

Shuaifei S Zhao

List of Publications by Year in descending order

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108
papers

7,284
citations

50276

46
h-index

58581

82
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111
all docs

111
docs citations

111
times ranked

4862
citing authors

#	ARTICLE	IF	CITATIONS
1	Edible films and coatings for shelf life extension of mango: a review. <i>Critical Reviews in Food Science and Nutrition</i> , 2022, 62, 2432-2459.	10.3	40
2	Reinforcing hydration layer on membrane surface via nano-capturing and hydrothermal crosslinking for fouling reduction. <i>Journal of Membrane Science</i> , 2022, 644, 120076.	8.2	18
3	Significant roles of substrate properties in forward osmosis membrane performance: A review. <i>Desalination</i> , 2022, 528, 115615.	8.2	55
4	Regulating Crystal Facets of MnO ₂ for Enhancing Peroxymonosulfate Activation to Degrade Pollutants: Performance and Mechanism. <i>Catalysts</i> , 2022, 12, 342.	3.5	15
5	Waste-derived carbon fiber membrane with hierarchical structures for enhanced oil-in-water emulsion separation: Performance and mechanisms. <i>Journal of Membrane Science</i> , 2022, 653, 120543.	8.2	21
6	Superhydrophilic photocatalytic g-C ₃ N ₄ /SiO ₂ composite membranes for effective separation of oil-in-water emulsion and bacteria removal. <i>Separation and Purification Technology</i> , 2022, 290, 120917.	7.9	25
7	Activation of peroxymonosulfate by MnO ₂ with oxygen vacancies: Degradation of organic compounds by electron transfer nonradical mechanism. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107481.	6.7	30
8	Piperazine-functionalized porous anion exchange membranes for efficient acid recovery by diffusion dialysis. <i>Journal of Membrane Science</i> , 2022, 654, 120560.	8.2	20
9	Confining Nano-Fe ₃ O ₄ in the Superhydrophilic Membrane Skin Layer to Minimize Internal Fouling. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 26044-26056.	8.0	9
10	Insights into the pollutant electron property inducing the transformation of peroxymonosulfate activation mechanisms on manganese dioxide. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121753.	20.2	29
11	Waste-derived low-cost ceramic membranes for water treatment: Opportunities, challenges and future directions. <i>Resources, Conservation and Recycling</i> , 2022, 185, 106497.	10.8	33
12	Removal mechanisms of perfluorinated compounds (PFCs) by nanofiltration: Roles of membrane-contaminant interactions. <i>Chemical Engineering Journal</i> , 2021, 406, 126814.	12.7	38
13	Engineering antifouling reverse osmosis membranes: A review. <i>Desalination</i> , 2021, 499, 114857.	8.2	192
14	A general QSPR protocol for the prediction of atomic/inter-atomic properties: a fragment based graph convolutional neural network (F-GCN). <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 13242-13249.	2.8	9
15	Omniphobic membranes for distillation: Opportunities and challenges. <i>Chinese Chemical Letters</i> , 2021, 32, 3298-3306.	9.0	46
16	Super-adsorptive and photo-regenerable carbon nanotube based membrane for highly efficient water purification. <i>Journal of Membrane Science</i> , 2021, 621, 119000.	8.2	43
17	High-performance porous anion exchange membranes for efficient acid recovery from acidic wastewater by diffusion dialysis. <i>Journal of Membrane Science</i> , 2021, 624, 119116.	8.2	31
18	Robust bio-inspired superhydrophilic and underwater superoleophobic membranes for simultaneously fast water and oil recovery. <i>Journal of Membrane Science</i> , 2021, 623, 119041.	8.2	62

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19	Activation of persulfate by MnOOH: Degradation of organic compounds by nonradical mechanism. <i>Chemosphere</i> , 2021, 272, 129629.	8.2	40
20	Enhancing co-catalysis of MoS ₂ for persulfate activation in Fe ³⁺ -based advanced oxidation processes via defect engineering. <i>Chemical Engineering Journal</i> , 2021, 417, 127987.	12.7	58
21	Enhancement of ball-milling on pyrite/zero-valent iron for persulfate activation on imidacloprid removal in aqueous solution: A mechanistic study. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105647.	6.7	15
22	Polyaniline-based adsorbents for aqueous pollutants removal: A review. <i>Chemical Engineering Journal</i> , 2021, 418, 129425.	12.7	108
23	Self-assembly enabled nano-intercalation for stable high-performance MXene membranes. <i>Journal of Membrane Science</i> , 2021, 635, 119464.	8.2	70
24	Sustainable management of landfill leachate concentrate via nanofiltration enhanced by one-step rapid assembly of metal-organic coordination complexes. <i>Water Research</i> , 2021, 204, 117633.	11.3	28
25	Integrated loose nanofiltration-electrodialysis process for sustainable resource extraction from high-salinity textile wastewater. <i>Journal of Hazardous Materials</i> , 2021, 419, 126505.	12.4	38
26	Assessment of hydropower sustainability: Review and modeling. <i>Journal of Cleaner Production</i> , 2021, 321, 128898.	9.3	26
27	Enhancing water permeability and antifouling performance of thin-film composite membrane by tailoring the support layer. <i>Desalination</i> , 2021, 516, 115193.	8.2	23
28	Hierarchically superhydrophilic poly(vinylidene fluoride) membrane with self-cleaning fabricated by surface mineralization for stable separation of oily wastewater. <i>Journal of Membrane Science</i> , 2021, 640, 119864.	8.2	60
29	Supramolecular Membranes for Liquid Separation. <i>Chemistry in the Environment</i> , 2021, , 232-255.	0.4	0
30	Perfluorinated superhydrophobic and oleophobic SiO ₂ @PTFE nanofiber membrane with hierarchical nanostructures for oily fume purification. <i>Journal of Membrane Science</i> , 2020, 594, 117473.	8.2	57
31	Scalable fabrication of robust superhydrophobic membranes by one-step spray-coating for gravitational water-in-oil emulsion separation. <i>Separation and Purification Technology</i> , 2020, 231, 115898.	7.9	78
32	Antibiotic enhanced dopamine polymerization for engineering antifouling and antimicrobial membranes. <i>Chinese Chemical Letters</i> , 2020, 31, 851-854.	9.0	46
33	Integrated membrane system without adding chemicals for produced water desalination towards zero liquid discharge. <i>Desalination</i> , 2020, 496, 114693.	8.2	32
34	Graphitic Carbon Nitride/Copper-Iron Oxide Composite for Effective Fenton Degradation of Ciprofloxacin at Near-Neutral pH. <i>ChemistrySelect</i> , 2020, 5, 8198-8206.	1.5	6
35	Editorial: Advanced Membrane Science and Technology for Sustainable Environmental Applications. <i>Frontiers in Chemistry</i> , 2020, 8, 609774.	3.6	11
36	Simple Amphoteric Charge Strategy to Reinforce Superhydrophilic Polyvinylidene Fluoride Membrane for Highly Efficient Separation of Various Surfactant-Stabilized Oil-in-Water Emulsions. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 47018-47028.	8.0	52

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37	Polyvinylidene fluoride membrane functionalized with zero valent iron for highly efficient degradation of organic contaminants. <i>Separation and Purification Technology</i> , 2020, 250, 117266.	7.9	60
38	Developing novel thin film composite membrane on a permeate spacer backing fabric for forward osmosis. <i>Chemical Engineering Research and Design</i> , 2020, 160, 326-334.	5.6	13
39	Hierarchically Active Poly(vinylidene fluoride) Membrane Fabricated by In Situ Generated Zero-Valent Iron for Fouling Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 10993-11004.	8.0	49
40	Elevated nanofiltration performance via mussel-inspired co-deposition for sustainable resource extraction from landfill leachate concentrate. <i>Chemical Engineering Journal</i> , 2020, 388, 124200.	12.7	24
41	Relating forward water and reverse salt fluxes to membrane porosity and tortuosity in forward osmosis: CFD modelling. <i>Separation and Purification Technology</i> , 2020, 241, 116727.	7.9	33
42	Carboxylated Nanodiamond-Enhanced Photocatalytic Membranes with Improved Antifouling and Self-Cleaning Properties. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 3538-3549.	3.7	34
43	High-performance electrocatalytic microfiltration CuO/Carbon membrane by facile dynamic electrodeposition for small-sized organic pollutants removal. <i>Journal of Membrane Science</i> , 2020, 601, 117913.	8.2	43
44	Loose nanofiltration-based electrodialysis for highly efficient textile wastewater treatment. <i>Journal of Membrane Science</i> , 2020, 608, 118182.	8.2	68
45	Hierarchical poly(vinylidene fluoride)/active carbon composite membrane with self-confining functional carbon nanotube layer for intractable wastewater remediation. <i>Journal of Membrane Science</i> , 2020, 603, 118041.	8.2	32
46	Sustainable management of saline oily wastewater via forward osmosis using aquaporin membrane. <i>Chemical Engineering Research and Design</i> , 2020, 138, 199-207.	5.6	39
47	High-flux nanofiltration membranes tailored by bio-inspired co-deposition of hydrophilic g-C ₃ N ₄ nanosheets for enhanced selectivity towards organics and salts. <i>Environmental Science: Nano</i> , 2019, 6, 2958-2967.	4.3	68
48	Exploring the Key Factors in Dusty Gas Filtration: Experimental and Modeling Studies. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 19633-19641.	3.7	6
49	Membrane heat exchanger for novel heat recovery in carbon capture. <i>Journal of Membrane Science</i> , 2019, 577, 60-68.	8.2	32
50	Heat and mass transfer in a hollow fiber membrane contactor for sweeping gas membrane distillation. <i>Separation and Purification Technology</i> , 2019, 220, 334-344.	7.9	20
51	Entropy generation analysis of heat and water recovery from flue gas by transport membrane condenser. <i>Energy</i> , 2019, 174, 835-847.	8.8	46
52	Sustainable management of landfill leachate concentrate through recovering humic substance as liquid fertilizer by loose nanofiltration. <i>Water Research</i> , 2019, 157, 555-563.	11.3	75
53	Effects of fly ash properties on carbonation efficiency in CO ₂ mineralisation. <i>Fuel Processing Technology</i> , 2019, 188, 79-88.	7.2	56
54	Discrete silver nanoparticle infusion across silica aerogels towards versatile catalytic coatings for 4-nitrophenol reduction. <i>Materials Chemistry and Physics</i> , 2019, 223, 404-409.	4.0	5

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55	Janus Membrane with Unparalleled Forward Osmosis Performance. <i>Environmental Science and Technology Letters</i> , 2019, 6, 79-85.	8.7	47
56	Introducing sorption coefficient through extended UNIQAC and Flory-Huggins models for improved flux prediction in forward osmosis. <i>Chemical Engineering Science</i> , 2019, 198, 33-42.	3.8	10
57	Potential of coagulation/GAC adsorption combined with UV/H ₂ O ₂ and ozonation for removing dissolved organic matter from secondary RO concentrate. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 1091-1099.	3.2	9
58	Positively charged nanofiltration membrane based on cross-linked polyvinyl chloride copolymer. <i>Journal of Membrane Science</i> , 2019, 572, 28-37.	8.2	81
59	Thin-Film Composite Membrane with Interlayer Decorated Metal-Organic Framework UiO-66 toward Enhanced Forward Osmosis Performance. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 195-206.	3.7	73
60	Enhanced fouling and wetting resistance of composite Hyflon AD/poly(vinylidene fluoride) membrane in vacuum membrane distillation. <i>Separation and Purification Technology</i> , 2019, 211, 135-140.	7.9	27
61	Fabrication and characterization of TiO ₂ /ZrO ₂ ceramic membranes for nanofiltration. <i>Microporous and Mesoporous Materials</i> , 2018, 260, 125-131.	4.4	76
62	Enhancing water permeability and fouling resistance of polyvinylidene fluoride membranes with carboxylated nanodiamonds. <i>Journal of Membrane Science</i> , 2018, 556, 154-163.	8.2	96
63	Comparing the antifouling effects of activated carbon and TiO ₂ in ultrafiltration membrane development. <i>Journal of Colloid and Interface Science</i> , 2018, 515, 109-118.	9.4	67
64	Insights into Carbonation Kinetics of Fly Ash from Victorian Lignite for CO ₂ Sequestration. <i>Energy & Fuels</i> , 2018, 32, 4569-4578.	5.1	70
65	Advanced desalination of dye/NaCl mixtures by a loose nanofiltration membrane for digital ink-jet printing. <i>Separation and Purification Technology</i> , 2018, 197, 27-35.	7.9	144
66	Developing new adsorptive membrane by modification of support layer with iron oxide microspheres for arsenic removal. <i>Journal of Colloid and Interface Science</i> , 2018, 514, 760-768.	9.4	75
67	Renewable CO ₂ absorbent for carbon capture and biogas upgrading by membrane contactor. <i>Separation and Purification Technology</i> , 2018, 194, 207-215.	7.9	53
68	Tuning sol size to optimize organosilica membranes for gas separation. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 53-59.	3.5	12
69	Development of antifouling poly(vinyl chloride) blend membranes by atom transfer radical polymerization. <i>Journal of Applied Polymer Science</i> , 2018, 135, 45832.	2.6	14
70	Relating water vapor transfer to ammonia recovery from biogas slurry by vacuum membrane distillation. <i>Separation and Purification Technology</i> , 2018, 191, 182-191.	7.9	78
71	Optimization of novel composite membranes for water and mineral recovery by vacuum membrane distillation. <i>Desalination</i> , 2018, 440, 39-47.	8.2	32
72	Multifunctional metal organic framework and carbon nanotube-modified filter for combined ultrafine dust capture and SO ₂ dynamic adsorption. <i>Environmental Science: Nano</i> , 2018, 5, 3023-3031.	4.3	37

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73	Specially Wettable Membranes for Oil-Water Separation. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800576.	3.7	212
74	Theoretical and experimental study of organic fouling of loose nanofiltration membrane. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 93, 509-518.	5.3	28
75	Effective dye purification using tight ceramic ultrafiltration membrane. <i>Journal of Membrane Science</i> , 2018, 566, 151-160.	8.2	85
76	Integrated absorption-mineralisation for low-energy CO ₂ capture and sequestration. <i>Applied Energy</i> , 2018, 225, 356-366.	10.1	93
77	Incorporating organic nanospheres into the polyamide layer to prepare thin film composite membrane with enhanced biocidal activity and chlorine resistance. <i>Separation and Purification Technology</i> , 2018, 207, 222-230.	7.9	42
78	Dopamine incorporating forward osmosis membranes with enhanced selectivity and antifouling properties. <i>RSC Advances</i> , 2018, 8, 22469-22481.	3.6	41
79	Integrated absorption-mineralisation for energy-efficient CO ₂ sequestration: Reaction mechanism and feasibility of using fly ash as a feedstock. <i>Chemical Engineering Journal</i> , 2018, 352, 151-162.	12.7	51
80	Conventional Ultrafiltration As Effective Strategy for Dye/Salt Fractionation in Textile Wastewater Treatment. <i>Environmental Science & Technology</i> , 2018, 52, 10698-10708.	10.0	201
81	Renewable aqueous ammonia from biogas slurry for carbon capture: Chemical composition and CO ₂ absorption rate. <i>International Journal of Greenhouse Gas Control</i> , 2018, 77, 46-54.	4.6	12
82	Dopamine Incorporated Forward Osmosis Membranes with High Structural Stability and Chlorine Resistance. <i>Processes</i> , 2018, 6, 151.	2.8	16
83	Improved antifouling properties of polyvinyl chloride blend membranes by novel phosphate based-zwitterionic polymer additive. <i>Journal of Membrane Science</i> , 2017, 528, 326-335.	8.2	84
84	Enhancing wetting resistance of poly(vinylidene fluoride) membranes for vacuum membrane distillation. <i>Desalination</i> , 2017, 415, 58-66.	8.2	66
85	Once-through CO ₂ absorption for simultaneous biogas upgrading and fertilizer production. <i>Fuel Processing Technology</i> , 2017, 166, 50-58.	7.2	33
86	A novel strategy to enhance hydrothermal stability of Pd-doped organosilica membrane for hydrogen separation. <i>Microporous and Mesoporous Materials</i> , 2017, 253, 55-63.	4.4	16
87	Closing CO ₂ Loop in Biogas Production: Recycling Ammonia As Fertilizer. <i>Environmental Science & Technology</i> , 2017, 51, 8841-8850.	10.0	40
88	Simultaneous heat and water recovery from flue gas by membrane condensation: Experimental investigation. <i>Applied Thermal Engineering</i> , 2017, 113, 843-850.	6.0	100
89	Structures and antifouling properties of polyvinyl chloride/poly(methyl methacrylate) membranes. <i>Journal of Membrane Science</i> , 2017, 524, 235-244.	8.2	85
90	Status and progress of membrane contactors in post-combustion carbon capture: A state-of-the-art review of new developments. <i>Journal of Membrane Science</i> , 2016, 511, 180-206.	8.2	249

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91	Pd-doped organosilica membrane with enhanced gas permeability and hydrothermal stability for gas separation. <i>Journal of Materials Science</i> , 2016, 51, 6275-6286.	3.7	37
92	Hydrothermally stable Zr-doped organosilica membranes for H ₂ /CO ₂ separation. <i>Microporous and Mesoporous Materials</i> , 2016, 224, 277-284.	4.4	38
93	Multichannel Tubular Ceramic Membrane for Water and Heat Recovery from Waste Gas Streams. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 2615-2622.	3.7	54
94	Innovative Use of Membrane Contactor as Condenser for Heat Recovery in Carbon Capture. <i>Environmental Science & Technology</i> , 2015, 49, 2532-2540.	10.0	47
95	Transport membrane condenser for water and heat recovery from gaseous streams: Performance evaluation. <i>Journal of Membrane Science</i> , 2015, 484, 10-17.	8.2	97
96	Membrane evaporation of amine solution for energy saving in post-combustion carbon capture: Wetting and condensation. <i>Separation and Purification Technology</i> , 2015, 146, 60-67.	7.9	35
97	Condensation, re-evaporation and associated heat transfer in membrane evaporation and sweeping gas membrane distillation. <i>Journal of Membrane Science</i> , 2015, 475, 445-454.	8.2	39
98	CO ₂ removal from biogas by using green amino acid salts: Performance evaluation. <i>Fuel Processing Technology</i> , 2015, 129, 203-212.	7.2	58
99	Membrane evaporation of amine solution for energy saving in post-combustion carbon capture: Performance evaluation. <i>Journal of Membrane Science</i> , 2015, 473, 274-282.	8.2	37
100	Condensation studies in membrane evaporation and sweeping gas membrane distillation. <i>Journal of Membrane Science</i> , 2014, 462, 9-16.	8.2	62
101	Osmotic Pressure versus Swelling Pressure: Comment on "Bifunctional Polymer Hydrogel Layers As Forward Osmosis Draw Agents for Continuous Production of Fresh Water Using Solar Energy". <i>Environmental Science & Technology</i> , 2014, 48, 4212-4213.	10.0	29
102	Biogas upgrading by CO ₂ removal with a highly selective natural amino acid salt in gas-liquid membrane contactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 85, 125-135.	3.6	54
103	Organic fouling in pressure retarded osmosis: Experiments, mechanisms and implications. <i>Journal of Membrane Science</i> , 2013, 428, 181-189.	8.2	155
104	Brackish water desalination by a hybrid forward osmosis-nanofiltration system using divalent draw solute. <i>Desalination</i> , 2012, 284, 175-181.	8.2	208
105	Recent developments in forward osmosis: Opportunities and challenges. <i>Journal of Membrane Science</i> , 2012, 396, 1-21.	8.2	1,141
106	Effects of membrane orientation on process performance in forward osmosis applications. <i>Journal of Membrane Science</i> , 2011, 382, 308-315.	8.2	170
107	Effects of working temperature on separation performance, membrane scaling and cleaning in forward osmosis desalination. <i>Desalination</i> , 2011, 278, 157-164.	8.2	196
108	Relating solution physicochemical properties to internal concentration polarization in forward osmosis. <i>Journal of Membrane Science</i> , 2011, 379, 459-467.	8.2	201