

# Xing Xie

## List of Publications by Year in descending order

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68  
papers

7,993  
citations

117453

34  
h-index

91712

69  
g-index

73  
all docs

73  
docs citations

73  
times ranked

11180  
citing authors

#	ARTICLE	IF	CITATIONS
1	Airborne pathogenic microorganisms and air cleaning technology development: A review. <i>Journal of Hazardous Materials</i> , 2022, 424, 127429.	6.5	29
2	Operando Investigation of Locally Enhanced Electric Field Treatment (LEEFT) Harnessing Lightning-Rod Effect for Rapid Bacteria Inactivation. <i>Nano Letters</i> , 2022, 22, 860-867.	4.5	16
3	Ternary Biocidal-Photocatalytic-Upconverting Nanocomposites for Enhanced Antibacterial Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 4741-4749.	3.2	11
4	Inactivation and Removal Technologies for Algal-Bloom Control: Advances and Challenges. <i>Current Pollution Reports</i> , 2021, 7, 392-406.	3.1	19
5	Self-Driven Pretreatment and Room-Temperature Storage of Water Samples for Virus Detection Using Enhanced Porous Superabsorbent Polymer Beads. <i>Environmental Science &amp; Technology</i> , 2021, 55, 14059-14068.	4.6	3
6	Making waves: Pathogen inactivation by electric field treatment: From liquid food to drinking water. <i>Water Research</i> , 2021, 207, 117817.	5.3	14
7	Microalgae Harvesting by Self-Driven 3D Microfiltration with Rationally Designed Porous Superabsorbent Polymer (PSAP) Beads. <i>Environmental Science &amp; Technology</i> , 2021, 55, 15446-15455.	4.6	5
8	Emerging investigator series: locally enhanced electric field treatment (LEEFT) with nanowire-modified electrodes for water disinfection in pipes. <i>Environmental Science: Nano</i> , 2020, 7, 397-403.	2.2	25
9	A multi-parameter in-situ water quality analyzer based on a portable document scanner and 3D printed self-sampling cells. <i>Analytica Chimica Acta</i> , 2020, 1101, 176-183.	2.6	3
10	Effects of Fe <sub>3</sub> O <sub>4</sub> nanoparticle fabrication and surface modification on <i>Chlorella</i> sp. harvesting efficiency. <i>Science of the Total Environment</i> , 2020, 704, 135286.	3.9	35
11	Self-Driven "Microfiltration"-Enabled by Porous Superabsorbent Polymer (PSAP) Beads for Biofluid Specimen Processing and Storage. , 2020, 2, 1545-1554.		16
12	In Vivo Polymerization ("Hard-Wiring") of Bioanodes Enables Rapid Start-Up and Order-of-Magnitude Higher Power Density in a Microbial Battery. <i>Environmental Science &amp; Technology</i> , 2020, 54, 14732-14739.	4.6	7
13	Smartphone-powered efficient water disinfection at the point of use. <i>Npj Clean Water</i> , 2020, 3, .	3.1	9
14	Locally Enhanced Electric Field Treatment (LEEFT) Promotes the Performance of Ozonation for Bacteria Inactivation by Disrupting the Cell Membrane. <i>Environmental Science &amp; Technology</i> , 2020, 54, 14017-14025.	4.6	41
15	Development of nanowire-modified electrodes applied in the locally enhanced electric field treatment (LEEFT) for water disinfection. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12262-12277.	5.2	22
16	Efficient microalgae inactivation and growth control by locally enhanced electric field treatment (LEEFT). <i>Environmental Science: Nano</i> , 2020, 7, 2021-2031.	2.2	8
17	Self-driven membrane filtration by core-shell polymer composites. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15942-15950.	5.2	13
18	Locally enhanced electric field treatment (LEEFT) for water disinfection. <i>Frontiers of Environmental Science and Engineering</i> , 2020, 14, 1.	3.3	29

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19	Microwave-induced release and degradation of airborne antibiotic resistance genes (ARGs) from <i>Escherichia coli</i> bioaerosol based on microwave absorbing material. <i>Journal of Hazardous Materials</i> , 2020, 394, 122535.	6.5	16
20	Inactivation of Bacteria by Peracetic Acid Combined with Ultraviolet Irradiation: Mechanism and Optimization. <i>Environmental Science &amp; Technology</i> , 2020, 54, 9652-9661.	4.6	60
21	Electric-field enhanced microalgae inactivation using a flow-through copper ionization cell. <i>Journal of Hazardous Materials</i> , 2020, 400, 123320.	6.5	8
22	Cellulose nanocrystal/silver (CNC/Ag) thin-film nanocomposite nanofiltration membranes with multifunctional properties. <i>Environmental Science: Nano</i> , 2020, 7, 803-816.	2.2	49
23	Microfluidics for Environmental Applications. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2020, , 267-290.	0.6	18
24	Charge-Free Mixing Entropy Battery Enabled by Low-Cost Electrode Materials. <i>ACS Omega</i> , 2019, 4, 11785-11790.	1.6	21
25	Rapid determination of the electroporation threshold for bacteria inactivation using a lab-on-a-chip platform. <i>Environment International</i> , 2019, 132, 105040.	4.8	36
26	Silver Nanowire-Modified Filter with Controllable Silver Ion Release for Point-of-Use Disinfection. <i>Environmental Science &amp; Technology</i> , 2019, 53, 7504-7512.	4.6	26
27	TriboPump: A Low-Cost, Hand-Powered Water Disinfection System. <i>Advanced Energy Materials</i> , 2019, 9, 1901320.	10.2	74
28	Rationally designed tubular coaxial-electrode copper ionization cells (CECICs) harnessing non-uniform electric field for efficient water disinfection. <i>Environment International</i> , 2019, 128, 30-36.	4.8	31
29	Low-voltage alternating current powered polydopamine-protected copper phosphide nanowire for electroporation-disinfection in water. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7347-7354.	5.2	33
30	Elevating the stability of nanowire electrodes by thin polydopamine coating for low-voltage electroporation-disinfection of pathogens in water. <i>Chemical Engineering Journal</i> , 2019, 369, 1005-1013.	6.6	38
31	Digital Loop-Mediated Isothermal Amplification on a Commercial Membrane. <i>ACS Sensors</i> , 2019, 4, 242-249.	4.0	86
32	Simultaneous determination of surface energy and roughness of dense membranes by a modified contact angle method. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 562, 370-376.	2.3	49
33	Impact of water quality parameters on bacteria inactivation by low-voltage electroporation: mechanism and control. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 872-881.	1.2	17
34	Cell Transport Prompts the Performance of Low-Voltage Electroporation for Cell Inactivation. <i>Scientific Reports</i> , 2018, 8, 15832.	1.6	29
35	Asymmetric Membrane for Digital Detection of Single Bacteria in Milliliters of Complex Water Samples. <i>ACS Nano</i> , 2018, 12, 10281-10290.	7.3	45
36	A Cu <sub>3</sub> P nanowire enabling high-efficiency, reliable, and energy-efficient low-voltage electroporation-inactivation of pathogens in water. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18813-18820.	5.2	59

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37	Smartphone-Based in-Gel Loop-Mediated Isothermal Amplification (gLAMP) System Enables Rapid Coliphage MS2 Quantification in Environmental Waters. <i>Environmental Science &amp; Technology</i> , 2018, 52, 6399-6407.	4.6	43
38	Propidium monoazide pretreatment on a 3D-printed microfluidic device for efficient PCR determination of "live" versus "dead"™ microbial cells. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 956-963.	1.2	11
39	Carbon-nanotube sponges enabling highly efficient and reliable cell inactivation by low-voltage electroporation. <i>Environmental Science: Nano</i> , 2017, 4, 2010-2017.	2.2	56
40	Use of an intermediate solid-state electrode to enable efficient hydrogen production from dilute organic matter. <i>Nano Energy</i> , 2017, 39, 499-505.	8.2	7
41	"Nanofiltration" Enabled by Super-Absorbent Polymer Beads for Concentrating Microorganisms in Water Samples. <i>Scientific Reports</i> , 2016, 6, 20516.	1.6	33
42	Nanowire-Modified Three-Dimensional Electrode Enabling Low-Voltage Electroporation for Water Disinfection. <i>Environmental Science &amp; Technology</i> , 2016, 50, 7641-7649.	4.6	95
43	Sunlight-Activated Propidium Monoazide Pretreatment for Differentiation of Viable and Dead Bacteria by Quantitative Real-Time Polymerase Chain Reaction. <i>Environmental Science and Technology Letters</i> , 2016, 3, 57-61.	3.9	15
44	Design and fabrication of bioelectrodes for microbial bioelectrochemical systems. <i>Energy and Environmental Science</i> , 2015, 8, 3418-3441.	15.6	223
45	Use of low cost and easily regenerated Prussian Blue cathodes for efficient electrical energy recovery in a microbial battery. <i>Energy and Environmental Science</i> , 2015, 8, 546-551.	15.6	63
46	Personal Thermal Management by Metallic Nanowire-Coated Textile. <i>Nano Letters</i> , 2015, 15, 365-371.	4.5	415
47	Enhancing the Nanomaterial Bio-Interface by Addition of Mesoscale Secondary Features: Crinkling of Carbon Nanotube Films To Create Subcellular Ridges. <i>ACS Nano</i> , 2014, 8, 11958-11965.	7.3	26
48	Performance of a mixing entropy battery alternately flushed with wastewater effluent and seawater for recovery of salinity-gradient energy. <i>Energy and Environmental Science</i> , 2014, 7, 2295-2300.	15.6	56
49	Static Electricity Powered Copper Oxide Nanowire Microbicidal Electroporation for Water Disinfection. <i>Nano Letters</i> , 2014, 14, 5603-5608.	4.5	118
50	Conducting Nanosponge Electroporation for Affordable and High-Efficiency Disinfection of Bacteria and Viruses in Water. <i>Nano Letters</i> , 2013, 13, 4288-4293.	4.5	160
51	Hybrid nanostructured materials for high-performance electrochemical capacitors. <i>Nano Energy</i> , 2013, 2, 213-234.	8.2	976
52	Magnetically ultrasensitive nanoscavengers for next-generation water purification systems. <i>Nature Communications</i> , 2013, 4, 1866.	5.8	74
53	Microbial battery for efficient energy recovery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15925-15930.	3.3	67
54	Carbon nanotube-coated macroporous sponge for microbial fuel cell electrodes. <i>Energy and Environmental Science</i> , 2012, 5, 5265-5270.	15.6	284

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55	Graphene sponges as high-performance low-cost anodes for microbial fuel cells. <i>Energy and Environmental Science</i> , 2012, 5, 6862.	15.6	264
56	Antimicrobial Nanomaterials for Water Disinfection. , 2012, , 465-494.		7
57	Nano-structured textiles as high-performance aqueous cathodes for microbial fuel cells. <i>Energy and Environmental Science</i> , 2011, 4, 1293.	15.6	72
58	Three-Dimensional Carbon Nanotube Textile Anode for High-Performance Microbial Fuel Cells. <i>Nano Letters</i> , 2011, 11, 291-296.	4.5	388
59	High-Performance Nanostructured Supercapacitors on a Sponge. <i>Nano Letters</i> , 2011, 11, 5165-5172.	4.5	670
60	Symmetrical MnO <sub>2</sub> Carbon Nanotube Textile Nanostructures for Wearable Pseudocapacitors with High Mass Loading. <i>ACS Nano</i> , 2011, 5, 8904-8913.	7.3	582
61	Paper supercapacitors by a solvent-free drawing method. <i>Energy and Environmental Science</i> , 2011, 4, 3368.	15.6	290
62	Solution-Processed Graphene/MnO <sub>2</sub> Nanostructured Textiles for High-Performance Electrochemical Capacitors. <i>Nano Letters</i> , 2011, 11, 2905-2911.	4.5	1,195
63	Silicon Carbon Nanotube Coaxial Sponge as Li-ion Anodes with High Areal Capacity. <i>Advanced Energy Materials</i> , 2011, 1, 523-527.	10.2	220
64	Lithium-ion Textile Batteries with Large Areal Mass Loading. <i>Advanced Energy Materials</i> , 2011, 1, 1012-1017.	10.2	230
65	Monitoring and evaluation of removal of pathogens at municipal wastewater treatment plants. <i>Water Science and Technology</i> , 2010, 61, 1589-1599.	1.2	57
66	Gramine-induced growth inhibition, oxidative damage and antioxidant responses in freshwater cyanobacterium <i>Microcystis aeruginosa</i> . <i>Aquatic Toxicology</i> , 2009, 91, 262-269.	1.9	177
67	Improvement of detection method of <i>Cryptosporidium</i> and <i>Giardia</i> in reclaimed water. <i>Frontiers of Environmental Science and Engineering in China</i> , 2008, 2, 380-384.	0.8	3
68	Responses of enzymatic antioxidants and non-enzymatic antioxidants in the cyanobacterium <i>Microcystis aeruginosa</i> to the allelochemical ethyl 2-methyl acetoacetate (EMA) isolated from reed ( <i>Phragmites communis</i> ). <i>Journal of Plant Physiology</i> , 2008, 165, 1264-1273.	1.6	111