

# Nanofoaming of Polyamide Desalination Membranes To

Environmental Science and Technology Letters

5, 123-130

DOI: 10.1021/acs.estlett.8b00016

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.	4.1	55
2	Ceramic-supported thin film composite membrane for organic solvent nanofiltration. Journal of Membrane Science, 2018, 563, 857-863.	4.1	62
3	Rapid water transport through controllable, ultrathin polyamide nanofilms for high-performance nanofiltration. Journal of Materials Chemistry A, 2018, 6, 15701-15709.	5.2	148
4	Tannic Acid/Fe <sup>3+</sup> Nanoscaffold for Interfacial Polymerization: Toward Enhanced Nanofiltration Performance. Environmental Science & Technology, 2018, 52, 9341-9349.	4.6	310
5	Potable Water Reuse through Advanced Membrane Technology. Environmental Science & Technology, 2018, 52, 10215-10223.	4.6	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.	4.0	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.	3.3	69
8	3D printed polyamide membranes for desalination. Science, 2018, 361, 682-686.	6.0	359
9	Construction of MoS <sub>2</sub> composite membranes on ceramic hollow fibers for efficient water desalination. Journal of Membrane Science, 2019, 592, 117369.	4.1	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.	5.2	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.	4.1	26
12	The upper bound of thin-film composite (TFC) polyamide membranes for desalination. Journal of Membrane Science, 2019, 590, 117297.	4.1	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 & Technology, 2019, 53, 9764-9770.	4.6	91
14	Double-Crosslinked GO Interlayer Framework as a Pervaporation Hybrid Membrane with High Performance. ACS Omega, 2019, 4, 15043-15050.	1.6	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.	4.0	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 & Interfaces, 2019, 11, 7349-7356.	4.0	234
17	High-performance polyamide/ceramic hollow fiber TFC membranes with TiO <sub>2</sub> interlayer for pervaporation dehydration of isopropanol solution. Journal of Membrane Science, 2019, 576, 26-35.	4.1	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.	5.0	24

#	ARTICLE	IF	CITATIONS
19	MOF-positioned polyamide membranes with a fishnet-like structure for elevated nanofiltration performance. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16313-16322.	5.2	166
20	From micro to nano: Polyamide thin film on microfiltration ceramic tubular membranes for nanofiltration. <i>Journal of Membrane Science</i> , 2019, 587, 117161.	4.1	51
21	Supramolecular-Based Regenerable Coating Layer of a Thin-Film Composite Nanofiltration Membrane for Simultaneously Enhanced Desalination and Antifouling Properties. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 21137-21149.	4.0	92
22	Confined nanobubbles shape the surface roughness structures of thin film composite polyamide desalination membranes. <i>Journal of Membrane Science</i> , 2019, 582, 342-349.	4.1	143
23	Emerging R&D on membranes and systems for water reuse and desalination. <i>Chinese Journal of Chemical Engineering</i> , 2019, 27, 1578-1585.	1.7	27
24	Graphene oxide (GO)-interlayered thin-film nanocomposite (TFN) membranes with high solvent resistance for organic solvent nanofiltration (OSN). <i>Journal of Materials Chemistry A</i> , 2019, 7, 13315-13330.	5.2	86
25	Thin-film nanocomposite membranes incorporated with water stable metal-organic framework CuBTTri for mitigating biofouling. <i>Journal of Membrane Science</i> , 2019, 582, 289-297.	4.1	58
26	Calcium-Carboxyl Intrabridging during Interfacial Polymerization: A Novel Strategy to Improve Antifouling Performance of Thin Film Composite Membranes. <i>Environmental Science &amp; Technology</i> , 2019, 53, 4371-4379.	4.6	64
27	Effects of the support on the characteristics and permselectivity of thin film composite membranes. <i>Journal of Membrane Science</i> , 2019, 580, 12-23.	4.1	88
28	Hydrophilic Silver Nanoparticles Induce Selective Nanochannels in Thin Film Nanocomposite Polyamide Membranes. <i>Environmental Science &amp; Technology</i> , 2019, 53, 5301-5308.	4.6	190
29	Synthesis and gas transport properties of polyamide membranes containing PDMS groups. <i>RSC Advances</i> , 2019, 9, 9737-9744.	1.7	17
30	Thin film nanocomposite hollow fiber membranes comprising Na <sup>+</sup> -functionalized carbon quantum dots for brackish water desalination. <i>Water Research</i> , 2019, 154, 54-61.	5.3	79
31	Tuning roughness features of thin film composite polyamide membranes for simultaneously enhanced permeability, selectivity and anti-fouling performance. <i>Journal of Colloid and Interface Science</i> , 2019, 540, 382-388.	5.0	139
32	Carbon nanotubes enhance permeability of ultrathin polyamide rejection layers. <i>Journal of Membrane Science</i> , 2019, 570-571, 139-145.	4.1	61
33	Fabrication of a novel and green thin-film composite membrane containing nanovoids for water purification. <i>Journal of Membrane Science</i> , 2019, 570-571, 314-321.	4.1	54
34	High-performance thin-film composite polyamide membranes developed with green ultrasound-assisted interfacial polymerization. <i>Journal of Membrane Science</i> , 2019, 570-571, 112-119.	4.1	84
35	Improved reverse osmosis thin film composite biomimetic membranes by incorporation of polymersomes. <i>Journal of Membrane Science</i> , 2020, 593, 117392.	4.1	23
36	Tailoring the internal void structure of polyamide films to achieve highly permeable reverse osmosis membranes for water desalination. <i>Journal of Membrane Science</i> , 2020, 595, 117518.	4.1	46

#	ARTICLE	IF	CITATIONS
37	Resorcinol-formaldehyde nanobowls modified thin film nanocomposite membrane with enhanced nanofiltration performance. <i>Journal of Membrane Science</i> , 2020, 594, 117468.	4.1	42
38	Fast surface crosslinking ceramic hollow fiber pervaporation composite membrane with outstanding separation performance for isopropanol dehydration. <i>Separation and Purification Technology</i> , 2020, 234, 116116.	3.9	14
39	A Facile and Scalable Fabrication Procedure for Thin-Film Composite Membranes: Integration of Phase Inversion and Interfacial Polymerization. <i>Environmental Science &amp; Technology</i> , 2020, 54, 1946-1954.	4.6	56
40	Fabrication of Highly Permeable and Thermally Stable Reverse Osmosis Thin Film Composite Polyamide Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 2916-2925.	4.0	44
41	Charting the quantitative relationship between two-dimensional morphology parameters of polyamide membranes and synthesis conditions. <i>Molecular Systems Design and Engineering</i> , 2020, 5, 102-109.	1.7	8
42	Chemically functionalized polyamide thin film composite membranes: The art of chemistry. <i>Desalination</i> , 2020, 495, 114655.	4.0	43
43	High-Performance Zwitterionic Nanofiltration Membranes Fabricated via Microwave-Assisted Grafting of Betaine. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 35523-35531.	4.0	23
44	A Critical Review on Thin-Film Nanocomposite Membranes with Interlayered Structure: Mechanisms, Recent Developments, and Environmental Applications. <i>Environmental Science &amp; Technology</i> , 2020, 54, 15563-15583.	4.6	308
45	Nanodiamond-Enabled Thin-Film Nanocomposite Polyamide Membranes for High-Temperature Water Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 53274-53285.	4.0	33
46	Immobilization of sulfonated polysulfone via 2D LDH nanosheets during phase-inversion: A novel strategy towards greener membrane synthesis and enhanced desalination performance. <i>Journal of Membrane Science</i> , 2020, 614, 118508.	4.1	23
47	Mechanistic Insights into the Role of Polydopamine Interlayer toward Improved Separation Performance of Polyamide Nanofiltration Membranes. <i>Environmental Science &amp; Technology</i> , 2020, 54, 11611-11621.	4.6	137
48	PIP/TMC Interfacial Polymerization with Electrospray: Novel Loose Nanofiltration Membrane for Dye Wastewater Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 36148-36158.	4.0	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. <i>Environmental Science and Technology Letters</i> , 2020, 7, 766-772.	3.9	41
50	Tuning the Surface Structure of Polyamide Membranes Using Porous Carbon Nitride Nanoparticles for High-Performance Seawater Desalination. <i>Membranes</i> , 2020, 10, 163.	1.4	12
51	Vacuum-assisted diamine monomer distribution for synthesizing polyamide composite membranes by interfacial polymerization. <i>Journal of Membrane Science</i> , 2020, 616, 118557.	4.1	50
52	Thin-film nanocomposite membranes containing tannic acid-Fe <sup>3+</sup> modified MoS <sub>2</sub> nanosheets with enhanced nanofiltration performance. <i>Journal of Membrane Science</i> , 2020, 616, 118605.	4.1	82
53	Using reverse osmosis membranes to control ion transport during water electrolysis. <i>Energy and Environmental Science</i> , 2020, 13, 3138-3148.	15.6	49
54	Metal-Organic Framework Nanosheets for Thin-Film Composite Membranes with Enhanced Permeability and Selectivity. <i>ACS Applied Nano Materials</i> , 2020, 3, 9238-9248.	2.4	57

#	ARTICLE	IF	CITATIONS
55	Ultrathin Film Composite Membranes Fabricated by Novel In Situ Free Interfacial Polymerization for Desalination. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 25304-25315.	4.0	101
56	Dissecting the Role of Substrate on the Morphology and Separation Properties of Thin Film Composite Polyamide Membranes: Seeing Is Believing. <i>Environmental Science &amp; Technology</i> , 2020, 54, 6978-6986.	4.6	123
57	Engineering a Nanocomposite Interlayer for a Novel Ceramic-Based Forward Osmosis Membrane with Enhanced Performance. <i>Environmental Science &amp; Technology</i> , 2020, 54, 7715-7724.	4.6	63
58	Comparison of water and salt transport properties of ion exchange, reverse osmosis, and nanofiltration membranes for desalination and energy applications. <i>Journal of Membrane Science</i> , 2020, 604, 117998.	4.1	31
59	Facile Fabrication of High-Performance Thin Film Nanocomposite Desalination Membranes Imbedded with Alkyl Group-Capped Silica Nanoparticles. <i>Polymers</i> , 2020, 12, 1415.	2.0	18
60	Ultrathin polyamide nanofilm with an asymmetrical structure: A novel strategy to boost the permeance of reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2020, 612, 118402.	4.1	17
61	Fabrication of high performance TFN membrane containing NH <sub>2</sub> -SWCNTs via interfacial regulation. <i>RSC Advances</i> , 2020, 10, 25186-25199.	1.7	14
62	Constructing interlayer to tailor structure and performance of thin-film composite polyamide membranes: A review. <i>Advances in Colloid and Interface Science</i> , 2020, 282, 102204.	7.0	154
63	Intrinsic Nanoscale Structure of Thin Film Composite Polyamide Membranes: Connectivity, Defects, and Structure-Property Correlation. <i>Environmental Science &amp; Technology</i> , 2020, 54, 3559-3569.	4.6	135
64	Electrosprayed polyamide nanofiltration membrane with intercalated structure for controllable structure manipulation and enhanced separation performance. <i>Journal of Membrane Science</i> , 2020, 602, 117971.	4.1	68
65	Effect of ultrasonication parameters on forward osmosis performance of thin film composite polyamide membranes prepared with ultrasound-assisted interfacial polymerization. <i>Journal of Membrane Science</i> , 2020, 599, 117834.	4.1	26
66	High-performance nanofiltration membrane structured with enhanced stripe nano-morphology. <i>Journal of Membrane Science</i> , 2020, 600, 117852.	4.1	57
67	Evaluation of anti-bacterial adhesion performance of polydopamine cross-linked graphene oxide RO membrane via in situ optical coherence tomography. <i>Desalination</i> , 2020, 479, 114339.	4.0	35
68	Toward enhancing the separation and antifouling performance of thin-film composite nanofiltration membranes: A novel carbonate-based preoccupation strategy. <i>Journal of Colloid and Interface Science</i> , 2020, 571, 155-165.	5.0	47
69	Superior nanofiltration membranes with gradient cross-linked selective layer fabricated via controlled hydrolysis. <i>Journal of Membrane Science</i> , 2020, 604, 118067.	4.1	58
70	Tailoring the Polyamide Active Layer of Thin-Film Composite Forward Osmosis Membranes with Combined Cosolvents during Interfacial Polymerization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 8230-8242.	1.8	21
71	Hydrophilic yolk-shell ZIF-8 modified polyamide thin-film nanocomposite membrane with improved permeability and selectivity. <i>Separation and Purification Technology</i> , 2020, 247, 116990.	3.9	44
72	Polyamide reverse osmosis membranes containing 1D nanochannels for enhanced water purification. <i>Journal of Membrane Science</i> , 2021, 618, 118681.	4.1	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.	4.1	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.	4.1	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.	4.1	27
76	High-throughput thin-film composite membrane via interfacial polymerization using monomers of ultra-low concentration on tannic acid @ Copper interlayer for organic solvent nanofiltration. Separation and Purification Technology, 2021, 258, 118027.	3.9	38
77	Recent advances in high-performance TFC membranes: A review of the functional interlayers. Desalination, 2021, 500, 114869.	4.0	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.	4.0	30
79	Developing helical carbon functionalized chitosan-based loose nanofiltration membranes for selective separation and wastewater treatment. Chemical Engineering Journal, 2021, 417, 127911.	6.6	23
80	Breaking through permeability-selectivity tradeoff of thin-film composite membranes assisted with crown ethers. AIChE Journal, 2021, 67, e17173.	1.8	17
81	Fabrication of desalination membranes by interfacial polymerization: history, current efforts, and future directions. Chemical Society Reviews, 2021, 50, 6290-6307.	18.7	263
82	Polyamide Nanofiltration Membranes from Emulsion-Mediated Interfacial Polymerization. ACS ES&T Engineering, 2021, 1, 533-542.	3.7	23
83	Energy Efficient Seawater Desalination: Strategies and Opportunities. Energy Technology, 2021, 9, 2100008.	1.8	8
84	A review on the synthesis of fully aromatic polyamide reverse osmosis membranes. Desalination, 2021, 502, 114939.	4.0	64
85	Use of Ionic Liquids and Co-Solvents for Synthesis of Thin-Film Composite Membranes. Membranes, 2021, 11, 297.	1.4	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.	4.1	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.	4.1	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.	4.1	47
89	Biomimetic asymmetric structural polyamide OSN membranes fabricated via fluorinated polymeric networks regulated interfacial polymerization. Journal of Membrane Science, 2021, 625, 119112.	4.1	30
90	Polyamide membrane with nanocluster assembly structure for desalination. Journal of Membrane Science, 2021, 628, 119230.	4.1	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. <i>Chemical Engineering Journal</i> , 2021, 416, 129080.	6.6	35
92	Regulating composition and structure of nanofillers in thin film nanocomposite (TFN) membranes for enhanced separation performance: A critical review. <i>Separation and Purification Technology</i> , 2021, 266, 118567.	3.9	122
93	Interlayered Forward Osmosis Membranes with Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene and Carbon Nanotubes for Enhanced Municipal Wastewater Concentration. <i>Environmental Science &amp; Technology</i> , 2021, 55, 13219-13230.	4.6	16
95	Thin-Film Composite Membrane Prepared by Interfacial Polymerization on the Integrated ZIF-L Nanosheets Interface for Pervaporation Dehydration. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 39819-39830.	4.0	19
96	Advanced thin-film nanocomposite membranes embedded with organic-based nanomaterials for water and organic solvent purification: A review. <i>Separation and Purification Technology</i> , 2021, 269, 118719.	3.9	37
97	Crumple-textured polyamide membranes via MXene nanosheet-regulated interfacial polymerization for enhanced nanofiltration performance. <i>Journal of Membrane Science</i> , 2021, 635, 119536.	4.1	64
98	Facile ZIF-8 nanocrystals interlayered solvent-resistant thin-film nanocomposite membranes for enhanced solvent permeance and rejection. <i>Journal of Membrane Science</i> , 2021, 636, 119586.	4.1	32
99	Fabrication of high performance TFN membrane incorporated with graphene oxide via support-free interfacial polymerization. <i>Science of the Total Environment</i> , 2021, 793, 148503.	3.9	24
100	Enhancing water permeability and antifouling performance of thin-film composite membrane by tailoring the support layer. <i>Desalination</i> , 2021, 516, 115193.	4.0	23
101	Manipulating interfacial polymerization for polymeric nanofilms of composite separation membranes. <i>Progress in Polymer Science</i> , 2021, 122, 101450.	11.8	90
102	Polyamide desalination membranes: Formation, structure, and properties. <i>Progress in Polymer Science</i> , 2021, 122, 101451.	11.8	123
103	Regulating solvent activation by the mechanical force for the fabrication of reverse osmosis membranes with high permeability and selectivity. <i>Journal of Membrane Science</i> , 2021, 638, 119732.	4.1	11
104	Regulating the interfacial polymerization process toward high-performance polyamide thin-film composite reverse osmosis and nanofiltration membranes: A review. <i>Journal of Membrane Science</i> , 2021, 640, 119765.	4.1	106
105	The role of phase transfer catalysts on properties of polyamide thin-film composite forward osmosis membranes. <i>Chemical Engineering Journal</i> , 2021, 426, 128989.	6.6	9
106	Anionic covalent organic framework as an interlayer to fabricate negatively charged polyamide composite nanofiltration membrane featuring ions sieving. <i>Chemical Engineering Journal</i> , 2022, 427, 132009.	6.6	43
107	A critical review on porous substrates of TFC polyamide membranes: Mechanisms, membrane performances, and future perspectives. <i>Journal of Membrane Science</i> , 2022, 641, 119871.	4.1	167
108	Direct ellipsometry for non-destructive characterization of interfacially-polymerized thin-film composite membranes. <i>Journal of Membrane Science</i> , 2020, 608, 118174.	4.1	13
109	Facile polyamide microstructure adjustment of the composite reverse osmosis membrane assisted by PF127/SDS mixed micelles for improving seawater desalination performance. <i>Desalination</i> , 2022, 521, 115395.	4.0	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. <i>Journal of Membrane Science</i> , 2022, 643, 120043.	4.1	6
111	Preparation of highly selective nanofiltration membranes by moderately increasing pore size and optimizing microstructure of polyamide layer. <i>Journal of Membrane Science</i> , 2022, 643, 120056.	4.1	24
112	Hierarchically porous membranes with multiple channels: Fabrications in PVDF/PMMA/PLLA blend and enhanced separation performance. <i>Journal of Membrane Science</i> , 2022, 643, 120065.	4.1	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. <i>Journal of Membrane Science</i> , 2022, 644, 120112.	4.1	27
114	Preparation of advanced reverse osmosis membrane by a wettability-transformable interlayer combining with N-acyl imidazole chemistry. <i>Journal of Membrane Science</i> , 2022, 644, 120085.	4.1	11
115	Toward Enhancing Desalination and Heavy Metal Removal of TFC Nanofiltration Membranes: A Cost-Effective Interface Temperature-Regulated Interfacial Polymerization. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 57998-58010.	4.0	57
116	Second interfacial polymerization decorating defects of TFC NF membrane formed by 1D nanochannels for improving separation performance. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 106896.	3.3	2
117	Micropatterned Thin-Film Composite Poly(piperazine-amide) Nanofiltration Membranes for Wastewater Treatment. <i>ACS Applied Polymer Materials</i> , 2021, 3, 6653-6665.	2.0	18
118	Ultrathin Sulfonated Mesoporous Interlayer Facilitates to Prepare Highly-Permeable Polyamide Nanofiltration Membranes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
119	Tailored design of nanofiltration membranes for water treatment based on synthesisâ€“propertyâ€“performance relationships. <i>Chemical Society Reviews</i> , 2022, 51, 672-719.	18.7	182
120	Biocidal surfactant-assisted fabrication of thin film composite membranes with excellent and durable anti-biofouling performance. <i>Chemical Engineering Journal</i> , 2022, 431, 134114.	6.6	18
121	Conjugated polyaniline derivative membranes enable ultrafast nanofiltration and organic-solvent nanofiltration. <i>Journal of Membrane Science</i> , 2022, 645, 120241.	4.1	20
122	Exploring of Polyethylene Membrane as a Porous Support for High-Performance Polyamide TFC Reverse Osmosis Membranes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
123	Ultraporous nanofiltration membranes with tunable selectivity fabricated with polyaniline nanofibers. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4392-4401.	5.2	13
124	Layer-by-layer assembly of nanocomposite interlayers on a kaolin substrate for enhancing membrane performance of Pb(II) and Cd(II) removal. <i>Science of the Total Environment</i> , 2022, 820, 153149.	3.9	6
125	Polyamide thin film nanocomposite membrane with internal void structure mediated by silica and SDS for highly permeable reverse-osmosis application. <i>Composites Communications</i> , 2022, , 101092.	3.3	3
126	MXene-regulation polyamide membrane featuring with bubble-like nodule for efficient dye/salt separation and antifouling performance. <i>RSC Advances</i> , 2022, 12, 10267-10279.	1.7	21
127	Sulfonated Zr-Based Metal-Organic Framework Incorporated Thin-Film Composite Membrane for Enhanced Desalination. <i>SSRN Electronic Journal</i> , 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. <i>Science Advances</i> , 2022, 8, eabk1888.	4.7	22
129	Novel Poly(ester amide) Membranes with Tunable Crosslinked Structures for Nanofiltration. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 10782-10792.	4.0	30
130	Metal-organic framework enables ultrasensitive polyamide membrane for desalination and water reuse. <i>Science Advances</i> , 2022, 8, eabm4149.	4.7	87
131	Deciphering the Role of Amine Concentration on Polyamide Formation toward Enhanced RO Performance. <i>ACS ES&amp;T Engineering</i> , 2022, 2, 903-912.	3.7	23
132	Tweak in Puzzle: Tailoring Membrane Chemistry and Structure toward Targeted Removal of Organic Micropollutants for Water Reuse. <i>Environmental Science and Technology Letters</i> , 2022, 9, 247-257.	3.9	42
133	Aromatic Polyamide Brushes for High Young's Modulus Surfaces by Surface-Initiated Chain-Growth Condensation Polymerization. <i>Macromolecules</i> , 2022, 55, 2051-2066.	2.2	4
134	Ultrathin Membranes for Separations: A New Era Driven by Advanced Nanotechnology. <i>Advanced Materials</i> , 2022, 34, e2108457.	11.1	58
135	Cost-effective polymer-based membranes for drinking water purification. <i>Giant</i> , 2022, 10, 100099.	2.5	26
136	Ultra-smooth and ultra-thin polyamide thin film nanocomposite membranes incorporated with functionalized MoS <sub>2</sub> nanosheets for high performance organic solvent nanofiltration. <i>Separation and Purification Technology</i> , 2022, 291, 120937.	3.9	23
137	Ultrathin sulfonated mesoporous interlayer facilitates to prepare highly-permeable polyamide nanofiltration membranes. <i>Journal of Membrane Science</i> , 2022, 652, 120507.	4.1	20
138	Development of high-performance electrospun nanofiber based forward osmosis membrane by introducing graphene oxide-calcium carbonate particle composite intermediate layer. <i>Desalination</i> , 2022, 531, 115672.	4.0	7
139	Thin film nanocomposite membrane incorporated with 2D-MOF nanosheets for highly efficient reverse osmosis desalination. <i>Journal of Membrane Science</i> , 2022, 653, 120520.	4.1	44
140	Revolutionizing Membrane Design Using Machine Learning-Bayesian Optimization. <i>Environmental Science &amp; Technology</i> , 2022, 56, 2572-2581.	4.6	63
141	Thin Film Polyamide Nanocomposite Membrane Decorated by Polyphenol-Assisted Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene Nanosheets for Reverse Osmosis. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 1838-1849.	4.0	30
142	The Intrinsic Parameters of the Polyamide Nanofilm in Thin-Film Composite Reverse Osmosis (TFC-RO) Membranes: The Impact of Monomer Concentration. <i>Membranes</i> , 2022, 12, 417.	1.4	7
143	Rapid and selective recycling of Ag(I) from wastewater through an allyl-rhodanine functionalized micro-filtration membrane. <i>Chemical Engineering Journal</i> , 2022, , 136376.	6.6	4
144	Compounded Nonsterile Preparations and FDA-Approved Commercially Available Liquid Products for Children: A North American Update. <i>Pharmaceutics</i> , 2022, 14, 1032.	2.0	4
145	Optimizing the surface properties of nanofiltration membrane by tailoring the diffusion coefficient of amine monomer. <i>Journal of Membrane Science</i> , 2022, 656, 120601.	4.1	16

#	ARTICLE	IF	CITATIONS
146	Amphiphilic MOF nanoflakes for ultrasensitive polyamide membranes. <i>Matter</i> , 2022, 5, 1350-1352.	5.0	0
147	Re-thinking polyamide thin film formation: How does interfacial destabilization dictate film morphology?. <i>Journal of Membrane Science</i> , 2022, 656, 120593.	4.1	24
148	A PEI/TMC membrane modified with an ionic liquid with enhanced permeability and antibacterial properties for the removal of heavy metal ions. <i>Journal of Hazardous Materials</i> , 2022, 435, 129010.	6.5	33
149	Enhancing the Permselectivity of Thin-Film Composite Membranes Interlayered with MoS <sub>2</sub> Nanosheets via Precise Thickness Control. <i>Environmental Science &amp; Technology</i> , 2022, 56, 8807-8818.	4.6	27
150	Multimodal confined water dynamics in reverse osmosis polyamide membranes. <i>Nature Communications</i> , 2022, 13, 2809.	5.8	16
151	Functionalized-MXene Thin-Film Nanocomposite Hollow Fiber Membranes for Enhanced PFAS Removal from Water. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 25397-25408.	4.0	23
152	Effects of polyvinylidene fluoride substrate characteristics on the selectivity of thin-film composite nanofiltration membrane. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	2
153	Tailoring the substrate of thin film reverse osmosis membrane through a novel FeOOH nanorods templating strategy: An insight into the effects on interfacial polymerization of polyamide. <i>Journal of Membrane Science</i> , 2022, 657, 120706.	4.1	8
154	In Situ Chemical Modification with Zwitterionic Copolymers of Nanofiltration Membranes: Cure for the Trade-Off between Filtration and Antifouling Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 28842-28853.	4.0	12
155	Vacuum-assisted MPD loading toward promoted nanoscale structure and enhanced water permeance of polyamide RO membrane. <i>Separation and Purification Technology</i> , 2022, 297, 121547.	3.9	6
156	Highly permeable composite nanofiltration membrane via $\beta$ -cyclodextrin modulation for multiple applications. <i>Separation and Purification Technology</i> , 2022, 297, 121541.	3.9	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?. <i>Environmental Science &amp; Technology</i> , 2022, 56, 10308-10316.	4.6	20
158	Constructing highly rough skin layer of thin film (nano)composite polyamide membranes to enhance separation performance: A review. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	11
159	Quantitatively relating the structural performance of polyamide layer with skin layer modified via in-situ precipitation. <i>Journal of Membrane Science</i> , 2022, , 120783.	4.1	1
160	Unveiling the Growth of Polyamide Nanofilms at Water/Organic Free Interfaces: Toward Enhanced Water/Salt Selectivity. <i>Environmental Science &amp; Technology</i> , 2022, 56, 10279-10288.	4.6	27
161	Sustainable electrospray polymerization fabrication of thin-film composite polyamide nanofiltration membranes for heavy metal removal. <i>Desalination</i> , 2022, 539, 115952.	4.0	17
162	Fabrication of anti-fouling polyamide nanofiltration membrane by incorporating streptomycin as a novel co-monomer. <i>Chinese Journal of Chemical Engineering</i> , 2022, 50, 185-196.	1.7	4
163	Modeling Water Transport in Interlayered Thin-Film Nanocomposite Membranes: Gutter Effect vs Funnel Effect. <i>ACS ES&amp;T Engineering</i> , 2022, 2, 2023-2033.	3.7	27

#	ARTICLE	IF	CITATIONS
164	Thin-Film Composite Membranes with a Carbon Nanotube Interlayer for Organic Solvent Nanofiltration. <i>Membranes</i> , 2022, 12, 817.	1.4	8
165	Trends and errors in reverse osmosis membrane performance calculations stemming from test pressure and simplifying assumptions about concentration polarization and solute rejection. <i>Journal of Membrane Science</i> , 2022, 660, 120856.	4.1	5
166	Hyaluronic acid-modified nanofiltration membrane for ultrahigh water permeance and efficient rejection of PFASs. <i>Chemical Engineering Research and Design</i> , 2022, 166, 214-221.	2.7	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. <i>Data in Brief</i> , 2022, 44, 108538.	0.5	0
168	Tuning the surface functionality of polyamide films via termination reaction in molecular layer-by-layer deposition. <i>Journal of Membrane Science</i> , 2022, 661, 120855.	4.1	1
169	Influence of molecular weight cut-off (MWCO) of commercial ultrafiltration substrate on the performance of thin film composite nanofiltration membrane. <i>Desalination</i> , 2022, 541, 116020.	4.0	4
170	Effect of the interlayer construction on the performances of the TFC-FO membranes: A review from materials perspective. <i>Desalination</i> , 2022, 541, 116033.	4.0	11
171	Distinct impact of substrate hydrophilicity on performance and structure of TFC NF and RO polyamide membranes. <i>Journal of Membrane Science</i> , 2022, 662, 120966.	4.1	24
172	Tailored design of highly permeable polyamide-based nanofiltration membrane via a complex-dissociation regulated interfacial polymerization. <i>Chemical Engineering Journal</i> , 2023, 452, 139197.	6.6	12
173	Ultrathin polyamide nanofiltration membrane prepared by triazine-based porous organic polymer as interlayer for dye removal. <i>Chinese Journal of Chemical Engineering</i> , 2023, 57, 193-201.	1.7	1
174	Nanofiltration Membranes with Crumpled Polyamide Films: A Critical Review on Mechanisms, Performances, and Environmental Applications. <i>Environmental Science &amp; Technology</i> , 2022, 56, 12811-12827.	4.6	92
175	2D COFs interlayer manipulated interfacial polymerization for fabricating high performance reverse osmosis membrane. <i>Separation and Purification Technology</i> , 2022, 303, 122198.	3.9	8
176	Facile monomer interlayered MOF based thin film nanocomposite for efficient arsenic separation. <i>Chemosphere</i> , 2022, 309, 136634.	4.2	4
177	Facile synthesis of nanofiltration membrane with asymmetric selectivity towards enhanced water recovery for groundwater remediation. <i>Journal of Membrane Science</i> , 2022, 663, 121038.	4.1	13
178	Hollow Fiber Membrane for Organic Solvent Nanofiltration: A Mini Review. <i>Membranes</i> , 2022, 12, 995.	1.4	3
179	Improving properties of thin film nanocomposite membrane via temperature-controlled interfacial polymerization for nanofiltration process. <i>Desalination</i> , 2023, 545, 116091.	4.0	18
180	Demystifying viscous isoalkanes as the organic solvent in interfacial polymerization for manufacturing desalination membranes. <i>Desalination</i> , 2023, 545, 116166.	4.0	3
181	Polyamide nanofiltration membranes with rigid-flexible microstructures for high-efficiency Mg <sup>2+</sup> /Li <sup>+</sup> separation. <i>Separation and Purification Technology</i> , 2023, 306, 122552.	3.9	16

#	ARTICLE	IF	CITATIONS
182	MPD and TMC supply as parameters to describe synthesis-morphology-performance relationships of polyamide thin film composite membranes. <i>Journal of Membrane Science</i> , 2023, 667, 121155.	4.1	10
183	Recent advances in thin film nanocomposite membranes containing an interlayer (TFNi): fabrication, applications, characterization and perspectives. <i>RSC Advances</i> , 2022, 12, 34245-34267.	1.7	2
184	Tailored ultra-low pressure nanofiltration membranes for advanced drinking water treatment. <i>Desalination</i> , 2023, 548, 116264.	4.0	19
185	Polyamide thin film nanocomposite membranes with in-situ integration of multiple functional nanoparticles for high performance reverse osmosis. <i>Journal of Membrane Science</i> , 2023, 669, 121311.	4.1	12
186	Demystifying the Role of Surfactant in Tailoring Polyamide Morphology for Enhanced Reverse Osmosis Performance: Mechanistic Insights and Environmental Implications. <i>Environmental Science &amp; Technology</i> , 2023, 57, 1819-1827.	4.6	15
187	Tailoring the crumpled structures of a polyamide membrane with a heterostructural MXene-TiO <sub>2</sub> interlayer for high water permeability. <i>Desalination</i> , 2023, 549, 116352.	4.0	11
188	A comprehensive evaluation of PVA enhanced polyamide nanofiltration membranes: Additive versus interlayer. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 660, 130870.	2.3	5
189	Does Surface Roughness Necessarily Increase the Fouling Propensity of Polyamide Reverse Osmosis Membranes by Humic Acid?. <i>Environmental Science &amp; Technology</i> , 2023, 57, 2548-2556.	4.6	14
190	Regulating interfacial polymerization via a multi-functional calcium carbonate based interlayer for a highly permselective nanofiltration membrane. <i>Journal of Materials Chemistry A</i> , 2023, 11, 8836-8844.	5.2	10
191	Generation of Nano-Bubbles by NaHCO <sub>3</sub> for Improving the FO Membrane Performance. <i>Membranes</i> , 2023, 13, 404.	1.4	0
192	Sulfonated polyaniline interlayer with controllable doping conditions for high-performance nanofiltration. <i>Journal of Membrane Science</i> , 2023, 672, 121478.	4.1	9
193	Tailoring properties and performance of thin-film composite membranes by salt additives for water treatment: A critical review. <i>Water Research</i> , 2023, 234, 119821.	5.3	7
194	Regulation of micro-structure and surface property of SWRO membrane via introducing albumin into polyamide layer for improving permselectivity. <i>Desalination</i> , 2023, 555, 116551.	4.0	1
195	Modeling nanovoid-enhanced water permeance of thin film composite membranes. <i>Journal of Membrane Science</i> , 2023, 675, 121555.	4.1	7
196	Evading the permeance-selectivity trade-off dilemma in electrospray-assisted interfacial polymerization polyamide thin-film composite membrane through electrospinning nanofibers interlayer. <i>Desalination</i> , 2023, 558, 116625.	4.0	6
197	Low-pressure thin-film composite nanofiltration membranes with enhanced selectivity and antifouling property for effective dye/salt separation. <i>Journal of Colloid and Interface Science</i> , 2023, 641, 197-214.	5.0	13
198	Hydrophilic-hydrophobic heterogeneous interface enables the formation of a high-performance polyamide membrane for water purification. <i>Separation and Purification Technology</i> , 2023, 316, 123752.	3.9	4
199	Correlating the role of nanofillers with active layer properties and performance of thin-film nanocomposite membranes. <i>Desalination</i> , 2023, 550, 116370.	4.0	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.	1.7	0
201	Nanofoaming by surfactant tunes morphology and performance of polyamide nanofiltration membrane. Desalination, 2023, 552, 116457.	4.0	8
202	High-Performance Polyamide Reverse Osmosis Membrane Containing Flexible Aliphatic Ring for Water Purification. Polymers, 2023, 15, 944.	2.0	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 <sup>+</sup> on Interfacial Polymerization and Its Effects on Nanofiltration Performance. Environmental Science and Technology Letters, 2023, 10, 274-279.	3.9	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.	4.8	0