 2016, 50, 8231-8238.	4.6	166
27	Intrapore energy barriers govern ion transport and selectivity of desalination membranes. Science Advances, 2020, 6, .	4.7	161
28	Harnessing low energy photons (635 nm) for the production of H₂O₂ using upconversion nanohybrid photocatalysts. Energy and Environmental Science, 2016, 9, 1063-1073.	15.6	160
29	Dual-Color Emissive Upconversion Nanocapsules for Differential Cancer Bioimaging In Vivo. ACS Nano, 2016, 10, 1512-1521.	7.3	157
30	A mechanistic study on boron rejection by sea water reverse osmosis membranes. Journal of Membrane Science, 2006, 286, 269-278.	4.1	156
31	Photochemical Production of Reactive Oxygen Species by C60in the Aqueous Phase During UV Irradiation. Environmental Science & Technology, 2007, 41, 2529-2535.	4.6	148
32	Electrified Membranes for Water Treatment Applications. ACS ES&T Engineering, 2021, 1, 725-752.	3.7	139
33	Membrane-Confined Iron Oxychloride Nanocatalysts for Highly Efficient Heterogeneous Fenton Water Treatment. Environmental Science & Technology, 2021, 55, 9266-9275.	4.6	135
34	Oxidizing Capacity of Periodate Activated with Iron-Based Bimetallic Nanoparticles. Environmental Science & Technology, 2014, 48, 8086-8093.	4.6	133
35	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. Environmental Science & Technology, 2017, 51, 10274-10281.	4.6	129
36	Photochemical and Antimicrobial Properties of Novel C₆₀ Derivatives in Aqueous Systems. Environmental Science & Technology, 2009, 43, 6604-6610.	4.6	127

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37	Cooperative Pollutant Adsorption and Persulfate-Driven Oxidation on Hierarchically Ordered Porous Carbon. Environmental Science & Technology, 2019, 53, 10352-10360.	4.6	127
38	Reaction of Water-Stable C₆₀ Aggregates with Ozone. Environmental Science & Technology, 2007, 41, 7497-7502.	4.6	123
39	PolyDADMAC and Dimethylamine as Precursors of N-Nitrosodimethylamine during Ozonation: Reaction Kinetics and Mechanisms. Environmental Science & Technology, 2011, 45, 4353-4359.	4.6	116
40	3D hydrogel scaffold doped with 2D graphene materials for biosensors and bioelectronics. Biosensors and Bioelectronics, 2017, 89, 187-200.	5.3	112
41	Photosensitized Oxidation of Emerging Organic Pollutants by Tetrakis C₆₀ Aminofullerene-Derivatized Silica under Visible Light Irradiation. Environmental Science & Technology, 2011, 45, 10598-10604.	4.6	107
42	Converting Visible Light into UVC: Microbial Inactivation by Pr³⁺-Activated Upconversion Materials. Environmental Science & Technology, 2011, 45, 3680-3686.	4.6	107
43	Solar Photothermal Disinfection using Broadband-Light Absorbing Gold Nanoparticles and Carbon Black. Environmental Science & Technology, 2018, 52, 205-213.	4.6	107
44	Removal of phenol and substituted phenols by newly developed emulsion liquid membrane process. Water Research, 2006, 40, 1763-1772.	5.3	103
45	Robust Co-catalytic Performance of Nanodiamonds Loaded on WO₃ for the Decomposition of Volatile Organic Compounds under Visible Light. ACS Catalysis, 2016, 6, 8350-8360.	5.5	98
46	Visible-light-induced activation of periodate that mimics dye-sensitization of TiO2: Simultaneous decolorization of dyes and production of oxidizing radicals. Applied Catalysis B: Environmental, 2017, 203, 475-484.	10.8	97
47	Angstrom-confined catalytic water purification within Co-TiOx laminar membrane nanochannels. Nature Communications, 2022, 13, .	5.8	97
48	Dispersion of C60 in natural water and removal by conventional drinking water treatment processes. Water Research, 2009, 43, 2463-2470.	5.3	95
49	Tripletâ€“Triplet Annihilation Upconversion in CdS-Decorated SiO₂ Nanocapsules for Sub-Bandgap Photocatalysis. ACS Applied Materials & Interfaces, 2015, 7, 318-325.	4.0	88
50	Environmental Materials beyond and below the Nanoscale: Single-Atom Catalysts. ACS ES&T Engineering, 2021, 1, 157-172.	3.7	88
51	Neighboring Pd single atoms surpass isolated single atoms for selective hydrodehalogenation catalysis. Nature Communications, 2021, 12, 5179.	5.8	87
52	Investigating synergism during sequential inactivation of Bacillus subtilis spores with several disinfectants. Water Research, 2006, 40, 2911-2920.	5.3	86
53	1,4-Dioxane as an emerging water contaminant: State of the science and evaluation of research needs. Science of the Total Environment, 2019, 690, 853-866.	3.9	85
54	Differential natural organic matter fouling ofÂceramic versus polymeric ultrafiltration membranes. Water Research, 2014, 48, 43-51.	5.3	84

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55	Electronic Tuning of Metal Nanoparticles for Highly Efficient Photocatalytic Hydrogen Peroxide Production. ACS Catalysis, 2019, 9, 626-631.	5.5	84
56	Mechanism of C₆₀ Photoreactivity in Water: Fate of Triplet State and Radical Anion and Production of Reactive Oxygen Species. Environmental Science & Technology, 2008, 42, 3459-3464.	4.6	82
57	Chloride-enhanced oxidation of organic contaminants by Cu(II)-catalyzed Fenton-like reaction at neutral pH. Journal of Hazardous Materials, 2018, 344, 1174-1180.	6.5	81
58	Environmental Applications of Engineered Materials with Nanoconfinement. ACS ES&T Engineering, 2021, 1, 706-724.	3.7	80
59	Transformation of Aggregated C₆₀ in the Aqueous Phase by UV Irradiation. Environmental Science & Technology, 2009, 43, 4878-4883.	4.6	79
60	Inactivation and surface interactions of MS-2 bacteriophage in a TiO2 photoelectrocatalytic reactor. Water Research, 2011, 45, 2104-2110.	5.3	79
61	Engineering Light: Advances in Wavelength Conversion Materials for Energy and Environmental Technologies. Environmental Science & Technology, 2012, 46, 12316-12328.	4.6	79
62	Water Disinfection in Rural Areas Demands Unconventional Solar Technologies. Accounts of Chemical Research, 2019, 52, 1187-1195.	7.6	79
63	Amorphous Pd-Loaded Ti₄O₇ Electrode for Direct Anodic Destruction of Perfluorooctanoic Acid. Environmental Science & Technology, 2020, 54, 10954-10963.	4.6	76
64	Self-Healing Hydrogel Pore-Filled Water Filtration Membranes. Environmental Science & Technology, 2017, 51, 905-913.	4.6	74
65	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater â€“ a perspective. Environmental Science: Nano, 2020, 7, 2178-2194.	2.2	74
66	C₆₀ Aminofullerene Immobilized on Silica as a Visible-Light-Activated Photocatalyst. Environmental Science & Technology, 2010, 44, 9488-9495.	4.6	73
67	Single-Atom Cobalt Incorporated in a 2D Graphene Oxide Membrane for Catalytic Pollutant Degradation. Environmental Science & Technology, 2022, 56, 1341-1351.	4.6	72
68	Modeling boron rejection in pilot- and full-scale reverse osmosis desalination processes. Journal of Membrane Science, 2009, 338, 119-127.	4.1	71
69	Easily Recoverable, Micrometer-Sized TiO₂ Hierarchical Spheres Decorated with Cyclodextrin for Enhanced Photocatalytic Degradation of Organic Micropollutants. Environmental Science & Technology, 2018, 52, 12402-12411.	4.6	71
70	Single-Atom Pt Catalyst for Effective Câ€“F Bond Activation via Hydrodefluorination. ACS Catalysis, 2018, 8, 9353-9358.	5.5	70
71	High-Performance Capacitive Deionization via Manganese Oxide-Coated, Vertically Aligned Carbon Nanotubes. Environmental Science and Technology Letters, 2018, 5, 692-700.	3.9	69
72	Photocurrent Enhancement from Solid-State Tripletâ€“Triplet Annihilation Upconversion of Low-Intensity, Low-Energy Photons. ACS Photonics, 2016, 3, 784-790.	3.2	68

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73	Delineating Mechanisms of Upconversion Enhancement by Li⁺ Codoping in Y₂SiO₅:Pr³⁺. Journal of Physical Chemistry C, 2012, 116, 12772-12778.	1.5	66
74	Red-to-Blue/Cyan/Green Upconverting Microcapsules for Aqueous- and Dry-Phase Color Tuning and Magnetic Sorting. ACS Photonics, 2014, 1, 382-388.	3.2	66
75	N-nitrosodimethylamine (NDMA) formation potential of amine-based water treatment polymers: Effects of in situ chloramination, breakpoint chlorination, and pre-oxidation. Journal of Hazardous Materials, 2015, 282, 133-140.	6.5	66
76	Adsorption, desorption, and steady-state removal of 17Î²-estradiol by nanofiltration membranes. Journal of Membrane Science, 2008, 319, 38-43.	4.1	62
77	Removal of N-Nitrosamines and Their Precursors by Nanofiltration and Reverse Osmosis Membranes. Journal of Environmental Engineering, ASCE, 2009, 135, 788-795.	0.7	60
78	Visible Light Sensitized Inactivation of MS-2 Bacteriophage by a Cationic Amine-Functionalized C₆₀ Derivative. Environmental Science & Technology, 2010, 44, 6685-6691.	4.6	60
79	Transport behavior of functionalized multi-wall carbon nanotubes in water-saturated quartz sand as a function of tube length. Water Research, 2012, 46, 4521-4531.	5.3	59
80	Fluorinated TiO2 as an ambient light-activated virucidal surface coating material for the control of human norovirus. Journal of Photochemistry and Photobiology B: Biology, 2014, 140, 315-320.	1.7	59
81	Delineating Oxidative Processes of Aqueous C₆₀ Preparations: Role of THF Peroxide. Environmental Science & Technology, 2009, 43, 108-113.	4.6	56
82	Different roles of Fe atoms and nanoparticles on g-C3N4 in regulating the reductive activation of ozone under visible light. Applied Catalysis B: Environmental, 2021, 296, 120362.	10.8	54
83	Investigating synergism during sequential inactivation of MS-2 phage and Bacillus subtilis spores with UV/H2O2 followed by free chlorine. Water Research, 2011, 45, 1063-1070.	5.3	53
84	Full-scale simulation of seawater reverse osmosis desalination processes for boron removal: Effect of membrane fouling. Water Research, 2012, 46, 3796-3804.	5.3	53
85	Plasmon-Enhanced Sub-Bandgap Photocatalysis via Tripletâ€“Triplet Annihilation Upconversion for Volatile Organic Compound Degradation. Environmental Science & Technology, 2016, 50, 11184-11192.	4.6	53
86	Large Eddy Simulation of Flow and Tracer Transport in Multichamber Ozone Contactors. Journal of Environmental Engineering, ASCE, 2010, 136, 22-31.	0.7	52
87	Beyond the Pipeline: Assessing the Efficiency Limits of Advanced Technologies for Solar Water Disinfection. Environmental Science and Technology Letters, 2016, 3, 73-80.	3.9	52
88	Effect of Encapsulating Agents on Dispersion Status and Photochemical Reactivity of C₆₀ in the Aqueous Phase. Environmental Science & Technology, 2008, 42, 1552-1557.	4.6	51
89	Hierarchical Bi2O2CO3 wrapped with modified graphene oxide for adsorption-enhanced photocatalytic inactivation of antibiotic resistant bacteria and resistance genes. Water Research, 2020, 184, 116157.	5.3	50
90	Engineered Nanoconfinement Accelerating Spontaneous Manganese-Catalyzed Degradation of Organic Contaminants. Environmental Science & Technology, 2021, 55, 16708-16715.	4.6	50

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91	Removal of biological and non-biological viral surrogates by spiral-wound reverse osmosis membrane elements with intact and compromised integrity. Water Research, 2004, 38, 3821-3832.	5.3	49
92	Mechanisms of antibiotic removal by nanofiltration membranes: Model development and application. Journal of Membrane Science, 2012, 389, 234-244.	4.1	49
93	Oxidation of dithiocarbamates to yield N-nitrosamines by water disinfection oxidants. Water Research, 2013, 47, 725-736.	5.3	49
94	The effect of baffle spacing on hydrodynamics and solute transport in serpentine contact tanks. Journal of Hydraulic Research/De Recherches Hydrauliques, 2013, 51, 558-568.	0.7	49
95	Plasmon-enabled degradation of organic micropollutants in water by visible-light illumination of Janus gold nanorods. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15473-15481.	3.3	49
96	Role of Disinfectant Concentration and pH in the Inactivation Kinetics ofCryptosporidium parvumOocysts with Ozone and Monochloramine. Environmental Science & Technology, 2001, 35, 2752-2757.	4.6	47
97	Toward Microcapsule-Embedded Self-Healing Membranes. Environmental Science and Technology Letters, 2016, 3, 216-221.	3.9	47
98	Flexible and Micropatternable Tripletâ€“Triplet Annihilation Upconversion Thin Films for Photonic Device Integration and Anticounterfeiting Applications. ACS Applied Materials & Interfaces, 2018, 10, 8985-8992.	4.0	43
99	Enhanced Pollutant Adsorption and Regeneration of Layered Double Hydroxide-Based Photoregenerable Adsorbent. Environmental Science & Technology, 2020, 54, 9106-9115.	4.6	43
100	Microbial removal and integrity monitoring of ro and NF Membranes. Journal - American Water Works Association, 2003, 95, 105-119.	0.2	42
101	The Myth of Visible Light Photocatalysis Using Lanthanide Upconversion Materials. Environmental Science & Technology, 2018, 52, 2973-2980.	4.6	42
102	Site-Selective Loading of Single-Atom Pt on TiO₂ for Photocatalytic Oxidation and Reductive Hydrodefluorination. ACS ES&T Engineering, 2021, 1, 512-522.	3.7	42
103	Escherichia coli Inactivation by Water-Soluble, Ozonated C₆₀ Derivative: Kinetics and Mechanisms. Environmental Science & Technology, 2009, 43, 7410-7415.	4.6	41
104	Simple Synthetic Method Toward Solid Supported C₆₀ Visible Light-Activated Photocatalysts. Environmental Science & Technology, 2014, 48, 2785-2791.	4.6	41
105	Upconversion under polychromatic excitation: Y2SiO5:Pr3+, Li+ converts violet, cyan, green, and yellow light into UVC. Optical Materials, 2013, 35, 2347-2351.	1.7	40
106	Triple-Emulsion Microcapsules for Highly Efficient Multispectral Upconversion in the Aqueous Phase. ACS Photonics, 2015, 2, 633-638.	3.2	40
107	Controlled TiO₂ Growth on Reverse Osmosis and Nanofiltration Membranes by Atomic Layer Deposition: Mechanisms and Potential Applications. Environmental Science & Technology, 2018, 52, 14311-14320.	4.6	40
108	Titanium Dioxideâ€“Layered Double Hydroxide Composite Material for Adsorptionâ€“Photocatalysis of Water Pollutants. Langmuir, 2019, 35, 8699-8708.	1.6	40

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109	ModelingCryptosporidium parvumOocyst Inactivation and Bromate Formation in a Full-Scale Ozone Contactor. Environmental Science & Technology, 2005, 39, 9343-9350.	4.6	39
110	Improving the Visible Light Photoactivity of Supported Fullerene Photocatalysts through the Use of [C₇₀] Fullerene. Environmental Science & Technology, 2015, 49, 6190-6197.	4.6	39
111	Coupling Light Emitting Diodes with Photocatalyst-Coated Optical Fibers Improves Quantum Yield of Pollutant Oxidation. Environmental Science & Technology, 2017, 51, 13319-13326.	4.6	39
112	Visible-to-UVC upconversion efficiency and mechanisms of Lu7O6F9:Pr3+ and Y2SiO5:Pr3+ ceramics. Journal of Luminescence, 2015, 160, 202-209.	1.5	38
113	Conflicting Roles of Coordination Number on Catalytic Performance of Single-Atom Pt Catalysts. ACS Catalysis, 2021, 11, 5586-5592.	5.5	38
114	Stochastic cost estimation approach for full-scale reverse osmosis desalination plants. Journal of Membrane Science, 2010, 364, 52-64.	4.1	37
115	Interaction of C₆₀ with Water: First-Principles Modeling and Environmental Implications. Environmental Science & Technology, 2015, 49, 1529-1536.	4.6	37
116	Toward microvascular network-embedded self-healing membranes. Journal of Membrane Science, 2017, 531, 94-102.	4.1	37
117	Simultaneous Prediction ofCryptosporidium parvumOocyst Inactivation and Bromate Formation during Ozonation of Synthetic Waters. Environmental Science & Technology, 2004, 38, 2232-2241.	4.6	36
118	Modeling Cryptosporidium parvum oocyst inactivation and bromate in a flow-through ozone contactor treating natural water. Water Research, 2007, 41, 467-475.	5.3	36
119	Differential Photoactivity of Aqueous [C₆₀] and [C₇₀] Fullerene Aggregates. Environmental Science & Technology, 2015, 49, 5990-5998.	4.6	33
120	Optimum emulsion liquid membranes stabilized by non-Newtonian conversion in Taylorâ€“Couette flow. Chemical Engineering Science, 2004, 59, 5725-5734.	1.9	31
121	Catalytic Membrane with Copper Single-Atom Catalysts for Effective Hydrogen Peroxide Activation and Pollutant Destruction. Environmental Science & Technology, 2022, 56, 8733-8745.	4.6	31
122	Stability of Water-Stable C₆₀Clusters to OH Radical Oxidation and Hydrated Electron Reduction. Environmental Science & Technology, 2010, 44, 3786-3792.	4.6	30
123	[C70] Fullerene-sensitized tripletâ€“triplet annihilation upconversion. Chemical Communications, 2013, 49, 10829.	2.2	30
124	Cationic Fullerene Aggregates with Unprecedented Virus Photoinactivation Efficiencies in Water. Environmental Science and Technology Letters, 2014, 1, 290-294.	3.9	30
125	Cathodic Hydrogen Peroxide Electrosynthesis Using Anthraquinone Modified Carbon Nitride on Gas Diffusion Electrode. ACS Applied Energy Materials, 2019, 2, 7972-7979.	2.5	30
126	Technology assessment of solar disinfection for drinking water treatment. Nature Sustainability, 2022, 5, 801-808.	11.5	30

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127	Reaction Kinetics and Transformation of Carbadox and Structurally Related Compounds with Aqueous Chlorine. Environmental Science & Technology, 2006, 40, 7228-7235.	4.6	29
128	Tripletâ€“Triplet Annihilation Upconversion in Broadly Absorbing Layered Film Systems for Sub-Bandgap Photocatalysis. ACS Applied Materials & Interfaces, 2019, 11, 13304-13318.	4.0	29
129	Edible Dye-Enhanced Solar Disinfection with Safety Indication. Environmental Science & Technology, 2018, 52, 13361-13369.	4.6	27
130	Using 3D LIF to investigate and improve performance of a multichamber ozone contactor. Journal - American Water Works Association, 2010, 102, 61-70.	0.2	26
131	Modeling aspects of flow and solute transport simulations in water disinfection tanks. Applied Mathematical Modelling, 2013, 37, 8039-8050.	2.2	25
132	Electron transfer mediation by aqueous C₆₀aggregates in H₂O₂/UV advanced oxidation of indigo carmine. Nanoscale, 2014, 6, 13579-13585.	2.8	25
133	Enhanced Tripletâ€“Triplet Annihilation Upconversion in Dual-Sensitizer Systems: Translating Broadband Light Absorption to Practical Solid-State Materials. ACS Photonics, 2017, 4, 127-137.	3.2	25
134	Improved stability of self-healing hydrogel pore-filled membranes with ionic cross-links. Journal of Membrane Science, 2018, 553, 1-9.	4.1	25
135	Enhanced hole-dominated photocatalytic activity of doughnut-like porous g-C3N4 driven by down-shifted valance band maximum. Catalysis Today, 2018, 307, 147-153.	2.2	25
136	Asymmetric hydrogel-composite membranes with improved water permeability and self-healing property. Journal of Membrane Science, 2019, 578, 196-202.	4.1	25
137	Dual-Functionality Fullerene and Silver Nanoparticle Antimicrobial Composites via Block Copolymer Templates. ACS Applied Materials & Interfaces, 2016, 8, 33583-33591.	4.0	24
138	Nanoparticle Enhanced Interfacial Solar Photothermal Water Disinfection Demonstrated in 3-D Printed Flow-Through Reactors. Environmental Science & Technology, 2019, 53, 7621-7631.	4.6	24
139	Inactivation of Cryptosporidium Oocysts in a Pilot-Scale Ozone Bubble-Diffuser Contactor. I: Model Development. Journal of Environmental Engineering, ASCE, 2002, 128, 514-521.	0.7	23
140	Escherichia coli Inactivation by UVC-Irradiated C₆₀: Kinetics and Mechanisms. Environmental Science & Technology, 2011, 45, 9627-9633.	4.6	23
141	Temperature-boosted photocatalytic H2 production and charge transfer kinetics on TiO2 under UV and visible light. Photochemical and Photobiological Sciences, 2016, 15, 1247-1253.	1.6	23
142	Tertiary amines enhance reactions of organic contaminants with aqueous chlorine. Water Research, 2011, 45, 6087-6096.	5.3	22
143	Yale School of Public Health Symposium: An overview of the challenges and opportunities associated with per- and polyfluoroalkyl substances (PFAS). Science of the Total Environment, 2021, 778, 146192.	3.9	22
144	Restoring the virus removal capability of damaged hollow fiber membranes via chitosan-based in situ healing. Journal of Membrane Science, 2016, 497, 387-393.	4.1	20

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145	Versatile Yolkâ€“Shell Encapsulation: Catalytic, Photothermal, and Sensing Demonstration. Small, 2020, 16, e2002311.	5.2	19
146	Modular Hydrogen Peroxide Electrosynthesis Cell with Anthraquinone-Modified Polyaniline Electrocatalyst. ACS ES&T Engineering, 2021, 1, 446-455.	3.7	19
147	Opportunities and Challenges for Industrial Water Treatment and Reuse. ACS ES&T Engineering, 2022, 2, 465-488.	3.7	19
148	Response to Comment on â€œActivation of Persulfate by Graphitized Nanodiamonds for Removal of Organic Compoundsâ€• Environmental Science & Technology, 2017, 51, 5353-5354.	4.6	18
149	Occurrence of unknown reactive species in UV/H2O2 system leading to false interpretation of hydroxyl radical probe reactions. Water Research, 2021, 201, 117338.	5.3	18
150	Inactivation of Cryptosporidium Oocysts in a Pilot-Scale Ozone Bubble-Diffuser Contactor. II: Model Validation and Application. Journal of Environmental Engineering, ASCE, 2002, 128, 522-532.	0.7	16
151	UV reactor flow visualization and mixing quantification using three-dimensional laser-induced fluorescence. Water Research, 2011, 45, 3855-3862.	5.3	16
152	Selective Fluoride Transport in Subnanometer TiO₂ Pores. ACS Nano, 2021, 15, 16828-16838.	7.3	16
153	Photochemical and Photophysical Properties of Sequentially Functionalized Fullerenes in the Aqueous Phase. Environmental Science & Technology, 2012, 46, 13227-13234.	4.6	15
154	Toward in Situ Healing of Compromised Polymeric Membranes. Environmental Science and Technology Letters, 2014, 1, 113-116.	3.9	15
155	Functionalized Fullerenes in Water: A Closer Look. Environmental Science & Technology, 2015, 49, 2147-2155.	4.6	15
156	In Situ Healing of Compromised Membranes via Polyethylenimine-Functionalized Silica Microparticles. Environmental Science & Technology, 2017, 51, 12630-12637.	4.6	15
157	Synthesis and Characterization of Visible-to-UVC Upconversion Antimicrobial Ceramics. Environmental Science & Technology, 2014, 48, 140205070115003.	4.6	14
158	Farm-to-Tap Water Treatment: Naturally-Sourced Photosensitizers for Enhanced Solar Disinfection of Drinking Water. ACS ES&T Engineering, 2021, 1, 86-99.	3.7	14
159	Bench-scale evaluation of water disinfection by visible-to-UVC upconversion under high-intensity irradiation. Journal of Photochemistry and Photobiology B: Biology, 2015, 153, 405-411.	1.7	13
160	Hand-ground fullerene-nanodiamond composite for photosensitized water treatment and photodynamic cancer therapy. Journal of Colloid and Interface Science, 2021, 587, 101-109.	5.0	12
161	Microstructural origin of selective water oxidation to hydrogen peroxide at low overpotentials: a study on Mn-alloyed TiO₂. Journal of Materials Chemistry A, 2021, 9, 18498-18505.	5.2	12
162	Elucidating the Role of Single-Atom Pd for Electrocatalytic Hydrodechlorination. Environmental Science & Technology, 2021, 55, 13306-13316.	4.6	12

#	Article	IF	Citations
163	A Protocol for Electrocatalyst Stability Evaluation: H₂O₂ Electrosynthesis for Industrial Wastewater Treatment. Environmental Science & Technology, 2022, 56, 1365-1375.	4.6	12
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