# Jae-Hong Kim

List of Publications by Year
in descending order



| 186 | 17,495 | 13865 67 | 15266 126 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 189 | 189 | 189 | 14704 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Persulfate-Based Advanced Oxidation: Critical Assessment of Opportunities and Roadblocks. Environmental Science & Technology, 2020, 54, 3064-3081. | 10.0 | 1,779 |
| 2 | Natural Organic Matter Stabilizes Carbon Nanotubes in the Aqueous Phase. Environmental Science & Technology, 2007, 41, 179-184. | 10.0 | 756 |
| 3 | Challenges and prospects of advanced oxidation water treatment processes using catalytic nanomaterials. Nature Nanotechnology, 2018, 13, 642-650. | 31.5 | 745 |
| 4 | Oxidation of Organic Compounds in Water by Unactivated Peroxymonosulfate. Environmental Science & Technology, 2018, 52, 5911-5919. | 10.0 | 576 |
| 5 | Activation of Persulfates by Graphitized Nanodiamonds for Removal of Organic Compounds. Environmental Science & Technology, 2016, 50, 10134-10142. | 10.0 | 546 |
| 6 | The Technology Horizon for Photocatalytic Water Treatment: Sunrise or Sunset?. Environmental Science & Technology, 2019, 53, 2937-2947. | 10.0 | 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. | 10.0 | 428 |
| 8 | The role of nanotechnology in tackling global water challenges. Nature Sustainability, 2018, 1, 166-175. | 23.7 | 377 |
| 9 | Porous Electrospun Fibers Embedding TiO<sub>2</sub> for Adsorption and Photocatalytic Degradation of Water Pollutants. Environmental Science & Technology, 2018, 52, 4285-4293. | 10.0 | 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. | 7.1 | 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. | 13.7 | 267 |
| 12 | Activation of Peroxymonosulfate by Surface-Loaded Noble Metal Nanoparticles for Oxidative Degradation of Organic Compounds. Environmental Science & Technology, 2016, 50, 10187-10197. | 10.0 | 262 |
| 13 | Surface-loaded metal nanoparticles for peroxymonosulfate activation: Efficiency and mechanism reconnaissance. Applied Catalysis B: Environmental, 2019, 241, 561-569. | 20.2 | 260 |
| 14 | Spatially separating redox centers on 2D carbon nitride with cobalt single atom for photocatalytic H <sub>2</sub> O <sub>2</sub> production. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6376-6382. | 7.1 | 245 |
| 15 | Facet-Dependent Photoelectrochemical Performance of TiO<sub>2</sub> Nanostructures: An Experimental and Computational Study. Journal of the American Chemical Society, 2015, 137, 1520-1529. | 13.7 | 242 |
| 16 | Mechanisms of Escherichia coli inactivation by several disinfectants. Water Research, 2010, 44, 3410-3418. | 11.3 | 241 |
| 17 | LED revolution: fundamentals and prospects for UV disinfection applications. Environmental Science: Water Research and Technology, 2017, 3, 188-202. | 2.4 | 202 |
| 18 | Reinventing Fenton Chemistry: Iron Oxychloride Nanosheet for pH-Insensitive H<sub>2</sub>O<sub>2</sub> Activation. Environmental Science and Technology Letters, 2018, 5, 186-191. | 8.7 | 202 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Mechanism of Heterogeneous Fenton Reaction Kinetics Enhancement under Nanoscale Spatial Confinement. Environmental Science & Technology, 2020, 54, 10868-10875. | 10.0 | 188 |
| 20 | Cobalt Single Atoms on Tetrapyridomacrocyclic Support for Efficient Peroxymonosulfate Activation. Environmental Science & Technology, 2021, 55, 1242-1250. | 10.0 | 185 |
| 21 | High Efficiency Low-Power Upconverting Soft Materials. Chemistry of Materials, 2012, 24, 2250-2252. | 6.7 | 184 |
| 22 | Comparative analysis of fouling characteristics of ceramic and polymeric microfiltration membranes using filtration models. Journal of Membrane Science, 2013, 432, 97-105. | 8.2 | 181 |
| 23 | Hydrophilic modification of polypropylene microfiltration membranes by ozone-induced graft polymerization. Journal of Membrane Science, 2000, 169, 269-276. | 8.2 | 175 |
| 24 | Photocatalytic hydrogen peroxide production by anthraquinone-augmented polymeric carbon nitride. Applied Catalysis B: Environmental, 2018, 229, 121-129. | 20.2 | 171 |
| 25 | Analysis of CaSO4 scale formation mechanism in various nanofiltration modules. Journal of Membrane Science, 1999, 163, 63-74. | 8.2 | 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. | 10.0 | 166 |
| 27 | Intrapore energy barriers govern ion transport and selectivity of desalination membranes. Science Advances, 2020, 6, . | 10.3 | 161 |
| 28 | Harnessing low energy photons (635 nm) for the production of H<sub>2</sub>O<sub>2</sub> using upconversion nanohybrid photocatalysts. Energy and Environmental Science, 2016, 9, 1063-1073. | 30.8 | 160 |
| 29 | Dual-Color Emissive Upconversion Nanocapsules for Differential Cancer Bioimaging In Vivo. ACS Nano, 2016, 10, 1512-1521. | 14.6 | 157 |
| 30 | A mechanistic study on boron rejection by sea water reverse osmosis membranes. Journal of Membrane Science, 2006, 286, 269-278. | 8.2 | 156 |
| 31 | Photochemical Production of Reactive Oxygen Species by C60in the Aqueous Phase During UV Irradiation. Environmental Science & Technology, 2007, 41, 2529-2535. | 10.0 | 148 |
| 32 | Electrified Membranes for Water Treatment Applications. ACS ES&T Engineering, 2021, 1, 725-752. | 7.6 | 139 |
| 33 | Membrane-Confined Iron Oxychloride Nanocatalysts for Highly Efficient Heterogeneous Fenton Water Treatment. Environmental Science & Technology, 2021, 55, 9266-9275. | 10.0 | 135 |
| 34 | Oxidizing Capacity of Periodate Activated with Iron-Based Bimetallic Nanoparticles. Environmental Science & Technology, 2014, 48, 8086-8093. | 10.0 | 133 |
| 35 | Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. Environmental Science & Technology, 2017, 51, 10274-10281. | 10.0 | 129 |
| 36 | Photochemical and Antimicrobial Properties of Novel C<sub>60</sub> Derivatives in Aqueous Systems. Environmental Science & Technology, 2009, 43, 6604-6610. | 10.0 | 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. | 10.0 | 127 |
| 38 | Reaction of Water-Stable C<sub>60</sub> Aggregates with Ozone. Environmental Science & Technology, 2007, 41, 7497-7502. | 10.0 | 123 |
| 39 | PolyDADMAC and Dimethylamine as Precursors of N-Nitrosodimethylamine during Ozonation: Reaction Kinetics and Mechanisms. Environmental Science & Technology, 2011, 45, 4353-4359. | 10.0 | 116 |
| 40 | 3D hydrogel scaffold doped with 2D graphene materials for biosensors and bioelectronics. Biosensors and Bioelectronics, 2017, 89, 187-200. | 10.1 | 112 |
| 41 | Photosensitized Oxidation of Emerging Organic Pollutants by Tetrakis C<sub>60</sub> Aminofullerene-Derivatized Silica under Visible Light Irradiation. Environmental Science & Technology, 2011, 45, 10598-10604. | 10.0 | 107 |
| 42 | Converting Visible Light into UVC: Microbial Inactivation by Pr<sup>3+</sup>-Activated Upconversion Materials. Environmental Science & Technology, 2011, 45, 3680-3686. | 10.0 | 107 |
| 43 | Solar Photothermal Disinfection using Broadband-Light Absorbing Gold Nanoparticles and Carbon Black. Environmental Science & Technology, 2018, 52, 205-213. | 10.0 | 107 |
| 44 | Removal of phenol and substituted phenols by newly developed emulsion liquid membrane process. Water Research, 2006, 40, 1763-1772. | 11.3 | 103 |
| 45 | Robust Co-catalytic Performance of Nanodiamonds Loaded on WO<sub>3</sub> for the Decomposition of Volatile Organic Compounds under Visible Light. ACS Catalysis, 2016, 6, 8350-8360. | 11.2 | 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. | 20.2 | 97 |
| 47 | Angstrom-confined catalytic water purification within Co-TiOx laminar membrane nanochannels. Nature Communications, 2022, 13, . | 12.8 | 97 |
| 48 | Dispersion of C60 in natural water and removal by conventional drinking water treatment processes. Water Research, 2009, 43, 2463-2470. | 11.3 | 95 |
| 49 | Tripletâ€“Triplet Annihilation Upconversion in CdS-Decorated SiO<sub>2</sub> Nanocapsules for Sub-Bandgap Photocatalysis. ACS Applied Materials & Interfaces, 2015, 7, 318-325. | 8.0 | 88 |
| 50 | Environmental Materials beyond and below the Nanoscale: Single-Atom Catalysts. ACS ES&T Engineering, 2021, 1, 157-172. | 7.6 | 88 |
| 51 | Neighboring Pd single atoms surpass isolated single atoms for selective hydrodehalogenation catalysis. Nature Communications, 2021, 12, 5179. | 12.8 | 87 |
| 52 | Investigating synergism during sequential inactivation of Bacillus subtilis spores with several disinfectants. Water Research, 2006, 40, 2911-2920. | 11.3 | 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. | 8.0 | 85 |
| 54 | Differential natural organic matter fouling ofÂceramic versus polymeric ultrafiltration membranes. Water Research, 2014, 48, 43-51. | 11.3 | 84 |

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| 55 | Electronic Tuning of Metal Nanoparticles for Highly Efficient Photocatalytic Hydrogen Peroxide Production. ACS Catalysis, 2019, 9, 626-631. | 11.2 | 84 |
| 56 | Mechanism of C<sub>60</sub> Photoreactivity in Water: Fate of Triplet State and Radical Anion and Production of Reactive Oxygen Species. Environmental Science & Technology, 2008, 42, 3459-3464. | 10.0 | 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. | 12.4 | 81 |
| 58 | Environmental Applications of Engineered Materials with Nanoconfinement. ACS ES&T Engineering, 2021, 1, 706-724. | 7.6 | 80 |
| 59 | Transformation of Aggregated C<sub>60</sub> in the Aqueous Phase by UV Irradiation. Environmental Science & Technology, 2009, 43, 4878-4883. | 10.0 | 79 |
| 60 | Inactivation and surface interactions of MS-2 bacteriophage in a TiO2 photoelectrocatalytic reactor. Water Research, 2011, 45, 2104-2110. | 11.3 | 79 |
| 61 | Engineering Light: Advances in Wavelength Conversion Materials for Energy and Environmental Technologies. Environmental Science & Technology, 2012, 46, 12316-12328. | 10.0 | 79 |
| 62 | Water Disinfection in Rural Areas Demands Unconventional Solar Technologies. Accounts of Chemical Research, 2019, 52, 1187-1195. | 15.6 | 79 |
| 63 | Amorphous Pd-Loaded Ti<sub>4</sub>O<sub>7</sub> Electrode for Direct Anodic Destruction of Perfluorooctanoic Acid. Environmental Science & Technology, 2020, 54, 10954-10963. | 10.0 | 76 |
| 64 | Self-Healing Hydrogel Pore-Filled Water Filtration Membranes. Environmental Science & Technology, 2017, 51, 905-913. | 10.0 | 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. | 4.3 | 74 |
| 66 | C<sub>60</sub> Aminofullerene Immobilized on Silica as a Visible-Light-Activated Photocatalyst. Environmental Science & Technology, 2010, 44, 9488-9495. | 10.0 | 73 |
| 67 | Single-Atom Cobalt Incorporated in a 2D Graphene Oxide Membrane for Catalytic Pollutant Degradation. Environmental Science & Technology, 2022, 56, 1341-1351. | 10.0 | 72 |
| 68 | Modeling boron rejection in pilot- and full-scale reverse osmosis desalination processes. Journal of Membrane Science, 2009, 338, 119-127. | 8.2 | 71 |
| 69 | Easily Recoverable, Micrometer-Sized TiO<sub>2</sub> Hierarchical Spheres Decorated with Cyclodextrin for Enhanced Photocatalytic Degradation of Organic Micropollutants. Environmental Science & Technology, 2018, 52, 12402-12411. | 10.0 | 71 |
| 70 | Single-Atom Pt Catalyst for Effective Câ€“F Bond Activation via Hydrodefluorination. ACS Catalysis, 2018, 8, 9353-9358. | 11.2 | 70 |
| 71 | High-Performance Capacitive Deionization via Manganese Oxide-Coated, Vertically Aligned Carbon Nanotubes. Environmental Science and Technology Letters, 2018, 5, 692-700. | 8.7 | 69 |
| 72 | Photocurrent Enhancement from Solid-State Tripletâ€“Triplet Annihilation Upconversion of Low-Intensity, Low-Energy Photons. ACS Photonics, 2016, 3, 784-790. | 6.6 | 68 |

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| 73 | Delineating Mechanisms of Upconversion Enhancement by Li<sup>+</sup> Codoping in Y<sub>2</sub>SiO<sub>5</sub>:Pr<sup>3+</sup>. Journal of Physical Chemistry C, 2012, 116, 12772-12778. | 3.1 | 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. | 6.6 | 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. | 12.4 | 66 |
| 76 | Adsorption, desorption, and steady-state removal of 17Î²-estradiol by nanofiltration membranes. Journal of Membrane Science, 2008, 319, 38-43. | 8.2 | 62 |
| 77 | Removal of N-Nitrosamines and Their Precursors by Nanofiltration and Reverse Osmosis Membranes. Journal of Environmental Engineering, ASCE, 2009, 135, 788-795. | 1.4 | 60 |
| 78 | Visible Light Sensitized Inactivation of MS-2 Bacteriophage by a Cationic Amine-Functionalized C<sub>60</sub> Derivative. Environmental Science & Technology, 2010, 44, 6685-6691. | 10.0 | 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. | 11.3 | 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. | 3.8 | 59 |
| 81 | Delineating Oxidative Processes of Aqueous C<sub>60</sub> Preparations: Role of THF Peroxide. Environmental Science & Technology, 2009, 43, 108-113. | 10.0 | 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. | 20.2 | 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. | 11.3 | 53 |
| 84 | Full-scale simulation of seawater reverse osmosis desalination processes for boron removal: Effect of membrane fouling. Water Research, 2012, 46, 3796-3804. | 11.3 | 53 |
| 85 | Plasmon-Enhanced Sub-Bandgap Photocatalysis via Tripletâ€“Triplet Annihilation Upconversion for Volatile Organic Compound Degradation. Environmental Science & Technology, 2016, 50, 11184-11192. | 10.0 | 53 |
| 86 | Large Eddy Simulation of Flow and Tracer Transport in Multichamber Ozone Contactors. Journal of Environmental Engineering, ASCE, 2010, 136, 22-31. | 1.4 | 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. | 8.7 | 52 |
| 88 | Effect of Encapsulating Agents on Dispersion Status and Photochemical Reactivity of C<sub>60</sub> in the Aqueous Phase. Environmental Science & Technology, 2008, 42, 1552-1557. | 10.0 | 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. | 11.3 | 50 |
| 90 | Engineered Nanoconfinement Accelerating Spontaneous Manganese-Catalyzed Degradation of Organic Contaminants. Environmental Science & Technology, 2021, 55, 16708-16715. | 10.0 | 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. | 11.3 | 49 |
| 92 | Mechanisms of antibiotic removal by nanofiltration membranes: Model development and application. Journal of Membrane Science, 2012, 389, 234-244. | 8.2 | 49 |
| 93 | Oxidation of dithiocarbamates to yield N-nitrosamines by water disinfection oxidants. Water Research, 2013, 47, 725-736. | 11.3 | 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. | 1.7 | 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. | 7.1 | 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. | 10.0 | 47 |
| 97 | Toward Microcapsule-Embedded Self-Healing Membranes. Environmental Science and Technology Letters, 2016, 3, 216-221. | 8.7 | 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. | 8.0 | 43 |
| 99 | Enhanced Pollutant Adsorption and Regeneration of Layered Double Hydroxide-Based Photoregenerable Adsorbent. Environmental Science & Technology, 2020, 54, 9106-9115. | 10.0 | 43 |
| 100 | Microbial removal and integrity monitoring of ro and NF Membranes. Journal - American Water Works Association, 2003, 95, 105-119. | 0.3 | 42 |
| 101 | The Myth of Visible Light Photocatalysis Using Lanthanide Upconversion Materials. Environmental Science & Technology, 2018, 52, 2973-2980. | 10.0 | 42 |
| 102 | Site-Selective Loading of Single-Atom Pt on TiO<sub>2</sub> for Photocatalytic Oxidation and Reductive Hydrodefluorination. ACS ES&T Engineering, 2021, 1, 512-522. | 7.6 | 42 |
| 103 | Escherichia coli Inactivation by Water-Soluble, Ozonated C<sub>60</sub> Derivative: Kinetics and Mechanisms. Environmental Science & Technology, 2009, 43, 7410-7415. | 10.0 | 41 |
| 104 | Simple Synthetic Method Toward Solid Supported C<sub>60</sub> Visible Light-Activated Photocatalysts. Environmental Science & Technology, 2014, 48, 2785-2791. | 10.0 | 41 |
| 105 | Upconversion under polychromatic excitation: Y2SiO5:Pr3+, Li+ converts violet, cyan, green, and yellow light into UVC. Optical Materials, 2013, 35, 2347-2351. | 3.6 | 40 |
| 106 | Triple-Emulsion Microcapsules for Highly Efficient Multispectral Upconversion in the Aqueous Phase. ACS Photonics, 2015, 2, 633-638. | 6.6 | 40 |
| 107 | Controlled TiO<sub>2</sub> Growth on Reverse Osmosis and Nanofiltration Membranes by Atomic Layer Deposition: Mechanisms and Potential Applications. Environmental Science & Technology, 2018, 52, 14311-14320. | 10.0 | 40 |
| 108 | Titanium Dioxideâ€“Layered Double Hydroxide Composite Material for Adsorptionâ€“Photocatalysis of Water Pollutants. Langmuir, 2019, 35, 8699-8708. | 3.5 | 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. | 10.0 | 39 |
| 110 | Improving the Visible Light Photoactivity of Supported Fullerene Photocatalysts through the Use of [C<sub>70</sub>] Fullerene. Environmental Science & Technology, 2015, 49, 6190-6197. | 10.0 | 39 |
| 111 | Coupling Light Emitting Diodes with Photocatalyst-Coated Optical Fibers Improves Quantum Yield of Pollutant Oxidation. Environmental Science & Technology, 2017, 51, 13319-13326. | 10.0 | 39 |
| 112 | Visible-to-UVC upconversion efficiency and mechanisms of Lu7O6F9:Pr3+ and Y2SiO5:Pr3+ ceramics. Journal of Luminescence, 2015, 160, 202-209. | 3.1 | 38 |
| 113 | Conflicting Roles of Coordination Number on Catalytic Performance of Single-Atom Pt Catalysts. ACS Catalysis, 2021, 11, 5586-5592. | 11.2 | 38 |
| 114 | Stochastic cost estimation approach for full-scale reverse osmosis desalination plants. Journal of Membrane Science, 2010, 364, 52-64. | 8.2 | 37 |
| 115 | Interaction of C<sub>60</sub> with Water: First-Principles Modeling and Environmental Implications. Environmental Science & Technology, 2015, 49, 1529-1536. | 10.0 | 37 |
| 116 | Toward microvascular network-embedded self-healing membranes. Journal of Membrane Science, 2017, 531, 94-102. | 8.2 | 37 |
| 117 | Simultaneous Prediction ofCryptosporidium parvumOocyst Inactivation and Bromate Formation during Ozonation of Synthetic Waters. Environmental Science & Technology, 2004, 38, 2232-2241. | 10.0 | 36 |
| 118 | Modeling Cryptosporidium parvum oocyst inactivation and bromate in a flow-through ozone contactor treating natural water. Water Research, 2007, 41, 467-475. | 11.3 | 36 |
| 119 | Differential Photoactivity of Aqueous [C<sub>60</sub>] and [C<sub>70</sub>] Fullerene Aggregates. Environmental Science & Technology, 2015, 49, 5990-5998. | 10.0 | 33 |
| 120 | Optimum emulsion liquid membranes stabilized by non-Newtonian conversion in Taylorâ€“Couette flow. Chemical Engineering Science, 2004, 59, 5725-5734. | 3.8 | 31 |
| 121 | Catalytic Membrane with Copper Single-Atom Catalysts for Effective Hydrogen Peroxide Activation and Pollutant Destruction. Environmental Science & Technology, 2022, 56, 8733-8745. | 10.0 | 31 |
| 122 | Stability of Water-Stable C<sub>60</sub>Clusters to OH Radical Oxidation and Hydrated Electron Reduction. Environmental Science & Technology, 2010, 44, 3786-3792. | 10.0 | 30 |
| 123 | [C70] Fullerene-sensitized tripletâ€“triplet annihilation upconversion. Chemical Communications, 2013, 49, 10829. | 4.1 | 30 |
| 124 | Cationic Fullerene Aggregates with Unprecedented Virus Photoinactivation Efficiencies in Water. Environmental Science and Technology Letters, 2014, 1, 290-294. | 8.7 | 30 |
| 125 | Cathodic Hydrogen Peroxide Electrosynthesis Using Anthraquinone Modified Carbon Nitride on Gas Diffusion Electrode. ACS Applied Energy Materials, 2019, 2, 7972-7979. | 5.1 | 30 |
| 126 | Technology assessment of solar disinfection for drinking water treatment. Nature Sustainability, 2022, 5, 801-808. | 23.7 | 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. | 10.0 | 29 |
| 128 | Tripletâ€“Triplet Annihilation Upconversion in Broadly Absorbing Layered Film Systems for Sub-Bandgap Photocatalysis. ACS Applied Materials & Interfaces, 2019, 11, 13304-13318. | 8.0 | 29 |
| 129 | Edible Dye-Enhanced Solar Disinfection with Safety Indication. Environmental Science & Technology, 2018, 52, 13361-13369. | 10.0 | 27 |
| 130 | Using 3D LIF to investigate and improve performance of a multichamber ozone contactor. Journal - American Water Works Association, 2010, 102, 61-70. | 0.3 | 26 |
| 131 | Modeling aspects of flow and solute transport simulations in water disinfection tanks. Applied Mathematical Modelling, 2013, 37, 8039-8050. | 4.2 | 25 |
| 132 | Electron transfer mediation by aqueous C<sub>60</sub>aggregates in H<sub>2</sub>O<sub>2</sub>/UV advanced oxidation of indigo carmine. Nanoscale, 2014, 6, 13579-13585. | 5.6 | 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. | 6.6 | 25 |
| 134 | Improved stability of self-healing hydrogel pore-filled membranes with ionic cross-links. Journal of Membrane Science, 2018, 553, 1-9. | 8.2 | 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. | 4.4 | 25 |
| 136 | Asymmetric hydrogel-composite membranes with improved water permeability and self-healing property. Journal of Membrane Science, 2019, 578, 196-202. | 8.2 | 25 |
| 137 | Dual-Functionality Fullerene and Silver Nanoparticle Antimicrobial Composites via Block Copolymer Templates. ACS Applied Materials & Interfaces, 2016, 8, 33583-33591. | 8.0 | 24 |
| 138 | Nanoparticle Enhanced Interfacial Solar Photothermal Water Disinfection Demonstrated in 3-D Printed Flow-Through Reactors. Environmental Science & Technology, 2019, 53, 7621-7631. | 10.0 | 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. | 1.4 | 23 |
| 140 | Escherichia coli Inactivation by UVC-Irradiated C<sub>60</sub>: Kinetics and Mechanisms. Environmental Science & Technology, 2011, 45, 9627-9633. | 10.0 | 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. | 2.9 | 23 |
| 142 | Tertiary amines enhance reactions of organic contaminants with aqueous chlorine. Water Research, 2011, 45, 6087-6096. | 11.3 | 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. | 8.0 | 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. | 8.2 | 20 |

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| 145 | Versatile Yolkâ€“Shell Encapsulation: Catalytic, Photothermal, and Sensing Demonstration. Small, 2020, 16, e2002311. | 10.0 | 19 |
| 146 | Modular Hydrogen Peroxide Electrosynthesis Cell with Anthraquinone-Modified Polyaniline Electrocatalyst. ACS ES&T Engineering, 2021, 1, 446-455. | 7.6 | 19 |
| 147 | Opportunities and Challenges for Industrial Water Treatment and Reuse. ACS ES&T Engineering, 2022, 2, 465-488. | 7.6 | 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. | 10.0 | 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. | 11.3 | 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. | 1.4 | 16 |
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