

Nai-Xin Wang

List of Publications by Year in Descending Order

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Version: 2024-04-28

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

82
papers

2,607
citations

29
h-index

49
g-index

84
ext. papers

3,308
ext. citations

8.9
avg, IF

5.42
L-index

#	Paper	IF	Citations
82	POSS-graphene oxide nanocomposite membranes for ethanol permselective pervaporation. <i>Microporous and Mesoporous Materials</i> , 2022 , 331, 111635	5.3	1
81	Tailor-made microstructures lead to high-performance robust PEO membrane for CO2 capture via green fabrication technique. <i>Green Energy and Environment</i> , 2022 ,	5.7	1
80	Fabrication of MOF derivatives composite membrane via in-situ sulfurization for dye/salt separation. <i>Journal of Membrane Science</i> , 2022 , 645, 120211	9.6	1
79	In situ growth of covalent triazine frameworks membrane on alumina substrate for dye/salt separation. <i>Separation and Purification Technology</i> , 2022 , 280, 119930	8.3	1
78	Development of high-performance and robust membrane via Bard-crosslinking-soft technique for dehydration of acetic acid. <i>Journal of Membrane Science</i> , 2022 , 643, 120033	9.6	1
77	Two-step hierarchical crosslinking to construct acid-resistance membrane for pervaporation dehydration of artificial esterification reaction. <i>Journal of Membrane Science</i> , 2022 , 649, 120396	9.6	1
76	Fabrication of stable polyelectrolyte complexed membrane for dye/salt separation via dynamic self-assembly coupled ice-templating technique. <i>Desalination</i> , 2022 , 535, 115803	10.3	0
75	Intensification of mass transfer for zwitterionic amine monomers in interfacial polymerization to fabricate monovalent salt/antibiotics separation membrane. <i>Journal of Membrane Science</i> , 2021 , 643, 120050	9.6	1
74	Tailoring of polysulfate/polyvinylpyrrolidone membrane structure via NIPS coupled physical aging technique for high-performance dye/salt separation. <i>Separation and Purification Technology</i> , 2021 , 283, 120163	8.3	1
73	A review of nano-confined composite membranes fabricated inside the porous support 2021 , 1, 100005		2
72	Acid-Resistance and Self-Repairing Supramolecular Nanoparticle Membranes via Hydrogen-Bonding for Sustainable Molecules Separation. <i>Advanced Science</i> , 2021 , 8, e2102594	13.6	7
71	In-situ growth of graphene quantum dots modified MoS2 membrane on tubular ceramic substrate with high permeability for both water and organic solvent. <i>Journal of Membrane Science</i> , 2021 , 627, 119247	9.6	1
70	Green Techniques for Rapid Fabrication of Unprecedentedly High-Performance PEO Membranes for CO2 Capture. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 10167-10175	8.3	8
69	Graphene oxide membranes with stable porous structure for ultrafast water transport. <i>Nature Nanotechnology</i> , 2021 , 16, 337-343	28.7	95
68	"Mix-Then-On-Demand-Complex": Cascade Anionization and Complexation of Graphene Oxide for High-Performance Nanofiltration Membranes. <i>ACS Nano</i> , 2021 , 15, 4440-4449	16.7	9
67	Freezing assisted in situ growth of nano-confined ZIF-8 composite membrane for dye removal from water. <i>Journal of Membrane Science</i> , 2021 , 632, 119352	9.6	4
66	Impact of crosslinking on organic solvent nanofiltration performance in polydimethylsiloxane composite membrane: Probed by in-situ low-field nuclear magnetic resonance spectroscopy. <i>Journal of Membrane Science</i> , 2021 , 633, 119382	9.6	0

65	Ice-crystal templating approach for tailoring mass transfer channels in graphene oxide membranes for high-performance dye/salt separation. <i>Carbon</i> , 2021 , 183, 119-127	10.4	6
64	Chlorine-resistant positively charged polyamide nanofiltration membranes for heavy metal ions removal. <i>Separation and Purification Technology</i> , 2021 , 275, 119264	8.3	5
63	Ultralow Ti3C2TX doping polysulfate membrane for high ultrafiltration performance. <i>Journal of Membrane Science</i> , 2021 , 637, 119603	9.6	2
62	Development of high-performance polyelectrolyte-complex-nanoparticle-based pervaporation membranes via convenient tailoring of charged groups. <i>Journal of Materials Science</i> , 2020 , 55, 12607-12620	4.3	6
61	Vacuum-assisted assembly of iron cage intercalated layered double hydroxide composite membrane for water purification. <i>Journal of Membrane Science</i> , 2020 , 603, 118032	9.6	7
60	TiO2-incorporated polyelectrolyte composite membrane with transformable hydrophilicity/hydrophobicity for nanofiltration separation. <i>Chinese Journal of Chemical Engineering</i> , 2020 , 28, 2533-2541	3.2	3
59	Enhanced permeance for PDMS organic solvent nanofiltration membranes using modified mesoporous silica nanoparticles. <i>Journal of Membrane Science</i> , 2020 , 612, 118257	9.6	19
58	A comprehensive study on phase inversion behavior of a novel polysulfate membrane for high-performance ultrafiltration applications. <i>Journal of Membrane Science</i> , 2020 , 610, 118404	9.6	9
57	Calcination of layered double hydroxide membrane with enhanced nanofiltration performance. <i>Journal of Industrial and Engineering Chemistry</i> , 2020 , 89, 368-374	6.3	4
56	Phosphonium Modification Leads to Ultrapervaporable Antibacterial Polyamide Composite Membranes with Unreduced Thickness. <i>Advanced Materials</i> , 2020 , 32, e2001383	24	65
55	Hollow Polyhedron-Modified Graphene Oxide Membranes for Organic Solvent Nanofiltration with Enhanced Permeance. <i>ACS Applied Nano Materials</i> , 2020 , 3, 5874-5880	5.6	8
54	Covalent organic frameworks hybrid membrane with optimized mass transport nanochannel for aromatic/aliphatic mixture pervaporation. <i>Journal of Membrane Science</i> , 2020 , 598, 117652	9.6	12
53	Recovery of bio-butanol from aqueous solution with ZIF-8 modified graphene oxide composite membrane. <i>Journal of Membrane Science</i> , 2020 , 598, 117671	9.6	7
52	Nano-confinement-inspired metal organic framework/polymer composite separation membranes. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 17212-17218	13	10
51	High-flux zwitterionic nanofiltration membrane constructed by in-situ introduction method for monovalent salt/antibiotics separation. <i>Journal of Membrane Science</i> , 2020 , 593, 117441	9.6	63
50	Nano-array assisted metal-organic polyhedra membranes for the pervaporation of aromatic/aliphatic mixtures. <i>Journal of Membrane Science</i> , 2019 , 575, 1-8	9.6	14
49	Construction of well-arranged graphene oxide/polyelectrolyte complex nanoparticles membranes for pervaporation ethylene glycol dehydration. <i>Journal of Membrane Science</i> , 2019 , 577, 104-112	9.6	18
48	3D re-crosslinking of an acid-resistant layer on NaA tubular membrane for application in acidic feed. <i>Journal of Membrane Science</i> , 2019 , 589, 117259	9.6	4

47	Facile Fabrication of High Performance Nanofiltration Membranes by Using Molecular Coordination Complexes as Pore-Forming Agents. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 2728-2738	8.3	8
46	PDMS/ZIF-8 coating polymeric hollow fiber substrate for alcohol permselective pervaporation membranes. <i>Chinese Journal of Chemical Engineering</i> , 2019 , 27, 2376-2382	3.2	11
45	The potential of pervaporation for biofuel recovery from fermentation: An energy consumption point of view. <i>Chinese Journal of Chemical Engineering</i> , 2019 , 27, 1296-1306	3.2	19
44	MoS ₂ / polyelectrolytes hybrid nanofiltration (NF) membranes with enhanced permselectivity. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018 , 84, 196-202	5.3	19
43	Enhanced pH and oxidant resistance of polyelectrolyte multilayers via the confinement effect of lamellar graphene oxide nanosheets. <i>Separation and Purification Technology</i> , 2018 , 193, 274-282	8.3	9
42	Facile fabrication of mixed matrix membranes from simultaneously polymerized hyperbranched polymer/modified graphene oxide for MTBE/MeOH separation. <i>Journal of Membrane Science</i> , 2018 , 559, 8-18	9.6	21
41	Membrane materials in the pervaporation separation of aromatic/aliphatic hydrocarbon mixtures [A review]. <i>Chinese Journal of Chemical Engineering</i> , 2018 , 26, 1-16	3.2	45
40	Vacuum-assisted assembly of ZIF-8@GO composite membranes on ceramic tube with enhanced organic solvent nanofiltration performance. <i>Journal of Membrane Science</i> , 2018 , 545, 158-166	9.6	80
39	Preparation of acid-resistant PEI/SA composite membranes for the pervaporation dehydration of ethanol at low pH. <i>Separation and Purification Technology</i> , 2018 , 192, 205-212	8.3	29
38	Tuning molecular sieving channels of layered double hydroxides membrane with direct intercalation of amino acids. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 17148-17155	13	16
37	Self-assembled soft nanoparticle membranes with programmed free volume hierarchy. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22925-22930	13	17
36	A vertically channeled lamellar membrane for molecular sieving of water from organic solvents. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18095-18102	13	10
35	Tuning inter-layer spacing of graphene oxide laminates with solvent green to enhance its nanofiltration performance. <i>Journal of Membrane Science</i> , 2017 , 527, 43-50	9.6	37
34	Hyperbranched polymer composite membrane using water as solvent for separating aromatic/aliphatic hydrocarbon mixtures. <i>Separation and Purification Technology</i> , 2017 , 179, 225-235	8.3	5
33	In situ repairing the large defects of macroporous ceramic membranes by polyelectrolyte-coated nanoparticles. <i>Separation and Purification Technology</i> , 2017 , 183, 318-326	8.3	4
32	Pervaporation dehydration of acetic acid using NH ₂ -UiO-66/PEI mixed matrix membranes. <i>Separation and Purification Technology</i> , 2017 , 186, 20-27	8.3	39
31	Nanoconfined Zeolitic Imidazolate Framework Membranes with Composite Layers of Nearly Zero Thickness. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 21979-83	9.5	46
30	Ceramic tubular MOF hybrid membrane fabricated through in situ layer-by-layer self-assembly for nanofiltration. <i>AIChE Journal</i> , 2016 , 62, 538-546	3.6	80

29	Oriented Nano-Microstructure-Assisted Controllable Fabrication of Metal-Organic Framework Membranes on Nickel Foam. <i>Advanced Materials</i> , 2016 , 28, 2374-81	24	77
28	Layer-by-layer self-assembly of polycation/GO nanofiltration membrane with enhanced stability and fouling resistance. <i>Separation and Purification Technology</i> , 2016 , 160, 123-131	8.3	132
27	Roll-coating of defect-free membranes with thin selective layer for alcohol permselective pervaporation: From laboratory scale to pilot scale. <i>Chemical Engineering Journal</i> , 2016 , 289, 106-113	14.7	15
26	Functionalized metal-organic polyhedra hybrid membranes for aromatic hydrocarbons recovery. <i>AIChE Journal</i> , 2016 , 62, 3706-3716	3.6	33
25	Co(HCOO) ₂ -based hybrid membranes for the pervaporation separation of aromatic/aliphatic hydrocarbon mixtures. <i>Journal of Membrane Science</i> , 2016 , 520, 646-656	9.6	24
24	Nanostructure array assisted aggregation-based growth of a Co-MOF-74 membrane on a Ni-foam substrate for gas separation. <i>RSC Advances</i> , 2016 , 6, 94177-94183	3.7	15
23	Enhanced flux of polydimethylsiloxane membrane for ethanol permselective pervaporation via incorporation of MIL-53 particles. <i>Journal of Membrane Science</i> , 2015 , 492, 322-330	9.6	77
22	Metal-organic framework/poly(vinyl alcohol) nanohybrid membrane for the pervaporation of toluene/n-heptane mixtures. <i>Journal of Membrane Science</i> , 2015 , 489, 144-152	9.6	51
21	Tubular thermal crosslinked-PEBA/ceramic membrane for aromatic/aliphatic pervaporation. <i>Journal of Membrane Science</i> , 2015 , 486, 1-9	9.6	47
20	MCM-41@ZIF-8/PDMS hybrid membranes with micro- and nanoscaled hierarchical structure for alcohol permselective pervaporation. <i>Separation and Purification Technology</i> , 2015 , 153, 146-155	8.3	51
19	Highly stable pore-filling tubular composite membrane by self-crosslinkable hyperbranched polymers for toluene/n-heptane separation. <i>Journal of Membrane Science</i> , 2015 , 474, 263-272	9.6	22
18	Tuning properties of silicalite-1 for enhanced ethanol/water pervaporation separation in its PDMS hybrid membrane. <i>Microporous and Mesoporous Materials</i> , 2015 , 201, 35-42	5.3	43
17	Covalent crosslinked polyelectrolyte complex membrane with high negative charges towards anti-natural organic matter fouling nanofiltration. <i>RSC Advances</i> , 2015 , 5, 11515-11523	3.7	25
16	One-step self-assembly fabrication of amphiphilic hyperbranched polymer composite membrane from aqueous emulsion for dye desalination. <i>Journal of Membrane Science</i> , 2014 , 452, 143-151	9.6	65
15	Designing superhydrophobic surfaces with SAM modification on hierarchical ZIF-8/polymer hybrid membranes for efficient bioalcohol pervaporation. <i>RSC Advances</i> , 2014 , 4, 59750-59753	3.7	19
14	Self-modified fabrication of inner skin ZIF-8 tubular membranes by a counter diffusion assisted secondary growth method. <i>RSC Advances</i> , 2014 , 4, 33007-33012	3.7	16
13	Hybrid membranes of metal-organic molecule nanocages for aromatic/aliphatic hydrocarbon separation by pervaporation. <i>Chemical Communications</i> , 2014 , 50, 13921-3	5.8	46
12	Poly(vinyl alcohol)-graphene oxide nanohybrid pore-filling membrane for pervaporation of toluene/n-heptane mixtures. <i>Journal of Membrane Science</i> , 2014 , 455, 113-120	9.6	82

11	In situ ultraviolet-light-induced TiO ₂ nanohybrid superhydrophilic membrane for pervaporation dehydration. <i>Separation and Purification Technology</i> , 2014 , 122, 32-40	8.3	32
10	Coordination-driven in situ self-assembly strategy for the preparation of metal-organic framework hybrid membranes. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 9775-9	16.4	284
9	Coordination-Driven In Situ Self-Assembly Strategy for the Preparation of Metal-Organic Framework Hybrid Membranes. <i>Angewandte Chemie</i> , 2014 , 126, 9933-9937	3.6	40
8	Nanodisperse ZIF-8/PDMS hybrid membranes for biobutanol permselective pervaporation. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 20947-20957	13	67
7	Covalent crosslinked assembly of tubular ceramic-based multilayer nanofiltration membranes for dye desalination. <i>AIChE Journal</i> , 2013 , 59, 3834-3842	3.6	61
6	Self-assembly of graphene oxide and polyelectrolyte complex nanohybrid membranes for nanofiltration and pervaporation. <i>Chemical Engineering Journal</i> , 2012 , 213, 318-329	14.7	208
5	Layer-by-layer assembled nanohybrid multilayer membranes for pervaporation dehydration of acetone/water mixtures. <i>Journal of Membrane Science</i> , 2012 , 415-416, 745-757	9.6	32
4	Dynamic layer-by-layer self-assembly of organic/inorganic composite hollow fiber membranes. <i>AIChE Journal</i> , 2012 , 58, 3176-3182	3.6	18
3	The salt-, pH- and oxidant-responsive pervaporation behaviors of weak polyelectrolyte multilayer membranes. <i>Journal of Membrane Science</i> , 2010 , 354, 14-22	9.6	43
2	Preparation of pilot-scale inner skin hollow fiber pervaporation membrane module: Effects of dynamic assembly conditions. <i>Journal of Membrane Science</i> , 2009 , 338, 43-50	9.6	26
1	Self-assembly of inner skin hollow fiber polyelectrolyte multilayer membranes by a dynamic negative pressure layer-by-layer technique. <i>Journal of Membrane Science</i> , 2008 , 325, 109-116	9.6	63