Zhenghua Zhang

List of Publications by Year
in descending order

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73 papers	3,098 citations	125106 35 h-index	190340 53 g-index
75 all docs	75 docs citations	75 times ranked	2507 citing authors

#	Article	IF	Citations
1	Synergistic mechanism of combined ferrate and ultrafiltration process for shale gas wastewater treatment. Journal of Membrane Science, 2022, 641, 119921.	4.1	20
2	Potential application of machine learning for exploring adsorption mechanisms of pharmaceuticals onto biochars. Chemosphere, 2022, 287, 132203.	4.2	29
3	Ti3C2/W18O49 hybrid membrane with visible-light-driven photocatalytic ability for selective dye separation. Separation and Purification Technology, 2022, 282, 120145.	3.9	7
4	Gravity-driven layered double hydroxide nanosheet membrane activated peroxymonosulfate system for micropollutant degradation. Journal of Hazardous Materials, 2022, 425, 127988.	6.5	41
5	Exploring the fate of dissolved organic matter at the molecular level in the reactive electrochemical ceramic membrane system using fluorescence spectroscopy and FT-ICR MS. Water Research, 2022, 210, 117979.	5.3	30
6	Honeycomb-like holey Co3O4 membrane triggered peroxymonosulfate activation for rapid degradation of organic contaminants. Science of the Total Environment, 2022, 814, 152698.	3.9	36
7	Two-dimensional nanoporous and lamellar membranes for water purification: Reality or a myth?. Chemical Engineering Journal, 2022, 432, 134335.	6.6	38
8	Exploring the potential application of hybrid permonosulfate/reactive electrochemical ceramic membrane on treating humic acid-dominant wastewater. Separation and Purification Technology, 2022, 286, 120513.	3.9	14
9	Ultrahigh-permeance functionalized boron nitride membrane for nanoconfined heterogeneous catalysis. Chem Catalysis, 2022, 2, 550-562.	2.9	23
10	Confined heterogeneous catalysis by boron nitride-Co3O4 nanosheet cluster for peroxymonosulfate oxidation toward ranitidine removal. Chemical Engineering Journal, 2022, 435, 135126.	6.6	45
11	Reactive electrochemical ceramic membrane for effective removal of high concentration humic acid: Insights of different performance and mechanisms. Journal of Membrane Science, 2022, 651, 120460.	4.1	19
12	Exploring potential machine learning application based on big data for prediction of wastewater quality from different full-scale wastewater treatment plants. Science of the Total Environment, 2022, 832, 154930.	3.9	32
13	Three-dimensional ordered mesoporous Co3O4/peroxymonosulfate triggered nanoconfined heterogeneous catalysis for rapid removal of ranitidine in aqueous solution. Chemical Engineering Journal, 2022, 443, 136495.	6.6	34
14	Ti4O7 reactive electrochemical membrane for humic acid removal: Insights of electrosorption and electrooxidation. Separation and Purification Technology, 2022, 293, 121112.	3.9	16
15	In-Situ Sludge Reduction in Membrane-Controlled Anoxic-Oxic-Anoxic Bioreactor: Performance and Mechanism. Membranes, 2022, 12, 659.	1.4	1
16	Angstrom-confined catalytic water purification within Co-TiOx laminar membrane nanochannels. Nature Communications, 2022, 13, .	5.8	97
17	Laminar membranes assembled by ultrathin cobalt-copper oxide nanosheets for nanoconfined catalytic degradation of contaminants. Chemical Engineering Journal, 2022, 449, 137811.	6.6	29
18	Elucidating the impacts of intermittent in-situ ozonation in a ceramic membrane bioreactor: Micropollutant removal, microbial community evolution and fouling mechanisms. Journal of Hazardous Materials, 2021, 402, 123730.	6.5	36

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19	Catalytic degradation of ranitidine using novel magnetic Ti3C2-based MXene nanosheets modified with nanoscale zero-valent iron particles. Applied Catalysis B: Environmental, 2021, 284, 119720.	10.8	75
20	Characterization of dissolved organic matter for understanding the adsorption on nanomaterials in aquatic environment: A review. Chemosphere, 2021, 269, 128690.	4.2	25
21	Rapid and long-lasting acceleration of zero-valent iron nanoparticles@Ti₃C₂-based MXene/peroxymonosulfate oxidation with bi-active centers toward ranitidine removal. Journal of Materials Chemistry A, 2021, 9, 19817-19833.	5.2	53
22	Novel MoS2/NOMC electrodes with enhanced capacitive deionization performances. Chemical Engineering Journal, 2021, 409, 128200.	6.6	53
23	Fluorescence moieties as a surrogate for residual chlorine in three drinking water networks. Chemical Engineering Journal, 2021, 411, 128519.	6.6	13
24	A year-long cyclic pattern of dissolved organic matter in the tap water of a metropolitan city revealed by fluorescence spectroscopy. Science of the Total Environment, 2021, 771, 144850.	3.9	8
25	Determining the leading sources of N-nitrosamines and dissolved organic matter in four reservoirs in Southern China. Science of the Total Environment, 2021, 771, 145409.	3.9	12
26	Photocatalytic degradation of ranitidine and reduction of nitrosamine dimethylamine formation potential over MXeneâ€“Ti3C2/MoS2 under visible light irradiation. Journal of Hazardous Materials, 2021, 413, 125424.	6.5	76
27	Occurrence and fate of N-nitrosamines in three full-scale drinking water treatment systems with different treatment trains. Science of the Total Environment, 2021, 783, 146982.	3.9	11
28	Ceramic membrane technology for water and wastewater treatment: A critical review of performance, full-scale applications, membrane fouling and prospects. Chemical Engineering Journal, 2021, 418, 129481.	6.6	217
29	Understanding the role of in-situ ozonation in Fe(II)-dosed membrane bioreactor (MBR) for membrane fouling mitigation. Journal of Membrane Science, 2021, 633, 119400.	4.1	15
30	Algogenic organic matter fouling alleviation in membrane distillation by peroxymonosulfate (PMS): Role of PMS concentration and activation temperature. Desalination, 2021, 516, 115225.	4.0	33
31	Polysaccharide-derived biopolymeric nanomaterials for wastewater treatment. , 2021, , 447-469.		6
32	Synergistic effects of combining ozonation, ceramic membrane filtration and biologically active carbon filtration for wastewater reclamation. Journal of Hazardous Materials, 2020, 382, 121091.	6.5	40
33	MoS2/RGO composites for photocatalytic degradation of ranitidine and elimination of NDMA formation potential under visible light. Chemical Engineering Journal, 2020, 383, 123084.	6.6	64
34	Capacitive deionization with nitrogen-doped highly ordered mesoporous carbon electrodes. Chemical Engineering Journal, 2020, 380, 122514.	6.6	122
35	TiO2-based catalysts for photocatalytic reduction of aqueous oxyanions: State-of-the-art and future prospects. Environment International, 2020, 136, 105453.	4.8	68
36	Powdered activated carbon â€“ Membrane bioreactor (PAC-MBR): Impacts of high PAC concentration on micropollutant removal and microbial communities. Science of the Total Environment, 2020, 745, 141090.	3.9	45

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37	Evaluating the impacts of a high concentration of powdered activated carbon in a ceramic membrane bioreactor: Mixed liquor properties, hydraulic performance and fouling mechanism. Journal of Membrane Science, 2020, 616, 118561.	4.1	17
38	Zâ€scheme photocatalytic production of hydrogen peroxide over Bi4O5Br2/g-C3N4 heterostructure under visible light. Applied Catalysis B: Environmental, 2020, 278, 119251.	10.8	163
39	Electrochemical membrane bioreactors: State-of-the-art and future prospects. Science of the Total Environment, 2020, 741, 140233.	3.9	44
40	Seasonal occurrence of N-nitrosamines and their association with dissolved organic matter in full-scale drinking water systems: Determination by LC-MS and EEM-PARAFAC. Water Research, 2020, 183, 116096.	5.3	36
41	Exploring the relative changes in dissolved organic matter for assessing the water quality of full-scale drinking water treatment plants using a fluorescence ratio approach. Water Research, 2020, 183, 116125.	5.3	47
42	Solar driven selfâˆ’sustainable photoelectrochemical bacteria inactivation in scaleâˆ’up reactor utilizing largeâˆ’scale fabricable Ti/MoS2/MoOx photoanode. Journal of Hazardous Materials, 2020, 392, 122292.	6.5	32
43	Fate and role of fluorescence moieties in extracellular polymeric substances during biological wastewater treatment: A review. Science of the Total Environment, 2020, 718, 137291.	3.9	45
44	Nutrients removal in membrane bioreactors for wastewater treatment. , 2020, , 163-180.		1
45	Capacitive deionization with MoS2/g-C3N4 electrodes. Desalination, 2020, 479, 114348.	4.0	63
46	Coupling ferrate pretreatment and in-situ ozonation/ceramic membrane filtration for wastewater reclamation: Water quality and membrane fouling. Journal of Membrane Science, 2019, 590, 117310.	4.1	36
47	Fenton cleaning strategy for ceramic membrane fouling in wastewater treatment. Journal of Environmental Sciences, 2019, 85, 189-199.	3.2	21
48	Removal of calcium ions from water by selective electrosorption using target-ion specific nanocomposite electrode. Water Research, 2019, 160, 445-453.	5.3	57
49	Fe(II)-dosed ceramic membrane bioreactor for wastewater treatment: Nutrient removal, microbial community and membrane fouling analysis. Science of the Total Environment, 2019, 664, 116-126.	3.9	48
50	A comparative study of ferrous, ferric and ferrate pretreatment for ceramic membrane fouling alleviation in reclaimed water treatment. Separation and Purification Technology, 2019, 217, 118-127.	3.9	30
51	Photo-electrochemical oxidation of hypophosphite and phosphorous recovery by UV/Fe2+/peroxydisulfate with electrochemical process. Chemical Engineering Journal, 2019, 359, 1075-1085.	6.6	14
52	Capacitative deionization using commercial activated carbon fiber decorated with polyaniline. Journal of Colloid and Interface Science, 2019, 537, 247-255.	5.0	63
53	Comparison of long-term ceramic membrane bioreactors without and with in-situ ozonation in wastewater treatment: Membrane fouling, effluent quality and microbial community. Science of the Total Environment, 2019, 652, 788-799.	3.9	47
54	Coupling in-situ ozonation with ferric chloride addition for ceramic ultrafiltration membrane fouling mitigation in wastewater treatment: Quantitative fouling analysis. Journal of Membrane Science, 2018, 555, 307-317.	4.1	33

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55	Integration of ferrate (VI) pretreatment and ceramic membrane reactor for membrane fouling mitigation in reclaimed water treatment. Journal of Membrane Science, 2018, 552, 315-325.	4.1	38
56	Ligand-promoted reductive cleaning of iron-fouled membranes from submerged membrane bioreactors. Journal of Membrane Science, 2018, 545, 126-132.	4.1	3
57	Does pre-ozonation or in-situ ozonation really mitigate the protein-based ceramic membrane fouling in the integrated process of ozonation coupled with ceramic membrane filtration?. Journal of Membrane Science, 2018, 548, 254-262.	4.1	61
58	Synergistic effect of ferrate (VI)-ozone integrated pretreatment on the improvement of water quality and fouling alleviation of ceramic UF membrane in reclaimed water treatment. Journal of Membrane Science, 2018, 567, 216-227.	4.1	33
59	Ti4O7/g-C3N4 for Visible Light Photocatalytic Oxidation of Hypophosphite: Effect of Mass Ratio of Ti4O7/g-C3N4. Frontiers in Chemistry, 2018, 6, 313.	1.8	13
60	Ti4O7/g-C3N4 Visible Light Photocatalytic Performance on Hypophosphite Oxidation: Effect of Annealing Temperature. Frontiers in Chemistry, 2018, 6, 37.	1.8	16
61	New insight into the effect of mixed liquor properties changed by pre-ozonation on ceramic UF membrane fouling in wastewater treatment. Chemical Engineering Journal, 2017, 314, 670-680.	6.6	53
62	A comparative study of pre-ozonation and in-situ ozonation on mitigation of ceramic UF membrane fouling caused by alginate. Journal of Membrane Science, 2017, 538, 50-57.	4.1	45
63	Double-win effects of in-situ ozonation on improved filterability of mixed liquor and ceramic UF membrane fouling mitigation in wastewater treatment?. Journal of Membrane Science, 2017, 533, 112-120.	4.1	42
64	Impact of polymeric membrane breakage on drinking water quality and an online detection method of the breakage. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2017, 52, 1126-1132.	0.9	0
65	Effect of pre-ozonation on mitigation of ceramic UF membrane fouling caused by algal extracellular organic matters. Chemical Engineering Journal, 2016, 294, 157-166.	6.6	106
66	Effect of in-situ ozonation on ceramic UF membrane fouling mitigation in algal-rich water treatment. Journal of Membrane Science, 2016, 498, 116-124.	4.1	97
67	Effect of ferric and ferrous iron addition on phosphorus removal and fouling in submerged membrane bioreactors. Water Research, 2015, 69, 210-222.	5.3	105
68	Ascorbic acid-mediated reductive cleaning of iron-fouled membranes from submerged membrane bioreactors. Journal of Membrane Science, 2015, 477, 194-202.	4.1	15
69	Cleaning strategies for iron-fouled membranes from submerged membrane bioreactor treatment of wastewaters. Journal of Membrane Science, 2015, 475, 9-21.	4.1	30
70	Fabrication and characterization of novel SiO2-PAMPS/PSF hybrid ultrafiltration membrane with high water flux. Desalination, 2012, 297, 59-71.	4.0	30
71	Fabrication of polysulfone ultrafiltration membranes of a density gradient cross section with good anti-pressure stability and relatively high water flux. Desalination, 2011, 269, 239-248.	4.0	50
72	Study on removal of organic matters in water by PVA modified PA-TFC nanofiltration membrane. Desalination and Water Treatment, 2011, 34, 75-80.	1.0	6

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73	Effect of zero shear viscosity of the casting solution on the morphology and permeability of polysulfone membrane prepared via the phase-inversion process. Desalination, 2010, 260, 43-50.	4.0	75