Chuyang Y Tang

List of Publications by Year
in descending order

317	33,176	1792 103	4870 168
papers	citations	h-index	g-index

318	318	318	13586
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent developments in forward osmosis: Opportunities and challenges. Journal of Membrane Science, 2012, 396, 1-21.	4.1	1,141
2	Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes. Desalination, 2009, 242, 149-167.	4.0	818
3	Coupled effects of internal concentration polarization and fouling on flux behavior of forward osmosis membranes during humic acid filtration. Journal of Membrane Science, 2010, 354, 123-133.	4.1	688
4	Membrane cleaning in membrane bioreactors: A review. Journal of Membrane Science, 2014, 468, 276-307.	4.1	637
5	Membrane fouling in osmotically driven membrane processes: A review. Journal of Membrane Science, 2016, 499, 201-233.	4.1	625
6	Probing the nano- and micro-scales of reverse osmosis membranesâ€"A comprehensive characterization of physiochemical properties of uncoated and coated membranes by XPS, TEM, ATR-FTIR, and streaming potential measurements. Journal of Membrane Science, 2007, 287, 146-156.	4.1	582
7	Colloidal interactions and fouling of NF and RO membranes: A review. Advances in Colloid and Interface Science, 2011, 164, 126-143.	7.0	559
8	Synthesis and characterization of flat-sheet thin film composite forward osmosis membranes. Journal of Membrane Science, 2011, 372, 292-302.	4.1	508
9	Characterization of novel forward osmosis hollow fiber membranes. Journal of Membrane Science, 2010, 355, 158-167.	4.1	502
10	Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes. Desalination, 2009, 242, 168-182.	4.0	424
11	The upper bound of thin-film composite (TFC) polyamide membranes for desalination. Journal of Membrane Science, 2019, 590, 117297.	4.1	381
12	Potable Water Reuse through Advanced Membrane Technology. Environmental Science & Technology, 2018, 52, 10215-10223.	4.6	363
13	Recent developments and future perspectives of reverse electrodialysis technology: A review. Desalination, 2018, 425, 156-174.	4.0	338
14	Degradation of Polyamide Nanofiltration and Reverse Osmosis Membranes by Hypochlorite. Environmental Science & Technology, 2012, 46, 852-859.	4.6	337
15	Fouling of reverse osmosis and nanofiltration membranes by humic acidâ€"Effects of solution composition and hydrodynamic conditions. Journal of Membrane Science, 2007, 290, 86-94.	4.1	328
16	Use of Reverse Osmosis Membranes to Remove Perfluorooctane Sulfonate (PFOS) from Semiconductor Wastewater. Environmental Science & Technology, 2006, 40, 7343-7349.	4.6	326
17	Membrane-based technologies for lithium recovery from water lithium resources: A review. Journal of Membrane Science, 2019, 591, 117317.	4.1	326
18	Zeolite-polyamide thin film nanocomposite membranes: Towards enhanced performance for forward osmosis. Journal of Membrane Science, 2012, 405-406, 149-157.	4.1	324

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19	Tannic Acid/Fe³⁺ Nanoscaffold for Interfacial Polymerization: Toward Enhanced Nanofiltration Performance. Environmental Science & Technology, 2018, 52, 9341-9349.	4.6	310
20	Effect of Flux (Transmembrane Pressure) and Membrane Properties on Fouling and Rejection of Reverse Osmosis and Nanofiltration Membranes Treating Perfluorooctane Sulfonate Containing Wastewater. Environmental Science & Technology, 2007, 41, 2008-2014.	4.6	309
21	Osmotic power production from salinity gradient resource by pressure retarded osmosis: Effects of operating conditions and reverse solute diffusion. Journal of Membrane Science, 2012, 401-402, 262-273.	4.1	308
22	A Critical Review on Thin-Film Nanocomposite Membranes with Interlayered Structure: Mechanisms, Recent Developments, and Environmental Applications. Environmental Science & Technology, 2020, 54, 15563-15583.	4.6	308
23	Effect of draw solution concentration and operating conditions on forward osmosis and pressure retarded osmosis performance in a spiral wound module. Journal of Membrane Science, 2010, 348, 298-309.	4.1	306
24	Thin-film composite hollow fiber membranes for pressure retarded osmosis (PRO) process with high power density. Journal of Membrane Science, 2012, 389, 25-33.	4.1	299
25	The role of physical and chemical parameters on forward osmosis membrane fouling during algae separation. Journal of Membrane Science, 2011, 366, 356-362.	4.1	283
26	Desalination by biomimetic aquaporin membranes: Review of status and prospects. Desalination, 2013, 308, 34-40.	4.0	280
27	Synthesis of robust and high-performance aquaporin-based biomimetic membranes by interfacial polymerization-membrane preparation and RO performance characterization. Journal of Membrane Science, 2012, 423-424, 422-428.	4.1	272
28	Nanofoaming of Polyamide Desalination Membranes To Tune Permeability and Selectivity. Environmental Science and Technology Letters, 2018, 5, 123-130.	3.9	260
29	Characteristics and potential applications of a novel forward osmosis hollow fiber membrane. Desalination, 2010, 261, 365-372.	4.0	256
30	A low-cost mullite-titania composite ceramic hollow fiber microfiltration membrane for highly efficient separation of oil-in-water emulsion. Water Research, 2016, 90, 277-285.	5.3	241
31	The potential to enhance membrane module design with 3D printing technology. Journal of Membrane Science, 2016, 499, 480-490.	4.1	238
32	Removal of organic micropollutants using advanced membrane-based water and wastewater treatment: A review. Journal of Membrane Science, 2020, 598, 117672.	4.1	238
33	Two-Dimensional Ti₃C₂T_x MXene Membranes as Nanofluidic Osmotic Power Generators. ACS Nano, 2019, 13, 8917-8925.	7.3	235
34	Synthesis and Characterization of Novel Forward Osmosis Membranes based on Layer-by-Layer Assembly. Environmental Science & Technology, 2011, 45, 5201-5208.	4.6	225
35	Protein fouling of nanofiltration, reverse osmosis, and ultrafiltration membranesâ€"The role of hydrodynamic conditions, solution chemistry, and membrane properties. Journal of Membrane Science, 2011, 376, 275-282.	4.1	224
36	Nanocomposite substrates for controlling internal concentration polarization in forward osmosis membranes. Journal of Membrane Science, 2013, 441, 54-62.	4.1	222

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37	Performance of a submerged anaerobic membrane bioreactor with forward osmosis membrane for low-strength wastewater treatment. Water Research, 2014, 50, 114-123.	5.3	220
38	Hollow Fiber Membrane Decorated with Ag/MWNTs: Toward Effective Water Disinfection and Biofouling Control. ACS Nano, 2011, 5, 10033-10040.	7.3	217
39	Osmotic membrane bioreactor (OMBR) technology for wastewater treatment and reclamation: Advances, challenges, and prospects for the future. Journal of Membrane Science, 2016, 504, 113-132.	4.1	217
40	Unraveling flux behavior of superhydrophilic loose nanofiltration membranes during textile wastewater treatment. Journal of Membrane Science, 2015, 493, 690-702.	4.1	203
41	Effect of solution chemistry on the adsorption of perfluorooctane sulfonate onto mineral surfaces. Water Research, 2010, 44, 2654-2662.	5.3	194
42	Engineering antifouling reverse osmosis membranes: A review. Desalination, 2021, 499, 114857.	4.0	192
43	Hydrophilic Silver Nanoparticles Induce Selective Nanochannels in Thin Film Nanocomposite Polyamide Membranes. Environmental Science & Technology, 2019, 53, 5301-5308.	4.6	190
44	Recent development of novel membranes for desalination. Desalination, 2018, 434, 37-59.	4.0	183
45	Membrane biofouling and scaling in forward osmosis membrane bioreactor. Journal of Membrane Science, 2012, 403-404, 8-14.	4.1	182
46	In Situ Reduction of Silver by Polydopamine: A Novel Antimicrobial Modification of a Thin-Film Composite Polyamide Membrane. Environmental Science & Technology, 2016, 50, 9543-9550.	4.6	182
47	Relating reverse and forward solute diffusion to membrane fouling in osmotically driven membrane processes. Water Research, 2012, 46, 2478-2486.	5.3	179
48	Effect of feed spacer induced membrane deformation on the performance of pressure retarded osmosis (PRO): Implications for PRO process operation. Journal of Membrane Science, 2013, 445, 170-182.	4.1	179
49	Robust superhydrophobic-superoleophilic polytetrafluoroethylene nanofibrous membrane for oil/water separation. Journal of Membrane Science, 2017, 540, 354-361.	4.1	178
50	Synthesis of high flux forward osmosis membranes by chemically crosslinked layer-by-layer polyelectrolytes. Journal of Membrane Science, 2011, 381, 74-80.	4.1	175
51	Direct Microscopic Observation of Forward Osmosis Membrane Fouling. Environmental Science & Technology, 2010, 44, 7102-7109.	4.6	174
52	Modeling salt accumulation in osmotic membrane bioreactors: Implications for FO membrane selection and system operation. Journal of Membrane Science, 2011, 366, 314-324.	4.1	174
53	Characterization of Humic Acid Fouled Reverse Osmosis and Nanofiltration Membranes by Transmission Electron Microscopy and Streaming Potential Measurements. Environmental Science & Technology, 2007, 41, 942-949.	4.6	173
54	Membrane fouling in an anaerobic membrane bioreactor: Differences in relative abundance of bacterial species in the membrane foulant layer and in suspension. Journal of Membrane Science, 2010, 364, 331-338.	4.1	170

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55	A critical review on porous substrates of TFC polyamide membranes: Mechanisms, membrane performances, and future perspectives. Journal of Membrane Science, 2022, 641, 119871.	4.1	167
56	Influence of monomer concentrations on the performance of polyamide-based thin film composite forward osmosis membranes. Journal of Membrane Science, 2011, 381, 110-117.	4.1	166
57	Effects of Chlorine Exposure Conditions on Physiochemical Properties and Performance of a Polyamide Membraneâ€"Mechanisms and Implications. Environmental Science & Technology, 2012, 46, 13184-13192.	4.6	164
58	A thin-film nanocomposite nanofiltration membrane prepared on a support with in situ embedded zeolite nanoparticles. Separation and Purification Technology, 2016, 166, 230-239.	3.9	162
59	Synthesis and characterization of novel antibacterial silver nanocomposite nanofiltration and forward osmosis membranes based on layer-by-layer assembly. Water Research, 2013, 47, 3081-3092.	5.3	161
60	Rejection of pharmaceuticals by forward osmosis membranes. Journal of Hazardous Materials, 2012, 227-228, 55-61.	6.5	159
61	Fabrication of carbon nanotubes incorporated double-skinned thin film nanocomposite membranes for enhanced separation performance and antifouling capability in forward osmosis process. Desalination, 2015, 369, 1-9.	4.0	157
62	Organic fouling in pressure retarded osmosis: Experiments, mechanisms and implications. Journal of Membrane Science, 2013, 428, 181-189.	4.1	155
63	A novel hybrid process of reverse electrodialysis and reverse osmosis for low energy seawater desalination and brine management. Applied Energy, 2013, 104, 592-602.	5.1	154
64	Stable Superhydrophobic Ceramic-Based Carbon Nanotube Composite Desalination Membranes. Nano Letters, 2018, 18, 5514-5521.	4.5	153
65	Removal of boron and arsenic by forward osmosis membrane: Influence of membrane orientation and organic fouling. Journal of Membrane Science, 2012, 389, 182-187.	4.1	152
66	Mining Nutrients (N, K, P) from Urban Source-Separated Urine by Forward Osmosis Dewatering. Environmental Science & Technology, 2014, 48, 3386-3394.	4.6	152
67	Solar-assisted fast cleanup of heavy oil spills using a photothermal sponge. Journal of Materials Chemistry A, 2018, 6, 9192-9199.	5.2	151
68	Advanced desalination of dye/NaCl mixtures by a loose nanofiltration membrane for digital ink-jet printing. Separation and Purification Technology, 2018, 197, 27-35.	3.9	144
69	Computational fluid dynamics simulations of flow and concentration polarization in forward osmosis membrane systems. Journal of Membrane Science, 2011, 379, 488-495.	4.1	143
70	Confined nanobubbles shape the surface roughness structures of thin film composite polyamide desalination membranes. Journal of Membrane Science, 2019, 582, 342-349.	4.1	143
71	Biomimetic aquaporin membranes coming of age. Desalination, 2015, 368, 89-105.	4.0	141
72	Nature gives the best solution for desalination: Aquaporin-based hollow fiber composite membrane with superior performance. Journal of Membrane Science, 2015, 494, 68-77.	4.1	141

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73	Study of integration of forward osmosis and biological process: Membrane performance under elevated salt environment. Desalination, 2011, 283, 123-130.	4.0	139
74	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.	5.0	139
75	The role of foulantâ€“foulant electrostatic interaction on limiting flux for RO and NF membranes during humic acid foulingâ€”Theoretical basis, experimental evidence, and AFM interaction force measurement. Journal of Membrane Science, 2009, 326, 526-532.	4.1	138
76	Effect of substrate structure on the performance of thin-film composite forward osmosis hollow fiber membranes. Journal of Membrane Science, 2011, 382, 116-123.	4.1	138
77	Gypsum scaling in pressure retarded osmosis: Experiments, mechanisms and implications. Water Research, 2014, 48, 387-395.	5.3	138
78	A facile preparation of novel positively charged MOF/chitosan nanofiltration membranes. Journal of Membrane Science, 2017, 525, 269-276.	4.1	138
79	Mechanistic Insights into the Role of Polydopamine Interlayer toward Improved Separation Performance of Polyamide Nanofiltration Membranes. Environmental Science & Technology, 2020, 54, 11611-11621.	4.6	137
80	Intrinsic Nanoscale Structure of Thin Film Composite Polyamide Membranes: Connectivity, Defects, and Structureâ€“Property Correlation. Environmental Science & Technology, 2020, 54, 3559-3569.	4.6	135
81	Opportunities to reach economic sustainability in forward osmosisâ€“reverse osmosis hybrids for seawater desalination. Desalination, 2015, 363, 26-36.	4.0	132
82	Boric Acid Permeation in Forward Osmosis Membrane Processes: Modeling, Experiments, and Implications. Environmental Science & Technology, 2011, 45, 2323-2330.	4.6	131
83	Preparation of high performance nanofiltration (NF) membranes incorporated with aquaporin Z. Journal of Membrane Science, 2014, 450, 181-188.	4.1	131
84	Double-skinned forward osmosis membranes based on layer-by-layer assemblyâ€”FO performance and fouling behavior. Journal of Membrane Science, 2012, 405-406, 20-29.	4.1	130
85	Acute Responses of Microorganisms from Membrane Bioreactors in the Presence of NaOCl: Protective Mechanisms of Extracellular Polymeric Substances. Environmental Science & Technology, 2017, 51, 3233-3241.	4.6	128
86	Fouling propensity of forward osmosis: investigation of the slower flux decline phenomenon. Water Science and Technology, 2010, 61, 927-936.	1.2	127
87	Fouling of Nanofiltration, Reverse Osmosis, and Ultrafiltration Membranes by Protein Mixtures: The Role of Inter-Foulant-Species Interaction. Environmental Science & Technology, 2011, 45, 6373-6379.	4.6	126
88	In situ observation of the growth of biofouling layer in osmotic membrane bioreactors by multiple fluorescence labeling and confocal laser scanning microscopy. Water Research, 2015, 75, 188-200.	5.3	126
89	Membrane Independent Limiting Flux for RO and NF Membranes Fouled by Humic Acid. Environmental Science & Technology, 2007, 41, 4767-4773.	4.6	123
90	Dissecting the Role of Substrate on the Morphology and Separation Properties of Thin Film Composite Polyamide Membranes: Seeing Is Believing. Environmental Science & Technology, 2020, 54, 6978-6986.	4.6	123

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91	Direct microscopic observation of forward osmosis membrane fouling by microalgae: Critical flux and the role of operational conditions. Journal of Membrane Science, 2013, 436, 174-185.	4.1	122
92	Monolithic Porous MagnÃ©li-phase Ti4O7 for Electro-oxidation Treatment of Industrial Wastewater. Electrochimica Acta, 2016, 214, 326-335.	2.6	122
93	Organic fouling of thin-film composite polyamide and cellulose triacetate forward osmosis membranes by oppositely charged macromolecules. Water Research, 2013, 47, 1867-1874.	5.3	121
94	Factors affecting flux performance of forward osmosis systems. Journal of Membrane Science, 2012, 394-395, 151-168.	4.1	118
95	Graphene oxide membranes: controlling their transport pathways. Journal of Materials Chemistry A, 2020, 8, 15319-15340.	5.2	118
96	Does Hydrophilic Polydopamine Coating Enhance Membrane Rejection of Hydrophobic Endocrine-Disrupting Compounds?. Environmental Science and Technology Letters, 2016, 3, 332-338.	3.9	117
97	Development of anaerobic osmotic membrane bioreactor for low-strength wastewater treatment at mesophilic condition. Journal of Membrane Science, 2015, 490, 197-208.	4.1	116
98	Preparation of supported lipid membranes for aquaporin Z incorporation. Colloids and Surfaces B: Biointerfaces, 2012, 94, 333-340.	2.5	113
99	High-Capacity Amidoxime-Functionalized Î²-Cyclodextrin/Graphene Aerogel for Selective Uranium Capture. Environmental Science & Technology, 2021, 55, 9181-9188.	4.6	112
100	Hydrophilic Selective Nanochannels Created by Metal Organic Frameworks in Nanofiltration Membranes Enhance Rejection of Hydrophobic Endocrine-Disrupting Compounds. Environmental Science & Technology, 2019, 53, 13776-13783.	4.6	111
101	A One-Step Rapid Assembly of Thin Film Coating Using Green Coordination Complexes for Enhanced Removal of Trace Organic Contaminants by Membranes. Environmental Science & Technology, 2017, 51, 12638-12643.	4.6	110
102	Polydopamine coating on a thin film composite forward osmosis membrane for enhanced mass transport and antifouling performance. Journal of Membrane Science, 2018, 551, 234-242.	4.1	110
103	Interfacial Polymerization with Electrosprayed Microdroplets: Toward Controllable and Ultrathin Polyamide Membranes. Environmental Science and Technology Letters, 2018, 5, 117-122.	3.9	105
104	Validation of assisted forward osmosis (AFO) process: Impact of hydraulic pressure. Journal of Membrane Science, 2013, 447, 1-11.	4.1	104
105	Membrane module design and dynamic shear-induced techniques to enhance liquid separation by hollow fiber modules: a review. Desalination and Water Treatment, 2013, 51, 3604-3627.	1.0	104
106	The role of hydrodynamic conditions and solution chemistry on protein fouling during ultrafiltration. Desalination, 2009, 249, 1079-1087.	4.0	102
107	Free-standing hierarchical Î±-MnO2@CuO membrane for catalytic filtration degradation of organic pollutants. Chemosphere, 2018, 200, 237-247.	4.2	101
108	Surface modification of thin film composite RO membrane for enhanced anti-biofouling performance. Journal of Membrane Science, 2013, 444, 192-200.	4.1	100

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109	In situ silica growth for superhydrophilic-underwater superoleophobic Silica/PVA nanofibrous membrane for gravity-driven oil-in-water emulsion separation. Journal of Membrane Science, 2020, 612, 118476.	4.1	97
110	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
111	Dually Charged MOF-Based Thin-Film Nanocomposite Nanofiltration Membrane for Enhanced Removal of Charged Pharmaceutically Active Compounds. Environmental Science & Technology, 2020, 54, 7619-7628.	4.6	95
112	Regulation, formation, exposure, and treatment of disinfection by-products (DBPs) in swimming pool waters: A critical review. Environment International, 2018, 121, 1039-1057.	4.8	94
113	Novel Approach To Characterizing the Growth of a Fouling Layer during Membrane Filtration via Optical Coherence Tomography. Environmental Science & Technology, 2014, 48, 14273-14281.	4.6	93
114	A comprehensive physico-chemical characterization of superhydrophilic loose nanofiltration membranes. Journal of Membrane Science, 2016, 501, 1-14.	4.1	93
115	Peptide-induced super-assembly of biocatalytic metalâ€“organic frameworks for programmed enzyme cascades. Chemical Science, 2019, 10, 7852-7858.	3.7	91
116	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
117	High performance flat sheet forward osmosis membrane with an NF-like selective layer on a woven fabric embedded substrate. Desalination, 2012, 287, 266-270.	4.0	90
118	Non-Polyamide Based Nanofiltration Membranes Using Green Metalâ€“Organic Coordination Complexes: Implications for the Removal of Trace Organic Contaminants. Environmental Science & Technology, 2019, 53, 2688-2694.	4.6	90
119	Low-Tortuosity Water Microchannels Boosting Energy Utilization for High Water Flux Solar Distillation. Environmental Science & Technology, 2020, 54, 5150-5158.	4.6	89
120	Rejection of heavy metals in acidic wastewater by a novel thin-film inorganic forward osmosis membrane. Chemical Engineering Journal, 2017, 320, 532-538.	6.6	87
121	Metal-organic framework enables ultraselective polyamide membrane for desalination and water reuse. Science Advances, 2022, 8, eabm4149.	4.7	87
122	Surface modification of thin film composite polyamide membrane using atomic layer deposition method. Journal of Membrane Science, 2014, 450, 174-180.	4.1	86
123	Antibiofouling Polyvinylidene Fluoride Membrane Modified by Quaternary Ammonium Compound: Direct Contact-Killing versus Induced Indirect Contact-Killing. Environmental Science & Technology, 2016, 50, 5086-5093.	4.6	86
124	A novel thin-film nano-templated composite membrane with in situ silver nanoparticles loading: Separation performance enhancement and implications. Journal of Membrane Science, 2017, 544, 351-358.	4.1	86
125	Novel high-flux positively charged composite membrane incorporating titanium-based MOFs for heavy metal removal. Chemical Engineering Journal, 2020, 398, 125706.	6.6	86
126	Modeling double-skinned FO membranes. Desalination, 2011, 283, 178-186.	4.0	85

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127	Development of a novel anaerobic membrane bioreactor simultaneously integrating microfiltration and forward osmosis membranes for low-strength wastewater treatment. Journal of Membrane Science, 2017, 527, 1-7.	4.1	84
128	Combined organicâ€“inorganic fouling of forward osmosis hollow fiber membranes. Water Research, 2012, 46, 6329-6338.	5.3	83
129	Atmospheric pressure atomic layer deposition for tight ceramic nanofiltration membranes: Synthesis and application in water purification. Journal of Membrane Science, 2017, 528, 163-170.	4.1	82
130	Removal of haloacetic acids from swimming pool water by reverse osmosis and nanofiltration. Water Research, 2017, 116, 116-125.	5.3	82
131	Thin-film nanocomposite membranes containing tannic acid-Fe3+ modified MoS2 nanosheets with enhanced nanofiltration performance. Journal of Membrane Science, 2020, 616, 118605.	4.1	82
132	Metalâ€“organic framework-based porous matrix membranes for improving mass transfer in forward osmosis membranes. Journal of Membrane Science, 2015, 492, 392-399.	4.1	80
133	Omniphobic Nanofibrous Membrane with Pine-Needle-Like Hierarchical Nanostructures: Toward Enhanced Performance for Membrane Distillation. ACS Applied Materials & Interfaces, 2019, 11, 47963-47971.	4.0	80
134	Analyzing the Evolution of Membrane Fouling via a Novel Method Based on 3D Optical Coherence Tomography Imaging. Environmental Science & Technology, 2016, 50, 6930-6939.	4.6	79
135	Network modeling for studying the effect of support structure on internal concentration polarization during forward osmosis: Model development and theoretical analysis with FEM. Journal of Membrane Science, 2011, 379, 307-321.	4.1	77
136	A highly selective surface coating for enhanced membrane rejection of endocrine disrupting compounds: Mechanistic insights and implications. Water Research, 2017, 121, 197-203.	5.3	77
137	Nanofiltration for drinking water treatment: a review. Frontiers of Chemical Science and Engineering, 2022, 16, 681-698.	2.3	77
138	Trace organic contaminant rejection by aquaporin forward osmosis membrane: Transport mechanisms and membrane stability. Water Research, 2018, 132, 90-98.	5.3	76
139	Robust ultrathin nanoporous MOF membrane with intra-crystalline defects for fast water transport. Nature Communications, 2022, 13, 266.	5.8	76
140	Perfluorooctane sulfonate removal by nanofiltration membraneâ€”the effect and interaction of magnesium ion / humic acid. Journal of Membrane Science, 2016, 503, 31-41.	4.1	75
141	Cross-linked Graphene Oxide Framework Membranes with Robust Nano-Channels for Enhanced Sieving Ability. Environmental Science & Technology, 2020, 54, 15442-15453.	4.6	75
142	Omniphobic PVDF nanofibrous membrane for superior anti-wetting performance in direct contact membrane distillation. Journal of Membrane Science, 2020, 608, 118226.	4.1	75
143	Membrane Technology for Water: Microfiltration, Ultrafiltration, Nanofiltration, and Reverse Osmosis. , 2011, , 301-335.		74
144	Effects of hypochlorous acid exposure on the rejection of salt, polyethylene glycols, boron and arsenic(V) by nanofiltration and reverse osmosis membranes. Water Research, 2012, 46, 5217-5223.	5.3	74

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145	In situ surface modification of thin film composite forward osmosis membranes with sulfonated poly(arylene ether sulfone) for anti-fouling in emulsified oil/water separation. Journal of Membrane Science, 2017, 527, 26-34.	4.1	74
146	A modeling investigation on optimizing the design of forward osmosis hollow fiber modules. Journal of Membrane Science, 2012, 392-393, 76-87.	4.1	72
147	Influence of outer membrane câ€type cytochromes on particle size and activity of extracellular nanoparticles produced by Shewanella oneidensis. Biotechnology and Bioengineering, 2013, 110, 1831-1837.	1.7	72
148	Carbon Nanotube Interlayer Enhances Water Permeance and Antifouling Performance of Nanofiltration Membranes: Mechanisms and Experimental Evidence. Environmental Science & Technology, 2022, 56, 2656-2664.	4.6	72
149	Nanofiltration Membrane Fouling by Oppositely Charged Macromolecules: Investigation on Flux Behavior, Foulant Mass Deposition, and Solute Rejection. Environmental Science & Technology, 2011, 45, 8941-8947.	4.6	71
150	Fabrication of Porous Matrix Membrane (PMM) Using Metal-Organic Framework as Green Template for Water Treatment. Scientific Reports, 2014, 4, 3740.	1.6	70
151	Fabrication and characterization of nanocomposite pressure retarded osmosis (PRO) membranes with excellent anti-biofouling property and enhanced water permeability. Desalination, 2016, 389, 137-148.	4.0	70
152	Novel Positively Charged Metal-Coordinated Nanofiltration Membrane for Lithium Recovery. ACS Applied Materials & Interfaces, 2021, 13, 16906-16915.	4.0	70
153	Characterization of internal and external concentration polarizations during forward osmosis processes. Desalination, 2014, 338, 65-73.	4.0	69
154	Solvent-thermal induced roughening: A novel and versatile method to prepare superhydrophobic membranes. Journal of Membrane Science, 2018, 564, 465-472.	4.1	68
155	Electrosprayed polyamide nanofiltration membrane with intercalated structure for controllable structure manipulation and enhanced separation performance. Journal of Membrane Science, 2020, 602, 117971.	4.1	68
156	Recent advances in mitigating membrane biofouling using carbon-based materials. Journal of Hazardous Materials, 2020, 382, 120976.	6.5	67
157	Ultra-thin, multi-layered polyamide membranes: Synthesis and characterization. Journal of Membrane Science, 2017, 540, 10-18.	4.1	66
158	One-step tailoring surface roughness and surface chemistry to prepare superhydrophobic polyvinylidene fluoride (PVDF) membranes for enhanced membrane distillation performances. Journal of Colloid and Interface Science, 2019, 553, 99-107.	5.0	66
159	Spinel-based ceramic membranes coupling solid sludge recycling with oily wastewater treatment. Water Research, 2020, 169, 115180.	5.3	66
160	Flexible Superhydrophobic Metal-Based Carbon Nanotube Membrane for Electrochemically Enhanced Water Treatment. Environmental Science & Technology, 2020, 54, 9074-9082.	4.6	65
161	Modification of microfiltration membranes by alkoxysilane polycondensation induced quaternary ammonium compounds grafting for biofouling mitigation. Journal of Membrane Science, 2018, 549, 165-172.	4.1	64
162	Janus Polyvinylidene Fluoride Membrane with Extremely Opposite Wetting Surfaces via One Single-Step Unidirectional Segregation Strategy. ACS Applied Materials & Interfaces, 2018, 10, 24947-24954.	4.0	64

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163	Calcium-Carboxyl Intrabridging during Interfacial Polymerization: A Novel Strategy to Improve Antifouling Performance of Thin Film Composite Membranes. Environmental Science & Technology, 2019, 53, 4371-4379.	4.6	64
164	Charge-Gated Ion Transport through Polyelectrolyte Intercalated Amine Reduced Graphene Oxide Membranes. ACS Applied Materials & Interfaces, 2017, 9, 41482-41495.	4.0	63
165	Engineering a Nanocomposite Interlayer for a Novel Ceramic-Based Forward Osmosis Membrane with Enhanced Performance. Environmental Science & Technology, 2020, 54, 7715-7724.	4.6	63
166	Removal of cytostatic drugs from wastewater by an anaerobic osmotic membrane bioreactor. Chemical Engineering Journal, 2018, 339, 153-161.	6.6	62
167	The open membrane database: Synthesisâ€“structureâ€“performance relationships of reverse osmosis membranes. Journal of Membrane Science, 2022, 641, 119927.	4.1	62
168	Whey recovery using forward osmosis â€“ Evaluating the factors limiting the flux performance. Journal of Membrane Science, 2017, 533, 179-189.	4.1	61
169	Biofouling in ultrafiltration process for drinking water treatment and its control by chlorinated-water and pure water backwashing. Science of the Total Environment, 2018, 644, 306-314.	3.9	61
170	Carbon nanotubes enhance permeability of ultrathin polyamide rejection layers. Journal of Membrane Science, 2019, 570-571, 139-145.	4.1	61
171	Interactive Mechanical Model for Shear Strength of Deep Beams. Journal of Structural Engineering, 2004, 130, 1534-1544.	1.7	60
172	Change of membrane performance due to chlorination of crosslinked polyamide membranes. Journal of Applied Polymer Science, 2006, 102, 5895-5902.	1.3	59
173	Superior nanofiltration membranes with gradient cross-linked selective layer fabricated via controlled hydrolysis. Journal of Membrane Science, 2020, 604, 118067.	4.1	58
174	Direct Strut-and-Tie Model for Prestressed Deep Beams. Journal of Structural Engineering, 2001, 127, 1076-1084.	1.7	57
175	Forward Osmosis with a Novel Thin-Film Inorganic Membrane. Environmental Science & Technology, 2013, 47, 8733-8742.	4.6	57
176	Sustaining fouling resistant membranes: Membrane fabrication, characterization and mechanism understanding of demulsification and fouling-resistance. Journal of Membrane Science, 2019, 581, 105-113.	4.1	57
177	Metalâ€“Organic Framework Nanosheets for Thin-Film Composite Membranes with Enhanced Permeability and Selectivity. ACS Applied Nano Materials, 2020, 3, 9238-9248.	2.4	57
178	Change of chemical composition and hydrogen bonding behavior due to chlorination of crosslinked polyamide membranes. Journal of Applied Polymer Science, 2008, 108, 2061-2066.	1.3	56
179	Effect of Pharmaceuticals on the Performance of a Novel Osmotic Membrane Bioreactor (OMBR). Separation Science and Technology, 2012, 47, 543-554.	1.3	55
180	Influence of the properties of layer-by-layer active layers on forward osmosis performance. Journal of Membrane Science, 2012, 423-424, 536-542.	4.1	55

#	Article	IF	Citations
181	Microscopic Characterization of FO/PRO Membranes â€“ A Comparative Study of CLSM, TEM and SEM. Environmental Science & Technology, 2012, 46, 9995-10003.	4.6	54
182	Fabrication of a novel and green thin-film composite membrane containing nanovoids for water purification. Journal of Membrane Science, 2019, 570-571, 314-321.	4.1	54
183	Adsorption of perfluorinated compounds on thinâ€film composite polyamide membranes. Journal of Applied Polymer Science, 2012, 124, 1042-1049.	1.3	53
184	Strategic Co-Location in a Hybrid Process Involving Desalination and Pressure Retarded Osmosis (PRO). Membranes, 2013, 3, 98-125.	1.4	53
185	Fabrication and characterization of fabric-reinforced pressure retarded osmosis membranes for osmotic power harvesting. Journal of Membrane Science, 2016, 504, 75-88.	4.1	53
186	Gypsum scaling and membrane integrity of osmotically driven membranes: The effect of membrane materials and operating conditions. Desalination, 2016, 377, 1-10.	4.0	53
187	Characterization of forward osmosis membranes by electrochemical impedance spectroscopy. Desalination, 2013, 312, 45-51.	4.0	52
188	Highly Efficient Forward Osmosis Based on Porous Membranesâ€”Applications and Implications. Environmental Science & Technology, 2015, 49, 4690-4695.	4.6	51
189	Characterization of fluid dynamics in spacer-filled channels for membrane filtration using Doppler optical coherence tomography. Journal of Membrane Science, 2013, 448, 198-208.	4.1	50
190	Structural stability and mass transfer properties of pressure retarded osmosis (PRO) membrane under high operating pressures. Journal of Membrane Science, 2015, 488, 143-153.	4.1	50
191	Unveiling the Susceptibility of Functional Groups of Poly(ether sulfone)/Polyvinylpyrrolidone Membranes to NaOCl: A Two-Dimensional Correlation Spectroscopic Study. Environmental Science & Technology, 2017, 51, 14342-14351.	4.6	50
192	Ultrasound-assisted forward osmosis for mitigating internal concentration polarization. Journal of Membrane Science, 2017, 528, 147-154.	4.1	49
193	Co-locating reverse electrodialysis with reverse osmosis desalination: Synergies and implications. Journal of Membrane Science, 2017, 539, 305-312.	4.1	48
194	Fast polydopamine coating on reverse osmosis membrane: Process investigation and membrane performance study. Journal of Colloid and Interface Science, 2019, 535, 239-244.	5.0	48
195	Reaction heterogeneity in the bridging effect of divalent cations on polysaccharide fouling. Journal of Membrane Science, 2022, 641, 119933.	4.1	48
196	Comparison of NF-like and RO-like thin film composite osmotically-driven membranesâ€”Implications for membrane selection and process optimization. Journal of Membrane Science, 2013, 427, 460-471.	4.1	47
197	Janus Membrane with Unparalleled Forward Osmosis Performance. Environmental Science and Technology Letters, 2019, 6, 79-85.	3.9	47
198	High-flux robust ceramic membranes functionally decorated with nano-catalyst for emerging micro-pollutant removal from water. Journal of Membrane Science, 2020, 611, 118281.	4.1	47

#	Article	IF	Citations
199	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
200	Assessment of micellar solutions as draw solutions for forward osmosis. Desalination, 2014, 354, 97-106.	4.0	46
201	Metagenomic insights into the influence of salinity and cytostatic drugs on the composition and functional genes of microbial community in forward osmosis anaerobic membrane bioreactors. Chemical Engineering Journal, 2017, 326, 462-469.	6.6	46
202	Simultaneous Electrochemical Exfoliation and Covalent Functionalization of MoS₂ Membrane for Ion Sieving. Advanced Materials, 2022, 34, e2201416.	11.1	45
203	Effect of reverse solute diffusion on scaling in forward osmosis: A new control strategy by tailoring draw solution chemistry. Desalination, 2017, 401, 230-237.	4.0	44
204	Superhydrophilic and mechanical robust PVDF nanofibrous membrane through facile interfacial Span 80 welding for excellent oil/water separation. Applied Surface Science, 2019, 485, 179-187.	3.1	44
205	Role of calcium ions on the removal of haloacetic acids from swimming pool water by nanofiltration: mechanisms and implications. Water Research, 2017, 110, 332-341.	5.3	42
206	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.	3.9	42
207	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.	3.9	41
208	The role of hydrodynamic conditions and pH on algal-rich water fouling of ultrafiltration. Water Research, 2012, 46, 4783-4789.	5.3	40
209	Synthesis and characterization of silica gelâ€“polyacrylonitrile mixed matrix forward osmosis membranes based on layer-by-layer assembly. Separation and Purification Technology, 2014, 124, 207-216.	3.9	40
210	Gravity-driven catalytic nanofibrous membranes prepared using a green template. Journal of Membrane Science, 2017, 525, 298-303.	4.1	40
211	Recent development of pressure retarded osmosis membranes for water and energy sustainability: A critical review. Water Research, 2021, 189, 116666.	5.3	40
212	Coupling heat curing and surface modification for the fabrication of high permselectivity polyamide nanofiltration membranes. Journal of Membrane Science, 2021, 623, 119073.	4.1	40
213	Surface modification of nanofiltration membranes to improve the removal of organic micropollutants: Linking membrane characteristics to solute transmission. Water Research, 2021, 203, 117520.	5.3	40
214	A novel gravity-driven nanofibrous membrane for point-of-use water disinfection: polydopamine-induced in situ silver incorporation. Scientific Reports, 2017, 7, 2334.	1.6	39
215	Reactable substrate participating interfacial polymerization for thin film composite membranes with enhanced salt rejection performance. Desalination, 2018, 436, 1-7.	4.0	39
216	Novel polyethyleneimine/TMC-based nanofiltration membrane prepared on a polydopamine coated substrate. Frontiers of Chemical Science and Engineering, 2018, 12, 273-282.	2.3	39

#	Article	IF	Citations
217	Modelling the critical roles of zeta potential and contact angle on colloidal fouling with a coupled XDLVO - collision attachment approach. Journal of Membrane Science, 2021, 623, 119048.	4.1	39
218	Polyethyleneimine modified carbohydrate doped thin film composite nanofiltration membrane for purification of drinking water. Journal of Membrane Science, 2020, 610, 118220.	4.1	39
219	Water permeation dynamics of AqpZ: A tale of two states. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1581-1586.	1.4	37
220	Polyamide reverse osmosis membranes containing 1D nanochannels for enhanced water purification. Journal of Membrane Science, 2021, 618, 118681.	4.1	37
221	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.	3.9	37
222	Beyond Superwetting Surfaces: Dual-Scale Hyperporous Membrane with Rational Wettability for â€œNonfoulingâ€•Emulsion Separation via Coalescence Demulsification. ACS Applied Materials & Interfaces, 2021, 13, 4731-4739.	4.0	36
223	Dually charged polyamide nanofiltration membranes fabricated by microwave-assisted grafting for heavy metals removal. Journal of Membrane Science, 2021, 640, 119834.	4.1	34
224	Modeling Dynamics of Colloidal Fouling of RO/NF Membranes with A Novel Collision-Attachment Approach. Environmental Science & Technology, 2018, 52, 1471-1478.	4.6	32
225	Facile ZIFâ€“8 nanocrystals interlayered solventâ€“resistant thinâ€“film nanocomposite membranes for enhanced solvent permeance and rejection. Journal of Membrane Science, 2021, 636, 119586.	4.1	32
226	Stable Zr-Based Metalâ€“Organic Framework Nanoporous Membrane for Efficient Desalination of Hypersaline Water. Environmental Science & Technology, 2021, 55, 14917-14927.	4.6	31
227	Fusion behaviour of aquaporin Z incorporated proteoliposomes investigated by quartz crystal microbalance with dissipation (QCM-D). Colloids and Surfaces B: Biointerfaces, 2013, 111, 446-452.	2.5	30
228	Bactericidal activity of silver nanoparticles in environmentally relevant freshwater matrices: Influences of organic matter and chelating agent. Journal of Environmental Chemical Engineering, 2014, 2, 525-531.	3.3	30
229	Electro-Enhanced Separation of Microsized Oil-in-Water Emulsions via Metallic Membranes: Performance and Mechanistic Insights. Environmental Science & Technology, 2022, 56, 4518-4530.	4.6	30
230	Effects of Proteoliposome Composition and Draw Solution Types on Separation Performance of Aquaporin-Based Proteoliposomes: Implications for Seawater Desalination Using Aquaporin-Based Biomimetic Membranes. Environmental Science & Technology, 2013, 47, 130111084054009.	4.6	29
231	High Permeance or High Selectivity? Optimization of System-Scale Nanofiltration Performance Constrained by the Upper Bound. ACS ES&T Engineering, 2022, 2, 377-390.	3.7	29
232	Theoretical and experimental study of organic fouling of loose nanofiltration membrane. Journal of the Taiwan Institute of Chemical Engineers, 2018, 93, 509-518.	2.7	28
233	Unraveling the Kinetics and Mechanism of Surfactant-Induced Wetting in Membrane Distillation: An In Situ Observation with Optical Coherence Tomography. Environmental Science & Technology, 2022, 56, 556-563.	4.6	28
234	Unveiling the Growth of Polyamide Nanofilms at Water/Organic Free Interfaces: Toward Enhanced Water/Salt Selectivity. Environmental Science & Technology, 2022, 56, 10279-10288.	4.6	27

#	Article	IF	Citations
235	Spacer-induced forward osmosis membrane integrity loss during gypsum scaling. Desalination, 2016, 392, 85-90.	4.0	26
236	Cross-linked PVC/hyperbranched polyester composite hollow fiber membranes for dye removal. Reactive and Functional Polymers, 2018, 122, 51-59.	2.0	26
237	Engineering Interface with a One-Dimensional RuO₂/TiO₂ Heteronanostructure in an Electrocatalytic Membrane Electrode: Toward Highly Efficient Micropollutant Decomposition. ACS Applied Materials & Interfaces, 2020, 12, 21596-21604.	4.0	26
238	A comprehensive review of electrospray technique for membrane development: Current status, challenges, and opportunities. Journal of Membrane Science, 2022, 646, 120248.	4.1	26
239	A conceptual design of spacers with hairy structures for membrane processes. Journal of Membrane Science, 2016, 510, 314-325.	4.1	25
240	Novel molecular level insights into forward osmosis membrane fouling affected by reverse diffusion of draw solutions based on thermodynamic mechanisms. Journal of Membrane Science, 2021, 620, 118815.	4.1	25
241	Validation and Analysis of Forward Osmosis CFD Model in Complex 3D Geometries. Membranes, 2012, 2, 764-782.	1.4	24
242	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
243	Polydopamine enabled palladium loaded nanofibrous membrane and its catalytic performance for trichloroethene dechlorination. Applied Catalysis A: General, 2018, 559, 122-126.	2.2	23
244	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.	4.1	23
245	Enhancing nanofiltration performance for antibiotics/NaCl separation via water activation before microwave heating. Journal of Membrane Science, 2021, 629, 119285.	4.1	23
246	Deciphering the Role of Amine Concentration on Polyamide Formation toward Enhanced RO Performance. ACS ES&T Engineering, 2022, 2, 903-912.	3.7	23
247	Transmission Electron Microscopy (TEM). , 2017, , 145-159.		22
248	Understanding Selectivity in Soluteâ€“Solute Separation: Definitions, Measurements, and Comparability. Environmental Science & Technology, 2022, 56, 2605-2616.	4.6	22
249	Highly selective separation and resource recovery using forward osmosis membrane assembled by polyphenol network. Journal of Membrane Science, 2020, 611, 118305.	4.1	21
250	Effect of Spacer Configuration on the Characteristics of FO Membranes: Alteration of Permeation Characteristics by Membrane Deformation and Concentration Polarization. Environmental Science & Technology, 2020, 54, 6385-6395.	4.6	21
251	Effect of oxidation degree of GO nanosheets on microstructure and performance of polysulfone-GO mixed matrix membranes. Separation and Purification Technology, 2020, 244, 116865.	3.9	21
252	Superhydrophobic Carbon Nanotube Network Membranes for Membrane Distillation: High-Throughput Performance and Transport Mechanism. Environmental Science & Technology, 2022, 56, 5775-5785.	4.6	21

#	Article	IF	Citations
253	Towards improved separation performance using porous FO membranes: The critical roles of membrane separation properties and draw solution. Journal of Membrane Science, 2016, 498, 67-74.	4.1	20
254	Effects of hypochlorite exposure on the structure and electrochemical performance of ion exchange membranes in reverse electrodialysis. Journal of Membrane Science, 2018, 549, 295-305.	4.1	20
255	Management of concentrate and waste streams for membrane-based algal separation in water treatment: A review. Water Research, 2020, 183, 115969.	5.3	20
256	Breathable and Skinâ€Conformal Electronics with Hybrid Integration of Microfabricated Multifunctional Sensors and Kirigamiâ€Structured Nanofibrous Substrates. Advanced Functional Materials, 2022, 32, .	7.8	20
257	Cosolvent-Assisted Interfacial Polymerization toward Regulating the Morphology and Performance of Polyamide Reverse Osmosis Membranes: Increased m-Phenylenediamine Solubility or Enhanced Interfacial Vaporization?. Environmental Science & Technology, 2022, 56, 10308-10316.	4.6	20
258	Enhancing boron rejection in FO using alkaline draw solutions. Water Research, 2017, 118, 20-25.	5.3	19
259	Microfiltration membranes modified by silver-decorated biomimetic silica nanopollens for mitigating biofouling: Synergetic effects of nanopollens and silver nanoparticles. Journal of Membrane Science, 2020, 597, 117773.	4.1	19
260	Stochastic Collisionâ€“Attachment-Based Monte Carlo Simulation of Colloidal Fouling: Transition from Foulantâ€“Clean-Membrane Interaction to Foulantâ€“Fouled-Membrane Interaction. Environmental Science & Technology, 2020, 54, 12703-12712.	4.6	19
261	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
262	Fouling is the beginning: upcycling biopolymer-fouled substrates for fabricating high-permeance thin-film composite polyamide membranes. Green Chemistry, 2021, 23, 1013-1025.	4.6	18
263	Preparation of electrically enhanced forward osmosis (FO) membrane by two-dimensional MXenes for organic fouling mitigation. Chinese Chemical Letters, 2022, 33, 3818-3822.	4.8	18
264	Reverse Electrodialysis Chemical Cell for Energy Harvesting from Controlled Acidâ€“Base Neutralization. Environmental Science & Technology, 2019, 53, 4640-4647.	4.6	17
265	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.	4.1	17
266	High-Efficiency Capture and Recovery of Anionic Perfluoroalkyl Substances from Water Using PVA/PDDA Nanofibrous Membranes with Near-Zero Energy Consumption. Environmental Science and Technology Letters, 2021, 8, 350-355.	3.9	17
267	Multilayer assembly of thin-film nanocomposite membranes with enhanced NaCl and antibiotic rejection. Desalination, 2021, 517, 115261.	4.0	17
268	Removal of perfluorooctane sulfonate by a gravity-driven membrane: Filtration performance and regeneration behavior. Separation and Purification Technology, 2017, 174, 136-144.	3.9	16
269	Improved anti-biofouling performance of pressure retarded osmosis (PRO) by dosing with chlorhexidine gluconate. Desalination, 2020, 481, 114376.	4.0	16
270	An alkaline stable anion exchange membrane for electro-desalination. Desalination, 2021, 497, 114779.	4.0	16

#	Article	IF	Citations
271	Degradation of Polyamide Nanofiltration Membranes by Bromine: Changes of Physiochemical Properties and Filtration Performance. Environmental Science & Technology, 2021, 55, 6329-6339.	4.6	16
272	Interlayered Forward Osmosis Membranes with Ti₃C₂T_x MXene and Carbon Nanotubes for Enhanced Municipal Wastewater Concentration. Environmental Science & Technology, 2021, 55, 13219-13230.	4.6	16
273	Functionalized Graphene Oxide Modified Polyethersulfone Membranes for Low-Pressure Anionic Dye/Salt Fractionation. Polymers, 2018, 10, 795.	2.0	15
274	Cleaningâ€“Healingâ€“Interfacial Polymerization Strategy for Upcycling Real End-of-Life Polyvinylidene Fluoride Microfiltration Membranes. ACS Sustainable Chemistry and Engineering, 2021, 9, 10352-10360.	3.2	15
275	Analysis of Salt Accumulation in a Forward Osmosis System. Separation Science and Technology, 2012, 47, 1837-1848.	1.3	14
276	Mesoporous Silica Gelâ€“Based Mixed Matrix Membranes for Improving Mass Transfer in Forward Osmosis: Effect of Pore Size of Filler. Scientific Reports, 2015, 5, 16808.	1.6	14
277	Facile synthesis, characterization, and electrochemical performance of multi-scale AgVO3 particles. Journal of Alloys and Compounds, 2016, 674, 56-62.	2.8	14
278	An internal-integrated RED/ED system for energy-saving seawater desalination: A model study. Energy, 2019, 170, 139-148.	4.5	14
279	Dissect the role of particle size through collision-attachment simulations for colloidal fouling of RO/NF membranes. Journal of Membrane Science, 2021, 638, 119679.	4.1	13
280	Double-Crosslinked GO Interlayer Framework as a Pervaporation Hybrid Membrane with High Performance. ACS Omega, 2019, 4, 15043-15050.	1.6	12
281	Monovalent ion-mediated fouling propensity of model proteins during low-pressure membrane filtration. Separation and Purification Technology, 2015, 152, 200-206.	3.9	11
282	Vaporâ€phase polymerization of highâ€performance thinâ€film composite membranes for nanofiltration. AICHE Journal, 2022, 68, e17517.	1.8	11
283	Reverse Electrodialysis Energy Harvesting System Using High-Gain Step-Up DC/DC Converter. IEEE Transactions on Sustainable Energy, 2018, 9, 1578-1587.	5.9	10
284	Tunable isoporous ceramic membranes towards precise sieving of nanoparticles and proteins. Journal of Membrane Science, 2021, 634, 119391.	4.1	10
285	Template-free synthesis of hierarchical hollow V₂O₅ microspheres with highly stable lithium storage capacity. RSC Advances, 2017, 7, 2480-2485.	1.7	8
286	Simulation of an energy self-sufficient electrodialysis desalination stack for salt removal efficiency and fresh water recovery. Journal of Membrane Science, 2020, 598, 117771.	4.1	8
287	Tracing the impact of stack configuration on interface resistances in reverse electrodialysis by in situ electrochemical impedance spectroscopy. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	3.3	8
288	Optimization of Aquaporin Loading for Performance Enhancement of Aquaporin-Based Biomimetic Thin-Film Composite Membranes. Membranes, 2022, 12, 32.	1.4	8

#	Article	IF	Citations
289	Population Shift between the Open and Closed States Changes the Water Permeability of an Aquaporin Z Mutant. Biophysical Journal, 2012, 103, 212-218.	0.2	7
290	Characteristics and fouling propensity of polysaccharides in the presence of different monovalent ions. AICHE Journal, 2016, 62, 2501-2507.	1.8	7
291	Gypsum scaling during forward osmosis processâ€"a direct microscopic observation study. Desalination and Water Treatment, 2016, 57, 3317-3327.	1.0	7
292	Experimental Aspects of Scaling Control in Membrane Filtration of Mine Water. Mine Water and the Environment, 2017, 36, 193-198.	0.9	7
293	Effects of crossflow filtration cell configuration on membrane separation performance and fouling behaviour. Desalination, 2022, 525, 115505.	4.0	7
294	Fouling of ultrafiltration membrane during secondary effluent filtration. Desalination and Water Treatment, 2011, 30, 289-294.	1.0	6
295	Osmotically enhanced reverse osmosis using hollow fiber membranes. Journal of Membrane Science, 2021, 638, 119703.	4.1	6
296	Vacuum-assisted MPD loading toward promoted nanoscale structure and enhanced water permeance of polyamide RO membrane. Separation and Purification Technology, 2022, 297, 121547.	3.9	6
297	Ion-plus salinity gradient flow Battery. Chemical Engineering Science, 2022, 253, 117580.	1.9	5
298	REMOVED: Porous forward osmosis membranes for polishing biologically treated wastewater: Condition optimization and draw solution recovery. Bioresource Technology, 2018, 263, 192-198.	4.8	4
299	A Microfabricated Direct Methanol Fuel Cell with Integrated Electroosmotic Pump. , 0, , .		3
300	Biomimetic Membranes for Water Purification and Wastewater Treatment. , 2016, , 359-369.		3
301	Novel Membranes and Membrane Materials. , 2018, , 201-221.		3
302	A Generalized Reverse-Electrodialysis Model Incorporating Both Continuous and Recycle Modes for Energy Harvesting From Salinity Gradient Power. IEEE Access, 2021, 9, 71626-71637.	2.6	3
303	Air nanobubbles (ANBs) incorporated sandwich-structured carbon nanotube membranes (CNM) for highly permeable and stable forward osmosis. , 2022, 2, 100026.		3
304	Optimization of Self-Adaptive INR-MPPT for R-Mode RED Stacks. , 2022, , .		1
305	Plasma-Assisted Hybrid Coatings as Low-Fouling Surface Treatment of Membrane Spacer Materials. Procedia Engineering, 2012, 44, 1479-1480.	1.2	0
306	Special issue foreword. Desalination, 2014, 343, 1.	4.0	0

#	Article	IF	Citations
307	Modeling of Forward Osmosis Processes. , 2015, , 15-48.		0
308	Removal notice to Porous forward osmosis membranes for polishing biologically treated wastewater: Condition optimization and draw solution recovery Bioresource Technology 263 (2018) 192â€“198. Bioresource Technology, 2018, 263, R1.	4.8	0
309	An RED Hybrid Model for SOC Tracking, Runtime Prediction and Transient Response Description. , 2021, , .		0
310	One-step removal of lead from water using an electricity-free and sustainable membrane filtration. HKIE Transactions, 2021, 27, 166-172.	1.9	0
311	Solute Reverse Transport. , 2014, , 1-2.		0
312	Cross-Linked Layer-by-Layer Membranes. , 2014, , 1-2.		0
313	Cross-Linked Layer-by-Layer Membranes. , 2016, , 482-483.		0
314	Solute Reverse Transport. , 2016, , 1799-1799.		0
315	Forward osmosis for concentration of tannin containing bark extract. , 0, 170, 55-60.		0
316	Electrodialysis membrane technology for industrial wastewater treatment: recent advances. , 2022, , 265-315.		0
317	Recovery of Salinity Gradient Energy with an Inorganic Sodium Superionic Conductor. ACS Energy Letters, 2022, 7, 1806-1813.	8.8	0