# Jae-Hong Kim

#### List of Publications by Citations

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178 11,154 55 101 h-index g-index citations papers 14,182 189 10 7.09 L-index ext. citations avg, IF ext. papers

#	Paper	IF	Citations
178	Natural organic matter stabilizes carbon nanotubes in the aqueous phase. <i>Environmental Science</i> & amp; Technology, <b>2007</b> , 41, 179-84	10.3	716
177	Persulfate-Based Advanced Oxidation: Critical Assessment of Opportunities and Roadblocks. <i>Environmental Science &amp; Environmental Science &amp; Environment</i>	10.3	605
176	Natural organic matter (NOM) adsorption to multi-walled carbon nanotubes: effect of NOM characteristics and water quality parameters. <i>Environmental Science &amp; Environmental S</i>	27 <sup>0.3</sup>	385
175	Challenges and prospects of advanced oxidation water treatment processes using catalytic nanomaterials. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 642-650	28.7	375
174	Activation of Persulfates by Graphitized Nanodiamonds for Removal of Organic Compounds. <i>Environmental Science &amp; Environmental Science &amp; Environmental</i>	10.3	361
173	Oxidation of Organic Compounds in Water by Unactivated Peroxymonosulfate. <i>Environmental Science &amp; Compounds</i> , <b>2018</b> , 52, 5911-5919	10.3	306
172	The Technology Horizon for Photocatalytic Water Treatment: Sunrise or Sunset?. <i>Environmental Science &amp; Environmental Science </i>	10.3	277
171	Encapsulated triplet-triplet annihilation-based upconversion in the aqueous phase for sub-band-gap semiconductor photocatalysis. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 1747	8 <sup>-16</sup> 14	247
170	The role of nanotechnology in tackling global water challenges. <i>Nature Sustainability</i> , <b>2018</b> , 1, 166-175	22.1	241
169	Enhanced antibacterial activity through the controlled alignment of graphene oxide nanosheets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E9793-E980	1 <sup>11.5</sup>	215
168	Facet-dependent photoelectrochemical performance of TiO2 nanostructures: an experimental and computational study. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 1520-9	16.4	205
167	Porous Electrospun Fibers Embedding TiO for Adsorption and Photocatalytic Degradation of Water Pollutants. <i>Environmental Science &amp; Environmental Scie</i>	10.3	186
166	Mechanisms of Escherichia coli inactivation by several disinfectants. <i>Water Research</i> , <b>2010</b> , 44, 3410-8	12.5	177
165	Activation of Peroxymonosulfate by Surface-Loaded Noble Metal Nanoparticles for Oxidative Degradation of Organic Compounds. <i>Environmental Science &amp; Degradation of Organic Compounds</i> . <i>Environmental Science &amp; Degradation of Organic Compounds</i> . <i>Environmental Science &amp; Degradation of Organic Compounds</i> .	10.3	169
164	High Efficiency Low-Power Upconverting Soft Materials. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 2250-2252	9.6	167
163	Hydrophilic modification of polypropylene microfiltration membranes by ozone-induced graft polymerization. <i>Journal of Membrane Science</i> , <b>2000</b> , 169, 269-276	9.6	159
162	Analysis of CaSO4 scale formation mechanism in various nanofiltration modules. <i>Journal of Membrane Science</i> , <b>1999</b> , 163, 63-74	9.6	153

# (2011-2013)

161	Comparative analysis of fouling characteristics of ceramic and polymeric microfiltration membranes using filtration models. <i>Journal of Membrane Science</i> , <b>2013</b> , 432, 97-105	9.6	137
160	Photochemical production of reactive oxygen species by C60 in the aqueous phase during UV irradiation. <i>Environmental Science &amp; Environmental Science </i>	10.3	135
159	A mechanistic study on boron rejection by sea water reverse osmosis membranes. <i>Journal of Membrane Science</i> , <b>2006</b> , 286, 269-278	9.6	134
158	LED revolution: fundamentals and prospects for UV disinfection applications. <i>Environmental Science: Water Research and Technology</i> , <b>2017</b> , 3, 188-202	4.2	132
157	Dual-Color Emissive Upconversion Nanocapsules for Differential Cancer Bioimaging In Vivo. <i>ACS Nano</i> , <b>2016</b> , 10, 1512-21	16.7	130
156	Surface-loaded metal nanoparticles for peroxymonosulfate activation: Efficiency and mechanism reconnaissance. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 241, 561-569	21.8	124
155	Reinventing Fenton Chemistry: Iron Oxychloride Nanosheet for pH-Insensitive H2O2 Activation. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 186-191	11	120
154	Reaction of water-stable C60 aggregates with ozone. <i>Environmental Science &amp; Environmental Science &amp; E</i>	10.3	115
153	Harnessing low energy photons (635 nm) for the production of H2O2 using upconversion nanohybrid photocatalysts. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 1063-1073	35.4	111
152	Photochemical and antimicrobial properties of novel C60 derivatives in aqueous systems. <i>Environmental Science &amp; Environmental Science &amp; Environmental</i>	10.3	110
151	Activation of Oxygen and Hydrogen Peroxide by Copper(II) Coupled with Hydroxylamine for Oxidation of Organic Contaminants. <i>Environmental Science &amp; Environmental Science &amp; En</i>	10.3	110
150	Photocatalytic hydrogen peroxide production by anthraquinone-augmented polymeric carbon nitride. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 229, 121-129	21.8	96
149	Spatially separating redox centers on 2D carbon nitride with cobalt single atom for photocatalytic HO production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 6376-6382	11.5	95
148	PolyDADMAC and dimethylamine as precursors of N-nitrosodimethylamine during ozonation: reaction kinetics and mechanisms. <i>Environmental Science &amp; Environmental Science &amp; Envi</i>	10.3	94
147	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. <i>Environmental Science &amp; Enhance &amp; Mater Security</i> . 2017, 51, 10274-10281	10.3	93
146	Removal of phenol and substituted phenols by newly developed emulsion liquid membrane process. <i>Water Research</i> , <b>2006</b> , 40, 1763-72	12.5	93
145	Dispersion of C(60) in natural water and removal by conventional drinking water treatment processes. <i>Water Research</i> , <b>2009</b> , 43, 2463-70	12.5	90
144	Photosensitized oxidation of emerging organic pollutants by tetrakis CII aminofullerene-derivatized silica under visible light irradiation. <i>Environmental Science &amp; Environmental Science &amp; Technology</i> 2011, 45, 10598-604	10.3	85

143	3D hydrogel scaffold doped with 2D graphene materials for biosensors and bioelectronics. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 89, 187-200	11.8	82
142	Mechanism of C60 photoreactivity in water: fate of triplet state and radical anion and production of reactive oxygen species. <i>Environmental Science &amp; Environmental Science &amp;</i>	10.3	82
141	Robust Co-catalytic Performance of Nanodiamonds Loaded on WO3 for the Decomposition of Volatile Organic Compounds under Visible Light. <i>ACS Catalysis</i> , <b>2016</b> , 6, 8350-8360	13.1	81
140	Converting visible light into UVC: microbial inactivation by Pr(3+)-activated upconversion materials. <i>Environmental Science &amp; Environmental &amp;</i>	10.3	80
139	Investigating synergism during sequential inactivation of Bacillus subtilis spores with several disinfectants. <i>Water Research</i> , <b>2006</b> , 40, 2911-20	12.5	76
138	Transformation of aggregated C60 in the aqueous phase by UV irradiation. <i>Environmental Science &amp; Eamp; Technology</i> , <b>2009</b> , 43, 4878-83	10.3	74
137	Triplet-triplet annihilation upconversion in CdS-decorated SiO2 nanocapsules for sub-bandgap photocatalysis. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2015</b> , 7, 318-25	9.5	69
136	Differential natural organic matter fouling of ceramic versus polymeric ultrafiltration membranes. <i>Water Research</i> , <b>2014</b> , 48, 43-51	12.5	68
135	Solar Photothermal Disinfection using Broadband-Light Absorbing Gold Nanoparticles and Carbon Black. <i>Environmental Science &amp; Environmental Science &amp; </i>	10.3	68
134	Cooperative Pollutant Adsorption and Persulfate-Driven Oxidation on Hierarchically Ordered Porous Carbon. <i>Environmental Science &amp; Environmental Scien</i>	10.3	66
133	Engineering light: advances in wavelength conversion materials for energy and environmental technologies. <i>Environmental Science &amp; Environmental &amp; Environment</i>	10.3	66
132	Inactivation and surface interactions of MS-2 bacteriophage in a TiO2 photoelectrocatalytic reactor. <i>Water Research</i> , <b>2011</b> , 45, 2104-10	12.5	66
131	Modeling boron rejection in pilot- and full-scale reverse osmosis desalination processes. <i>Journal of Membrane Science</i> , <b>2009</b> , 338, 119-127	9.6	66
130	C60 aminofullerene immobilized on silica as a visible-light-activated photocatalyst. <i>Environmental Science &amp; Environmental Sc</i>	10.3	64
129	Oxidizing capacity of periodate activated with iron-based bimetallic nanoparticles. <i>Environmental Science &amp; Environmental Sci</i>	10.3	62
128	Red-to-Blue/Cyan/Green Upconverting Microcapsules for Aqueous- and Dry-Phase Color Tuning and Magnetic Sorting. <i>ACS Photonics</i> , <b>2014</b> , 1, 382-388	6.3	62
127	Visible-light-induced activation of periodate that mimics dye-sensitization of TiO2: Simultaneous decolorization of dyes and production of oxidizing radicals. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 203, 475-484	21.8	62
126	Intrapore energy barriers govern ion transport and selectivity of desalination membranes. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	58

# (2016-2020)

125	Mechanism of Heterogeneous Fenton Reaction Kinetics Enhancement under Nanoscale Spatial Confinement. <i>Environmental Science &amp; Enhance Science &amp; Enhancement Science &amp; Enhancemen</i>	10.3	56	
124	Photocurrent Enhancement from Solid-State Triplet Triplet Annihilation Upconversion of Low-Intensity, Low-Energy Photons. <i>ACS Photonics</i> , <b>2016</b> , 3, 784-790	6.3	56	
123	Delineating Mechanisms of Upconversion Enhancement by Li+ Codoping in Y2SiO5:Pr3+. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 12772-12778	3.8	54	
122	Transport behavior of functionalized multi-wall carbon nanotubes in water-saturated quartz sand as a function of tube length. <i>Water Research</i> , <b>2012</b> , 46, 4521-31	12.5	54	
121	Chloride-enhanced oxidation of organic contaminants by Cu(II)-catalyzed Fenton-like reaction at neutral pH. <i>Journal of Hazardous Materials</i> , <b>2018</b> , 344, 1174-1180	12.8	53	
120	Delineating oxidative processes of aqueous C60 preparations: role of THF peroxide. <i>Environmental Science &amp; Environmental Scie</i>	10.3	53	
119	Removal of N-Nitrosamines and Their Precursors by Nanofiltration and Reverse Osmosis Membranes. <i>Journal of Environmental Engineering, ASCE</i> , <b>2009</b> , 135, 788-795	2	52	
118	High-Performance Capacitive Deionization via Manganese Oxide-Coated, Vertically Aligned Carbon Nanotubes. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 692-700	11	52	
117	Easily Recoverable, Micrometer-Sized TiO Hierarchical Spheres Decorated with Cyclodextrin for Enhanced Photocatalytic Degradation of Organic Micropollutants. <i>Environmental Science &amp; Enhanced Photocatalytic Degradation of Organic Micropollutants</i> . <i>Environmental Science &amp; Enhanced Photocatalytic Degradation of Organic Micropollutants</i> .	10.3	52	
116	N-nitrosodimethylamine (NDMA) formation potential of amine-based water treatment polymers: Effects of in situ chloramination, breakpoint chlorination, and pre-oxidation. <i>Journal of Hazardous Materials</i> , <b>2015</b> , 282, 133-40	12.8	51	
115	Effect of encapsulating agents on dispersion status and photochemical reactivity of C60 in the aqueous phase. <i>Environmental Science &amp; Environmental &amp;</i>	10.3	51	
114	Visible light sensitized inactivation of MS-2 bacteriophage by a cationic amine-functionalized C60 derivative. <i>Environmental Science &amp; Environmental </i>	10.3	49	
113	Electronic Tuning of Metal Nanoparticles for Highly Efficient Photocatalytic Hydrogen Peroxide Production. <i>ACS Catalysis</i> , <b>2019</b> , 9, 626-631	13.1	47	
112	Cobalt Single Atoms on Tetrapyridomacrocyclic Support for Efficient Peroxymonosulfate Activation. <i>Environmental Science &amp; Environmental Science &amp; Env</i>	10.3	47	
111	Beyond the Pipeline: Assessing the Efficiency Limits of Advanced Technologies for Solar Water Disinfection. <i>Environmental Science and Technology Letters</i> , <b>2016</b> , 3, 73-80	11	46	
110	Self-Healing Hydrogel Pore-Filled Water Filtration Membranes. <i>Environmental Science &amp; Environmental &amp;</i>	10.3	45	
109	Large Eddy Simulation of Flow and Tracer Transport in Multichamber Ozone Contactors. <i>Journal of Environmental Engineering, ASCE</i> , <b>2010</b> , 136, 22-31	2	45	
108	Plasmon-Enhanced Sub-Bandgap Photocatalysis via Triplet-Triplet Annihilation Upconversion for Volatile Organic Compound Degradation. <i>Environmental Science &amp; Description (Compound Degradation)</i> 11184-11	1 <del>9</del> 2.3	45	

107	Mechanisms of antibiotic removal by nanofiltration membranes: Model development and application. <i>Journal of Membrane Science</i> , <b>2012</b> , 389, 234-244	9.6	44
106	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	1.9	44
105	Adsorption, desorption, and steady-state removal of 17Eestradiol by nanofiltration membranes. <i>Journal of Membrane Science</i> , <b>2008</b> , 319, 38-43	9.6	44
104	1,4-Dioxane as an emerging water contaminant: State of the science and evaluation of research needs. <i>Science of the Total Environment</i> , <b>2019</b> , 690, 853-866	10.2	43
103	Removal of biological and non-biological viral surrogates by spiral-wound reverse osmosis membrane elements with intact and compromised integrity. <i>Water Research</i> , <b>2004</b> , 38, 3821-32	12.5	43
102	Role of disinfectant concentration and pH in the inactivation kinetics of Cryptosporidium parvum oocysts with ozone and monochloramine. <i>Environmental Science &amp; Environmental Science &amp; Environmental</i>	10.3	43
101	Water Disinfection in Rural Areas Demands Unconventional Solar Technologies. <i>Accounts of Chemical Research</i> , <b>2019</b> , 52, 1187-1195	24.3	42
100	Full-scale simulation of seawater reverse osmosis desalination processes for boron removal: Effect of membrane fouling. <i>Water Research</i> , <b>2012</b> , 46, 3796-804	12.5	41
99	Single-Atom Pt Catalyst for Effective CE Bond Activation via Hydrodefluorination. <i>ACS Catalysis</i> , <b>2018</b> , 8, 9353-9358	13.1	41
98	Investigating synergism during sequential inactivation of MS-2 phage and Bacillus subtilis spores with UV/H2O2 followed by free chlorine. <i>Water Research</i> , <b>2011</b> , 45, 1063-70	12.5	40
97	Escherichia coli inactivation by water-soluble, ozonated C60 derivative: kinetics and mechanisms. <i>Environmental Science &amp; Environmental Science &amp; Env</i>	10.3	40
96	Oxidation of dithiocarbamates to yield N-nitrosamines by water disinfection oxidants. <i>Water Research</i> , <b>2013</b> , 47, 725-36	12.5	39
95	Simple synthetic method toward solid supported c60 visible light-activated photocatalysts. <i>Environmental Science &amp; Environmental Science &amp; Environmen</i>	10.3	38
94	Triple-Emulsion Microcapsules for Highly Efficient Multispectral Upconversion in the Aqueous Phase. <i>ACS Photonics</i> , <b>2015</b> , 2, 633-638	6.3	37
93	Fluorinated TiOlas an ambient light-activated virucidal surface coating material for the control of human norovirus. <i>Journal of Photochemistry and Photobiology B: Biology</i> , <b>2014</b> , 140, 315-20	6.7	37
92	The Myth of Visible Light Photocatalysis Using Lanthanide Upconversion Materials. <i>Environmental Science &amp; Environmental Scien</i>	10.3	34
91	Modeling Cryptosporidium parvum oocyst inactivation and bromate formation in a full-scale ozone contactor. <i>Environmental Science &amp; Environmental Scie</i>	10.3	34
90	Interaction of Clwith water: first-principles modeling and environmental implications.  Environmental Science & amp; Technology, 2015, 49, 1529-36	10.3	33

# (2020-2004)

89	Simultaneous prediction of Cryptosporidium parvum oocyst inactivation and bromate formation during ozonation of synthetic waters. <i>Environmental Science &amp; Environmental Scien</i>	10.3	33
88	Electrified Membranes for Water Treatment Applications. ACS ES&T Engineering, 2021, 1, 725-752		33
87	Improving the Visible Light Photoactivity of Supported Fullerene Photocatalysts through the Use of [CI]Fullerene. <i>Environmental Science &amp; Environmental Science &amp; Environment</i>	10.3	32
86	Microbial removal and integrity monitoring of ro and NF Membranes. <i>Journal - American Water Works Association</i> , <b>2003</b> , 95, 105-119	0.5	32
85	Amorphous Pd-Loaded TiO Electrode for Direct Anodic Destruction of Perfluorooctanoic Acid. <i>Environmental Science &amp; Environmental Science &amp; Environmen</i>	10.3	32
84	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater he perspective. <i>Environmental Science: Nano</i> , <b>2020</b> , 7, 2178-2194	7.1	31
83	Toward Microcapsule-Embedded Self-Healing Membranes. <i>Environmental Science and Technology Letters</i> , <b>2016</b> , 3, 216-221	11	31
82	Stochastic cost estimation approach for full-scale reverse osmosis desalination plants. <i>Journal of Membrane Science</i> , <b>2010</b> , 364, 52-64	9.6	30
81	Optimum emulsion liquid membranes stabilized by non-Newtonian conversion in Taylor Couette flow. <i>Chemical Engineering Science</i> , <b>2004</b> , 59, 5725-5734	4.4	30
80	Differential photoactivity of aqueous [C60] and [C70] fullerene aggregates. <i>Environmental Science &amp; Environmental Science</i>	10.3	29
79	Modeling Cryptosporidium parvum oocyst inactivation and bromate in a flow-through ozone contactor treating natural water. <i>Water Research</i> , <b>2007</b> , 41, 467-75	12.5	29
78	Flexible and Micropatternable Triplet-Triplet Annihilation Upconversion Thin Films for Photonic Device Integration and Anticounterfeiting Applications. <i>ACS Applied Materials &amp; Device</i> , 2018, 10, 8985-8992	9.5	28
77	Upconversion under polychromatic excitation: Y2SiO5:Pr3+, Li+ converts violet, cyan, green, and yellow light into UVC. <i>Optical Materials</i> , <b>2013</b> , 35, 2347-2351	3.3	28
76	Cationic Fullerene Aggregates with Unprecedented Virus Photoinactivation Efficiencies in Water. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 290-294	11	27
75	Stability of water-stable C60 clusters to OH radical oxidation and hydrated electron reduction. <i>Environmental Science &amp; Environmental Science &amp; Envir</i>	10.3	27
74	Reaction kinetics and transformation of carbadox and structurally related compounds with aqueous chlorine. <i>Environmental Science &amp; Environmental Scie</i>	10.3	27
73	Environmental Materials beyond and below the Nanoscale: Single-Atom Catalysts. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 157-172		27
72	Hierarchical BiOCO wrapped with modified graphene oxide for adsorption-enhanced photocatalytic inactivation of antibiotic resistant bacteria and resistance genes. <i>Water Research</i> ,	12.5	26

71	Controlled TiO Growth on Reverse Osmosis and Nanofiltration Membranes by Atomic Layer Deposition: Mechanisms and Potential Applications. <i>Environmental Science &amp; Environmental Science &amp; Environmenta</i>	10.3	26
70	Visible-to-UVC upconversion efficiency and mechanisms of Lu7O6F9:Pr3+ and Y2SiO5:Pr3+ ceramics. <i>Journal of Luminescence</i> , <b>2015</b> , 160, 202-209	3.8	25
69	Titanium Dioxide-Layered Double Hydroxide Composite Material for Adsorption-Photocatalysis of Water Pollutants. <i>Langmuir</i> , <b>2019</b> , 35, 8699-8708	4	24
68	[C70] fullerene-sensitized triplet-triplet annihilation upconversion. <i>Chemical Communications</i> , <b>2013</b> , 49, 10829-31	5.8	24
67	Toward microvascular network-embedded self-healing membranes. <i>Journal of Membrane Science</i> , <b>2017</b> , 531, 94-102	9.6	23
66	Coupling Light Emitting Diodes with Photocatalyst-Coated Optical Fibers Improves Quantum Yield of Pollutant Oxidation. <i>Environmental Science &amp; Enphysiology</i> , <b>2017</b> , 51, 13319-13326	10.3	23
65	Modeling aspects of flow and solute transport simulations in water disinfection tanks. <i>Applied Mathematical Modelling</i> , <b>2013</b> , 37, 8039-8050	4.5	23
64	Membrane-Confined Iron Oxychloride Nanocatalysts for Highly Efficient Heterogeneous Fenton Water Treatment. <i>Environmental Science &amp; Environmental Sci</i>	10.3	23
63	Enhanced Triplet Triplet Annihilation Upconversion in Dual-Sensitizer Systems: Translating Broadband Light Absorption to Practical Solid-State Materials. <i>ACS Photonics</i> , <b>2017</b> , 4, 127-137	6.3	22
62	Using 3D LIF to investigate and improve performance of a multichamber ozone contactor. <i>Journal - American Water Works Association</i> , <b>2010</b> , 102, 61-70	0.5	22
61	Escherichia coli Inactivation by UVC-Irradiated C60: kinetics and mechanisms. <i>Environmental Science &amp; Environmental &amp;</i>	10.3	22
60	Edible Dye-Enhanced Solar Disinfection with Safety Indication. <i>Environmental Science &amp; Enp;</i> Technology, <b>2018</b> , 52, 13361-13369	10.3	22
59	Triplet-Triplet Annihilation Upconversion in Broadly Absorbing Layered Film Systems for Sub-Bandgap Photocatalysis. <i>ACS Applied Materials &amp; Description of Sub-Bandgap Photocatalysis</i> . <i>ACS Applied Materials &amp; Description of Sub-Bandgap Photocatalysis</i> . <i>ACS Applied Materials &amp; Description of Sub-Bandgap Photocatalysis</i> .	9.5	21
58	Enhanced hole-dominated photocatalytic activity of doughnut-like porous g-C3N4 driven by down-shifted valance band maximum. <i>Catalysis Today</i> , <b>2018</b> , 307, 147-153	5.3	20
57	Electron transfer mediation by aqueous Claggregates in HD/LUV advanced oxidation of indigo carmine. <i>Nanoscale</i> , <b>2014</b> , 6, 13579-85	7.7	20
56	Inactivation of Cryptosporidium Oocysts in a Pilot-Scale Ozone Bubble-Diffuser Contactor. I: Model Development. <i>Journal of Environmental Engineering, ASCE</i> , <b>2002</b> , 128, 514-521	2	19
55	Tertiary amines enhance reactions of organic contaminants with aqueous chlorine. <i>Water Research</i> , <b>2011</b> , 45, 6087-96	12.5	18
54	Plasmon-enabled degradation of organic micropollutants in water by visible-light illumination of Janus gold nanorods. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 15473-15481	11.5	17

#### (2009-2016)

53	Dual-Functionality Fullerene and Silver Nanoparticle Antimicrobial Composites via Block Copolymer Templates. <i>ACS Applied Materials &amp; Discourse (Materials &amp; Discourse)</i> 1, 100 (1997) 1	9.5	17
52	Nanoparticle Enhanced Interfacial Solar Photothermal Water Disinfection Demonstrated in 3-D Printed Flow-Through Reactors. <i>Environmental Science &amp; Environmental Science &amp; En</i>	10.3	14
51	Temperature-boosted photocatalytic H production and charge transfer kinetics on TiO under UV and visible light. <i>Photochemical and Photobiological Sciences</i> , <b>2016</b> , 15, 1247-1253	4.2	14
50	Photochemical and photophysical properties of sequentially functionalized fullerenes in the aqueous phase. <i>Environmental Science &amp; Environmental &amp; Environmen</i>	10.3	14
49	UV reactor flow visualization and mixing quantification using three-dimensional laser-induced fluorescence. <i>Water Research</i> , <b>2011</b> , 45, 3855-62	12.5	14
48	Environmental Applications of Engineered Materials with Nanoconfinement. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 706-724		14
47	Neighboring Pd single atoms surpass isolated single atoms for selective hydrodehalogenation catalysis. <i>Nature Communications</i> , <b>2021</b> , 12, 5179	17.4	14
46	Different roles of Fe atoms and nanoparticles on g-C3N4 in regulating the reductive activation of ozone under visible light. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 296, 120362	21.8	14
45	Response to Comment on "Activation of Persulfate by Graphitized Nanodiamonds for Removal of Organic Compounds". <i>Environmental Science &amp; Environmental Science &amp; Environmental</i>	10.3	13
44	Enhanced Pollutant Adsorption and Regeneration of Layered Double Hydroxide-Based Photoregenerable Adsorbent. <i>Environmental Science &amp; Environmental Sc</i>	10.3	13
43	Functionalized fullerenes in water: a closer look. Environmental Science & Env	1765.5	12
42	Asymmetric hydrogel-composite membranes with improved water permeability and self-healing property. <i>Journal of Membrane Science</i> , <b>2019</b> , 578, 196-202	9.6	12
41	property. <i>Journal of Membrane Science</i> , <b>2019</b> , 578, 196-202  Restoring the virus removal capability of damaged bollow fiber membranes via chitosan-based in	9.6 9.6	12
	Restoring the virus removal capability of damaged hollow fiber membranes via chitosan-based in situ healing. <i>Journal of Membrane Science</i> , <b>2016</b> , 497, 387-393  Toward in Situ Healing of Compromised Polymeric Membranes. <i>Environmental Science and</i>		
41	Restoring the virus removal capability of damaged hollow fiber membranes via chitosan-based in situ healing. <i>Journal of Membrane Science</i> , <b>2016</b> , 497, 387-393  Toward in Situ Healing of Compromised Polymeric Membranes. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 113-116	9.6	11
41 40	Restoring the virus removal capability of damaged hollow fiber membranes via chitosan-based in situ healing. <i>Journal of Membrane Science</i> , <b>2016</b> , 497, 387-393  Toward in Situ Healing of Compromised Polymeric Membranes. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 113-116  Bench-scale evaluation of water disinfection by visible-to-UVC upconversion under high-intensity irradiation. <i>Journal of Photochemistry and Photobiology B: Biology</i> , <b>2015</b> , 153, 405-11  Inactivation of Cryptosporidium Oocysts in a Pilot-Scale Ozone Bubble-Diffuser Contactor. II: Model	9.6	11
40 39	Restoring the virus removal capability of damaged hollow fiber membranes via chitosan-based in situ healing. <i>Journal of Membrane Science</i> , <b>2016</b> , 497, 387-393  Toward in Situ Healing of Compromised Polymeric Membranes. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 113-116  Bench-scale evaluation of water disinfection by visible-to-UVC upconversion under high-intensity irradiation. <i>Journal of Photochemistry and Photobiology B: Biology</i> , <b>2015</b> , 153, 405-11  Inactivation of Cryptosporidium Oocysts in a Pilot-Scale Ozone Bubble-Diffuser Contactor. II: Model Validation and Application. <i>Journal of Environmental Engineering, ASCE</i> , <b>2002</b> , 128, 522-532  Synthesis and characterization of visible-to-UVC upconversion antimicrobial ceramics.	9.6 11 6.7	11 11 11

35	Versatile Yolk-Shell Encapsulation: Catalytic, Photothermal, and Sensing Demonstration. <i>Small</i> , <b>2020</b> , 16, e2002311	11	10
34	Cathodic Hydrogen Peroxide Electrosynthesis Using Anthraquinone Modified Carbon Nitride on Gas Diffusion Electrode. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 7972-7979	6.1	10
33	Farm-to-Tap Water Treatment: Naturally-Sourced Photosensitizers for Enhanced Solar Disinfection of Drinking Water. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 86-99		10
32	Site-Selective Loading of Single-Atom Pt on TiO2 for Photocatalytic Oxidation and Reductive Hydrodefluorination. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 512-522		10
31	Improved stability of self-healing hydrogel pore-filled membranes with ionic cross-links. <i>Journal of Membrane Science</i> , <b>2018</b> , 553, 1-9	9.6	9
30	Cleaner production option in a food (Kimchi) industry. <i>Journal of Cleaner Production</i> , <b>2001</b> , 9, 35-41	10.3	9
29	Evaluation of biologic and non-biologic methods for assessing virus removal by and integrity of high pressure membrane systems. <i>Water Science and Technology: Water Supply</i> , <b>2003</b> , 3, 81-92	1.4	9
28	In Situ Healing of Compromised Membranes via Polyethylenimine-Functionalized Silica Microparticles. <i>Environmental Science &amp; Environmental Science &amp; E</i>	10.3	8
27	Ozone-contactor flow visualization and quantification using three-dimensional laser-induced fluorescence. <i>Journal - American Water Works Association</i> , <b>2010</b> , 102, 90-99	0.5	8
26	Visualizing and quantifying dose distribution in a UV reactor using three-dimensional laser-induced fluorescence. <i>Environmental Science &amp; Environmental Science &amp; Environment</i>	10.3	7
25	Simultaneous simulation of pathogen inactivation and bromate formation in full-scale ozone contactors by computer software. <i>Journal - American Water Works Association</i> , <b>2007</b> , 99, 77-91	0.5	7
24	A Multi-Channel Stopped-Flow Reactor for Measuring Ozone Decay Rate: Instrument Development and Application. <i>Ozone: Science and Engineering</i> , <b>2007</b> , 29, 121-129	2.4	7
23	Effect of Elevated Temperature on Ceramic Ultrafiltration of Colloidal Suspensions. <i>Journal of Environmental Engineering, ASCE</i> , <b>2015</b> , 141, 04014096	2	5
22	Plant conversion experience: ozone BAC process installation and disinfectant residual control. Journal - American Water Works Association, 2008, 100, 117-128	0.5	5
21	Effect of membrane support material on permeability in the microfiltration of brining wastewater. <i>Desalination</i> , <b>2001</b> , 140, 55-65	10.3	5
20	Conflicting Roles of Coordination Number on Catalytic Performance of Single-Atom Pt Catalysts. <i>ACS Catalysis</i> , <b>2021</b> , 11, 5586-5592	13.1	5
19	Occurrence of unknown reactive species in UV/HO system leading to false interpretation of hydroxyl radical probe reactions. <i>Water Research</i> , <b>2021</b> , 201, 117338	12.5	5
18	Porous Silicon@Photoactivity in Water: Insights into Environmental Fate. <i>Environmental Science &amp; Environmental Science &amp; Environmental Science</i>	10.3	4

#### LIST OF PUBLICATIONS

17	Engineered Nanoconfinement Accelerating Spontaneous Manganese-Catalyzed Degradation of Organic Contaminants. <i>Environmental Science &amp; Enphasia (Contaminants)</i> 2021,	10.3	4
16	Hand-ground fullerene-nanodiamond composite for photosensitized water treatment and photodynamic cancer therapy. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 587, 101-109	9.3	4
15	Modular Hydrogen Peroxide Electrosynthesis Cell with Anthraquinone-Modified Polyaniline Electrocatalyst. <i>ACS ES&amp;T Engineering</i> , <b>2021</b> , 1, 446-455		4
14	Yale School of Public Health Symposium: An overview of the challenges and opportunities associated with per- and polyfluoroalkyl substances (PFAS). <i>Science of the Total Environment</i> , <b>2021</b> , 778, 146192	10.2	4
13	Opportunities and Challenges for Industrial Water Treatment and Reuse. ACS ES&T Engineering,		3
12	Concentration-Based Decomposition of the Flow around a Confined Cylinder in a UV Disinfection Reactor. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2015</b> , 141, 04015050	2.4	2
11	Selective Fluoride Transport in Subnanometer TiO Pores. ACS Nano, 2021, 15, 16828-16838	16.7	2
10	Microstructural origin of selective water oxidation to hydrogen peroxide at low overpotentials: a study on Mn-alloyed TiO2. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 18498-18505	13	2
9	Effects of Coagulation on the Ceramic Membrane Fouling during Surface Water Treatment. <i>Journal of Environmental Engineering, ASCE</i> , <b>2015</b> , 141, 04014087	2	1
8	Elucidating the Role of Single-Atom Pd for Electrocatalytic Hydrodechlorination. <i>Environmental Science &amp; Environmental Scienc</i>	10.3	O
7	Utilizing the Broad Electromagnetic Spectrum and Unique Nanoscale Properties for Chemical-Free Water Treatment. <i>Current Opinion in Chemical Engineering</i> , <b>2021</b> , 33, 100709-100709	5.4	O
6	Basic Principles of Simulating Boron Removal in Reverse Osmosis Processes <b>2015</b> , 285-296		
5	Accelerated oxidation of microcystin-LR by Fe(II)-tetrapolyphosphate/oxygen in the presence of magnesium and calcium ions. <i>Water Research</i> , <b>2020</b> , 184, 116172	12.5	
4	Chemical and Photochemical Reactivity of Fullerenes in the Aqueous Phase159-195		
3	Light Sensitized Disinfection with Fullerene. <i>Advances in Environmental Engineering and Green Technologies Book Series</i> ,137-163	0.4	
2	Municipal Water Supply: Ozonation362		
1	Measuring temperature heterogeneities during solar-photothermal heating using quantum dot nanothermometry. <i>Analyst, The</i> , <b>2021</b> , 146, 2048-2056	5	