Shaofei Wang

List of Publications by Year
in descending order

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Version: 2024-02-01

70 papers	5,809 citations	94433 37 h-index	88630 70 g-index
70 all docs	70 docs citations	70 times ranked	4545 citing authors

#	Article	IF	Citations
1	Advances in high permeability polymer-based membrane materials for CO₂ separations. Energy and Environmental Science, 2016, 9, 1863-1890.	30.8	612
2	Nanostructured Ionâ€Exchange Membranes for Fuel Cells: Recent Advances and Perspectives. Advanced Materials, 2015, 27, 5280-5295.	21.0	335
3	Efficient CO₂ Capture by Functionalized Graphene Oxide Nanosheets as Fillers To Fabricate Multi-Permselective Mixed Matrix Membranes. ACS Applied Materials & Interfaces, 2015, 7, 5528-5537.	8.0	305
4	Recent advances in the fabrication of advanced composite membranes. Journal of Materials Chemistry A, 2013, 1, 10058.	10.3	252
5	Two-dimensional nanochannel membranes for molecular and ionic separations. Chemical Society Reviews, 2020, 49, 1071-1089.	38.1	242
6	Pebaxâ€“PEGâ€“MWCNT hybrid membranes with enhanced CO2 capture properties. Journal of Membrane Science, 2014, 460, 62-70.	8.2	223
7	Synergistic effect of combining carbon nanotubes and graphene oxide in mixed matrix membranes for efficient CO2 separation. Journal of Membrane Science, 2015, 479, 1-10.	8.2	219
8	Facilitated transport of small molecules and ions for energy-efficient membranes. Chemical Society Reviews, 2015, 44, 103-118.	38.1	211
9	Facilitated transport mixed matrix membranes incorporated with amine functionalized MCM-41 for enhanced gas separation properties. Journal of Membrane Science, 2014, 465, 78-90.	8.2	196
10	A highly permeable graphene oxide membrane with fast and selective transport nanochannels for efficient carbon capture. Energy and Environmental Science, 2016, 9, 3107-3112.	30.8	192
11	Mixed matrix membranes comprising polymers of intrinsic microporosity and covalent organic framework for gas separation. Journal of Membrane Science, 2017, 528, 273-283.	8.2	177
12	Mixed matrix membranes comprising aminosilane-functionalized graphene oxide for enhanced CO2 separation. Journal of Membrane Science, 2019, 570-571, 343-354.	8.2	175
13	Enhanced Interfacial Interaction and CO₂ Separation Performance of Mixed Matrix Membrane by Incorporating Polyethylenimine-Decorated Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2015, 7, 1065-1077.	8.0	162
14	Enhancing the CO₂ separation performance of composite membranes by the incorporation of amino acid-functionalized graphene oxide. Journal of Materials Chemistry A, 2015, 3, 6629-6641.	10.3	152
15	Nanoporous ZIF-67 embedded polymers of intrinsic microporosity membranes with enhanced gas separation performance. Journal of Membrane Science, 2018, 548, 309-318.	8.2	130
16	Graphene Oxide Membranes with Heterogeneous Nanodomains for Efficient CO₂ Separations. Angewandte Chemie - International Edition, 2017, 56, 14246-14251.	13.8	121
17	Efficient CO2 capture by humidified polymer electrolyte membranes with tunable water state. Energy and Environmental Science, 2014, 7, 1489.	30.8	119
18	High permeability hydrogel membranes of chitosan/poly ether-block-amide blends for CO2 separation. Journal of Membrane Science, 2014, 469, 198-208.	8.2	103

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19	Enhanced gas separation performance of mixed matrix membranes from graphitic carbon nitride nanosheets and polymers of intrinsic microporosity. Journal of Membrane Science, 2016, 514, 15-24.	8.2	103
20	Facilitated transport membranes by incorporating graphene nanosheets with high zinc ion loading for enhanced CO2 separation. Journal of Membrane Science, 2017, 522, 351-362.	8.2	102
21	Synergistic effects of zeolite imidazole framework@graphene oxide composites in humidified mixed matrix membranes on CO₂ separation. RSC Advances, 2018, 8, 6099-6109.	3.6	93
22	Mixed matrix membranes composed of sulfonated poly(ether ether ketone) and a sulfonated metalâ€“organic framework for gas separation. Journal of Membrane Science, 2015, 488, 67-78.	8.2	91
23	2D-dual-spacing channel membranes for high performance organic solvent nanofiltration. Journal of Materials Chemistry A, 2019, 7, 11673-11682.	10.3	88
24	SPEEK/amine-functionalized TiO2 submicrospheres mixed matrix membranes for CO2 separation. Journal of Membrane Science, 2014, 467, 23-35.	8.2	84
25	Bioinspired Ultrastrong Solid Electrolytes with Fast Proton Conduction along 2D Channels. Advanced Materials, 2017, 29, 1605898.	21.0	81
26	Enhanced CO₂ Permeability of Membranes by Incorporating Polyzwitterion@CNT Composite Particles into Polyimide Matrix. ACS Applied Materials & Interfaces, 2014, 6, 13051-13060.	8.0	73
27	Smart covalent organic networks (CONs) with â€œon-off-onâ€•light-switchable pores for molecular separation. Science Advances, 2020, 6, eabb3188.	10.3	71
28	Janus composite nanoparticle-incorporated mixed matrix membranes for CO 2 separation. Journal of Membrane Science, 2015, 489, 1-10.	8.2	62
29	High-Performance Composite Membrane with Enriched CO₂-philic Groups and Improved Adhesion at the Interface. ACS Applied Materials & Interfaces, 2014, 6, 6654-6663.	8.0	61
30	Enhanced CO2 selectivities by incorporating CO2-philic PEG-POSS into polymers of intrinsic microporosity membrane. Journal of Membrane Science, 2017, 543, 69-78.	8.2	60
31	Bioadhesion-inspired polymerâ€“inorganic nanohybrid membranes with enhanced CO2 capture properties. Journal of Materials Chemistry, 2012, 22, 19617.	6.7	57
32	Perspectives on water-facilitated CO₂ capture materials. Journal of Materials Chemistry A, 2017, 5, 6794-6816.	10.3	56
33	Enhanced CO2 separation properties by incorporating poly(ethylene glycol)-containing polymeric submicrospheres into polyimide membrane. Journal of Membrane Science, 2015, 473, 310-317.	8.2	47
34	Constructing CO2 transport passageways in MatrimidÂ® membranes using nanohydrogels for efficient carbon capture. Journal of Membrane Science, 2015, 474, 156-166.	8.2	45
35	Amino-functionalized POSS nanocage intercalated graphene oxide membranes for efficient biogas upgrading. Journal of Membrane Science, 2020, 596, 117733.	8.2	43
36	Interface engineering of mixed matrix membrane via CO2-philic polymer brush functionalized graphene oxide nanosheets for efficient gas separation. Journal of Membrane Science, 2019, 586, 23-33.	8.2	42

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37	Porous organosilicon nanotubes in pebax-based mixed-matrix membranes for biogas purification. Journal of Membrane Science, 2019, 573, 301-308.	8.2	41
38	Mixed matrix membranes containing well-designed composite microcapsules for CO2 separation. Journal of Membrane Science, 2019, 572, 650-657.	8.2	38
39	An organic electrochemical transistor integrated with a molecularly selective isoporous membrane for amyloid-Î² detection. Biosensors and Bioelectronics, 2019, 143, 111561.	10.1	36
40	Anionic surfactant-doped Pebax membrane with optimal free volume characteristics for efficient CO 2 separation. Journal of Membrane Science, 2015, 493, 460-469.	8.2	34
41	Comparison of facilitated transport behavior and separation properties of membranes with imidazole groups and zinc ions as CO2 carriers. Journal of Membrane Science, 2016, 505, 44-52.	8.2	34
42	Stable Graphene Oxide Cross-Linked Membranes for Organic Solvent Nanofiltration. Industrial & Engineering Chemistry Research, 2019, 58, 23106-23113.	3.7	29
43	Spray-coated graphene oxide hollow fibers for nanofiltration. Journal of Membrane Science, 2020, 606, 118006.	8.2	27
44	Enhanced carbon dioxide flux by catecholâ€“Zn2+ synergistic manipulation of graphene oxide membranes. Chemical Engineering Science, 2019, 195, 230-238.	3.8	26
45	Graphene Oxide Liquid Crystal Membranes in Protic Ionic Liquid for Nanofiltration. ACS Applied Nano Materials, 2018, 1, 4661-4670.	5.0	24
46	Exploration of the Synergy Between 2D Nanosheets and a Non-2D Filler in Mixed Matrix Membranes for Gas Separation. Frontiers in Chemistry, 2020, 8, 58.	3.6	22
47	Facilitated transport membranes by incorporating different divalent metal ions as CO₂ carriers. RSC Advances, 2016, 6, 65282-65290.	3.6	20
48	Oriented Zeolitic Imidazolate Framework (ZIF) Nanocrystal Films for Molecular Separation Membranes. ACS Applied Nano Materials, 2020, 3, 3839-3846.	5.0	20
49	Protein adsorption and desorption behavior of a pH-responsive membrane based on ethylene vinyl alcohol copolymer. RSC Advances, 2017, 7, 21398-21405.	3.6	19
50	Highly Hydroxide-Conductive Nanostructured Solid Electrolyte via Predesigned Ionic Nanoaggregates. ACS Applied Materials & Interfaces, 2017, 9, 28346-28354.	8.0	19
51	Enhanced hydrolysis of cellulose by catalytic polyethersulfone membranes with straight-through catalytic channels. Bioresource Technology, 2019, 294, 122119.	9.6	17
52	Efficient CO₂ Separation of Multi-Permselective Mixed Matrix Membranes with a Unique Interfacial Structure Regulated by Mesoporous Nanosheets. ACS Applied Materials & Interfaces, 2020, 12, 48067-48076.	8.0	17
53	Similarly sized protein separation of chargeâ€selective ethyleneâ€vinyl alcohol copolymer membrane by grafting dimethylaminoethyl methacrylate. Journal of Applied Polymer Science, 2018, 135, 46374.	2.6	16
54	Mixed matrix membrane contactor containing core-shell hierarchical Cu@4A filler for efficient SO2 capture. Journal of Hazardous Materials, 2019, 376, 160-169.	12.4	16

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55	Constructing superhydrophobic surface of PES/PES-SiO2 mixed matrix membrane contactors for efficient SO2 capture. Separation and Purification Technology, 2021, 259, 118222.	7.9	16
56	Trapping bound water within a polymer electrolyte membrane of calcium phosphotungstate for efficient CO₂ capture. Chemical Communications, 2015, 51, 1901-1904.	4.1	15
57	Widening CO2-facilitated transport passageways in SPEEK matrix using polymer brushes functionalized double-shelled organic submicrocapsules for efficient gas separation. Journal of Membrane Science, 2017, 525, 330-341.	8.2	15
58	Superhydrophobic Surface-Constructed Membrane Contactor with Hierarchical Lotus-Leaf-Like Interfaces for Efficient SO₂ Capture. ACS Applied Materials & Interfaces, 2021, 13, 1827-1837.	8.0	15
59	Electrospinning in membrane contactor: manufacturing Elec-PVDF/SiO2 superhydrophobic surface for efficient flue gas desulphurization applications. Green Chemical Engineering, 2021, 2, 111-121.	6.3	14
60	Constructing asymmetric membranes via surface segregation for efficient carbon capture. Journal of Membrane Science, 2016, 500, 25-32.	8.2	13
61	Graphene Oxide Membranes with Heterogeneous Nanodomains for Efficient CO₂ Separations. Angewandte Chemie, 2017, 129, 14434-14439.	2.0	13
62	Constructing robust and highly-selective hydrogel membranes by bioadhesion-inspired method for CO2 separation. Journal of Membrane Science, 2018, 563, 229-237.	8.2	11
63	Molecular engineering of organic-inorganic interface towards high-performance polyelectrolyte membrane via amphiphilic block copolymer. Journal of Membrane Science, 2018, 563, 1-9.	8.2	10
64	Metal organic frameworks decorated membrane contactor constructing SO2-philic channels for efficient flue gas desulphurization. Journal of Membrane Science, 2021, 620, 118908.	8.2	10
65	Light-responsive metalâ€“organic framework sheets constructed smart membranes with tunable transport channels for efficient gas separation. RSC Advances, 2021, 12, 517-527.	3.6	10
66	Enhanced Hydrolysis of Cellulose by Highly Dispersed Sulfonated Graphene Oxide. BioResources, 2018, 13, .	1.0	8
67	Enhanced CO2 separation in membranes with anion-cation dual pathways. Journal of CO2 Utilization, 2020, 38, 355-365.	6.8	6
68	Pebax-based membrane filled with photo-responsive Azo@NH2-MIL-53 nanoparticles for efficient SO2/N2 separation. Separation and Purification Technology, 2022, 296, 121363.	7.9	6
69	Flexible isoporous air filters for high-efficiency particle capture. Polymer, 2021, 213, 123278.	3.8	4
70	Isolated iron/polyether sulfone catalytic membranes for rapid phenol removal. Journal of Applied Polymer Science, 2022, 139, 51508.	2.6	3