Fuyi Cui

List of Publications by Year in descending order

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115 papers	5,920 citations	57631 44 h-index	76769 74 g-index
115 all docs	115 docs citations	115 times ranked	5964 citing authors

#	Article	IF	Citations
1	Identification and Regulation of Active Sites on Nanodiamonds: Establishing a Highly Efficient Catalytic System for Oxidation of Organic Contaminants. Advanced Functional Materials, 2018, 28, 1705295.	7.8	370
2	Heterogeneous activation of peroxymonosulfate by amorphous boron for degradation of bisphenol S. Journal of Hazardous Materials, 2017, 322, 532-539.	6.5	218
3	Development of CuO coated ceramic hollow fiber membrane for peroxymonosulfate activation: a highly efficient singlet oxygen-dominated oxidation process for bisphenol a degradation. Applied Catalysis B: Environmental, 2019, 256, 117783.	10.8	217
4	Highly Efficient Phosphate Scavenger Based on Well-Dispersed La(OH)₃ Nanorods in Polyacrylonitrile Nanofibers for Nutrient-Starvation Antibacteria. ACS Nano, 2015, 9, 9292-9302.	7.3	177
5	Calcinable Polymer Membrane with Revivability for Efficient Oilyâ€Water Remediation. Advanced Materials, 2018, 30, e1801870.	11.1	176
6	Magnetic nitrogen-doped nanocarbons for enhanced metal-free catalytic oxidation: Integrated experimental and theoretical investigations for mechanism and application. Chemical Engineering Journal, 2018, 354, 507-516.	6.6	162
7	Ultrahigh adsorption capacity of anionic dyes with sharp selectivity through the cationic charged hybrid nanofibrous membranes. Chemical Engineering Journal, 2017, 313, 957-966.	6.6	160
8	Robust phosphate capture over inorganic adsorbents derived from lanthanum metal organic frameworks. Chemical Engineering Journal, 2017, 326, 1086-1094.	6.6	154
9	Adsorption of Cu2+ and Zn2+ by extracellular polymeric substances (EPS) in different sludges: Effect of EPS fractional polarity on binding mechanism. Journal of Hazardous Materials, 2017, 321, 473-483.	6.5	152
10	Multifunctional CuO Nanowire Mesh for Highly Efficient Solar Evaporation and Water Purification. ACS Sustainable Chemistry and Engineering, 2019, 7, 5476-5485.	3.2	141
11	Breathable and asymmetrically superwettable Janus membrane with robust oil-fouling resistance for durable membrane distillation. Journal of Membrane Science, 2018, 563, 602-609.	4.1	137
12	Cobalt silicate hydroxide nanosheets in hierarchical hollow architecture with maximized cobalt active site for catalytic oxidation. Chemical Engineering Journal, 2019, 359, 79-87.	6.6	136
13	Dual-Bioinspired Design for Constructing Membranes with Superhydrophobicity for Direct Contact Membrane Distillation. Environmental Science & Technology, 2018, 52, 3027-3036.	4.6	130
14	Highly porous zirconium-crosslinked graphene oxide/alginate aerogel beads for enhanced phosphate removal. Chemical Engineering Journal, 2019, 359, 779-789.	6.6	121
15	A stable and easily prepared copper oxide catalyst for degradation of organic pollutants by peroxymonosulfate activation. Journal of Hazardous Materials, 2020, 387, 121995.	6.5	119
16	One pot synthesis of tunable Fe3O4â€“MnO2 coreâ€“shell nanoplates and their applications for water purification. Journal of Materials Chemistry, 2012, 22, 9052.	6.7	118
17	Molecular Dynamics Study of the Aggregation Process of Graphene Oxide in Water. Journal of Physical Chemistry C, 2015, 119, 26712-26718.	1.5	115
18	Magnetic Feâ€“Co crystal doped hierarchical porous carbon fibers for removal of organic pollutants. Journal of Materials Chemistry A, 2017, 5, 18071-18080.	5.2	111

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19	Polyamidoamine dendrimer grafted forward osmosis membrane with superior ammonia selectivity and robust antifouling capacity for domestic wastewater concentration. Water Research, 2019, 153, 1-10.	5.3	105
20	Structure-dependent catalysis of cuprous oxides in peroxymonosulfate activation via nonradical pathway with a high oxidation capacity. Journal of Hazardous Materials, 2020, 385, 121518.	6.5	101
21	Perylenetetracarboxylic acid nanosheets with internal electric fields and anisotropic charge migration for photocatalytic hydrogen evolution. Nature Communications, 2022, 13, 2067.	5.8	99
22	Bioinspired Nanosucker Array for Enhancing Bioelectricity Generation in Microbial Fuel Cells. Advanced Materials, 2016, 28, 270-275.	11.1	92
23	Enhanced adsorption of the cationic dyes in the spherical CuO/meso-silica nano composite and impact of solution chemistry. Journal of Colloid and Interface Science, 2017, 485, 192-200.	5.0	90
24	Copper substituted zinc ferrite with abundant oxygen vacancies for enhanced ciprofloxacin degradation via peroxymonosulfate activation. Journal of Hazardous Materials, 2020, 390, 121998.	6.5	90
25	Low-Tortuosity Water Microchannels Boosting Energy Utilization for High Water Flux Solar Distillation. Environmental Science & Technology, 2020, 54, 5150-5158.	4.6	89
26	Easily scaled-up photo-thermal membrane with structure-dependent auto-cleaning feature for high-efficient solar desalination. Journal of Membrane Science, 2019, 586, 222-230.	4.1	87
27	Origami system for efficient solar driven distillation in emergency water supply. Chemical Engineering Journal, 2019, 356, 869-876.	6.6	87
28	Wrinkle- and Edge-Adsorption of Aromatic Compounds on Graphene Oxide as Revealed by Atomic Force Microscopy, Molecular Dynamics Simulation, and Density Functional Theory. Environmental Science & Technology, 2018, 52, 7689-7697.	4.6	84
29	Efficient As(III) removal by magnetic CuO-Fe3O4 nanoparticles through photo-oxidation and adsorption under light irradiation. Journal of Colloid and Interface Science, 2017, 495, 168-177.	5.0	81
30	Effect of light intensity on the characteristics of algal-bacterial granular sludge and the role of N-acyl-homoserine lactone in the granulation. Science of the Total Environment, 2019, 659, 372-383.	3.9	78
31	Theoretical insight into the adsorption of aromatic compounds on graphene oxide. Environmental Science: Nano, 2018, 5, 2357-2367.	2.2	76
32	Remarkable phosphate removal and recovery from wastewater by magnetically recyclable La2O2CO3/Î³-Fe2O3 nanocomposites. Journal of Hazardous Materials, 2020, 397, 122597.	6.5	71
33	A sustainable strategy for effective regulation of aerobic granulation: Augmentation of the signaling molecule content by cultivating AHL-producing strains. Water Research, 2020, 169, 115193.	5.3	69
34	Calcium-Carboxyl Intrabridging during Interfacial Polymerization: A Novel Strategy to Improve Antifouling Performance of Thin Film Composite Membranes. Environmental Science & Technology, 2019, 53, 4371-4379.	4.6	64
35	New Insight into the Aggregation of Graphene Oxide Using Molecular Dynamics Simulations and Extended Derjaguinâ€“Landauâ€“Verweyâ€“Overbeek Theory. Environmental Science & Technology, 2017, 51, 9674-9682.	4.6	63
36	Adsorption-intensified degradation of organic pollutants over bifunctional Î±-Fe@carbon nanofibres. Environmental Science: Nano, 2017, 4, 302-306.	2.2	61

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37	A mechanically durable, sustained corrosion-resistant photothermal nanofiber membrane for highly efficient solar distillation. Journal of Materials Chemistry A, 2019, 7, 22296-22306.	5.2	60
38	Transformation and speciation of typical heavy metals in soil aquifer treatment system during long time recharging with secondary effluent: Depth distribution and combination. Chemosphere, 2016, 165, 100-109.	4.2	56
39	One-pot synthesis of Agâ€“Fe3O4 nanocomposites in the absence of additional reductant and its potent antibacterial properties. Journal of Materials Chemistry, 2012, 22, 13891.	6.7	53
40	Dual-biomimetic superwetting silica nanofibrous membrane for oily water purification. Journal of Membrane Science, 2019, 572, 73-81.	4.1	52
41	Selective adsorption of organic pigments on inorganically modified mesoporous biochar and its mechanism based on molecular structure. Journal of Colloid and Interface Science, 2020, 573, 21-30.	5.0	50
42	Enhanced aerobic granulation by applying the low-intensity direct current electric field via reactive iron anode. Water Research, 2019, 149, 159-168.	5.3	49
43	pH-Dependent adsorption of aromatic compounds on graphene oxide: An experimental, molecular dynamics simulation and density functional theory investigation. Journal of Hazardous Materials, 2020, 395, 122680.	6.5	48
44	Gravity driven ultrafast removal of organic contaminants across catalytic superwetting membranes. Journal of Materials Chemistry A, 2017, 5, 25266-25275.	5.2	45
45	Thermodynamic and dynamic dual regulation Bi₂O₂CO₃/Bi₅O₇I enabling high-flux photogenerated charge migration for enhanced visible-light-driven photocatalysis. Journal of Materials Chemistry A, 2020, 8, 10252-10259.	5.2	45
46	Exposure and health risk assessment of PM 2.5 -bound trace metals during winter in university campus in Northeast China. Science of the Total Environment, 2017, 576, 628-636.	3.9	41
47	Carbon nanofiber matrix with embedded LaCO₃OH synchronously captures phosphate and organic carbon to starve bacteria. Journal of Materials Chemistry A, 2016, 4, 12799-12806.	5.2	36
48	Recent Developments and Future Challenges of Hydrogels as Draw Solutes in Forward Osmosis Process. Water (Switzerland), 2020, 12, 692.	1.2	35
49	A novel flake-ball-like magnetic Fe3O4/Î³-MnO2 meso-porous nano-composite: Adsorption of fluorinion and effect of water chemistry. Chemosphere, 2018, 209, 173-181.	4.2	33
50	Role of TEMPO in Enhancing Permanganate Oxidation toward Organic Contaminants. Environmental Science & Technology, 2021, 55, 7681-7689.	4.6	29
51	Comparative evaluation of the mechanisms of toxicity of graphene oxide and graphene oxide quantum dots to blue-green algae Microcystis aeruginosa in the aquatic environment. Journal of Hazardous Materials, 2022, 425, 127898.	6.5	29
52	Efficient reductive and oxidative decomposition of haloacetic acids by the vacuum-ultraviolet/sulfite system. Water Research, 2022, 210, 117974.	5.3	29
53	Integrated process for membrane fouling mitigation and organic pollutants removal using copper oxide modified ceramic hollow fiber membrane with in-situ peroxymonosulfate activation. Chemical Engineering Journal, 2020, 396, 125289.	6.6	28
54	La₂O₃ nanoparticle/polyacrylonitrile nanofibers for bacterial inactivation based on phosphate control. RSC Advances, 2016, 6, 99353-99360.	1.7	27

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55	Significant acceleration of Fe2+/ peroxydisulfate oxidation towards sulfisoxazole by addition of MoS2. Environmental Research, 2020, 188, 109692.	3.7	27
56	Removal of aqueous organic contaminants using submerged ceramic hollow fiber membrane coupled with peroxymonosulfate oxidation: Comparison of CuO catalyst dispersed in the feed water and immobilized on the membrane. Journal of Membrane Science, 2021, 618, 118707.	4.1	27
57	Understanding the pH-dependent adsorption of ionizable compounds on graphene oxide using molecular dynamics simulations. Environmental Science: Nano, 2017, 4, 1935-1943.	2.2	26
58	A Light-Permeable Solar Evaporator with Three-Dimensional Photocatalytic Sites to Boost Volatile-Organic-Compound Rejection for Water Purification. Environmental Science & Technology, 2022, 56, 9797-9805.	4.6	25
59	Understanding the Roles of Solution Chemistries and Functionalization on the Aggregation of Graphene-Based Nanomaterials Using Molecular Dynamic Simulations. Journal of Physical Chemistry C, 2017, 121, 13888-13897.	1.5	24
60	Interfacial electronic effects of palladium nanocatalysts on the by-product ammonia selectivity during nitrite catalytic reduction. Environmental Science: Nano, 2018, 5, 338-349.	2.2	24
61	Simultaneous bioelectrochemical degradation of algae sludge and energy recovery in microbial fuel cells. RSC Advances, 2012, 2, 7228.	1.7	23
62	Degradation of 4-chlorophenol in a Fenton-like system using Auâ€“Fe₃O₄magnetic nanocomposites as the heterogeneous catalyst at near neutral conditions. RSC Advances, 2016, 6, 53080-53088.	1.7	23
63	Optimization of the Determination Method for Dissolved Cyanobacterial Toxin BMAA in Natural Water. Analytical Chemistry, 2017, 89, 10991-10998.	3.2	23
64	Three-dimensional porous photo-thermal fiber felt with salt-resistant property for high efficient solar distillation. Chinese Chemical Letters, 2021, 32, 1442-1446.	4.8	23
65	Î±-FeOOH nanowires loaded on carbon paper anodes improve the performance of microbial fuel cells. Chemosphere, 2021, 273, 129669.	4.2	23
66	Comparative study on bisphenols oxidation via TiO2 photocatalytic activation of peroxymonosulfate: Effectiveness, mechanism and pathways. Journal of Hazardous Materials, 2022, 424, 127434.	6.5	22
67	Synergy of feed-side aeration and super slippery interface in membrane distillation for enhanced water flux and scaling mitigation. Water Research, 2022, 215, 118246.	5.3	21
68	One-step nanotopography construction by polyaniline polymerization for a superhydrophobic nanofibrous membrane towards direct contact membrane distillation. Environmental Science: Nano, 2019, 6, 2553-2564.	2.2	20
69	One-step synthesis of noble metal/oxide nanocomposites with tunable size of noble metal particles and their size-dependent catalytic activity. RSC Advances, 2014, 4, 30624-30629.	1.7	19
70	Microstructured macroporous adsorbent composed of polypyrrole modified natural corncob-core sponge for Cr(<scp>vi</scp>) removal. RSC Advances, 2016, 6, 59292-59298.	1.7	19
71	Impact of recycling alum sludge on coagulation of low-turbidity source waters. Desalination and Water Treatment, 2016, 57, 6732-6739.	1.0	19
72	Investigation of Cleaning Strategies for an Antifouling Thin-Film Composite Forward Osmosis Membrane for Treatment of Polymer-Flooding Produced Water. Industrial & Engineering Chemistry Research, 2019, 58, 994-1003.	1.8	19

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73	Sedimentation of TiO₂nanoparticles in aqueous solutions: influence of pH, ionic strength, and adsorption of humic acid. Desalination and Water Treatment, 2016, 57, 18817-18824.	1.0	18
74	Application of ultra-sonication, acid precipitation and membrane filtration for co-recovery of protein and humic acid from sewage sludge. Frontiers of Environmental Science and Engineering, 2016, 10, 327-335.	3.3	17
75	Linear solvation energy relationship to predict the adsorption of aromatic contaminants on graphene oxide. Chemosphere, 2017, 185, 826-832.	4.2	16
76	Insight into the size effect of Pd nanoparticles on the catalytic reduction of nitrite in water over Pd/C catalysts. Environmental Science: Nano, 2020, 7, 2117-2129.	2.2	16
77	Combining physico-chemical analysis with a Daphnia magna bioassay to evaluate a recycling technology for drinking water treatment plant waste residuals. Ecotoxicology and Environmental Safety, 2015, 122, 368-376.	2.9	15
78	Impact factors on the production of Î²-methylamino-L-alanine (BMAA) by cyanobacteria. Chemosphere, 2020, 243, 125355.	4.2	15
79	Impact of chitosan and polyacrylamide on formation of carbonaceous and nitrogenous disinfection by-products. Chemosphere, 2017, 178, 26-33.	4.2	14
80	Photothermal Janus Anode with Photosynthesisâ€Shielding Effect for Activating Lowâ€Temperature Biological Wastewater Treatment. Advanced Functional Materials, 2020, 30, 1909432.	7.8	14
81	Activating the Basal Plane of 2H-MoS₂ by Doping Phosphor for Enhancement in the Photocatalytic Degradation of Organic Contaminants. ACS Applied Materials & Interfaces, 2021, 13, 38586-38594.	4.0	14
82	Interfacial catalytic oxidation for membrane fouling mitigation during algae-laden water filtration: Higher efficiency without algae integrity loss. Separation and Purification Technology, 2020, 251, 117366.	3.9	13
83	Effects of pH and electrolytes on the sheet-to-sheet aggregation mode of graphene oxide in aqueous solutions. Environmental Science: Nano, 2020, 7, 984-995.	2.2	13
84	Degradation of neurotoxin Î²-N-methylamino-L-alanine by UV254 activated persulfate: Kinetic model and reaction pathways. Chemical Engineering Journal, 2021, 404, 127041.	6.6	13
85	CuO@NiO Nanoparticles Derived from Metalâ€“Organic Framework Precursors for the Deoxygenation of Fatty Acids. ACS Sustainable Chemistry and Engineering, 2021, 9, 15612-15622.	3.2	13
86	Localized interfacial activation effect within interconnected porous photothermal matrix to promote solar-driven water evaporation. Journal of Materials Chemistry A, 2022, 10, 10548-10556.	5.2	13
87	Dissolved organic matter removal during coal slag additive soil aquifer treatment for secondary effluent recharging: Contribution of aerobic biodegradation. Journal of Environmental Management, 2015, 156, 158-166.	3.8	12
88	Selective and enhanced adsorption of the monosubstituted benzenes on the Fe-modified MCM-41: Contribution of the substituent groups. Chemosphere, 2019, 237, 124546.	4.2	12
89	Threeâ€component mixed matrix organic/inorganic hybrid membranes for pervaporation separation of ethanolâ€“water mixture. Journal of Applied Polymer Science, 2017, 134, .	1.3	11
90	Nitrogen doped hierarchically structured porous carbon fibers with an ultrahigh specific surface area for removal of organic dyes. RSC Advances, 2018, 8, 19116-19124.	1.7	10

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91	New insights into the organic fouling mechanism of an in situ Ca²⁺ modified thin film composite forward osmosis membrane. RSC Advances, 2019, 9, 38227-38234.	1.7	10
92	Formation of N-nitrosodimethylamine (NDMA) from tetracycline antibiotics during the disinfection of ammonium-containing water: The role of antibiotics dissociation and active chlorine species. Science of the Total Environment, 2021, 798, 149071.	3.9	10
93	Degradation mechanisms of cyanobacteria neurotoxin Î²-N-methylamino-l-alanine (BMAA) during UV254/H2O2 process: Kinetics and pathways. Chemosphere, 2022, 302, 134939.	4.2	10
94	Evaluation of drinking water treatment combined filter backwash water recycling technology based on comet and micronucleus assay. Journal of Environmental Sciences, 2016, 42, 61-70.	3.2	9
95	Plastic leachates lead to long-term toxicity in fungi and promote biodegradation of heterocyclic dye. Science of the Total Environment, 2022, 806, 150538.	3.9	9
96	Tailoring S-vacancy concentration changes the type of the defect and photocatalytic activity in ZFS. Journal of Hazardous Materials, 2022, 428, 128215.	6.5	9
97	Abatement of Organic Contaminants by Mn(VII)/TEMPOs: Effects of TEMPOs Structure, Organic Contaminant Speciation, and Active Oxidizing Species. Environmental Science & Technology, 2022, 56, 10361-10371.	4.6	9
98	Air bubbling for membrane fouling control in a submerged direct forward osmosis system for municipal wastewater treatment. Environmental Science: Water Research and Technology, 2019, 5, 684-692.	1.2	7
99	A synergistic strategy for nanoparticle/nanofiber composites towards p-nitrophenol catalytic hydrogenation. Chemical Research in Chinese Universities, 2015, 31, 1012-1017.	1.3	5
100	A MD Simulation and Analysis for Aggregation Behaviors of Nanoscale Zero-Valent Iron Particles in Water via MS. Scientific World Journal, The, 2014, 2014, 1-13.	0.8	4
101	Effective combination of permanganate composite chemicals (PPC) and biological aerated filter (BAF) to pre-treat polluted drinking water source. Desalination and Water Treatment, 2016, 57, 28240-28249.	1.0	4
102	Effect of Continuous Direct Recycling of Combined Residual Streams on Water Quality at the Pilot Scale in Different Seasons. Journal of Environmental Engineering, ASCE, 2017, 143, .	0.7	4
103	A light-enhanced Î±-FeOOH nanowires/polyaniline anode for improved electricity generation performance in microbial fuel cells. Chemosphere, 2022, 296, 133994.	4.2	4
104	Selective adsorption of anions on hydrotalcite-like compounds derived from drinking water treatment residuals. Chemosphere, 2022, 300, 134508.	4.2	4
105	Utilization of artificial recharged effluent as makeup water for industrial cooling system: corrosion and scaling. Water Science and Technology, 2016, 73, 2559-2569.	1.2	3
106	Effects and mechanism on the removal of neurotoxin Î²-N-methylamino-l-alanine (BMAA) by chlorination. Science of the Total Environment, 2020, 703, 135513.	3.9	3
107	Mineralization, characteristics variation, and removal mechanism of algal extracellular organic matter during vacuum ultraviolet/ozone process. Science of the Total Environment, 2022, 820, 153298.	3.9	3
108	The Role of Extracellular Polymeric Substances in the Toxicity Response of Anaerobic Granule Sludge to Different Metal Oxide Nanoparticles. International Journal of Environmental Research and Public Health, 2022, 19, 5371.	1.2	3

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109	Molecular Dynamics Simulation of Natural Organic Matterâ€“TiO2 Nanoparticle Interaction in Aqueous Environment: Effects of Ca2+ and Na+ Ions. Environmental Engineering Science, 2018, 35, 846-855.	0.8	2
110	Investigation on the fate of quinolone antibiotics in three drinking water treatment plants of China. Water Science and Technology: Water Supply, 2022, 22, 170-180.	1.0	2
111	Importance of Surface Carboxyl Groups on Biofouling Development and Control for Thin Film Composite (TFC) Polyamide Membranes. ACS ES&T Engineering, 0, , .	3.7	2
112	A new multi-agent reinforcement learning algorithm and its application in wastewater reclamation by IBAC reactor. , 0, , .		1
113	Photothermal Janus Anodes: Photothermal Janus Anode with Photosynthesisâ€Shielding Effect for Activating Lowâ€Temperature Biological Wastewater Treatment (Adv. Funct. Mater. 7/2020). Advanced Functional Materials, 2020, 30, 2070045.	7.8	1
114	Effect of Ammonia and pH Combinations on the Formation of Ozonation and Chlorination By-Products in Bromide-Containing Water. International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering, 2010, , .	0.0	0
115	Notice of Retraction: A Comparison of a Blue-Green Algal Organic Matter and Humic Substances on the Formation of THMs during Chlorination. , 2011, , .		0