

Yan-Fang Guan

List of Publications by Year in descending order

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182
papers

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#	ARTICLE	IF	CITATIONS
1	Tailored design of nanofiltration membranes for water treatment based on synthesisâ€œpropertyâ€œperformance relationships. <i>Chemical Society Reviews</i> , 2022, 51, 672-719.	18.7	182
2	Module-scale analysis of low-salt-rejection reverse osmosis: Design guidelines and system performance. <i>Water Research</i> , 2022, 209, 117936.	5.3	9
3	Perfect divalent cation selectivity with capacitive deionization. <i>Water Research</i> , 2022, 210, 117959.	5.3	46
4	Reply to â€œA resurrection of the Haber-Weiss reactionâ€œ. <i>Nature Communications</i> , 2022, 13, 395.	5.8	3
5	Machine learning reveals key ion selectivity mechanisms in polymeric membranes with subnanometer pores. <i>Science Advances</i> , 2022, 8, eabl5771.	4.7	45
6	Laser Interferometry for Precise Measurement of Ultralow Flow Rates from Permeable Materials. <i>Environmental Science and Technology Letters</i> , 2022, 9, 233-238.	3.9	0
7	Molecular Simulations to Elucidate Transport Phenomena in Polymeric Membranes. <i>Environmental Science & Technology</i> , 2022, 56, 3313-3323.	4.6	25
8	Designing polymeric membranes with coordination chemistry for high-precision ion separations. <i>Science Advances</i> , 2022, 8, eabm9436.	4.7	50
9	Catalytic Membrane with Copper Single-Atom Catalysts for Effective Hydrogen Peroxide Activation and Pollutant Destruction. <i>Environmental Science & Technology</i> , 2022, 56, 8733-8745.	4.6	31
10	Distinct impacts of natural organic matter and colloidal particles on gypsum crystallization. <i>Water Research</i> , 2022, 218, 118500.	5.3	22
11	Simultaneous nanocatalytic surface activation of pollutants and oxidants for highly efficient water decontamination. <i>Nature Communications</i> , 2022, 13, .	5.8	117
12	Contrasting behaviors of pre-ozonation on ceramic membrane biofouling: Early stage vs late stage. <i>Water Research</i> , 2022, 220, 118702.	5.3	12
13	Inorganic Scaling in Membrane Desalination: Models, Mechanisms, and Characterization Methods. <i>Environmental Science & Technology</i> , 2022, 56, 7484-7511.	4.6	60
14	Synergistic Nanowire-Enhanced Electroporation and Electrochlorination for Highly Efficient Water Disinfection. <i>Environmental Science & Technology</i> , 2022, 56, 10925-10934.	4.6	26
15	Mining Nontraditional Water Sources for a Distributed Hydrogen Economy. <i>Environmental Science & Technology</i> , 2022, 56, 10577-10585.	4.6	14
16	High performance polyester reverse osmosis desalination membrane with chlorine resistance. <i>Nature Sustainability</i> , 2021, 4, 138-146.	11.5	185
17	Colloidal stability of cellulose nanocrystals in aqueous solutions containing monovalent, divalent, and trivalent inorganic salts. <i>Journal of Colloid and Interface Science</i> , 2021, 584, 456-463.	5.0	32
18	Cobalt Single Atoms on Tetrapyrrodomacrocyclic Support for Efficient Peroxymonosulfate Activation. <i>Environmental Science & Technology</i> , 2021, 55, 1242-1250.	4.6	185

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19	Photo-electrochemical Osmotic System Enables Simultaneous Metal Recovery and Electricity Generation from Wastewater. <i>Environmental Science & Technology</i> , 2021, 55, 604-613.	4.6	26
20	Removal of Emerging Wastewater Organic Contaminants by Polyelectrolyte Multilayer Nanofiltration Membranes with Tailored Selectivity. <i>ACS ES&T Engineering</i> , 2021, 1, 404-414.	3.7	41
21	Comment on "Techno-economic analysis of capacitive and intercalative water deionization" by M. Metzger, M. Besli, S. Kuppan, S. Hellstrom, S. Kim, E. Sebt, C. Subban and J. Christensen, <i>Energy Environ. Sci.</i> , 2020, 13, 1544. <i>Energy and Environmental Science</i> , 2021, 14, 2494-2498.	15.6	4
22	Graphene oxide membranes with stable porous structure for ultrafast water transport. <i>Nature Nanotechnology</i> , 2021, 16, 337-343.	15.6	301
23	Precisely Engineered Photoreactive Titanium Nanoarray Coating to Mitigate Biofouling in Ultrafiltration. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 9975-9984.	4.0	14
24	Electrified Membranes for Water Treatment Applications. <i>ACS ES&T Engineering</i> , 2021, 1, 725-752.	3.7	139
25	Environmental Applications of Engineered Materials with Nanoconfinement. <i>ACS ES&T Engineering</i> , 2021, 1, 706-724.	3.7	80
26	Enhanced Photocatalytic Water Decontamination by Micro "Nano Bubbles: Measurements and Mechanisms. <i>Environmental Science & Technology</i> , 2021, 55, 7025-7033.	4.6	29
27	Membrane-Confined Iron Oxochloride Nanocatalysts for Highly Efficient Heterogeneous Fenton Water Treatment. <i>Environmental Science & Technology</i> , 2021, 55, 9266-9275.	4.6	135
28	Comparison of Energy Consumption of Osmotically Assisted Reverse Osmosis and Low-Salt-Rejection Reverse Osmosis for Brine Management. <i>Environmental Science & Technology</i> , 2021, 55, 10714-10723.	4.6	25
29	<i>In Situ</i> Characterization of Dehydration during Ion Transport in Polymeric Nanochannels. <i>Journal of the American Chemical Society</i> , 2021, 143, 14242-14252.	6.6	89
30	Plate-Based Kinetic Fluorescence Tests for High-Throughput Screening of Electrochemically Active Bacteria. <i>ACS ES&T Water</i> , 2021, 1, 2139-2145.	2.3	4
31	Chlorine-Resistant Epoxide-Based Membranes for Sustainable Water Desalination. <i>Environmental Science and Technology Letters</i> , 2021, 8, 818-824.	3.9	12
32	Membrane Materials for Selective Ion Separations at the Water "Energy Nexus. <i>Advanced Materials</i> , 2021, 33, e2101312.	11.1	100
33	Nanopore-Based Power Generation from Salinity Gradient: Why It Is Not Viable. <i>ACS Nano</i> , 2021, 15, 4093-4107.	7.3	101
34	Nanoscale Thickness Control of Nanoporous Films Derived from Directionally Photopolymerized Mesophases. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001977.	1.9	9
35	Selective Fluoride Transport in Subnanometer TiO ₂ Pores. <i>ACS Nano</i> , 2021, 15, 16828-16838.	7.3	16
36	Joule-Heated Layered Double Hydroxide Sponge for Rapid Removal of Silica from Water. <i>Environmental Science & Technology</i> , 2021, 55, 16130-16142.	4.6	12

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37	Engineered Nanoconfinement Accelerating Spontaneous Manganese-Catalyzed Degradation of Organic Contaminants. <i>Environmental Science & Technology</i> , 2021, 55, 16708-16715.	4.6	50
38	Salt and Water Transport in Reverse Osmosis Membranes: Beyond the Solution-Diffusion Model. <i>Environmental Science & Technology</i> , 2021, 55, 16665-16675.	4.6	82
39	Graphene Oxide-Functionalized Membranes: The Importance of Nanosheet Surface Exposure for Biofouling Resistance. <i>Environmental Science & Technology</i> , 2020, 54, 517-526.	4.6	47
40	Similarities and differences between potassium and ammonium ions in liquid water: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 2540-2548.	1.3	33
41	Minimal and zero liquid discharge with reverse osmosis using low-salt-rejection membranes. <i>Water Research</i> , 2020, 170, 115317.	5.3	102
42	Intrapore energy barriers govern ion transport and selectivity of desalination membranes. <i>Science Advances</i> , 2020, 6, .	4.7	161
43	Ionization behavior of nanoporous polyamide membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 30191-30200.	3.3	82
44	Janus electrocatalytic flow-through membrane enables highly selective singlet oxygen production. <i>Nature Communications</i> , 2020, 11, 6228.	5.8	142
45	Surface functionalization of reverse osmosis membranes with sulfonic groups for simultaneous mitigation of silica scaling and organic fouling. <i>Water Research</i> , 2020, 185, 116203.	5.3	50
46	Mechanism of Heterogeneous Fenton Reaction Kinetics Enhancement under Nanoscale Spatial Confinement. <i>Environmental Science & Technology</i> , 2020, 54, 10868-10875.	4.6	188
47	Pathways and Challenges for Biomimetic Desalination Membranes with Sub-Nanometer Channels. <i>ACS Nano</i> , 2020, 14, 10894-10916.	7.3	72
48	Rethinking wastewater risks and monitoring in light of the COVID-19 pandemic. <i>Nature Sustainability</i> , 2020, 3, 981-990.	11.5	195
49	Electrochemical-Osmotic Process for Simultaneous Recovery of Electric Energy, Water, and Metals from Wastewater. <i>Environmental Science & Technology</i> , 2020, 54, 8430-8442.	4.6	31
50	Towards single-species selectivity of membranes with subnanometre pores. <i>Nature Nanotechnology</i> , 2020, 15, 426-436.	15.6	389
51	The relative insignificance of advanced materials in enhancing the energy efficiency of desalination technologies. <i>Energy and Environmental Science</i> , 2020, 13, 1694-1710.	15.6	206
52	Relating Selectivity and Separation Performance of Lamellar Two-Dimensional Molybdenum Disulfide (MoS ₂) Membranes to Nanosheet Stacking Behavior. <i>Environmental Science & Technology</i> , 2020, 54, 9640-9651.	4.6	82
53	Capillary-driven desalination in a synthetic mangrove. <i>Science Advances</i> , 2020, 6, eaax5253.	4.7	47
54	Energy Efficiency of Electro-Driven Brackish Water Desalination: Electrodialysis Significantly Outperforms Membrane Capacitive Deionization. <i>Environmental Science & Technology</i> , 2020, 54, 3663-3677.	4.6	133

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55	Strong Differential Monovalent Anion Selectivity in Narrow Diameter Carbon Nanotube Porins. <i>ACS Nano</i> , 2020, 14, 6269-6275.	7.3	35
56	In Situ Electrochemical Generation of Reactive Chlorine Species for Efficient Ultrafiltration Membrane Self-Cleaning. <i>Environmental Science & Technology</i> , 2020, 54, 6997-7007.	4.6	84
57	Tunable Molybdenum Disulfide-Enabled Fiber Mats for High-Efficiency Removal of Mercury from Water. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 18446-18456.	4.0	55
58	Polyamide nanofiltration membrane with highly uniform sub-nanometre pores for sub-1-Å... precision separation. <i>Nature Communications</i> , 2020, 11, 2015.	5.8	398
59	Derivation of the Theoretical Minimum Energy of Separation of Desalination Processes. <i>Journal of Chemical Education</i> , 2020, 97, 4361-4369.	1.1	50
60	Precise nanofiltration in a fouling-resistant self-assembled membrane with water-continuous transport pathways. <i>Science Advances</i> , 2019, 5, eaav9308.	4.7	79
61	One-step sonochemical synthesis of a reduced graphene oxide @ ZnO nanocomposite with antibacterial and antibiofouling properties. <i>Environmental Science: Nano</i> , 2019, 6, 3080-3090.	2.2	36
62	Sub-1 μ m Free-Standing Symmetric Membrane for Osmotic Separations. <i>Environmental Science and Technology Letters</i> , 2019, 6, 492-498.	3.9	20
63	1,4-Dioxane as an emerging water contaminant: State of the science and evaluation of research needs. <i>Science of the Total Environment</i> , 2019, 690, 853-866.	3.9	85
64	Pathways and challenges for efficient solar-thermal desalination. <i>Science Advances</i> , 2019, 5, eaax0763.	4.7	311
65	Modification of forward osmosis membrane with naturally-available humic acid: Towards simultaneously improved filtration performance and antifouling properties. <i>Environment International</i> , 2019, 131, 105045.	4.8	9
66	Silica Removal Using Magnetic Iron-Aluminum Hybrid Nanomaterials: Measurements, Adsorption Mechanisms, and Implications for Silica Scaling in Reverse Osmosis. <i>Environmental Science & Technology</i> , 2019, 53, 13302-13311.	4.6	22
67	Shape-Dependent Interactions of Manganese Oxide Nanomaterials with Lipid Bilayer Vesicles. <i>Langmuir</i> , 2019, 35, 13958-13966.	1.6	5
68	Tuning Pb(II) Adsorption from Aqueous Solutions on Ultrathin Iron Oxychloride (FeOCl) Nanosheets. <i>Environmental Science & Technology</i> , 2019, 53, 2075-2085.	4.6	121
69	Photografting Graphene Oxide to Inert Membrane Materials to Impart Antibacterial Activity. <i>Environmental Science and Technology Letters</i> , 2019, 6, 141-147.	3.9	33
70	Comparison of energy consumption in desalination by capacitive deionization and reverse osmosis. <i>Desalination</i> , 2019, 455, 100-114.	4.0	210
71	Single crystal texture by directed molecular self-assembly along dual axes. <i>Nature Materials</i> , 2019, 18, 1235-1243.	13.3	34
72	Engineering Carbon Nanotube Forest Superstructure for Robust Thermal Desalination Membranes. <i>Advanced Functional Materials</i> , 2019, 29, 1903125.	7.8	48

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73	Tuning the permselectivity of polymeric desalination membranes via control of polymer crystallite size. <i>Nature Communications</i> , 2019, 10, 2347.	5.8	43
74	Critical Knowledge Gaps in Mass Transport through Single-Digit Nanopores: A Review and Perspective. <i>Journal of Physical Chemistry C</i> , 2019, 123, 21309-21326.	1.5	234
75	Monte Carlo Simulations of Framework Defects in Layered Two-Dimensional Nanomaterial Desalination Membranes: Implications for Permeability and Selectivity. <i>Environmental Science & Technology</i> , 2019, 53, 6214-6224.	4.6	80
76	Removal of calcium ions from water by selective electrosorption using target-ion specific nanocomposite electrode. <i>Water Research</i> , 2019, 160, 445-453.	5.3	57
77	Concentration and Recovery of Dyes from Textile Wastewater Using a Self-Standing, Support-Free Forward Osmosis Membrane. <i>Environmental Science & Technology</i> , 2019, 53, 3078-3086.	4.6	76
78	Actinia-like multifunctional nanoagulant for single-step removal of water contaminants. <i>Nature Nanotechnology</i> , 2019, 14, 64-71.	15.6	89
79	Environmental performance of graphene-based 3D macrostructures. <i>Nature Nanotechnology</i> , 2019, 14, 107-119.	15.6	286
80	Reinventing Fenton Chemistry: Iron Oxide Nanosheet for pH-Insensitive H ₂ O ₂ Activation. <i>Environmental Science and Technology Letters</i> , 2018, 5, 186-191.	3.9	202
81	Role of Ionic Charge Density in Donnan Exclusion of Monovalent Anions by Nanofiltration. <i>Environmental Science & Technology</i> , 2018, 52, 4108-4116.	4.6	196
82	The role of nanotechnology in tackling global water challenges. <i>Nature Sustainability</i> , 2018, 1, 166-175.	11.5	377
83	Elucidating the Role of Oxidative Debris in the Antimicrobial Properties of Graphene Oxide. <i>ACS Applied Nano Materials</i> , 2018, 1, 1164-1174.	2.4	42
84	Nanofoaming of Polyamide Desalination Membranes To Tune Permeability and Selectivity. <i>Environmental Science and Technology Letters</i> , 2018, 5, 123-130.	3.9	260
85	Emerging electrochemical and membrane-based systems to convert low-grade heat to electricity. <i>Energy and Environmental Science</i> , 2018, 11, 276-285.	15.6	172
86	A Self-Standing, Support-Free Membrane for Forward Osmosis with No Internal Concentration Polarization. <i>Environmental Science and Technology Letters</i> , 2018, 5, 266-271.	3.9	50
87	Membrane distillation at the water-energy nexus: limits, opportunities, and challenges. <i>Energy and Environmental Science</i> , 2018, 11, 1177-1196.	15.6	740
88	Bacterial inactivation by a carbon nanotube-iron oxide nanocomposite: a mechanistic study using E. coli mutants. <i>Environmental Science: Nano</i> , 2018, 5, 372-380.	2.2	22
89	Engineered Slippery Surface to Mitigate Gypsum Scaling in Membrane Distillation for Treatment of Hypersaline Industrial Wastewaters. <i>Environmental Science & Technology</i> , 2018, 52, 14362-14370.	4.6	148
90	Relating Organic Fouling in Membrane Distillation to Intermolecular Adhesion Forces and Interfacial Surface Energies. <i>Environmental Science & Technology</i> , 2018, 52, 14198-14207.	4.6	87

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91	Controlled TiO ₂ Growth on Reverse Osmosis and Nanofiltration Membranes by Atomic Layer Deposition: Mechanisms and Potential Applications. <i>Environmental Science & Technology</i> , 2018, 52, 14311-14320.	4.6	40
92	High-Performance Capacitive Deionization via Manganese Oxide-Coated, Vertically Aligned Carbon Nanotubes. <i>Environmental Science and Technology Letters</i> , 2018, 5, 692-700.	3.9	69
93	Layer-by-Layer Assembly of Cross-Functional Semi-transparent MXene-Carbon Nanotubes Composite Films for Next-Generation Electromagnetic Interference Shielding. <i>Advanced Functional Materials</i> , 2018, 28, 1803360.	7.8	407
94	High Performance Nanofiltration Membrane for Effective Removal of Perfluoroalkyl Substances at High Water Recovery. <i>Environmental Science & Technology</i> , 2018, 52, 7279-7288.	4.6	218
95	Permselectivity limits of biomimetic desalination membranes. <i>Science Advances</i> , 2018, 4, eaar8266.	4.7	72
96	High-Pressure Reverse Osmosis for Energy-Efficient Hypersaline Brine Desalination: Current Status, Design Considerations, and Research Needs. <i>Environmental Science and Technology Letters</i> , 2018, 5, 467-475.	3.9	213
97	Emerging opportunities for nanotechnology to enhance water security. <i>Nature Nanotechnology</i> , 2018, 13, 634-641.	15.6	627
98	Combined Organic Fouling and Inorganic Scaling in Reverse Osmosis: Role of Protein-Silica Interactions. <i>Environmental Science & Technology</i> , 2018, 52, 9145-9153.	4.6	66
99	Photocatalytic Reactive Ultrafiltration Membrane for Removal of Antibiotic Resistant Bacteria and Antibiotic Resistance Genes from Wastewater Effluent. <i>Environmental Science & Technology</i> , 2018, 52, 8666-8673.	4.6	157
100	Reactive, Self-Cleaning Ultrafiltration Membrane Functionalized with Iron Oxide Nanocatalysts. <i>Environmental Science & Technology</i> , 2018, 52, 8674-8683.	4.6	124
101	A Path to Ultraspecificity: Support Layer Properties To Maximize Performance of Biomimetic Desalination Membranes. <i>Environmental Science & Technology</i> , 2018, 52, 10737-10747.	4.6	36
102	Fabrication of a Desalination Membrane with Enhanced Microbial Resistance through Vertical Alignment of Graphene Oxide. <i>Environmental Science and Technology Letters</i> , 2018, 5, 614-620.	3.9	37
103	Highly efficient and sustainable non-precious-metal Fe-N-C electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2527-2539.	5.2	214
104	Antifouling Thin-Film Composite Membranes by Controlled Architecture of Zwitterionic Polymer Brush Layer. <i>Environmental Science & Technology</i> , 2017, 51, 2161-2169.	4.6	232
105	Maximizing the right stuff: The trade-off between membrane permeability and selectivity. <i>Science</i> , 2017, 356, .	6.0	1,864
106	Carbon nanotubes keep up the heat. <i>Nature Nanotechnology</i> , 2017, 12, 501-503.	15.6	62
107	Relating Silica Scaling in Reverse Osmosis to Membrane Surface Properties. <i>Environmental Science & Technology</i> , 2017, 51, 4396-4406.	4.6	136
108	Highly Selective Vertically Aligned Nanopores in Sustainably Derived Polymer Membranes by Molecular Templating. <i>ACS Nano</i> , 2017, 11, 3911-3921.	7.3	83

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109	Enhanced antibacterial activity through the controlled alignment of graphene oxide nanosheets. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9793-E9801.	3.3	275
110	Energy Efficiency and Performance Limiting Effects in Thermo-Osmotic Energy Conversion from Low-Grade Heat. Environmental Science & Technology, 2017, 51, 12925-12937.	4.6	82
111	Loss of Phospholipid Membrane Integrity Induced by Two-Dimensional Nanomaterials. Environmental Science and Technology Letters, 2017, 4, 404-409.	3.9	39
112	An Osmotic Membrane Bioreactor—Membrane Distillation System for Simultaneous Wastewater Reuse and Seawater Desalination: Performance and Implications. Environmental Science & Technology, 2017, 51, 14311-14320.	4.6	56
113	Performance and Mechanisms of Ultrafiltration Membrane Fouling Mitigation by Coupling Coagulation and Applied Electric Field in a Novel Electrocoagulation Membrane Reactor. Environmental Science & Technology, 2017, 51, 8544-8551.	4.6	84
114	Osmotic versus conventional membrane bioreactors integrated with reverse osmosis for water reuse: Biological stability, membrane fouling, and contaminant removal. Water Research, 2017, 109, 122-134.	5.3	152
115	Engineering Surface Energy and Nanostructure of Microporous Films for Expanded Membrane Distillation Applications. Environmental Science & Technology, 2016, 50, 8112-8119.	4.6	203
116	Development of Omniphobic Desalination Membranes Using a Charged Electrospun Nanofiber Scaffold. ACS Applied Materials & Interfaces, 2016, 8, 11154-11161.	4.0	218
117	Biofouling Mitigation in Forward Osmosis Using Graphene Oxide Functionalized Thin-Film Composite Membranes. Environmental Science & Technology, 2016, 50, 5840-5848.	4.6	160
118	Effect of Final Monomer Deposition Steps on Molecular Layer-by-Layer Polyamide Surface Properties. Langmuir, 2016, 32, 10815-10823.	1.6	15
119	Antifouling membranes for sustainable water purification: strategies and mechanisms. Chemical Society Reviews, 2016, 45, 5888-5924.	18.7	977
120	Materials for next-generation desalination and water purification membranes. Nature Reviews Materials, 2016, 1, .	23.3	1,977
121	Harvesting low-grade heat energy using thermo-osmotic vapour transport through nanoporous membranes. Nature Energy, 2016, 1, .	19.8	226
122	Omniphobic Polyvinylidene Fluoride (PVDF) Membrane for Desalination of Shale Gas Produced Water by Membrane Distillation. Environmental Science & Technology, 2016, 50, 12275-12282.	4.6	307
123	The Global Rise of Zero Liquid Discharge for Wastewater Management: Drivers, Technologies, and Future Directions. Environmental Science & Technology, 2016, 50, 6846-6855.	4.6	682
124	Heterogeneous WS ₂ /WO ₃ Thorn-Bush Nanofiber Electrodes for Sodium-Ion Batteries. ACS Nano, 2016, 10, 3257-3266.	7.3	121
125	Thin Polymer Films with Continuous Vertically Aligned 1 nm Pores Fabricated by Soft Confinement. ACS Nano, 2016, 10, 150-158.	7.3	92
126	Environmental Applications of Interfacial Materials with Special Wettability. Environmental Science & Technology, 2016, 50, 2132-2150.	4.6	273

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127	The Critical Need for Increased Selectivity, Not Increased Water Permeability, for Desalination Membranes. <i>Environmental Science and Technology Letters</i> , 2016, 3, 112-120.	3.9	527
128	Pressure-retarded osmosis for power generation from salinity gradients: is it viable?. <i>Energy and Environmental Science</i> , 2016, 9, 31-48.	15.6	289
129	Membrane-based processes for wastewater nutrient recovery: Technology, challenges, and future direction. <i>Water Research</i> , 2016, 89, 210-221.	5.3	405
130	The role of forward osmosis and microfiltration in an integrated osmotic-microfiltration membrane bioreactor system. <i>Chemosphere</i> , 2015, 136, 125-132.	4.2	56
131	Elements Provide a Clue: Nanoscale Characterization of Thin-Film Composite Polyamide Membranes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 16917-16922.	4.0	50
132	Engineering flat sheet microporous PVDF films for membrane distillation. <i>Journal of Membrane Science</i> , 2015, 492, 355-363.	4.1	118
133	Antimicrobial Properties of Graphene Oxide Nanosheets: Why Size Matters. <i>ACS Nano</i> , 2015, 9, 7226-7236.	7.3	806
134	Biofouling in forward osmosis and reverse osmosis: Measurements and mechanisms. <i>Journal of Membrane Science</i> , 2015, 493, 703-708.	4.1	137
135	Membrane-Based Osmotic Heat Engine with Organic Solvent for Enhanced Power Generation from Low-Grade Heat. <i>Environmental Science & Technology</i> , 2015, 49, 5820-5827.	4.6	76
136	Antimicrobial Electrospun Biopolymer Nanofiber Mats Functionalized with Graphene Oxideâ€“Silver Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 12751-12759.	4.0	256
137	Interaction of Graphene Oxide with Bacterial Cell Membranes: Insights from Force Spectroscopy. <i>Environmental Science and Technology Letters</i> , 2015, 2, 112-117.	3.9	164
138	Selectivity and Mass Transfer Limitations in Pressure-Retarded Osmosis at High Concentrations and Increased Operating Pressures. <i>Environmental Science & Technology</i> , 2015, 49, 12551-12559.	4.6	46
139	Controlled Architecture of Dual-Functional Block Copolymer Brushes on Thin-Film Composite Membranes for Integrated â€œDefendingâ€ and â€œAttackingâ€ Strategies against Biofouling. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 23069-23079.	4.0	216
140	Impaired Performance of Pressure-Retarded Osmosis due to Irreversible Biofouling. <i>Environmental Science & Technology</i> , 2015, 49, 13050-13058.	4.6	75
141	Mitigating biofouling on thin-film composite polyamide membranes using a controlled-release platform. <i>Journal of Membrane Science</i> , 2014, 453, 84-91.	4.1	34
142	Molecular Design of Liquid Crystalline Brush-Like Block Copolymers for Magnetic Field Directed Self-Assembly: A Platform for Functional Materials. <i>ACS Macro Letters</i> , 2014, 3, 462-466.	2.3	59
143	Thin-Film Composite Polyamide Membranes Functionalized with Biocidal Graphene Oxide Nanosheets. <i>Environmental Science and Technology Letters</i> , 2014, 1, 71-76.	3.9	460
144	Direct contact membrane distillation with heat recovery: Thermodynamic insights from module scale modeling. <i>Journal of Membrane Science</i> , 2014, 453, 498-515.	4.1	168

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145	Low flow data logger in membrane distillation: An interdisciplinary laboratory in process control. , 2014, , .		2
146	Thermodynamic limits of extractable energy by pressure retarded osmosis. Energy and Environmental Science, 2014, 7, 2706-2714.	15.6	149
147	The road to nowhere: equilibrium partition coefficients for nanoparticles. Environmental Science: Nano, 2014, 1, 317-323.	2.2	129
148	In situ formation of silver nanoparticles on thin-film composite reverse osmosis membranes for biofouling mitigation. Water Research, 2014, 62, 260-270.	5.3	244
149	Reverse Osmosis Biofilm Dispersal by Osmotic Back-Flushing: Cleaning via Substratum Perforation. Environmental Science and Technology Letters, 2014, 1, 162-166.	3.9	39
150	Omniphobic Membrane for Robust Membrane Distillation. Environmental Science and Technology Letters, 2014, 1, 443-447.	3.9	288
151	Membrane scaling and flux decline during fertiliser-drawn forward osmosis desalination of brackish groundwater. Water Research, 2014, 57, 172-182.	5.3	101
152	Raising the Bar: Increased Hydraulic Pressure Allows Unprecedented High Power Densities in Pressure-Retarded Osmosis. Environmental Science and Technology Letters, 2014, 1, 55-59.	3.9	159
153	Relating rejection of trace organic contaminants to membrane properties in forward osmosis: Measurements, modelling and implications. Water Research, 2014, 49, 265-274.	5.3	124
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