Nanofoaming of Polyamide Desalination Membranes To

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Citation Report

#	Article	IF	CITATIONS
1	Temperature measurement of the reaction zone during polyamide film formation by interfacial polymerization. Journal of Membrane Science, 2018, 566, 329-335.	8.2	55
2	Ceramic-supported thin film composite membrane for organic solvent nanofiltration. Journal of Membrane Science, 2018, 563, 857-863.	8.2	62
3	Rapid water transport through controllable, ultrathin polyamide nanofilms for high-performance nanofiltration. Journal of Materials Chemistry A, 2018, 6, 15701-15709.	10.3	148
4	Tannic Acid/Fe ³⁺ Nanoscaffold for Interfacial Polymerization: Toward Enhanced Nanofiltration Performance. Environmental Science & Environme	10.0	310
5	Potable Water Reuse through Advanced Membrane Technology. Environmental Science & Eamp; Technology, 2018, 52, 10215-10223.	10.0	363
6	Preparation of nanocavity-contained thin film composite nanofiltration membranes with enhanced permeability and divalent to monovalent ion selectivity. Desalination, 2018, 445, 115-122.	8.2	96
7	Electron tomography reveals details of the internal microstructure of desalination membranes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8694-8699.	7.1	69
8	3D printed polyamide membranes for desalination. Science, 2018, 361, 682-686.	12.6	359
9	Construction of MoS2 composite membranes on ceramic hollow fibers for efficient water desalination. Journal of Membrane Science, 2019, 592, 117369.	8.2	45
10	Nanofibrous hydrogel composite membranes with ultrafast transport performance for molecular separation in organic solvents. Journal of Materials Chemistry A, 2019, 7, 19269-19279.	10.3	90
11	Rapid co-deposition of graphene oxide incorporated metal-phenolic network/piperazine followed by crosslinking for high flux nanofiltration membranes. Journal of Membrane Science, 2019, 588, 117203.	8.2	26
12	The upper bound of thin-film composite (TFC) polyamide membranes for desalination. Journal of Membrane Science, 2019, 590, 117297.	8.2	381
13	Tailoring Polyamide Rejection Layer with Aqueous Carbonate Chemistry for Enhanced Membrane Separation: Mechanistic Insights, Chemistry-Structure-Property Relationship, and Environmental Implications. Environmental Science & Environmental Science	10.0	91
14	Double-Crosslinked GO Interlayer Framework as a Pervaporation Hybrid Membrane with High Performance. ACS Omega, 2019, 4, 15043-15050.	3.5	12
15	Seawater pretreatment with an NF-like forward osmotic membrane: Membrane preparation, characterization and performance comparison with RO-like membranes. Desalination, 2019, 470, 114115.	8.2	18
16	New Insights into the Role of an Interlayer for the Fabrication of Highly Selective and Permeable Thin-Film Composite Nanofiltration Membrane. ACS Applied Materials & Samp; Interfaces, 2019, 11, 7349-7356.	8.0	234
17	High-performance polyamide/ceramic hollow fiber TFC membranes with TiO2 interlayer for pervaporation dehydration of isopropanol solution. Journal of Membrane Science, 2019, 576, 26-35.	8.2	60
18	Highly permeable and highly selective ultrathin film composite polyamide membranes reinforced by reactable polymer chains. Journal of Colloid and Interface Science, 2019, 552, 418-425.	9.4	24

#	ARTICLE	IF	CITATIONS
19	MOF-positioned polyamide membranes with a fishnet-like structure for elevated nanofiltration performance. Journal of Materials Chemistry A, 2019, 7, 16313-16322.	10.3	166
20	From micro to nano: Polyamide thin film on microfiltration ceramic tubular membranes for nanofiltration. Journal of Membrane Science, 2019, 587, 117161.	8.2	51
21	Supramolecular-Based Regenerable Coating Layer of a Thin-Film Composite Nanofiltration Membrane for Simultaneously Enhanced Desalination and Antifouling Properties. ACS Applied Materials & Samp; Interfaces, 2019, 11, 21137-21149.	8.0	92
22	Confined nanobubbles shape the surface roughness structures of thin film composite polyamide desalination membranes. Journal of Membrane Science, 2019, 582, 342-349.	8.2	143
23	Emerging R&D on membranes and systems for water reuse and desalination. Chinese Journal of Chemical Engineering, 2019, 27, 1578-1585.	3.5	27
24	Graphene oxide (GO)-interlayered thin-film nanocomposite (TFN) membranes with high solvent resistance for organic solvent nanofiltration (OSN). Journal of Materials Chemistry A, 2019, 7, 13315-13330.	10.3	86
25	Thin-film nanocomposite membranes incorporated with water stable metal-organic framework CuBTTri for mitigating biofouling. Journal of Membrane Science, 2019, 582, 289-297.	8.2	58
26	Calcium-Carboxyl Intrabridging during Interfacial Polymerization: A Novel Strategy to Improve Antifouling Performance of Thin Film Composite Membranes. Environmental Science & Emp; Technology, 2019, 53, 4371-4379.	10.0	64
27	Effects of the support on the characteristics and permselectivity of thin film composite membranes. Journal of Membrane Science, 2019, 580, 12-23.	8.2	88
28	Hydrophilic Silver Nanoparticles Induce Selective Nanochannels in Thin Film Nanocomposite Polyamide Membranes. Environmental Science & Environmental S	10.0	190
29	Synthesis and gas transport properties of polyamide membranes containing PDMS groups. RSC Advances, 2019, 9, 9737-9744.	3.6	17
30	Thin film nanocomposite hollow fiber membranes comprising Na+-functionalized carbon quantum dots for brackish water desalination. Water Research, 2019, 154, 54-61.	11.3	79
31	Tuning roughness features of thin film composite polyamide membranes for simultaneously enhanced permeability, selectivity and anti-fouling performance. Journal of Colloid and Interface Science, 2019, 540, 382-388.	9.4	139
32	Carbon nanotubes enhance permeability of ultrathin polyamide rejection layers. Journal of Membrane Science, 2019, 570-571, 139-145.	8.2	61
33	Fabrication of a novel and green thin-film composite membrane containing nanovoids for water purification. Journal of Membrane Science, 2019, 570-571, 314-321.	8.2	54
34	High-performance thin-film composite polyamide membranes developed with green ultrasound-assisted interfacial polymerization. Journal of Membrane Science, 2019, 570-571, 112-119.	8.2	84
35	Improved reverse osmosis thin film composite biomimetic membranes by incorporation of polymersomes. Journal of Membrane Science, 2020, 593, 117392.	8.2	23
36	Tailoring the internal void structure of polyamide films to achieve highly permeable reverse osmosis membranes for water desalination. Journal of Membrane Science, 2020, 595, 117518.	8.2	46

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#	ARTICLE	IF	CITATIONS
37	Resorcinol-formaldehyde nanobowls modified thin film nanocomposite membrane with enhanced nanofiltration performance. Journal of Membrane Science, 2020, 594, 117468.	8.2	42
38	Fast surface crosslinking ceramic hollow fiber pervaporation composite membrane with outstanding separation performance for isopropanol dehydration. Separation and Purification Technology, 2020, 234, 116116.	7.9	14
39	A Facile and Scalable Fabrication Procedure for Thin-Film Composite Membranes: Integration of Phase Inversion and Interfacial Polymerization. Environmental Science & Eamp; Technology, 2020, 54, 1946-1954.	10.0	56
40	Fabrication of Highly Permeable and Thermally Stable Reverse Osmosis Thin Film Composite Polyamide Membranes. ACS Applied Materials & Samp; Interfaces, 2020, 12, 2916-2925.	8.0	44
41	Charting the quantitative relationship between two-dimensional morphology parameters of polyamide membranes and synthesis conditions. Molecular Systems Design and Engineering, 2020, 5, 102-109.	3.4	8
42	Chemically functionalized polyamide thin film composite membranes: The art of chemistry. Desalination, 2020, 495, 114655.	8.2	43
43	High-Performance Zwitterionic Nanofiltration Membranes Fabricated via Microwave-Assisted Grafting of Betaine. ACS Applied Materials & Samp; Interfaces, 2020, 12, 35523-35531.	8.0	23
44	A Critical Review on Thin-Film Nanocomposite Membranes with Interlayered Structure: Mechanisms, Recent Developments, and Environmental Applications. Environmental Science & E	10.0	308
45	Nanodiamond-Enabled Thin-Film Nanocomposite Polyamide Membranes for High-Temperature Water Treatment. ACS Applied Materials & Samp; Interfaces, 2020, 12, 53274-53285.	8.0	33
46	Immobilization of sulfonated polysulfone via 2D LDH nanosheets during phase-inversion: A novel strategy towards greener membrane synthesis and enhanced desalination performance. Journal of Membrane Science, 2020, 614, 118508.	8.2	23
47	Mechanistic Insights into the Role of Polydopamine Interlayer toward Improved Separation Performance of Polyamide Nanofiltration Membranes. Environmental Science & Environmen	10.0	137
48	PIP/TMC Interfacial Polymerization with Electrospray: Novel Loose Nanofiltration Membrane for Dye Wastewater Treatment. ACS Applied Materials & Samp; Interfaces, 2020, 12, 36148-36158.	8.0	130
49	Probing the Contributions of Interior and Exterior Channels of Nanofillers toward the Enhanced Separation Performance of a Thin-Film Nanocomposite Reverse Osmosis Membrane. Environmental Science and Technology Letters, 2020, 7, 766-772.	8.7	41
50	Tuning the Surface Structure of Polyamide Membranes Using Porous Carbon Nitride Nanoparticles for High-Performance Seawater Desalination. Membranes, 2020, 10, 163.	3.0	12
51	Vacuum-assisted diamine monomer distribution for synthesizing polyamide composite membranes by interfacial polymerization. Journal of Membrane Science, 2020, 616, 118557.	8.2	50
52	Thin-film nanocomposite membranes containing tannic acid-Fe3+ modified MoS2 nanosheets with enhanced nanofiltration performance. Journal of Membrane Science, 2020, 616, 118605.	8.2	82
53	Using reverse osmosis membranes to control ion transport during water electrolysis. Energy and Environmental Science, 2020, 13, 3138-3148.	30.8	49
54	Metal–Organic Framework Nanosheets for Thin-Film Composite Membranes with Enhanced Permeability and Selectivity. ACS Applied Nano Materials, 2020, 3, 9238-9248.	5.0	57

#	Article	IF	CITATIONS
55	Ultrathin Film Composite Membranes Fabricated by Novel In Situ Free Interfacial Polymerization for Desalination. ACS Applied Materials & Interfaces, 2020, 12, 25304-25315.	8.0	101
56	Dissecting the Role of Substrate on the Morphology and Separation Properties of Thin Film Composite Polyamide Membranes: Seeing Is Believing. Environmental Science & Environm	10.0	123
57	Engineering a Nanocomposite Interlayer for a Novel Ceramic-Based Forward Osmosis Membrane with Enhanced Performance. Environmental Science & Enparce (2020, 54, 7715-7724.	10.0	63
58	Comparison of water and salt transport properties of ion exchange, reverse osmosis, and nanofiltration membranes for desalination and energy applications. Journal of Membrane Science, 2020, 604, 117998.	8.2	31
59	Facile Fabrication of High-Performance Thin Film Nanocomposite Desalination Membranes Imbedded with Alkyl Group-Capped Silica Nanoparticles. Polymers, 2020, 12, 1415.	4.5	18
60	Ultrathin polyamide nanofilm with an asymmetrical structure: A novel strategy to boost the permeance of reverse osmosis membranes. Journal of Membrane Science, 2020, 612, 118402.	8.2	17
61	Fabrication of high performance TFN membrane containing NH ₂ -SWCNTs <i>via</i> interfacial regulation. RSC Advances, 2020, 10, 25186-25199.	3.6	14
62	Constructing interlayer to tailor structure and performance of thin-film composite polyamide membranes: A review. Advances in Colloid and Interface Science, 2020, 282, 102204.	14.7	154
63	Intrinsic Nanoscale Structure of Thin Film Composite Polyamide Membranes: Connectivity, Defects, and Structure–Property Correlation. Environmental Science & Environmental Science & 2020, 54, 3559-3569.	10.0	135
64	Electrosprayed polyamide nanofiltration membrane with intercalated structure for controllable structure manipulation and enhanced separation performance. Journal of Membrane Science, 2020, 602, 117971.	8.2	68
65	Effect of ultrasonication parameters on forward osmosis performance of thin film composite polyamide membranes prepared with ultrasound-assisted interfacial polymerization. Journal of Membrane Science, 2020, 599, 117834.	8.2	26
66	High-performance nanofiltration membrane structured with enhanced stripe nano-morphology. Journal of Membrane Science, 2020, 600, 117852.	8.2	57
67	Evaluation of anti-bacterial adhesion performance of polydopamine cross-linked graphene oxide RO membrane via in situ optical coherence tomography. Desalination, 2020, 479, 114339.	8.2	35
68	Toward enhancing the separation and antifouling performance of thin-film composite nanofiltration membranes: A novel carbonate-based preoccupation strategy. Journal of Colloid and Interface Science, 2020, 571, 155-165.	9.4	47
69	Superior nanofiltration membranes with gradient cross-linked selective layer fabricated via controlled hydrolysis. Journal of Membrane Science, 2020, 604, 118067.	8.2	58
70	Tailoring the Polyamide Active Layer of Thin-Film Composite Forward Osmosis Membranes with Combined Cosolvents during Interfacial Polymerization. Industrial & Engineering Chemistry Research, 2020, 59, 8230-8242.	3.7	21
71	Hydrophilic yolk-shell ZIF-8 modified polyamide thin-film nanocomposite membrane with improved permeability and selectivity. Separation and Purification Technology, 2020, 247, 116990.	7.9	44
72	Polyamide reverse osmosis membranes containing 1D nanochannels for enhanced water purification. Journal of Membrane Science, 2021, 618, 118681.	8.2	37

#	Article	IF	CITATIONS
73	Structure adjustment for enhancing the water permeability and separation selectivity of the thin film composite nanofiltration membrane based on a dendritic hyperbranched polymer. Journal of Membrane Science, 2021, 618, 118455.	8.2	37
74	Polydopamine nanoparticles modified nanofiber supported thin film composite membrane with enhanced adhesion strength for forward osmosis. Journal of Membrane Science, 2021, 618, 118673.	8.2	45
75	Highly improved organic solvent reverse osmosis (OSRO) membrane for organic liquid mixture separation by simple heat treatment. Journal of Membrane Science, 2021, 618, 118710.	8.2	27
76	High-throughput thin-film composite membrane via interfacial polymerization using monomers of ultra-low concentration on tannic acid $\hat{a} \in \text{Copper}$ interlayer for organic solvent nanofiltration. Separation and Purification Technology, 2021, 258, 118027.	7.9	38
77	Recent advances in high-performance TFC membranes: A review of the functional interlayers. Desalination, 2021, 500, 114869.	8.2	127
78	Composite reverse osmosis membrane with a selective separation layer of double-layer structure for enhanced desalination, anti-fouling and durability properties. Desalination, 2021, 499, 114838.	8.2	30
79	Developing helical carbon functionalized chitosan-based loose nanofiltration membranes for selective separation and wastewater treatment. Chemical Engineering Journal, 2021, 417, 127911.	12.7	23
80	Breaking through permeability–selectivity tradeâ€off of thinâ€film composite membranes assisted with crown ethers. AICHE Journal, 2021, 67, e17173.	3.6	17
81	Fabrication of desalination membranes by interfacial polymerization: history, current efforts, and future directions. Chemical Society Reviews, 2021, 50, 6290-6307.	38.1	263
82	Polyamide Nanofiltration Membranes from Emulsion-Mediated Interfacial Polymerization. ACS ES&T Engineering, 2021, 1, 533-542.	7.6	23
83	Energy Efficient Seawater Desalination: Strategies and Opportunities. Energy Technology, 2021, 9, 2100008.	3.8	8
84	A review on the synthesis of fully aromatic polyamide reverse osmosis membranes. Desalination, 2021, 502, 114939.	8.2	64
85	Use of Ionic Liquids and Co-Solvents for Synthesis of Thin-Film Composite Membranes. Membranes, 2021, 11, 297.	3.0	4
86	Understanding water and solute transport in thin film nanocomposite membranes by resistance-in-series theory combined with Monte Carlo simulation. Journal of Membrane Science, 2021, 626, 119106.	8.2	10
87	Optimization of interfacial polymerization to fabricate thin-film composite hollow fiber membranes in modules for brackish water reverse osmosis. Journal of Membrane Science, 2021, 626, 119187.	8.2	19
88	Does interfacial vaporization of organic solvent affect the structure and separation properties of polyamide RO membranes?. Journal of Membrane Science, 2021, 625, 119173.	8.2	47
89	Biomimetic asymmetric structural polyamide OSN membranes fabricated via fluorinated polymeric networks regulated interfacial polymerization. Journal of Membrane Science, 2021, 625, 119112.	8.2	30
90	Polyamide membrane with nanocluster assembly structure for desalination. Journal of Membrane Science, 2021, 628, 119230.	8.2	17

#	Article	IF	CITATIONS
91	Tailoring the asymmetric structure of polyamide reverse osmosis membrane with self-assembled aromatic nanoparticles for high-efficient removal of organic micropollutants. Chemical Engineering Journal, 2021, 416, 129080.	12.7	35
92	Regulating composition and structure of nanofillers in thin film nanocomposite (TFN) membranes for enhanced separation performance: A critical review. Separation and Purification Technology, 2021, 266, 118567.	7.9	122
93	Interlayered Forward Osmosis Membranes with Ti ₃ C ₂ T _{<i>x</i>} MXene and Carbon Nanotubes for Enhanced Municipal Wastewater Concentration. Environmental Science & Enhanced Municipal Wastewater Concentration. Environmental Science & Enhanced Municipal Wastewater Concentration.	10.0	16
95	Thin-Film Composite Membrane Prepared by Interfacial Polymerization on the Integrated ZIF-L Nanosheets Interface for Pervaporation Dehydration. ACS Applied Materials & Deficiency (1997), 13, 39819-39830.	8.0	19
96	Advanced thin-film nanocomposite membranes embedded with organic-based nanomaterials for water and organic solvent purification: A review. Separation and Purification Technology, 2021, 269, 118719.	7.9	37
97	Crumple-textured polyamide membranes via MXene nanosheet-regulated interfacial polymerization for enhanced nanofiltration performance. Journal of Membrane Science, 2021, 635, 119536.	8.2	64
98	Facile ZIF–8 nanocrystals interlayered solvent–resistant thin–film nanocomposite membranes for enhanced solvent permeance and rejection. Journal of Membrane Science, 2021, 636, 119586.	8.2	32
99	Fabrication of high performance TFN membrane incorporated with graphene oxide via support-free interfacial polymerization. Science of the Total Environment, 2021, 793, 148503.	8.0	24
100	Enhancing water permeability and antifouling performance of thin–film composite membrane by tailoring the support layer. Desalination, 2021, 516, 115193.	8.2	23
101	Manipulating interfacial polymerization for polymeric nanofilms of composite separation membranes. Progress in Polymer Science, 2021, 122, 101450.	24.7	90
102	Polyamide desalination membranes: Formation, structure, and properties. Progress in Polymer Science, 2021, 122, 101451.	24.7	123
103	Regulating solvent activation by the mechanical force for the fabrication of reverse osmosis membranes with high permeability and selectivity. Journal of Membrane Science, 2021, 638, 119732.	8.2	11
104	Regulating the interfacial polymerization process toward high-performance polyamide thin-film composite reverse osmosis and nanofiltration membranes: A review. Journal of Membrane Science, 2021, 640, 119765.	8.2	106
105	The role of phase transfer catalysts on properties of polyamide thin-film composite forward osmosis membranes. Chemical Engineering Journal, 2021, 426, 128989.	12.7	9
106	Anionic covalent organic framework as an interlayer to fabricate negatively charged polyamide composite nanofiltration membrane featuring ions sieving. Chemical Engineering Journal, 2022, 427, 132009.	12.7	43
107	A critical review on porous substrates of TFC polyamide membranes: Mechanisms, membrane performances, and future perspectives. Journal of Membrane Science, 2022, 641, 119871.	8.2	167
108	Direct ellipsometry for non-destructive characterization of interfacially-polymerized thin-film composite membranes. Journal of Membrane Science, 2020, 608, 118174.	8.2	13
109	Facile polyamide microstructure adjustment of the composite reverse osmosis membrane assisted by PF127/SDS mixed micelles for improving seawater desalination performance. Desalination, 2022, 521, 115395.	8.2	7

#	Article	IF	CITATIONS
110	Elucidating the role of graphene oxide layers in enhancing N-Nitrosodimethylamine (NDMA) rejection and antibiofouling property of RO membrane simultaneously. Journal of Membrane Science, 2022, 643, 120043.	8.2	6
111	Preparation of highly selective nanofiltration membranes by moderately increasing pore size and optimizing microstructure of polyamide layer. Journal of Membrane Science, 2022, 643, 120056.	8.2	24
112	Hierarchically porous membranes with multiple channels: Fabrications in PVDF/PMMA/PLLA blend and enhanced separation performance. Journal of Membrane Science, 2022, 643, 120065.	8.2	12
113	Accessing greater thickness and new morphology features in polyamide active layers of thin-film composite membranes by reducing restrictions in amine monomer supply. Journal of Membrane Science, 2022, 644, 120112.	8.2	27
114	Preparation of advanced reverse osmosis membrane by a wettability-transformable interlayer combining with N-acyl imidazole chemistry. Journal of Membrane Science, 2022, 644, 120085.	8.2	11
115	Toward Enhancing Desalination and Heavy Metal Removal of TFC Nanofiltration Membranes: A Cost-Effective Interface Temperature-Regulated Interfacial Polymerization. ACS Applied Materials & Amp; Interfaces, 2021, 13, 57998-58010.	8.0	57
116	Second interfacial polymerization decorating defects of TFC NF membrane formed by 1D nanochannels for improving separation performance. Journal of Environmental Chemical Engineering, 2022, 10, 106896.	6.7	2
117	Micropatterned Thin-Film Composite Poly(piperazine-amide) Nanofiltration Membranes for Wastewater Treatment. ACS Applied Polymer Materials, 2021, 3, 6653-6665.	4.4	18
118	Ultrathin Sulfonated Mesoporous Interlayer Facilitates to Prepare Highly-Permeable Polyamide Nanofiltration Membranes. SSRN Electronic Journal, 0, , .	0.4	0
119	Tailored design of nanofiltration membranes for water treatment based on synthesis–property–performance relationships. Chemical Society Reviews, 2022, 51, 672-719.	38.1	182
120	Biocidal surfactant-assisted fabrication of thin film composite membranes with excellent and durable anti-biofouling performance. Chemical Engineering Journal, 2022, 431, 134114.	12.7	18
121	Conjugated polyaniline derivative membranes enable ultrafast nanofiltration and organic-solvent nanofiltration. Journal of Membrane Science, 2022, 645, 120241.	8.2	20
122	Exploring of Polyethylene Membrane as a Porous Support for High-Performance Polyamide TFC Reverse Osmosis Membranes. SSRN Electronic Journal, 0, , .	0.4	0
123	Ultrapermeable nanofiltration membranes with tunable selectivity fabricated with polyaniline nanofibers. Journal of Materials Chemistry A, 2022, 10, 4392-4401.	10.3	13
124	Layer-by-layer assembly of nanocomposite interlayers on a kaolin substrate for enhancing membrane performance of Pb(II) and Cd(II) removal. Science of the Total Environment, 2022, 820, 153149.	8.0	6
125	Polyamide thin film nanocomposite membrane with internal void structure mediated by silica and SDS for highly permeable reverse-osmosis application. Composites Communications, 2022, , 101092.	6.3	3
126	MXene-regulation polyamide membrane featuring with bubble-like nodule for efficient dye/salt separation and antifouling performance. RSC Advances, 2022, 12, 10267-10279.	3.6	21
127	Sulfonated Zr-Based Metal-Organic Framework Incorporated Thin-Film Composite Membrane for Enhanced Desalination. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	CITATIONS
128	Mechanism and performance relevance of nanomorphogenesis in polyamide films revealed by quantitative 3D imaging and machine learning. Science Advances, 2022, 8, eabk1888.	10.3	22
129	Novel Poly(ester amide) Membranes with Tunable Crosslinked Structures for Nanofiltration. ACS Applied Materials & Diterfaces, 2022, 14, 10782-10792.	8.0	30
130	Metal-organic framework enables ultraselective polyamide membrane for desalination and water reuse. Science Advances, 2022, 8, eabm4149.	10.3	87
131	Deciphering the Role of Amine Concentration on Polyamide Formation toward Enhanced RO Performance. ACS ES&T Engineering, 2022, 2, 903-912.	7.6	23
132	Tweak in Puzzle: Tailoring Membrane Chemistry and Structure toward Targeted Removal of Organic Micropollutants for Water Reuse. Environmental Science and Technology Letters, 2022, 9, 247-257.	8.7	42
133	Aromatic Polyamide Brushes for High Young's Modulus Surfaces by Surface-Initiated Chain-Growth Condensation Polymerization. Macromolecules, 2022, 55, 2051-2066.	4.8	4
134	Ultrathin Membranes for Separations: A New Era Driven by Advanced Nanotechnology. Advanced Materials, 2022, 34, e2108457.	21.0	58
135	Cost-effective polymer-based membranes for drinking water purification. Giant, 2022, 10, 100099.	5.1	26
136	Ultra-smooth and ultra-thin polyamide thin film nanocomposite membranes incorporated with functionalized MoS2 nanosheets for high performance organic solvent nanofiltration. Separation and Purification Technology, 2022, 291, 120937.	7.9	23
137	Ultrathin sulfonated mesoporous interlayer facilitates to prepare highly-permeable polyamide nanofiltration membranes. Journal of Membrane Science, 2022, 652, 120507.	8.2	20
138	Development of high-performance electrospun nanofiber based forward osmosis membrane by introducing graphene oxideâ€'calcium carbonate particle composite intermediate layer. Desalination, 2022, 531, 115672.	8.2	7
139	Thin film nanocomposite membrane incorporated with 2D-MOF nanosheets for highly efficient reverse osmosis desalination. Journal of Membrane Science, 2022, 653, 120520.	8.2	44
140	Revolutionizing Membrane Design Using Machine Learning-Bayesian Optimization. Environmental Science &	10.0	63
141	Thin Film Polyamide Nanocomposite Membrane Decorated by Polyphenol-Assisted Ti ₃ C ₂ T _{<i>x</i>Applied Materials & Decorated by Polyphenol-Assisted Ti₃C₂T_{ACS Applied Materials & Decorated by Polyphenol-Assisted}}	8.0	30
142	The Intrinsic Parameters of the Polyamide Nanofilm in Thin-Film Composite Reverse Osmosis (TFC-RO) Membranes: The Impact of Monomer Concentration. Membranes, 2022, 12, 417.	3.0	7
143	Rapid and selective recycling of Ag(I) from wastewater through an allylrhodanine functionalized micro-filtration membrane. Chemical Engineering Journal, 2022, , 136376.	12.7	4
144	Compounded Nonsterile Preparations and FDA-Approved Commercially Available Liquid Products for Children: A North American Update. Pharmaceutics, 2022, 14, 1032.	4.5	4
145	Optimizing the surface properties of nanofiltration membrane by tailoring the diffusion coefficient of amine monomer. Journal of Membrane Science, 2022, 656, 120601.	8.2	16

#	Article	IF	CITATIONS
146	Amphiphilic MOF nanoflakes for ultraselective polyamide membranes. Matter, 2022, 5, 1350-1352.	10.0	0
147	Re-thinking polyamide thin film formation: How does interfacial destabilization dictate film morphology?. Journal of Membrane Science, 2022, 656, 120593.	8.2	24
148	A PEI/TMC membrane modified with an ionic liquid with enhanced permeability and antibacterial properties for the removal of heavy metal ions. Journal of Hazardous Materials, 2022, 435, 129010.	12.4	33
149	Enhancing the Permselectivity of Thin-Film Composite Membranes Interlayered with MoS ₂ Nanosheets via Precise Thickness Control. Environmental Science & Enhancing Technology, 2022, 56, 8807-8818.	10.0	27
150	Multimodal confined water dynamics in reverse osmosis polyamide membranes. Nature Communications, 2022, 13, 2809.	12.8	16
151	Functionalized-MXene Thin-Film Nanocomposite Hollow Fiber Membranes for Enhanced PFAS Removal from Water. ACS Applied Materials & Samp; Interfaces, 2022, 14, 25397-25408.	8.0	23
152	Effects of polyvinylidene fluoride substrate characteristics on the selectivity of thinâ€film composite nanofiltration membrane. Journal of Applied Polymer Science, 2022, 139, .	2.6	2
153	Tailoring the substrate of thin film reverse osmosis membrane through a novel \hat{l}^2 -FeOOH nanorods templating strategy: An insight into the effects on interfacial polymerization of polyamide. Journal of Membrane Science, 2022, 657, 120706.	8.2	8
154	In Situ Chemical Modification with Zwitterionic Copolymers of Nanofiltration Membranes: Cure for the Trade-Off between Filtration and Antifouling Performance. ACS Applied Materials & Emp; Interfaces, 2022, 14, 28842-28853.	8.0	12
155	Vacuum-assisted MPD loading toward promoted nanoscale structure and enhanced water permeance of polyamide RO membrane. Separation and Purification Technology, 2022, 297, 121547.	7.9	6
156	Highly permeable composite nanofiltration membrane via \hat{I}^3 -cyclodextrin modulation for multiple applications. Separation and Purification Technology, 2022, 297, 121541.	7.9	11
157	Cosolvent-Assisted Interfacial Polymerization toward Regulating the Morphology and Performance of Polyamide Reverse Osmosis Membranes: Increased <i>m</i> -Phenylenediamine Solubility or Enhanced Interfacial Vaporization?. Environmental Science & Enp. Technology, 2022, 56, 10308-10316.	10.0	20
158	Constructing highly rough skin layer of thin film (nano)composite polyamide membranes to enhance separation performance: A review. Journal of Applied Polymer Science, 2022, 139, .	2.6	11
159	Quantitatively relating the structural performance of polyamide layer with skin layer modified via in-situ precipitation. Journal of Membrane Science, 2022, , 120783.	8.2	1
160	Unveiling the Growth of Polyamide Nanofilms at Water/Organic Free Interfaces: Toward Enhanced Water/Salt Selectivity. Environmental Science & Environm	10.0	27
161	Sustainable electrospray polymerization fabrication of thin-film composite polyamide nanofiltration membranes for heavy metal removal. Desalination, 2022, 539, 115952.	8.2	17
162	Fabrication of anti-fouling polyamide nanofiltration membrane by incorporating streptomycin as a novel co-monomer. Chinese Journal of Chemical Engineering, 2022, 50, 185-196.	3.5	4
163	Modeling Water Transport in Interlayered Thin-Film Nanocomposite Membranes: Gutter Effect vs Funnel Effect. ACS ES&T Engineering, 2022, 2, 2023-2033.	7.6	27

#	Article	IF	CITATIONS
164	Thin-Film Composite Membranes with a Carbon Nanotube Interlayer for Organic Solvent Nanofiltration. Membranes, 2022, 12, 817.	3.0	8
165	Trends and errors in reverse osmosis membrane performance calculations stemming from test pressure and simplifying assumptions about concentration polarization and solute rejection. Journal of Membrane Science, 2022, 660, 120856.	8.2	5
166	Hyaluronic acid-modified nanofiltration membrane for ultrahigh water permeance and efficient rejection of PFASs. Chemical Engineering Research and Design, 2022, 166, 214-221.	5.6	10
167	Dataset of reverse osmosis membrane transport properties calculated with and without assumptions about concentration polarization and solute rejection and the errors associated with each assumption. Data in Brief, 2022, 44, 108538.	1.0	O
168	Tuning the surface functionality of polyamide films via termination reaction in molecular layer-by-layer deposition. Journal of Membrane Science, 2022, 661, 120855.	8.2	1
169	Influence of molecular weight cut-off (MWCO) of commercial ultrafiltration substrate on the performance of thin film composite nanofiltration membrane. Desalination, 2022, 541, 116020.	8.2	4
170	Effect of the interlayer construction on the performances of the TFC-FO membranes: A review from materials perspective. Desalination, 2022, 541, 116033.	8.2	11
171	Distinct impact of substrate hydrophilicity on performance and structure of TFC NF and RO polyamide membranes. Journal of Membrane Science, 2022, 662, 120966.	8.2	24
172	Tailored design of highly permeable polyamide-based nanofiltration membrane via a complex-dissociation regulated interfacial polymerization. Chemical Engineering Journal, 2023, 452, 139197.	12.7	12
173	Ultrathin polyamide nanofiltration membrane prepared by triazine-based porous organic polymer as interlayer for dye removal. Chinese Journal of Chemical Engineering, 2023, 57, 193-201.	3.5	1
174	Nanofiltration Membranes with Crumpled Polyamide Films: A Critical Review on Mechanisms, Performances, and Environmental Applications. Environmental Science & Environmental S	10.0	92
175	2D COFs interlayer manipulated interfacial polymerization for fabricating high performance reverse osmosis membrane. Separation and Purification Technology, 2022, 303, 122198.	7.9	8
176	Facile monomer interlayered MOF based thin film nanocomposite for efficient arsenic separation. Chemosphere, 2022, 309, 136634.	8.2	4
177	Facile synthesis of nanofiltration membrane with asymmetric selectivity towards enhanced water recovery for groundwater remediation. Journal of Membrane Science, 2022, 663, 121038.	8.2	13
178	Hollow Fiber Membrane for Organic Solvent Nanofiltration: A Mini Review. Membranes, 2022, 12, 995.	3.0	3
179	Improving properties of thin film nanocomposite membrane via temperature-controlled interfacial polymerization for nanofiltration process. Desalination, 2023, 545, 116091.	8.2	18
180	Demystifying viscous isoalkanes as the organic solvent in interfacial polymerization for manufacturing desalination membranes. Desalination, 2023, 545, 116166.	8.2	3
181	Polyamide nanofiltration membranes with rigid–flexible microstructures for high-efficiency Mg2+/Li+ separation. Separation and Purification Technology, 2023, 306, 122552.	7.9	16

#	Article	IF	CITATIONS
182	MPD and TMC supply as parameters to describe synthesis-morphology-performance relationships of polyamide thin film composite membranes. Journal of Membrane Science, 2023, 667, 121155.	8.2	10
183	Recent advances in thin film nanocomposite membranes containing an interlayer (TFNi): fabrication, applications, characterization and perspectives. RSC Advances, 2022, 12, 34245-34267.	3.6	2
184	Tailored ultra-low pressure nanofiltration membranes for advanced drinking water treatment. Desalination, 2023, 548, 116264.	8.2	19
185	Polyamide thin film nanocomposite membranes with in-situ integration of multiple functional nanoparticles for high performance reverse osmosis. Journal of Membrane Science, 2023, 669, 121311.	8.2	12
186	Demystifying the Role of Surfactant in Tailoring Polyamide Morphology for Enhanced Reverse Osmosis Performance: Mechanistic Insights and Environmental Implications. Environmental Science & Environme	10.0	15
187	Tailoring the crumpled structures of a polyamide membrane with a heterostructural MXene-TiO2 interlayer for high water permeability. Desalination, 2023, 549, 116352.	8.2	11
188	A comprehensive evaluation of PVA enhanced polyamide nanofiltration membranes: Additive versus interlayer. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 660, 130870.	4.7	5
189	Does Surface Roughness Necessarily Increase the Fouling Propensity of Polyamide Reverse Osmosis Membranes by Humic Acid?. Environmental Science & Envi	10.0	14
190	Regulating interfacial polymerization <i>via</i> a multi-functional calcium carbonate based interlayer for a highly permselective nanofiltration membrane. Journal of Materials Chemistry A, 2023, 11, 8836-8844.	10.3	10
191	Generation of Nano-Bubbles by NaHCO3 for Improving the FO Membrane Performance. Membranes, 2023, 13, 404.	3.0	0
192	Sulfonated polyaniline interlayer with controllable doping conditions for high-performance nanofiltration. Journal of Membrane Science, 2023, 672, 121478.	8.2	9
193	Tailoring properties and performance of thin-film composite membranes by salt additives for water treatment: A critical review. Water Research, 2023, 234, 119821.	11.3	7
194	Regulation of micro-structure and surface property of SWRO membrane via introducing albumin into polyamide layer for improving permselectivity. Desalination, 2023, 555, 116551.	8.2	1
195	Modeling nanovoid-enhanced water permeance of thin film composite membranes. Journal of Membrane Science, 2023, 675, 121555.	8.2	7
196	Evading the permeance-selectivity trade-off dilemma in electrospray-assisted interfacial polymerization polyamide thin-film composite membrane through electrospinning nanofibers interlayer. Desalination, 2023, 558, 116625.	8.2	6
197	Low-pressure thin-film composite nanofiltration membranes with enhanced selectivity and antifouling property for effective dye/salt separation. Journal of Colloid and Interface Science, 2023, 641, 197-214.	9.4	13
198	Hydrophilic-hydrophobic heterogeneous interface enables the formation of a high-performance polyamide membrane for water purification. Separation and Purification Technology, 2023, 316, 123752.	7.9	4
199	Correlating the role of nanofillers with active layer properties and performance of thin-film nanocomposite membranes. Desalination, 2023, 550, 116370.	8.2	4

#	Article	IF	CITATIONS
200	Thin-film composite membrane for desalination containing a sulfonated UiO-66 material. Journal of Materials Science, 2023, 58, 3134-3146.	3.7	0
201	Nanofoaming by surfactant tunes morphology and performance of polyamide nanofiltration membrane. Desalination, 2023, 552, 116457.	8.2	8
202	High-Performance Polyamide Reverse Osmosis Membrane Containing Flexible Aliphatic Ring for Water Purification. Polymers, 2023, 15, 944.	4.5	2
203	Nanovehicle-assisted monomer shuttling enables highly permeable and selective nanofiltration membranes for water purification., 2023, 1, 281-290.		27
204	The Veiled Impacts of H ⁺ on Interfacial Polymerization and Its Effects on Nanofiltration Performance. Environmental Science and Technology Letters, 2023, 10, 274-279.	8.7	8
205	Fabrication of novel thin-film composite membrane based on ultrathin metal-organic framework interlayer for enhancing forward osmosis performance. Chinese Chemical Letters, 2023, 34, 108369.	9.0	0
206	Fabricating ultrathin polyamide nanofiltration membranes by surface negative charge-driven assembly strategy for fast desalination. Journal of Membrane Science, 2023, 680, 121758.	8.2	4
207	Mechanistic insights into the role of nanoparticles towards the enhanced performance of thin-film nanocomposite membranes., 2023, 3, 100046.		1
208	Water Nanochannels in MXene Polyamide Nanofiltration Membranes: Implications for Permeability. ACS Applied Nano Materials, 2023, 6, 11282-11290.	5.0	3
209	D (+)-Glucosamine (DGA) based polyesteramide TFC NF membrane for the pretreatment of reverse osmosis seawater desalination. Journal of Membrane Science, 2023, 683, 121835.	8.2	1
210	Recent advances of the interfacial polymerization process in gas separation membranes fabrication. Journal of Membrane Science, 2023, 683, 121854.	8.2	14
211	Constructing carboxylated MXene interlayer in polyamide nanofiltration membrane for enhancing perm-selectivity and antifouling performance. Journal of Membrane Science, 2023, 683, 121860.	8.2	5
212	NaHCO3 addition enhances water permeance and Ca/haloacetic acids selectivity of nanofiltration membranes for drinking water treatment. Water Research, 2023, 242, 120255.	11.3	1
213	Towards enhanced performance of fertilizer-drawn forward osmosis process coupled with sludge thickening using a thin-film nanocomposite membrane interlayered with Mxene scaffolded alginate hydrogel. Journal of Membrane Science, 2023, 685, 121899.	8.2	2
214	Synthesis of nanofiltration membranes with enhanced monovalent and divalent selectivity using \hat{l}^2 -cyclodextrin, tannic acid and ZIF-8. Desalination, 2023, 561, 116685.	8.2	3
215	Visualizing the formation process of interfacial polymerized (Co)polyarylate films by an optical three-dimensional microscope. Chemical Engineering Science, 2023, 278, 118882.	3.8	1
216	Lyotropic Liquid Crystal (LLC)-Templated Nanofiltration Membranes by Precisely Administering LLC/Substrate Interfacial Structure. Membranes, 2023, 13, 549.	3.0	0
217	Spray coating as a novel, versatile tool to prepare membranes via IP. Journal of Membrane Science, 2023, 685, 121905.	8.2	3

#	Article	IF	CITATIONS
218	Expanding the toolbox for microfluidic-based in situ membrane characterization via microscopy. Journal of Membrane Science, 2023, 685, 121897.	8.2	1
219	Attenuated thermal-regulated interfacial polymerization towards polyamide nanofiltration membrane with unprecedentedly enhanced performance. Chemical Engineering Journal, 2023, 471, 144706.	12.7	4
220	High performance cellulose acetate/polyamide (<scp>CA</scp> / <scp>PA</scp>) thin film composite forward osmotic (<scp>TFCâ€FO</scp>) membranes from dual solvent modification processes. Journal of Applied Polymer Science, 2023, 140, .	2.6	0
221	Thin film nanocomposite polyamide membrane doped with amino-functionalized graphene quantum dots for organic solvent nanofiltration. Journal of Membrane Science, 2023, 685, 121960.	8.2	5
222	Role of molybdenum disulfide (MoS2) nanosheets doping position on the thin-film nanocomposite (TFN) membrane during brackish water treatment. Separation and Purification Technology, 2023, 325, 124656.	7.9	2
223	Two-dimensional model of ion transport in composite membranes active layers with TEM-scanned morphology. Desalination, 2023, , 116876.	8.2	0
224	High flux nanofiltration membrane via surface modification using spirocyclic quaternary ammonium diamine for efficient antibiotics/salt separation. Separation and Purification Technology, 2023, 325, 124736.	7.9	3
225	Guanidinium manipulated interfacial polymerization for polyamide nanofiltration membranes with ultra-high permselectivity. Journal of Membrane Science, 2023, 687, 122003.	8.2	3
226	Real-time monitoring of interfacial polymerization using fluorescent dyes. Journal of Membrane Science, 2023, 686, 121998.	8.2	3
227	The Optimized Preparation Conditions of Cellulose Triacetate Hollow Fiber Reverse Osmosis Membrane with Response Surface Methodology. Polymers, 2023, 15, 3569.	4.5	0
228	Water/Salt Transport Properties of Polyamide Reverse Osmosis Membranes Using Quartz Crystal Microbalance. ACS Applied Polymer Materials, 0, , .	4.4	0
229	Recent Advances in the Support Layer, Interlayer and Active Layer of TFC and TFN Organic Solvent Nanofiltration (OSN) Membranes: A Review. Chemical Record, 2023, 23, .	5.8	1
230	Poly(vinyl alcohol)-based polyester nanofiltration membranes for fractionation of dye/salt mixtures: Alcoholysis degree matters. Separation and Purification Technology, 2024, 328, 125076.	7.9	6
231	Chlorine-resistant loose nanofiltration membranes based on interface quaternization of hexamethylenetetramine. Journal of Membrane Science, 2023, 687, 122078.	8.2	2
232	Functionâ€Led Design of Covalentâ€Organicâ€Framework Membranes for Precise Ion Separation. Chemistry - A European Journal, 0, , .	3.3	0
233	Ultra-permeable polyamide nanofiltration membrane modified by hydrophilic-hydrophobic alternated lignocellulosic nanofibrils for efficient water reuse. Journal of Membrane Science, 2023, 688, 122125.	8.2	0
235	Ice-confined synthesis of highly ionized 3D-quasilayered polyamide nanofiltration membranes. Science, 2023, 382, 202-206.	12.6	26
236	Reverse osmosis membrane functionalized with aminated graphene oxide and polydopamine nanospheres plugging for enhanced NDMA rejection and anti-fouling performance. Chemosphere, 2023, 338, 139557.	8.2	3

#	Article	IF	CITATIONS
237	Modulating interfacial polymerization via 1-methylimidazole as reactive additive for nanofiltration membrane with high-performance. Desalination, 2023, 568, 117021.	8.2	1
238	NH4HCO3 as additive for fabrication of thin film nanocomposite membrane with enhanced permeability. Journal of Coatings Technology Research, 0, , .	2.5	0
239	Constructing a tannic-Fe interlayer via a simple in-situ method to enhance the filtration performance of hollow fiber organic solvent nanofiltration membranes. Journal of Membrane Science, 2024, 691, 122250.	8.2	0
240	Anhydrous interfacial polymerization of sub-1 $\tilde{\text{A}}$ sieving polyamide membrane. Nature Communications, 2023, 14, .	12.8	4
241	Development of high-integrity reverse osmosis membranes for enhanced removal of microorganisms. Desalination, 2024, 572, 117155.	8.2	1
242	Tailorable metal–organic framework based thin film nanocomposite membrane for lithium recovery from wasted batteries. Separation and Purification Technology, 2024, 334, 125943.	7.9	0
243	Electrospray Fabrication of Ultrathin Chlorine-Resistant Polyamide Brackish Water Desalination Membrane with Protonated Montmorillonite Nanoplates. ACS Applied Polymer Materials, 2023, 5, 9836-9851.	4.4	0
244	Approaching ratio as a guideline for substrate design of forward osmosis membranes. Journal of Membrane Science, 2024, 693, 122332.	8.2	0
245	Engineering of metal organic framework (MOF) membrane for waste water treatment: Synthesis, applications and future challenges. Journal of Water Process Engineering, 2024, 57, 104676.	5.6	5
246	Comprehensive Characterization of Commercial Reverse Osmosis Membranes through High-Temperature Cross-Flow Filtration. ACS Omega, 0, , .	3.5	0
247	Novel polyamide-hydrazide based reverse osmosis membrane with enhanced antifouling properties. Desalination, 2024, 574, 117233.	8.2	0
248	The fabrication of thin-film nanocomposite membrane for organic solvent forward osmosis via host-guest chemistry of \hat{l}_{\pm} -cyclodextrin. Desalination, 2024, 574, 117247.	8.2	0
249	Effects of acid acceptor and pH on the structure and filtration performance of nanofiltration membrane. Journal of Industrial and Engineering Chemistry, 2023, , .	5.8	0
250	Advanced reverse osmosis membranes prepared by counter-diffusion of organic phase monomers induced by polypyrrole additives. Separation and Purification Technology, 2024, 337, 126230.	7.9	0
251	Polyamide Nanofilms through a Nonâ€Isothermalâ€Controlled Interfacial Polymerization. Advanced Functional Materials, 2024, 34, .	14.9	1
252	A critical review on polyamide and polyesteramide nanofiltration membranes: Emerging monomeric structures and interfacial polymerization strategies. Desalination, 2024, 577, 117379.	8.2	0
253	Tuning and optimization of structure and surface properties of thin and fine hydrophilic nanofibrous substrates through lowâ€pressure heatâ€press treatment. Journal of Applied Polymer Science, 2024, 141, .	2.6	0
254	Removal of heavy metals from wastewater using reverse osmosis. Frontiers in Chemical Engineering, 0, 6, .	2.7	0

CITATION REPORT

#	Article	IF	CITATIONS
255	Heat diffusion during thin-film composite membrane formation. Journal of Membrane Science, 2024, 696, 122493.	8.2	0
256	Pressure-driven membrane desalination. Nature Reviews Methods Primers, 2024, 4, .	21.2	0
257	Probing the construction mechanism of polyamide membranes regulated by interfacial polymerization from the novel micro- and macro- perspectives: A review. Desalination, 2024, 578, 117422.	8.2	0
258	High-performance thin-film composite (TFC) membranes with 2D nanomaterial interlayers: An overview. Results in Engineering, 2024, 21, 101932.	5.1	0
259	Interfacial diffusion manipulation by amphiphilic cellulose nanocrystal having antibacterial property for asymmetric polyamide layer. Desalination, 2024, 579, 117483.	8.2	0
260	Dissecting the impacts of nanobubbles and heat generated in polymerization on polyamide nanofiltration membranes. Journal of Membrane Science, 2024, 699, 122646.	8.2	0