Menachem Elimelech

List of Publications by Year
in descending order

523 papers	109,664 citations	100 170 h-index	233 314 g-index
535 all docs	535 docs citations	535 times ranked	54303 citing authors

#	Article	IF	Citations
1	Viability of Harvesting Salinity Gradient (Blue) Energy by Nanopore-Based Osmotic Power Generation. Engineering, 2022, 9, 51-60.	3.2	21
2	The open membrane database: Synthesisâ€“structureâ€“performance relationships of reverse osmosis membranes. Journal of Membrane Science, 2022, 641, 119927.	4.1	62
3	Tethered electrolyte active-layer membranes. Journal of Membrane Science, 2022, 642, 120004.	4.1	7
4	Tailored design of nanofiltration membranes for water treatment based on synthesisâ€“propertyâ€“performance relationships. Chemical Society Reviews, 2022, 51, 672-719.	18.7	182
5	Module-scale analysis of low-salt-rejection reverse osmosis: Design guidelines and system performance. Water Research, 2022, 209, 117936.	5.3	9
6	Perfect divalent cation selectivity with capacitive deionization. Water Research, 2022, 210, 117959.	5.3	46
7	New parametrization method for salt permeability of reverse osmosis desalination membranes. , 2022, 2, 100010.		16
8	Reply to â€œA resurrection of the Haber-Weiss reactionâ€• Nature Communications, 2022, 13, 395.	5.8	3
9	Machine learning reveals key ion selectivity mechanisms in polymeric membranes with subnanometer pores. Science Advances, 2022, 8, eabl5771.	4.7	45
10	Tutorial review of reverse osmosis and electrodialysis. Journal of Membrane Science, 2022, 647, 120221.	4.1	55
11	Laser Interferometry for Precise Measurement of Ultralow Flow Rates from Permeable Materials. Environmental Science and Technology Letters, 2022, 9, 233-238.	3.9	0
12	Molecular Simulations to Elucidate Transport Phenomena in Polymeric Membranes. Environmental Science & Technology, 2022, 56, 3313-3323.	4.6	25
13	Designing polymeric membranes with coordination chemistry for high-precision ion separations. Science Advances, 2022, 8, eabm9436.	4.7	50
14	Catalytic Membrane with Copper Single-Atom Catalysts for Effective Hydrogen Peroxide Activation and Pollutant Destruction. Environmental Science & Technology, 2022, 56, 8733-8745.	4.6	31
15	Distinct impacts of natural organic matter and colloidal particles on gypsum crystallization. Water Research, 2022, 218, 118500.	5.3	22
16	Simultaneous nanocatalytic surface activation of pollutants and oxidants for highly efficient water decontamination. Nature Communications, 2022, 13, .	5.8	117
17	Inorganic Scaling in Membrane Desalination: Models, Mechanisms, and Characterization Methods. Environmental Science & Technology, 2022, 56, 7484-7511.	4.6	60
18	Spatial assessment of tap-water safety in China. Nature Sustainability, 2022, 5, 689-698.	11.5	33

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19	Synergistic Nanowire-Enhanced Electroporation and Electrochlorination for Highly Efficient Water Disinfection. Environmental Science & Technology, 2022, 56, 10925-10934.	4.6	26
20	(Invited) Electrified Membranes for Transformation of Nitrate in Wastewaters. ECS Meeting Abstracts, 2022, MA2022-01, 1798-1798.	0.0	0
21	Mining Nontraditional Water Sources for a Distributed Hydrogen Economy. Environmental Science & Technology, 2022, 56, 10577-10585.	4.6	14
22	Zwitterionic coating on thin-film composite membranes to delay gypsum scaling in reverse osmosis. Journal of Membrane Science, 2021, 618, 118568.	4.1	58
23	High performance polyester reverse osmosis desalination membrane with chlorine resistance. Nature Sustainability, 2021, 4, 138-146.	11.5	185
24	Colloidal stability of cellulose nanocrystals in aqueous solutions containing monovalent, divalent, and trivalent inorganic salts. Journal of Colloid and Interface Science, 2021, 584, 456-463.	5.0	32
25	Cobalt Single Atoms on Tetrapyridomacrocyclic Support for Efficient Peroxymonosulfate Activation. Environmental Science & Technology, 2021, 55, 1242-1250.	4.6	185
26	Photo-electrochemical Osmotic System Enables Simultaneous Metal Recovery and Electricity Generation from Wastewater. Environmental Science & Technology, 2021, 55, 604-613.	4.6	26
27	Removal of Emerging Wastewater Organic Contaminants by Polyelectrolyte Multilayer Nanofiltration Membranes with Tailored Selectivity. ACS ES&T Engineering, 2021, 1, 404-414.	3.7	41
28	Comment on â€œTechno-economic analysis of capacitive and intercalative water deionizationâ€•by M. Metzger, M. Besli, S. Kuppan, S. Hellstrom, S. Kim, E. Sebti, C. Subban and J. Christensen, Energy Environ. Sci., 2020, 13, 1544. Energy and Environmental Science, 2021, 14, 2494-2498.	15.6	4
29	Graphene oxide membranes with stable porous structure for ultrafast water transport. Nature Nanotechnology, 2021, 16, 337-343.	15.6	301
30	Recent advances in ion selectivity with capacitive deionization. Energy and Environmental Science, 2021, 14, 1095-1120.	15.6	226
31	Energy Consumption of Brackish Water Desalination: Identifying the Sweet Spots for Electrodialysis and Reverse Osmosis. ACS ES&T Engineering, 2021, 1, 851-864.	3.7	81
32	Fabrication of desalination membranes by interfacial polymerization: history, current efforts, and future directions. Chemical Society Reviews, 2021, 50, 6290-6307.	18.7	263
33	Precisely Engineered Photoreactive Titanium Nanoarray Coating to Mitigate Biofouling in Ultrafiltration. ACS Applied Materials & Interfaces, 2021, 13, 9975-9984.	4.0	14
34	Electrified Membranes for Water Treatment Applications. ACS ES&T Engineering, 2021, 1, 725-752.	3.7	139
35	Environmental Applications of Engineered Materials with Nanoconfinement. ACS ES&T Engineering, 2021, 1, 706-724.	3.7	80
36	Biogas sparging to control fouling and enhance resource recovery from anaerobically digested sludge centrate by forward osmosis. Journal of Membrane Science, 2021, 625, 119176.	4.1	21

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37	Enhanced Photocatalytic Water Decontamination by Microâ€“Nano Bubbles: Measurements and Mechanisms. Environmental Science & Technology, 2021, 55, 7025-7033.	4.6	29
38	Membrane-Confined Iron Oxychloride Nanocatalysts for Highly Efficient Heterogeneous Fenton Water Treatment. Environmental Science & Technology, 2021, 55, 9266-9275.	4.6	135
39	Selective membranes in water and wastewater treatment: Role of advanced materials. Materials Today, 2021, 50, 516-532.	8.3	106
40	Selective and sensitive environmental gas sensors enabled by membrane overlayers. Trends in Chemistry, 2021, 3, 547-560.	4.4	10
41	Comparison of Energy Consumption of Osmotically Assisted Reverse Osmosis and Low-Salt-Rejection Reverse Osmosis for Brine Management. Environmental Science & Technology, 2021, 55, 10714-10723.	4.6	25
42	Correlation equation for evaluating energy consumption and process performance of brackish water desalination by electrodialysis. Desalination, 2021, 510, 115089.	4.0	8
43	In Situ Characterization of Dehydration during Ion Transport in Polymeric Nanochannels. Journal of the American Chemical Society, 2021, 143, 14242-14252.	6.6	89
44	Chlorine-Resistant Epoxide-Based Membranes for Sustainable Water Desalination. Environmental Science and Technology Letters, 2021, 8, 818-824.	3.9	12
45	Membrane Materials for Selective Ion Separations at the Waterâ€“Energy Nexus. Advanced Materials, 2021, 33, e2101312.	11.1	100
46	True driving force and characteristics of water transport in osmotic membranes. Desalination, 2021, 520, 115360.	4.0	20
47	Design principles and challenges of bench-scale high-pressure reverse osmosis up to 150Âbar. Desalination, 2021, 517, 115237.	4.0	22
48	Nanopore-Based Power Generation from Salinity Gradient: Why It Is Not Viable. ACS Nano, 2021, 15, 4093-4107.	7.3	101
49	Nanoscale Thickness Control of Nanoporous Films Derived from Directionally Photopolymerized Mesophases. Advanced Materials Interfaces, 2021, 8, 2001977.	1.9	9
50	Selective Fluoride Transport in Subnanometer TiO₂ Pores. ACS Nano, 2021, 15, 16828-16838.	7.3	16
51	Joule-Heated Layered Double Hydroxide Sponge for Rapid Removal of Silica from Water. Environmental Science & Technology, 2021, 55, 16130-16142.	4.6	12
52	Engineered Nanoconfinement Accelerating Spontaneous Manganese-Catalyzed Degradation of Organic Contaminants. Environmental Science & Technology, 2021, 55, 16708-16715.	4.6	50
53	Salt and Water Transport in Reverse Osmosis Membranes: Beyond the Solution-Diffusion Model. Environmental Science & Technology, 2021, 55, 16665-16675.	4.6	82
54	Graphene Oxide-Functionalized Membranes: The Importance of Nanosheet Surface Exposure for Biofouling Resistance. Environmental Science & Technology, 2020, 54, 517-526.	4.6	47

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55	Similarities and differences between potassium and ammonium ions in liquid water: a first-principles study. Physical Chemistry Chemical Physics, 2020, 22, 2540-2548.	1.3	33
56	Controlled grafting of polymer brush layers from porous cellulosic membranes. Journal of Membrane Science, 2020, 596, 117719.	4.1	24
57	Ion Selectivity in Brackish Water Desalination by Reverse Osmosis: Theory, Measurements, and Implications. Environmental Science and Technology Letters, 2020, 7, 42-47.	3.9	55
58	Minimal and zero liquid discharge with reverse osmosis using low-salt-rejection membranes. Water Research, 2020, 170, 115317.	5.3	102
59	Membrane distillation assisted by heat pump for improved desalination energy efficiency. Desalination, 2020, 496, 114694.	4.0	27
60	Doing nano-enabled water treatment right: sustainability considerations from design and research through development and implementation. Environmental Science: Nano, 2020, 7, 3255-3278.	2.2	13
61	Intrapore energy barriers govern ion transport and selectivity of desalination membranes. Science Advances, 2020, 6, .	4.7	161
62	Ionization behavior of nanoporous polyamide membranes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30191-30200.	3.3	82
63	Janus electrocatalytic flow-through membrane enables highly selective singlet oxygen production. Nature Communications, 2020, 11, 6228.	5.8	142
64	Surface functionalization of reverse osmosis membranes with sulfonic groups for simultaneous mitigation of silica scaling and organic fouling. Water Research, 2020, 185, 116203.	5.3	50
65	Mechanism of Heterogeneous Fenton Reaction Kinetics Enhancement under Nanoscale Spatial Confinement. Environmental Science & Technology, 2020, 54, 10868-10875.	4.6	188
66	Multifunctional nanocoated membranes for high-rate electrothermal desalination of hypersaline waters. Nature Nanotechnology, 2020, 15, 1025-1032.	15.6	88
67	Pathways and Challenges for Biomimetic Desalination Membranes with Sub-Nanometer Channels. ACS Nano, 2020, 14, 10894-10916.	7.3	72
68	Rethinking wastewater risks and monitoring in light of the COVID-19 pandemic. Nature Sustainability, 2020, 3, 981-990.	11.5	195
69	Thin film composite membrane compaction in high-pressure reverse osmosis. Journal of Membrane Science, 2020, 610, 118268.	4.1	73
70	Electrochemical-Osmotic Process for Simultaneous Recovery of Electric Energy, Water, and Metals from Wastewater. Environmental Science & Technology, 2020, 54, 8430-8442.	4.6	31
71	Towards single-species selectivity of membranes with subnanometre pores. Nature Nanotechnology, 2020, 15, 426-436.	15.6	389
72	The relative insignificance of advanced materials in enhancing the energy efficiency of desalination technologies. Energy and Environmental Science, 2020, 13, 1694-1710.	15.6	206

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73	Relating Selectivity and Separation Performance of Lamellar Two-Dimensional Molybdenum Disulfide (MoS₂) Membranes to Nanosheet Stacking Behavior. Environmental Science & Technology, 2020, 54, 9640-9651.	4.6	82
74	Energy barriers to anion transport in polyelectrolyte multilayer nanofiltration membranes: Role of intra-pore diffusion. Journal of Membrane Science, 2020, 603, 117921.	4.1	51
75	Capillary-driven desalination in a synthetic mangrove. Science Advances, 2020, 6, eaax5253.	4.7	47
76	Energy Efficiency of Electro-Driven Brackish Water Desalination: Electrodialysis Significantly Outperforms Membrane Capacitive Deionization. Environmental Science & Technology, 2020, 54, 3663-3677.	4.6	133
77	Induced Charge Anisotropy: A Hidden Variable Affecting Ion Transport through Membranes. Matter, 2020, 2, 735-750.	5.0	19
78	Strong Differential Monovalent Anion Selectivity in Narrow Diameter Carbon Nanotube Porins. ACS Nano, 2020, 14, 6269-6275.	7.3	35
79	In Situ Electrochemical Generation of Reactive Chlorine Species for Efficient Ultrafiltration Membrane Self-Cleaning. Environmental Science & Technology, 2020, 54, 6997-7007.	4.6	84
80	Complexation between dissolved silica and alginate molecules: Implications for reverse osmosis membrane fouling. Journal of Membrane Science, 2020, 605, 118109.	4.1	35
81	Tunable Molybdenum Disulfide-Enabled Fiber Mats for High-Efficiency Removal of Mercury from Water. ACS Applied Materials & Interfaces, 2020, 12, 18446-18456.	4.0	55
82	Polyamide nanofiltration membrane with highly uniform sub-nanometre pores for sub-1â€‰Ã… precision separation. Nature Communications, 2020, 11, 2015.	5.8	398
83	Derivation of the Theoretical Minimum Energy of Separation of Desalination Processes. Journal of Chemical Education, 2020, 97, 4361-4369.	1.1	50
84	Precise nanofiltration in a fouling-resistant self-assembled membrane with water-continuous transport pathways. Science Advances, 2019, 5, eaav9308.	4.7	79
85	One-step sonochemical synthesis of a reduced graphene oxide â€“ ZnO nanocomposite with antibacterial and antibiofouling properties. Environmental Science: Nano, 2019, 6, 3080-3090.	2.2	36
86	Sub-1 Î¼m Free-Standing Symmetric Membrane for Osmotic Separations. Environmental Science and Technology Letters, 2019, 6, 492-498.	3.9	20
87	1,4-Dioxane as an emerging water contaminant: State of the science and evaluation of research needs. Science of the Total Environment, 2019, 690, 853-866.	3.9	85
88	Pathways and challenges for efficient solar-thermal desalination. Science Advances, 2019, 5, eaax0763.	4.7	311
89	Silica Removal Using Magnetic Ironâ€“Aluminum Hybrid Nanomaterials: Measurements, Adsorption Mechanisms, and Implications for Silica Scaling in Reverse Osmosis. Environmental Science & Technology, 2019, 53, 13302-13311.	4.6	22
90	Economic performance of membrane distillation configurations in optimal solar thermal desalination systems. Desalination, 2019, 472, 114164.	4.0	53

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91	Shape-Dependent Interactions of Manganese Oxide Nanomaterials with Lipid Bilayer Vesicles. Langmuir, 2019, 35, 13958-13966.	1.6	5
92	Tuning Pb(II) Adsorption from Aqueous Solutions on Ultrathin Iron Oxychloride (FeOCl) Nanosheets. Environmental Science & Technology, 2019, 53, 2075-2085.	4.6	121
93	Photografting Graphene Oxide to Inert Membrane Materials to Impart Antibacterial Activity. Environmental Science and Technology Letters, 2019, 6, 141-147.	3.9	33
94	Comparison of energy consumption in desalination by capacitive deionization and reverse osmosis. Desalination, 2019, 455, 100-114.	4.0	210
95	Single crystal texture by directed molecular self-assembly along dual axes. Nature Materials, 2019, 18, 1235-1243.	13.3	34
96	Engineering Carbon Nanotube Forest Superstructure for Robust Thermal Desalination Membranes. Advanced Functional Materials, 2019, 29, 1903125.	7.8	48
97	Electrospun silica nanofiber mats functionalized with ceria nanoparticles for water decontamination. RSC Advances, 2019, 9, 19408-19417.	1.7	16
98	Removal of arsenic with reduced graphene oxide-TiO2-enabled nanofibrous mats. Chemical Engineering Journal, 2019, 375, 122040.	6.6	40
99	Tuning the permselectivity of polymeric desalination membranes via control of polymer crystallite size. Nature Communications, 2019, 10, 2347.	5.8	43
100	Critical Knowledge Gaps in Mass Transport through Single-Digit Nanopores: A Review and Perspective. Journal of Physical Chemistry C, 2019, 123, 21309-21326.	1.5	234
101	Monte Carlo Simulations of Framework Defects in Layered Two-Dimensional Nanomaterial Desalination Membranes: Implications for Permeability and Selectivity. Environmental Science & Technology, 2019, 53, 6214-6224.	4.6	80
102	Removal of calcium ions from water by selective electrosorption using target-ion specific nanocomposite electrode. Water Research, 2019, 160, 445-453.	5.3	57
103	Controlling pore structure of polyelectrolyte multilayer nanofiltration membranes by tuning polyelectrolyte-salt interactions. Journal of Membrane Science, 2019, 581, 413-420.	4.1	65
104	Response to comments on â€œcomparison of energy consumption in desalination by capacitive deionization and reverse osmosisâ€• Desalination, 2019, 462, 48-55.	4.0	22
105	Concentration and Recovery of Dyes from Textile Wastewater Using a Self-Standing, Support-Free Forward Osmosis Membrane. Environmental Science & Technology, 2019, 53, 3078-3086.	4.6	76
106	Activation behavior for ion permeation in ion-exchange membranes: Role of ion dehydration in selective transport. Journal of Membrane Science, 2019, 580, 316-326.	4.1	146
107	Actinia-like multifunctional nanocoagulant for single-step removal of water contaminants. Nature Nanotechnology, 2019, 14, 64-71.	15.6	89
108	Asymmetric membranes for membrane distillation and thermo-osmotic energy conversion. Desalination, 2019, 452, 141-148.	4.0	46

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109	Environmental performance of graphene-based 3D macrostructures. Nature Nanotechnology, 2019, 14, 107-119.	15.6	286
110	Potential and implemented membrane-based technologies for the treatment and reuse of flowback and produced water from shale gas and oil plays: A review. Desalination, 2019, 455, 34-57.	4.0	233
111	Reinventing Fenton Chemistry: Iron Oxychloride Nanosheet for pH-Insensitive H₂O₂ Activation. Environmental Science and Technology Letters, 2018, 5, 186-191.	3.9	202
112	Role of Ionic Charge Density in Donnan Exclusion of Monovalent Anions by Nanofiltration. Environmental Science & Technology, 2018, 52, 4108-4116.	4.6	196
113	The role of nanotechnology in tackling global water challenges. Nature Sustainability, 2018, 1, 166-175.	11.5	377
114	Elucidating the Role of Oxidative Debris in the Antimicrobial Properties of Graphene Oxide. ACS Applied Nano Materials, 2018, 1, 1164-1174.	2.4	42
115	Nanofoaming of Polyamide Desalination Membranes To Tune Permeability and Selectivity. Environmental Science and Technology Letters, 2018, 5, 123-130.	3.9	260
116	Emerging electrochemical and membrane-based systems to convert low-grade heat to electricity. Energy and Environmental Science, 2018, 11, 276-285.	15.6	172
117	Selective removal of divalent cations by polyelectrolyte multilayer nanofiltration membrane: Role of polyelectrolyte charge, ion size, and ionic strength. Journal of Membrane Science, 2018, 559, 98-106.	4.1	227
118	A Self-Standing, Support-Free Membrane for Forward Osmosis with No Internal Concentration Polarization. Environmental Science and Technology Letters, 2018, 5, 266-271.	3.9	50
119	Vapor-gap membranes for highly selective osmotically driven desalination. Journal of Membrane Science, 2018, 555, 407-417.	4.1	31
120	Membrane distillation at the water-energy nexus: limits, opportunities, and challenges. Energy and Environmental Science, 2018, 11, 1177-1196.	15.6	740
121	Studying water and solute transport through desalination membranes via neutron radiography. Journal of Membrane Science, 2018, 548, 667-675.	4.1	2
122	Biocatalytic and salt selective multilayer polyelectrolyte nanofiltration membrane. Journal of Membrane Science, 2018, 549, 357-365.	4.1	60
123	Bacterial inactivation by a carbon nanotubeâ€“iron oxide nanocomposite: a mechanistic study usingE. colimutants. Environmental Science: Nano, 2018, 5, 372-380.	2.2	22
124	Elucidating the mechanisms underlying the difference between chloride and nitrate rejection in nanofiltration. Journal of Membrane Science, 2018, 548, 694-701.	4.1	58
125	Engineered Slippery Surface to Mitigate Gypsum Scaling in Membrane Distillation for Treatment of Hypersaline Industrial Wastewaters. Environmental Science & Technology, 2018, 52, 14362-14370.	4.6	148
126	Relating Organic Fouling in Membrane Distillation to Intermolecular Adhesion Forces and Interfacial Surface Energies. Environmental Science & Technology, 2018, 52, 14198-14207.	4.6	87

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127	Controlled TiO₂ Growth on Reverse Osmosis and Nanofiltration Membranes by Atomic Layer Deposition: Mechanisms and Potential Applications. Environmental Science & Technology, 2018, 52, 14311-14320.	4.6	40
128	High-Performance Capacitive Deionization via Manganese Oxide-Coated, Vertically Aligned Carbon Nanotubes. Environmental Science and Technology Letters, 2018, 5, 692-700.	3.9	69
129	High Performance Nanofiltration Membrane for Effective Removal of Perfluoroalkyl Substances at High Water Recovery. Environmental Science & Technology, 2018, 52, 7279-7288.	4.6	218
130	Permselectivity limits of biomimetic desalination membranes. Science Advances, 2018, 4, eaar8266.	4.7	72
131	High-Pressure Reverse Osmosis for Energy-Efficient Hypersaline Brine Desalination: Current Status, Design Considerations, and Research Needs. Environmental Science and Technology Letters, 2018, 5, 467-475.	3.9	213
132	Emerging opportunities for nanotechnology to enhance water security. Nature Nanotechnology, 2018, 13, 634-641.	15.6	627
133	Combined Organic Fouling and Inorganic Scaling in Reverse Osmosis: Role of Proteinâ€“Silica Interactions. Environmental Science & Technology, 2018, 52, 9145-9153.	4.6	66
134	Photocatalytic Reactive Ultrafiltration Membrane for Removal of Antibiotic Resistant Bacteria and Antibiotic Resistance Genes from Wastewater Effluent. Environmental Science & Technology, 2018, 52, 8666-8673.	4.6	157
135	Reactive, Self-Cleaning Ultrafiltration Membrane Functionalized with Iron Oxychloride Nanocatalysts. Environmental Science & Technology, 2018, 52, 8674-8683.	4.6	124
136	A Path to Ultraselectivity: Support Layer Properties To Maximize Performance of Biomimetic Desalination Membranes. Environmental Science & Technology, 2018, 52, 10737-10747.	4.6	36
137	Functionalization of ultrafiltration membrane with polyampholyte hydrogel and graphene oxide to achieve dual antifouling and antibacterial properties. Journal of Membrane Science, 2018, 565, 293-302.	4.1	90
138	Fabrication of a Desalination Membrane with Enhanced Microbial Resistance through Vertical Alignment of Graphene Oxide. Environmental Science and Technology Letters, 2018, 5, 614-620.	3.9	37
139	Highly efficient and sustainable non-precious-metal Feâ€“Nâ€“C electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 2527-2539.	5.2	214
140	Antifouling Thin-Film Composite Membranes by Controlled Architecture of Zwitterionic Polymer Brush Layer. Environmental Science & Technology, 2017, 51, 2161-2169.	4.6	232
141	Self-cleaning anti-fouling hybrid ultrafiltration membranes via side chain grafting of poly(aryl ether) Tj ETQq1 1 0.784314 rgBT /Overlo	4.1	104
142	Post-fabrication modification of electrospun nanofiber mats with polymer coating for membrane distillation applications. Journal of Membrane Science, 2017, 530, 158-165.	4.1	91
143	A facile method to quantify the carboxyl group areal density in the active layer of polyamide thin-film composite membranes. Journal of Membrane Science, 2017, 534, 100-108.	4.1	86
144	Techno-economic assessment of a closed-loop osmotic heat engine. Journal of Membrane Science, 2017, 535, 178-187.	4.1	37

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145	Understanding the impact of membrane properties and transport phenomena on the energetic performance of membrane distillation desalination. Journal of Membrane Science, 2017, 539, 458-474.	4.1	100
146	Acyl-chloride quenching following interfacial polymerization to modulate the water permeability, selectivity, and surface charge of desalination membranes. Journal of Membrane Science, 2017, 535, 357-364.	4.1	58
147	Maximizing the right stuff: The trade-off between membrane permeability and selectivity. Science, 2017, 356, .	6.0	1,864
148	Nanophotonics-enabled solar membrane distillation for off-grid water purification. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6936-6941.	3.3	348
149	Carbon nanotubes keep up the heat. Nature Nanotechnology, 2017, 12, 501-503.	15.6	62
150	Recent Developments in Forward Osmosis Processes. Water Intelligence Online, 2017, 16, 9781780408125.	0.3	9
151	Relating Silica Scaling in Reverse Osmosis to Membrane Surface Properties. Environmental Science & Technology, 2017, 51, 4396-4406.	4.6	136
152	Highly Selective Vertically Aligned Nanopores in Sustainably Derived Polymer Membranes by Molecular Templating. ACS Nano, 2017, 11, 3911-3921.	7.3	83
153	Mitigation of Biofilm Development on Thin-Film Composite Membranes Functionalized with Zwitterionic Polymers and Silver Nanoparticles. Environmental Science & Technology, 2017, 51, 182-191.	4.6	180
154	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
155	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
156	Comparison of organic fouling resistance of thin-film composite membranes modified by hydrophilic silica nanoparticles and zwitterionic polymer brushes. Journal of Membrane Science, 2017, 544, 135-142.	4.1	80
157	Loss of Phospholipid Membrane Integrity Induced by Two-Dimensional Nanomaterials. Environmental Science and Technology Letters, 2017, 4, 404-409.	3.9	39
158	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. Environmental Science & Technology, 2017, 51, 10274-10281.	4.6	129
159	Efficacy of antifouling modification of ultrafiltration membranes by grafting zwitterionic polymer brushes. Separation and Purification Technology, 2017, 189, 389-398.	3.9	84
160	An Osmotic Membrane Bioreactorâ€“Membrane Distillation System for Simultaneous Wastewater Reuse and Seawater Desalination: Performance and Implications. Environmental Science & Technology, 2017, 51, 14311-14320.	4.6	56
161	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
162	Influence of polyamide membrane surface chemistry on gypsum scaling behavior. Journal of Membrane Science, 2017, 525, 249-256.	4.1	73

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163	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
164	Thin-film composite forward osmosis membranes functionalized with graphene oxideâ€“silver nanocomposites for biofouling control. Journal of Membrane Science, 2017, 525, 146-156.	4.1	180
165	Can batch or semi-batch processes save energy in reverse-osmosis desalination?. Desalination, 2017, 402, 109-122.	4.0	105
166	Kinetics and energetics trade-off in reverse osmosis desalination with different configurations. Desalination, 2017, 401, 42-52.	4.0	61
167	Engineering Surface Energy and Nanostructure of Microporous Films for Expanded Membrane Distillation Applications. Environmental Science & Technology, 2016, 50, 8112-8119.	4.6	203
168	Evaluating ionic organic draw solutes in osmotic membrane bioreactors for water reuse. Journal of Membrane Science, 2016, 514, 636-645.	4.1	59
169	Development of Omniphobic Desalination Membranes Using a Charged Electrospun Nanofiber Scaffold. ACS Applied Materials & Interfaces, 2016, 8, 11154-11161.	4.0	218
170	Biofouling Mitigation in Forward Osmosis Using Graphene Oxide Functionalized Thin-Film Composite Membranes. Environmental Science & Technology, 2016, 50, 5840-5848.	4.6	160
171	Effect of Final Monomer Deposition Steps on Molecular Layer-by-Layer Polyamide Surface Properties. Langmuir, 2016, 32, 10815-10823.	1.6	15
172	Antifouling membranes for sustainable water purification: strategies and mechanisms. Chemical Society Reviews, 2016, 45, 5888-5924.	18.7	977
173	Materials for next-generation desalination and water purification membranes. Nature Reviews Materials, 2016, 1, .	23.3	1,977
174	Harvesting low-grade heat energy using thermo-osmotic vapour transport through nanoporousÂmembranes. Nature Energy, 2016, 1, .	19.8	226
175	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
176	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
177	Designing a biocidal reverse osmosis membrane coating: Synthesis and biofouling properties. Desalination, 2016, 380, 52-59.	4.0	38
178	Thin Polymer Films with Continuous Vertically Aligned 1 nm Pores Fabricated by Soft Confinement. ACS Nano, 2016, 10, 150-158.	7.3	92
179	In situ surface functionalization of reverse osmosis membranes with biocidal copper nanoparticles. Desalination, 2016, 388, 1-8.	4.0	130
180	Environmental Applications of Interfacial Materials with Special Wettability. Environmental Science & Technology, 2016, 50, 2132-2150.	4.6	273

#	Article	IF	Citations
181	Shape-Dependent Surface Reactivity and Antimicrobial Activity of Nano-Cupric Oxide. Environmental Science & Technology, 2016, 50, 3975-3984.	4.6	96
182	The Critical Need for Increased Selectivity, Not Increased Water Permeability, for Desalination Membranes. Environmental Science and Technology Letters, 2016, 3, 112-120.	3.9	527
183	Assessing the current state of commercially available membranes and spacers for energy production with pressure retarded osmosis. Desalination, 2016, 389, 108-118.	4.0	66
184	Pressure-retarded osmosis for power generation from salinity gradients: is it viable?. Energy and Environmental Science, 2016, 9, 31-48.	15.6	289
185	Membrane-based processes for wastewater nutrient recovery: Technology, challenges, and future direction. Water Research, 2016, 89, 210-221.	5.3	405
186	The role of forward osmosis and microfiltration in an integrated osmotic-microfiltration membrane bioreactor system. Chemosphere, 2015, 136, 125-132.	4.2	56
187	Performance evaluation of trimethylamineâ€“carbon dioxide thermolytic draw solution for engineered osmosis. Journal of Membrane Science, 2015, 473, 302-309.	4.1	100
188	Transparent Exopolymer Particles: From Aquatic Environments and Engineered Systems to Membrane Biofouling. Environmental Science & Technology, 2015, 49, 691-707.	4.6	147
189	Influence of Active Layer and Support Layer Surface Structures on Organic Fouling Propensity of Thin-Film Composite Forward Osmosis Membranes. Environmental Science & Technology, 2015, 49, 1436-1444.	4.6	112
190	Elements Provide a Clue: Nanoscale Characterization of Thin-Film Composite Polyamide Membranes. ACS Applied Materials & Interfaces, 2015, 7, 16917-16922.	4.0	50
191	Role of pressure in organic fouling in forward osmosis and reverse osmosis. Journal of Membrane Science, 2015, 493, 748-754.	4.1	174
192	Engineering flat sheet microporous PVDF films for membrane distillation. Journal of Membrane Science, 2015, 492, 355-363.	4.1	118
193	Antimicrobial Properties of Graphene Oxide Nanosheets: Why Size Matters. ACS Nano, 2015, 9, 7226-7236.	7.3	806
194	Biofouling in forward osmosis and reverse osmosis: Measurements and mechanisms. Journal of Membrane Science, 2015, 493, 703-708.	4.1	137
195	Application of membrane dewatering for algal biofuel. Algal Research, 2015, 11, 1-12.	2.4	103
196	Membrane-Based Osmotic Heat Engine with Organic Solvent for Enhanced Power Generation from Low-Grade Heat. Environmental Science & Technology, 2015, 49, 5820-5827.	4.6	76
197	Staged reverse osmosis operation: Configurations, energy efficiency, and application potential. Desalination, 2015, 366, 9-14.	4.0	121
198	Desalination by forward osmosis: Identifying performance limiting parameters through module-scale modeling. Journal of Membrane Science, 2015, 491, 159-167.	4.1	111

#	Article	IF	Citations
199	Post-fabrication modification of forward osmosis membranes with a poly(ethylene glycol) block copolymer for improved organic fouling resistance. Journal of Membrane Science, 2015, 490, 209-219.	4.1	83
200	Antimicrobial Electrospun Biopolymer Nanofiber Mats Functionalized with Graphene Oxideâ€“Silver Nanocomposites. ACS Applied Materials & Interfaces, 2015, 7, 12751-12759.	4.0	256
201	Environmental applications of graphene-based nanomaterials. Chemical Society Reviews, 2015, 44, 5861-5896.	18.7	1,236
202	Interaction of Graphene Oxide with Bacterial Cell Membranes: Insights from Force Spectroscopy. Environmental Science and Technology Letters, 2015, 2, 112-117.	3.9	164
203	Selectivity and Mass Transfer Limitations in Pressure-Retarded Osmosis at High Concentrations and Increased Operating Pressures. Environmental Science & Technology, 2015, 49, 12551-12559.	4.6	46
204	Controlled Architecture of Dual-Functional Block Copolymer Brushes on Thin-Film Composite Membranes for Integrated â€œDefendingâ€•and â€œAttackingâ€•Strategies against Biofouling. ACS Applied Materials & Interfaces, 2015, 7, 23069-23079.	4.0	216
205	Role of Reverse Divalent Cation Diffusion in Forward Osmosis Biofouling. Environmental Science & Technology, 2015, 49, 13222-13229.	4.6	50
206	Impaired Performance of Pressure-Retarded Osmosis due to Irreversible Biofouling. Environmental Science & Technology, 2015, 49, 13050-13058.	4.6	75
207	Osmotic dilution for sustainable greenwall irrigation by liquid fertilizer: Performance and implications. Journal of Membrane Science, 2015, 494, 32-38.	4.1	44
208	Forward osmosis: Where are we now?. Desalination, 2015, 356, 271-284.	4.0	681
209	Aligned Nanostructured Polymers by Magnetic-Field-Directed Self-Assembly of a Polymerizable Lyotropic Mesophase. ACS Applied Materials & Interfaces, 2014, 6, 19710-19717.	4.0	35
210	Module-Scale Analysis of Pressure Retarded Osmosis: Performance Limitations and Implications for Full-Scale Operation. Environmental Science & Technology, 2014, 48, 12435-12444.	4.6	104
211	Bidirectional Diffusion of Ammonium and Sodium Cations in Forward Osmosis: Role of Membrane Active Layer Surface Chemistry and Charge. Environmental Science & Technology, 2014, 48, 14369-14376.	4.6	95
212	Thermally Switchable Aligned Nanopores by Magneticâ€Field Directed Selfâ€Assembly of Block Copolymers. Advanced Materials, 2014, 26, 5148-5154.	11.1	66
213	Designing block copolymer architectures for targeted membrane performance. Polymer, 2014, 55, 347-353.	1.8	103
214	Combined organic and colloidal fouling in forward osmosis: Fouling reversibility and the role of applied pressure. Journal of Membrane Science, 2014, 460, 206-212.	4.1	152
215	Mitigating biofouling on thin-film composite polyamide membranes using a controlled-release platform. Journal of Membrane Science, 2014, 453, 84-91.	4.1	34
216	Molecular Design of Liquid Crystalline Brush-Like Block Copolymers for Magnetic Field Directed Self-Assembly: A Platform for Functional Materials. ACS Macro Letters, 2014, 3, 462-466.	2.3	59

#	Article	IF	Citations
217	Thermodynamic, Energy Efficiency, and Power Density Analysis of Reverse Electrodialysis Power Generation with Natural Salinity Gradients. Environmental Science & Technology, 2014, 48, 4925-4936.	4.6	177
218	Thin-Film Composite Polyamide Membranes Functionalized with Biocidal Graphene Oxide Nanosheets. Environmental Science and Technology Letters, 2014, 1, 71-76.	3.9	460
219	Direct contact membrane distillation with heat recovery: Thermodynamic insights from module scale modeling. Journal of Membrane Science, 2014, 453, 498-515.	4.1	168
220	Scalable Fabrication of Polymer Membranes with Vertically Aligned 1 nm Pores by Magnetic Field Directed Self-Assembly. ACS Nano, 2014, 8, 11977-11986.	7.3	183
221	Low flow data logger in membrane distillation: An interdisciplinary laboratory in process control. , 2014, , .		2
222	Biofouling and Microbial Communities in Membrane Distillation and Reverse Osmosis. Environmental Science & Technology, 2014, 48, 13155-13164.	4.6	75
223	Thermodynamic limits of extractable energy by pressure retarded osmosis. Energy and Environmental Science, 2014, 7, 2706-2714.	15.6	149
224	The road to nowhere: equilibrium partition coefficients for nanoparticles. Environmental Science: Nano, 2014, 1, 317-323.	2.2	129
225	Comparison of Energy Efficiency and Power Density in Pressure Retarded Osmosis and Reverse Electrodialysis. Environmental Science & Technology, 2014, 48, 11002-11012.	4.6	173
226	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
227	The importance of microscopic characterization of membrane biofilms in an unconfined environment. Desalination, 2014, 348, 8-15.	4.0	27
228	Reverse Osmosis Biofilm Dispersal by Osmotic Back-Flushing: Cleaning via Substratum Perforation. Environmental Science and Technology Letters, 2014, 1, 162-166.	3.9	39
229	Toward Resource Recovery from Wastewater: Extraction of Phosphorus from Digested Sludge Using a Hybrid Forward Osmosisâ€“Membrane Distillation Process. Environmental Science and Technology Letters, 2014, 1, 191-195.	3.9	229
230	Omniphobic Membrane for Robust Membrane Distillation. Environmental Science and Technology Letters, 2014, 1, 443-447.	3.9	288
231	Membrane scaling and flux decline during fertiliser-drawn forward osmosis desalination of brackish groundwater. Water Research, 2014, 57, 172-182.	5.3	101
232	Amine enrichment and poly(ethylene glycol) (PEG) surface modification of thin-film composite forward osmosis membranes for organic fouling control. Journal of Membrane Science, 2014, 450, 331-339.	4.1	165
233	Organic fouling behavior of superhydrophilic polyvinylidene fluoride (PVDF) ultrafiltration membranes functionalized with surface-tailored nanoparticles: Implications for organic fouling in membrane bioreactors. Journal of Membrane Science, 2014, 463, 94-101.	4.1	110
234	Control of biofouling on reverse osmosis polyamide membranes modified with biocidal nanoparticles and antifouling polymer brushes. Journal of Materials Chemistry B, 2014, 2, 1724.	2.9	164

#	Article	IF	Citations
235	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
236	Impact of organic and colloidal fouling on trace organic contaminant rejection by forward osmosis: Role of initial permeate flux. Desalination, 2014, 336, 146-152.	4.0	62
237	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
238	Osmotic equilibrium in the forward osmosis process: Modelling, experiments and implications for process performance. Journal of Membrane Science, 2014, 453, 240-252.	4.1	110
239	Effect of hydraulic pressure and membrane orientation on water flux and reverse solute flux in pressure assisted osmosis. Journal of Membrane Science, 2014, 465, 159-166.	4.1	82
240	Surface Functionalization of Thin-Film Composite Membranes with Copper Nanoparticles for Antimicrobial Surface Properties. Environmental Science & Technology, 2014, 48, 384-393.	4.6	310
241	Hybrid Pressure Retarded Osmosisâ€“Membrane Distillation System for Power Generation from Low-Grade Heat: Thermodynamic Analysis and Energy Efficiency. Environmental Science & Technology, 2014, 48, 5306-5313.	4.6	129
242	Highly Hydrophilic Polyvinylidene Fluoride (PVDF) Ultrafiltration Membranes via Postfabrication Grafting of Surface-Tailored Silica Nanoparticles. ACS Applied Materials & Interfaces, 2013, 5, 6694-6703.	4.0	279
243	A method for the simultaneous determination of transport and structural parameters of forward osmosis membranes. Journal of Membrane Science, 2013, 444, 523-538.	4.1	397
244	High Efficiency in Energy Generation from Salinity Gradients with Reverse Electrodialysis. ACS Sustainable Chemistry and Engineering, 2013, 1, 1295-1302.	3.2	143
245	Water flows, energy demand, and market analysis of the informal water sector in Kisumu, Kenya. Ecological Economics, 2013, 87, 137-144.	2.9	26
246	Desalination and Reuse of High-Salinity Shale Gas Produced Water: Drivers, Technologies, and Future Directions. Environmental Science & Technology, 2013, 47, 9569-9583.	4.6	655
247	Effects of feed and draw solution temperature and transmembrane temperature difference on the rejection of trace organic contaminants by forward osmosis. Journal of Membrane Science, 2013, 438, 57-64.	4.1	153
248	Probing the Viability of Oxo-Coupling Pathways in Iridium-Catalyzed Oxygen Evolution. Organometallics, 2013, 32, 5384-5390.	1.1	42
249	A Forward Osmosisâ€“Membrane Distillation Hybrid Process for Direct Sewer Mining: System Performance and Limitations. Environmental Science & Technology, 2013, 47, 13486-13493.	4.6	234
250	Forward osmosis desalination of brackish groundwater: Meeting water quality requirements for fertigation by integrating nanofiltration. Journal of Membrane Science, 2013, 436, 1-15.	4.1	125
251	In Situ Surface Chemical Modification of Thin-Film Composite Forward Osmosis Membranes for Enhanced Organic Fouling Resistance. Environmental Science & Technology, 2013, 47, 12219-12228.	4.6	166
252	Aggregation rate and fractal dimension of fullerene nanoparticles via simultaneous multiangle static and dynamic light scattering measurement. Journal of Colloid and Interface Science, 2013, 392, 27-33.	5.0	75

#	Article	IF	Citations
253	Toxicity of Functionalized Single-Walled Carbon Nanotubes on Soil Microbial Communities: Implications for Nutrient Cycling in Soil. Environmental Science & Technology, 2013, 47, 625-633.	4.6	138
254	Silica scaling and scaling reversibility in forward osmosis. Desalination, 2013, 312, 75-81.	4.0	154
255	Standard Methodology for Evaluating Membrane Performance in Osmotically Driven Membrane Processes. Desalination, 2013, 312, 31-38.	4.0	349
256	Carbon nanotube bundling: influence on layer-by-layer assembly and antimicrobial activity. Soft Matter, 2013, 9, 2136.	1.2	32
257	Fouling control in a forward osmosis process integrating seawater desalination and wastewater reclamation. Journal of Membrane Science, 2013, 444, 148-156.	4.1	214
258	Potential of osmotic power generation by pressure retarded osmosis using seawater as feed solution: Analysis and experiments. Journal of Membrane Science, 2013, 429, 330-337.	4.1	152
259	Impact of humic acid fouling on membrane performance and transport of pharmaceutically active compounds in forward osmosis. Water Research, 2013, 47, 4567-4575.	5.3	104
260	Polyamide formation on a cellulose triacetate support for osmotic membranes: Effect of linking molecules on membrane performance. Desalination, 2013, 312, 2-9.	4.0	31
261	Cp* Iridium Precatalysts for Selective Câ€“H Oxidation with Sodium Periodate As the Terminal Oxidant. Organometallics, 2013, 32, 957-965.	1.1	60
262	More than a Drop in the Bucket: Decentralized Membrane-Based Drinking Water Refill Stations in Southeast Asia. Environmental Science & Technology, 2013, 47, 7580-7588.	4.6	31
263	Surface Cell Density Effects on Escherichia coli Gene Expression during Cell Attachment. Environmental Science & Technology, 2013, 47, 6223-6230.	4.6	9
264	Nanofibers in thin-film composite membrane support layers: Enabling expanded application of forward and pressure retarded osmosis. Desalination, 2013, 308, 73-81.	4.0	143
265	Removal of trace organic contaminants by the forward osmosis process. Separation and Purification Technology, 2013, 103, 258-266.	3.9	144
266	Influence of Natural Organic Matter Fouling and Osmotic Backwash on Pressure Retarded Osmosis Energy Production from Natural Salinity Gradients. Environmental Science & Technology, 2013, 47, 12607-12616.	4.6	106
267	Modeling Risk Categories to Predict the Longitudinal Prevalence of Childhood Diarrhea in Indonesia. American Journal of Tropical Medicine and Hygiene, 2013, 89, 884-891.	0.6	20
268	Relationship between Use of Water from Community-Scale Water Treatment Refill Kiosks and Childhood Diarrhea in Jakarta. American Journal of Tropical Medicine and Hygiene, 2012, 87, 979-984.	0.6	34
269	Membrane-based processes for sustainable power generation using water. Nature, 2012, 488, 313-319.	13.7	1,242
270	Particle Formation during Oxidation Catalysis with Cp* Iridium Complexes. Journal of the American Chemical Society, 2012, 134, 9785-9795.	6.6	150

#	Article	IF	Citations
271	Electrochemical Carbon-Nanotube Filter Performance toward Virus Removal and Inactivation in the Presence of Natural Organic Matter. Environmental Science & Technology, 2012, 46, 1556-1564.	4.6	256
272	Adverse Impact of Feed Channel Spacers on the Performance of Pressure Retarded Osmosis. Environmental Science & Technology, 2012, 46, 4673-4681.	4.6	172
273	Stable Sequestration of Single-Walled Carbon Nanotubes in Self-Assembled Aqueous Nanopores. Journal of the American Chemical Society, 2012, 134, 3950-3953.	6.6	14
274	Thermodynamic and Energy Efficiency Analysis of Power Generation from Natural Salinity Gradients by Pressure Retarded Osmosis. Environmental Science & Technology, 2012, 46, 5230-5239.	4.6	301
275	Highly Hydrophilic Thin-Film Composite Forward Osmosis Membranes Functionalized with Surface-Tailored Nanoparticles. ACS Applied Materials & Interfaces, 2012, 4, 5044-5053.	4.0	204
276	Impact of Surface Functionalization on Bacterial Cytotoxicity of Single-Walled Carbon Nanotubes. Environmental Science & Technology, 2012, 46, 6297-6305.	4.6	119
277	Seawater desalination for agriculture by integrated forward and reverse osmosis: Improved product water quality for potentially less energy. Journal of Membrane Science, 2012, 415-416, 1-8.	4.1	259
278	Boron transport in forward osmosis: Measurements, mechanisms, and comparison with reverse osmosis. Journal of Membrane Science, 2012, 419-420, 42-48.	4.1	80
279	Carbon nanotube-based antimicrobial biomaterials formed via layer-by-layer assembly with polypeptides. Journal of Colloid and Interface Science, 2012, 388, 268-273.	5.0	77
280	Superhydrophilic Thin-Film Composite Forward Osmosis Membranes for Organic Fouling Control: Fouling Behavior and Antifouling Mechanisms. Environmental Science & Technology, 2012, 46, 11135-11144.	4.6	255
281	Improved Antifouling Properties of Polyamide Nanofiltration Membranes by Reducing the Density of Surface Carboxyl Groups. Environmental Science & Technology, 2012, 46, 13253-13261.	4.6	178
282	Reverse Permeation of Weak Electrolyte Draw Solutes in Forward Osmosis. Industrial & Engineering Chemistry Research, 2012, 51, 13463-13472.	1.8	23
283	Biodegradable Polymer (PLGA) Coatings Featuring Cinnamaldehyde and Carvacrol Mitigate Biofilm Formation. Langmuir, 2012, 28, 13993-13999.	1.6	72
284	New Perspectives on Nanomaterial Aquatic Ecotoxicity: Production Impacts Exceed Direct Exposure Impacts for Carbon Nanotoubes. Environmental Science & Technology, 2012, 46, 2902-2910.	4.6	152
285	Comparison of the removal of hydrophobic trace organic contaminants by forward osmosis and reverse osmosis. Water Research, 2012, 46, 2683-2692.	5.3	270
286	Direct quantification of negatively charged functional groups on membrane surfaces. Journal of Membrane Science, 2012, 389, 499-508.	4.1	140
287	Coupled reverse draw solute permeation and water flux in forward osmosis with neutral draw solutes. Journal of Membrane Science, 2012, 392-393, 9-17.	4.1	135
288	Colloidal fouling in forward osmosis: Role of reverse salt diffusion. Journal of Membrane Science, 2012, 390-391, 277-284.	4.1	169

#	Article	IF	Citations
289	Adsorption and Aggregation Properties of Norovirus GI and GII Virus-like Particles Demonstrate Differing Responses to Solution Chemistry. Environmental Science & Technology, 2011, 45, 520-526.	4.6	82
290	Tuning Structure and Properties of Graded Triblock Terpolymer-Based Mesoporous and Hybrid Films. Nano Letters, 2011, 11, 2892-2900.	4.5	220
291	Bidirectional Permeation of Electrolytes in Osmotically Driven Membrane Processes. Environmental Science & Technology, 2011, 45, 10642-10651.	4.6	94
292	Antifouling Ultrafiltration Membranes via Post-Fabrication Grafting of Biocidal Nanomaterials. ACS Applied Materials & Interfaces, 2011, 3, 2861-2868.	4.0	268
293	Electrochemical Multiwalled Carbon Nanotube Filter for Viral and Bacterial Removal and Inactivation. Environmental Science & Technology, 2011, 45, 3672-3679.	4.6	345
294	Thin-Film Composite Pressure Retarded Osmosis Membranes for Sustainable Power Generation from Salinity Gradients. Environmental Science & Technology, 2011, 45, 4360-4369.	4.6	479
295	Covalent Binding of Single-Walled Carbon Nanotubes to Polyamide Membranes for Antimicrobial Surface Properties. ACS Applied Materials & Interfaces, 2011, 3, 2869-2877.	4.0	313
296	Biocidal Activity of Plasma Modified Electrospun Polysulfone Mats Functionalized with Polyethyleneimine-Capped Silver Nanoparticles. Langmuir, 2011, 27, 13159-13164.	1.6	73
297	Performance Limiting Effects in Power Generation from Salinity Gradients by Pressure Retarded Osmosis. Environmental Science & Technology, 2011, 45, 10273-10282.	4.6	270
298	The Future of Seawater Desalination: Energy, Technology, and the Environment. Science, 2011, 333, 712-717.	6.0	4,908
299	Antibacterial Activity of Electrospun Polymer Mats with Incorporated Narrow Diameter Single-Walled Carbon Nanotubes. ACS Applied Materials & Interfaces, 2011, 3, 462-468.	4.0	114
300	Relationship between distance to social gathering facilities and risk of trachoma for households in rural Tanzanian communities. Social Science and Medicine, 2011, 73, 1-5.	1.8	10
301	Chemical cleaning of RO membranes fouled by wastewater effluent: Achieving higher efficiency with dual-step cleaning. Journal of Membrane Science, 2011, 382, 100-106.	4.1	124
302	Forward with Osmosis: Emerging Applications for Greater Sustainability. Environmental Science & Technology, 2011, 45, 9824-9830.	4.6	230
303	Relating performance of thin-film composite forward osmosis membranes to support layer formation and structure. Journal of Membrane Science, 2011, 367, 340-352.	4.1	535
304	Biological approaches for addressing the grand challenge of providing access to clean drinking water. Journal of Biological Engineering, 2011, 5, 2.	2.0	32
305	Optimal design of a microthermoelectric cooler for microelectronics. Microelectronics Journal, 2011, 42, 772-777.	1.1	4
306	Membrane characterization by dynamic hysteresis: Measurements, mechanisms, and implications for membrane fouling. Journal of Membrane Science, 2011, 366, 17-24.	4.1	31

#	Article	IF	Citations
307	Fouling and cleaning of RO membranes fouled by mixtures of organic foulants simulating wastewater effluent. Journal of Membrane Science, 2011, 376, 196-206.	4.1	222
308	Calicivirus Removal in a Membrane Bioreactor Wastewater Treatment Plant. Applied and Environmental Microbiology, 2011, 77, 5170-5177.	1.4	76
309	Reverse Draw Solute Permeation in Forward Osmosis: Modeling and Experiments. Environmental Science & Technology, 2010, 44, 5170-5176.	4.6	576
310	Comparison of fouling behavior in forward osmosis (FO) and reverse osmosis (RO). Journal of Membrane Science, 2010, 365, 34-39.	4.1	645
311	Organic fouling of forward osmosis membranes: Fouling reversibility and cleaning without chemical reagents. Journal of Membrane Science, 2010, 348, 337-345.	4.1	744
312	Assessment of latrine use and quality and association with risk of trachoma in rural Tanzania. Transactions of the Royal Society of Tropical Medicine and Hygiene, 2010, 104, 283-289.	0.7	37
313	Comparing the Effectiveness of Shared versus Private Latrines in Preventing Trachoma in Rural Tanzania. American Journal of Tropical Medicine and Hygiene, 2010, 82, 693-695.	0.6	19
314	Aggregation and Deposition of Engineered Nanomaterials in Aquatic Environments: Role of Physicochemical Interactions. Environmental Science & Technology, 2010, 44, 6532-6549.	4.6	986
315	Multiwalled Carbon Nanotube Filter: Improving Viral Removal at Low Pressure. Langmuir, 2010, 26, 14975-14982.	1.6	102
316	Antimicrobial biomaterials based on carbon nanotubes dispersed in poly(lactic-co-glycolic acid). Nanoscale, 2010, 2, 1789.	2.8	139
317	Ultrafiltration Membranes Incorporating Amphiphilic Comb Copolymer Additives Prevent Irreversible Adhesion of Bacteria. Environmental Science & Technology, 2010, 44, 2406-2411.	4.6	85
318	Gypsum Scaling and Cleaning in Forward Osmosis: Measurements and Mechanisms. Environmental Science & Technology, 2010, 44, 2022-2028.	4.6	324
319	Adsorption Kinetics and Reversibility of Linear Plasmid DNA on Silica Surfaces: Influence of Alkaline Earth and Transition Metal Ions. Biomacromolecules, 2010, 11, 1225-1230.	2.6	28
320	Influence of Biomacromolecules and Humic Acid on the Aggregation Kinetics of Single-Walled Carbon Nanotubes. Environmental Science & Technology, 2010, 44, 2412-2418.	4.6	282
321	High Performance Thin-Film Composite Forward Osmosis Membrane. Environmental Science & Technology, 2010, 44, 3812-3818.	4.6	814
322	Impact of solution chemistry on viral removal by a single-walled carbon nanotube filter. Water Research, 2010, 44, 3773-3780.	5.3	134
323	SWNTâˆ’MWNT Hybrid Filter Attains High Viral Removal and Bacterial Inactivation. Langmuir, 2010, 26, 19153-19158.	1.6	99
324	Toxic Effects of Single-Walled Carbon Nanotubes in the Development of E. coli Biofilm. Environmental Science & Technology, 2010, 44, 4583-4589.	4.6	183

#	Article	IF	Citations
325	Electronic-Structure-Dependent Bacterial Cytotoxicity of Single-Walled Carbon Nanotubes. ACS Nano, 2010, 4, 5471-5479.	7.3	456
326	Nanocomposites of Vertically Aligned Single-Walled Carbon Nanotubes by Magnetic Alignment and Polymerization of a Lyotropic Precursor. ACS Nano, 2010, 4, 6651-6658.	7.3	86
327	Role of type 1 fimbriae and mannose in the development ofEscherichia coliK12 biofilm: from initial cell adhesion to biofilm formation. Biofouling, 2009, 25, 401-411.	0.8	76
328	Increasing Functional Sustainability of Water and Sanitation Supplies in Rural Sub-Saharan Africa. Environmental Engineering Science, 2009, 26, 1017-1023.	0.8	109
329	Energy-efficient water purification made possible by Yale engineers. Membrane Technology, 2009, 2009, 10-11.	0.5	6
330	Performance evaluation of sucrose concentration using forward osmosis. Journal of Membrane Science, 2009, 338, 61-66.	4.1	185
331	Role of Extracellular Polymeric Substances (EPS) in Biofouling of Reverse Osmosis Membranes. Environmental Science & Technology, 2009, 43, 4393-4398.	4.6	338
332	Single-Walled Carbon Nanotubes Exhibit Limited Transport in Soil Columns. Environmental Science & Technology, 2009, 43, 9161-9166.	4.6	198
333	Influence of shear on the production of extracellular polymeric substances in membrane bioreactors. Water Research, 2009, 43, 4305-4315.	5.3	67
334	Microbial Cytotoxicity of Carbon-Based Nanomaterials: Implications for River Water and Wastewater Effluent. Environmental Science & Technology, 2009, 43, 2648-2653.	4.6	354
335	Relating Colloidal Stability of Fullerene (C₆₀) Nanoparticles to Nanoparticle Charge and Electrokinetic Properties. Environmental Science & Technology, 2009, 43, 7270-7276.	4.6	172
336	Bioinspired Single Bacterial Cell Force Spectroscopy. Langmuir, 2009, 25, 9656-9659.	1.6	121
337	Science and technology for water purification in the coming decades. , 2009, , 337-346.		110
338	Influence of membrane support layer hydrophobicity on water flux in osmotically driven membrane processes. Journal of Membrane Science, 2008, 318, 458-466.	4.1	417
339	A Singleâ€Walledâ€Carbonâ€Nanotube Filter for Removal of Viral and Bacterial Pathogens. Small, 2008, 4, 481-484.	5.2	431
340	Novel numerical method for calculating initial flux of colloid particle adsorption through an energy barrier. Journal of Colloid and Interface Science, 2008, 319, 406-415.	5.0	20
341	Reduced aggregation and sedimentation of zero-valent iron nanoparticles in the presence of guar gum. Journal of Colloid and Interface Science, 2008, 324, 71-79.	5.0	331
342	Influence of biofouling on boron removal by nanofiltration and reverse osmosis membranes. Journal of Membrane Science, 2008, 318, 264-270.	4.1	77

#	Article	IF	Citations
343	Chemical and physical aspects of organic fouling of forward osmosis membranes. Journal of Membrane Science, 2008, 320, 292-302.	4.1	560
344	Environmental Applications of Carbon-Based Nanomaterials. Environmental Science & Technology, 2008, 42, 5843-5859.	4.6	1,337
345	Science and technology for water purification in the coming decades. Nature, 2008, 452, 301-310.	13.7	6,795
346	Global Challenges in Energy and Water Supply: The Promise of Engineered Osmosis. Environmental Science & Technology, 2008, 42, 8625-8629.	4.6	271
347	Physicochemical Determinants of Multiwalled Carbon Nanotube Bacterial Cytotoxicity. Environmental Science & Technology, 2008, 42, 7528-7534.	4.6	335
348	Transport of Single-Walled Carbon Nanotubes in Porous Media: Filtration Mechanisms and Reversibility. Environmental Science & Technology, 2008, 42, 8317-8323.	4.6	219
349	Aggregation Kinetics of Multiwalled Carbon Nanotubes in Aquatic Systems: Measurements and Environmental Implications. Environmental Science & Technology, 2008, 42, 7963-7969.	4.6	401
350	Antibacterial Effects of Carbon Nanotubes: Size Does Matter!. Langmuir, 2008, 24, 6409-6413.	1.6	1,003
351	Fatty acid fouling of reverse osmosis membranes: Implications for wastewater reclamation. Water Research, 2008, 42, 4393-4403.	5.3	60
352	Physiology and genetic traits of reverse osmosis membrane biofilms: a case study with Pseudomonas aeruginosa. ISME Journal, 2008, 2, 180-194.	4.4	88
353	Interaction of Fullerene (C₆₀) Nanoparticles with Humic Acid and Alginate Coated Silica Surfaces: Measurements, Mechanisms, and Environmental Implications. Environmental Science & Technology, 2008, 42, 7607-7614.	4.6	268
354	Calcium and Magnesium Cations Enhance the Adhesion of Motile and Nonmotile Pseudomonas aeruginosa on Alginate Films. Langmuir, 2008, 24, 3392-3399.	1.6	104
355	Norovirus Removal and Particle Association in a Waste Stabilization Pond. Environmental Science & Technology, 2008, 42, 9151-9157.	4.6	65
356	Bacterial Swimming Motility Enhances Cell Deposition and Surface Coverage. Environmental Science & Technology, 2008, 42, 4371-4377.	4.6	67
357	Impact of Alginate Conditioning Film on Deposition Kinetics of Motile and Nonmotile Pseudomonas aeruginosa Strains. Applied and Environmental Microbiology, 2007, 73, 5227-5234.	1.4	87
358	Evaluation of Removal of Noroviruses during Wastewater Treatment, Using Real-Time Reverse Transcription-PCR: Different Behaviors of Genogroups I and II. Applied and Environmental Microbiology, 2007, 73, 7891-7897.	1.4	435
359	Salt cleaning of organic-fouled reverse osmosis membranes. Water Research, 2007, 41, 1134-1142.	5.3	141
360	Water And Sanitation in Developing Countries: Including Health in the Equation. Environmental Science & Technology, 2007, 41, 17-24.	4.6	698

#	Article	IF	Citations
361	Plasmid DNA Adsorption on Silica:Â Kinetics and Conformational Changes in Monovalent and Divalent Salts. Biomacromolecules, 2007, 8, 24-32.	2.6	120
362	Adsorption of Plasmid DNA to a Natural Organic Matter-Coated Silica Surface:Â Kinetics, Conformation, and Reversibility. Langmuir, 2007, 23, 3273-3279.	1.6	87
363	Adhesion of Nonmotile Pseudomonas aeruginosa on â€œSoftâ€•Polyelectrolyte Layer in a Radial Stagnation Point Flow System:â€‰ Measurements and Model Predictions. Langmuir, 2007, 23, 12301-12308.	1.6	45
364	Formation of Polysaccharide Gel Layers in the Presence of Ca2+and K+Ions:Â Measurements and Mechanisms. Biomacromolecules, 2007, 8, 113-121.	2.6	100
365	Single-Walled Carbon Nanotubes Exhibit Strong Antimicrobial Activity. Langmuir, 2007, 23, 8670-8673.	1.6	1,165
366	Enhanced Aggregation of Alginate-Coated Iron Oxide (Hematite) Nanoparticles in the Presence of Calcium, Strontium, and Barium Cations. Langmuir, 2007, 23, 5920-5928.	1.6	234
367	Modeling water flux in forward osmosis: Implications for improved membrane design. AICHE Journal, 2007, 53, 1736-1744.	1.8	323
368	Direct microscopic observation of particle deposition in porous media: Role of the secondary energy minimum. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 294, 156-162.	2.3	123
369	Energy requirements of ammoniaâ€“carbon dioxide forward osmosis desalination. Desalination, 2007, 207, 370-382.	4.0	494
370	A novel ammoniaâ€“carbon dioxide osmotic heat engine for power generation. Journal of Membrane Science, 2007, 305, 13-19.	4.1	226
371	Protein antifouling mechanisms of PAN UF membranes incorporating PAN-g-PEO additive. Journal of Membrane Science, 2007, 296, 42-50.	4.1	194
372	Anti-fouling ultrafiltration membranes containing polyacrylonitrile-graft-poly(ethylene oxide) comb copolymer additives. Journal of Membrane Science, 2007, 298, 136-146.	4.1	404
373	Influence of humic acid on the aggregation kinetics of fullerene (C60) nanoparticles in monovalent and divalent electrolyte solutions. Journal of Colloid and Interface Science, 2007, 309, 126-134.	5.0	583
374	Isolation and assessment of phytate-hydrolysing bacteria from the DelMarVa Peninsula. Environmental Microbiology, 2007, 9, 3100-3107.	1.8	33
375	Yale constructs forward osmosis desalination pilot plant. Membrane Technology, 2007, 2007, 7-8.	0.5	44
376	Biofouling of reverse osmosis membranes: Role of biofilm-enhanced osmotic pressure. Journal of Membrane Science, 2007, 295, 11-20.	4.1	517
377	Protein (BSA) fouling of reverse osmosis membranes: Implications for wastewater reclamation. Journal of Membrane Science, 2007, 296, 83-92.	4.1	314
378	Aggregation Kinetics of Alginate-Coated Hematite Nanoparticles in Monovalent and Divalent Electrolytes. Environmental Science & Technology, 2006, 40, 1516-1523.	4.6	413

#	Article	IF	Citations
379	Cryptosporidium Oocyst Surface Macromolecules Significantly Hinder Oocyst Attachment. Environmental Science & Technology, 2006, 40, 1837-1842.	4.6	54
380	Structural Growth and Viscoelastic Properties of Adsorbed Alginate Layers in Monovalent and Divalent Salts. Macromolecules, 2006, 39, 6558-6564.	2.2	75
381	Fouling of reverse osmosis membranes by hydrophilic organic matter: implications for water reuse. Desalination, 2006, 187, 313-321.	4.0	242
382	Internal concentration polarization in forward osmosis: role of membrane orientation. Desalination, 2006, 197, 1-8.	4.0	564
383	Chemical and physical aspects of cleaning of organic-fouled reverse osmosis membranes. Journal of Membrane Science, 2006, 272, 198-210.	4.1	315
384	Synergistic effects in combined fouling of a loose nanofiltration membrane by colloidal materials and natural organic matter. Journal of Membrane Science, 2006, 278, 72-82.	4.1	174
385	Mechanisms of colloidal natural organic matter fouling in ultrafiltration. Journal of Membrane Science, 2006, 281, 716-725.	4.1	218
386	Aggregation and Deposition Kinetics of Fullerene (C60) Nanoparticles. Langmuir, 2006, 22, 10994-11001.	1.6	634
387	Relating Organic Fouling of Reverse Osmosis Membranes to Intermolecular Adhesion Forces. Environmental Science & Technology, 2006, 40, 980-987.	4.6	405
388	Desalination by ammoniaâ€“carbon dioxide forward osmosis: Influence of draw and feed solution concentrations on process performance. Journal of Membrane Science, 2006, 278, 114-123.	4.1	726
389	Forward osmosis: Principles, applications, and recent developments. Journal of Membrane Science, 2006, 281, 70-87.	4.1	2,089
390	Antifouling nanofiltration membranes for membrane bioreactors from self-assembling graft copolymers. Journal of Membrane Science, 2006, 285, 81-89.	4.1	226
391	Influence of concentrative and dilutive internal concentration polarization on flux behavior in forward osmosis. Journal of Membrane Science, 2006, 284, 237-247.	4.1	1,121
392	Role of electrostatic interactions in the retention of pharmaceutically active contaminants by a loose nanofiltration membrane. Journal of Membrane Science, 2006, 286, 52-59.	4.1	199
393	A Novel, Safe, and Environmentally Friendly Technology for Water Production Through Recovery of Rejected Thermal Energy From Nuclear Power Plants. , 2006, , 355.		1
394	The global challenge for adequate and safe water. Journal of Water Supply: Research and Technology - AQUA, 2006, 55, 3-10.	0.6	195
395	Combined influence of natural organic matter (NOM) and colloidal particles on nanofiltration membrane fouling. Journal of Membrane Science, 2005, 262, 27-41.	4.1	196
396	A novel ammoniaâ€”carbon dioxide forward (direct) osmosis desalination process. Desalination, 2005, 174, 1-11.	4.0	850

#	Article	IF	Citations
397	Monte Carlo simulation of colloidal membrane filtration: Model development with application to characterization of colloid phase transition. Journal of Membrane Science, 2005, 255, 291-305.	4.1	38
398	Influence of Growth Phase on Adhesion Kinetics of Escherichia coli D21g. Applied and Environmental Microbiology, 2005, 71, 3093-3099.	1.4	168
399	Nanofiltration of Hormone Mimicking Trace Organic Contaminants. Separation Science and Technology, 2005, 40, 2633-2649.	1.3	79
400	A Novel Method for Investigating the Influence of Feed Water Recovery on Colloidal and NOM Fouling of RO and NF Membranes. Environmental Engineering Science, 2005, 22, 496-509.	0.8	20
401	Relevance of Electrokinetic Theory for â€œSoftâ€•Particles to Bacterial Cells:â€‰ Implications for Bacterial Adhesion. Langmuir, 2005, 21, 6462-6472.	1.6	133
402	Reply to Comment on Breakdown of Colloid Filtration Theory:Â Role of the Secondary Energy Minimum and Surface Charge Heterogeneities. Langmuir, 2005, 21, 10896-10897.	1.6	10
403	Influence of Growth Phase on Bacterial Deposition:Â Interaction Mechanisms in Packed-Bed Column and Radial Stagnation Point Flow Systemsâ€. Environmental Science & Technology, 2005, 39, 6405-6411.	4.6	99
404	Pharmaceutical Retention Mechanisms by Nanofiltration Membranes. Environmental Science & Technology, 2005, 39, 7698-7705.	4.6	434
405	Spatial Distributions ofCryptosporidiumOocysts in Porous Media:Â Evidence for Dual Mode Deposition. Environmental Science & Technology, 2005, 39, 3620-3629.	4.6	116
406	Role of Surface Proteins in the Deposition Kinetics of Cryptosporidium parvum Oocysts. Langmuir, 2005, 21, 710-716.	1.6	78
407	Effect of Ferric Oxyhydroxide Grain Coatings on the Transport of Bacteriophage PRD1 andCryptosporidium parvumOocysts in Saturated Porous Mediaâ€. Environmental Science & Technology, 2005, 39, 6412-6419.	4.6	98
408	In honor of Charles R. O'Melia: Researcher, scholar, engineer, and educator | Guest Editors for the Charles R. O'Melia tribute issue. Environmental Science & Technology, 2005, 39, 352A-353A.	4.6	0
409	Response to Comment on â€œCorrelation Equation for Predicting Single-Collector Efficiency in Physicochemical Filtration in Saturated Porous Mediaâ€• Environmental Science & Technology, 2005, 39, 5496-5497.	4.6	3
410	Breakdown of Colloid Filtration Theory:Â Role of the Secondary Energy Minimum and Surface Charge Heterogeneities. Langmuir, 2005, 21, 841-852.	1.6	401
411	Natural organic matter fouling and chemical cleaning of nanofiltration membranes. Water Science and Technology: Water Supply, 2004, 4, 245-251.	1.0	11
412	The role of endocrine disrupters in water recycling: risk or mania?. Water Science and Technology, 2004, 50, 215-220.	1.2	21
413	Organic Fouling and Chemical Cleaning of Nanofiltration Membranes:Â Measurements and Mechanisms. Environmental Science & Technology, 2004, 38, 4683-4693.	4.6	700
414	Influence of Natural Organic Matter and Ionic Composition on the Kinetics and Structure of Hematite Colloid Aggregation:Â Implications to Iron Depletion in Estuaries. Langmuir, 2004, 20, 9000-9006.	1.6	217

#	Article	IF	Citations
415	Influence of colloidal fouling and feed water recovery on salt rejection of RO and NF membranes. Desalination, 2004, 160, 1-12.	4.0	131
416	Influence of colloidal fouling on rejection of trace organic contaminants by reverse osmosis. Journal of Membrane Science, 2004, 244, 215-226.	4.1	197
417	In situ monitoring techniques for concentration polarization and fouling phenomena in membrane filtration. Advances in Colloid and Interface Science, 2004, 107, 83-108.	7.0	174
418	Bacterial Adhesion and Transport in Porous Media:Â Role of the Secondary Energy Minimum. Environmental Science & Technology, 2004, 38, 1777-1785.	4.6	448
419	Adhesion Kinetics of ViableCryptosporidium parvumOocysts to Quartz Surfaces. Environmental Science & Technology, 2004, 38, 6839-6845.	4.6	71
420	Role of Cell Surface Lipopolysaccharides inEscherichia coliK12 Adhesion and Transport. Langmuir, 2004, 20, 7736-7746.	1.6	288
421	Deviation from the Classical Colloid Filtration Theory in the Presence of Repulsive DLVO Interactions. Langmuir, 2004, 20, 10818-10828.	1.6	372
422	Correlation Equation for Predicting Single-Collector Efficiency in Physicochemical Filtration in Saturated Porous Media. Environmental Science & Technology, 2004, 38, 529-536.	4.6	983
423	Transport ofCryptosporidiumOocysts in Porous Media:Â Role of Straining and Physicochemical Filtrationâ€. Environmental Science & Technology, 2004, 38, 5932-5938.	4.6	219
424	Removal of Natural Hormones by Nanofiltration Membranes:Â Measurement, Modeling, and Mechanisms. Environmental Science & Technology, 2004, 38, 1888-1896.	4.6	521
425	Colloid transport in a geochemically heterogeneous porous medium: aquifer tank experiment and modeling. Journal of Contaminant Hydrology, 2003, 65, 161-182.	1.6	46
426	Emergence of thermodynamic restriction and its implications for full-scale reverse osmosis processes. Desalination, 2003, 155, 213-228.	4.0	59
427	Effect of depletion interactions on transport of colloidal particles in porous media. Journal of Colloid and Interface Science, 2003, 262, 372-383.	5.0	20
428	Performance limitation of the full-scale reverse osmosis process. Journal of Membrane Science, 2003, 214, 239-244.	4.1	66
429	In situ monitoring techniques for concentration polarization and fouling phenomena in membrane filtration. Advances in Colloid and Interface Science, 2003, 107, 83-83.	7.0	0
430	Particle Deposition onto Solid Surfaces with Micropatterned Charge Heterogeneity:Â The â€œHydrodynamic Bumpâ€•Effect. Langmuir, 2003, 19, 6594-6597.	1.6	55
431	Interpreting Deposition Patterns of Microbial Particles in Laboratory-Scale Column Experiments. Environmental Science & Technology, 2003, 37, 616-623.	4.6	168
432	Cake-Enhanced Concentration Polarization:Â A New Fouling Mechanism for Salt-Rejecting Membranes. Environmental Science & Technology, 2003, 37, 5581-5588.	4.6	531

#	Article	IF	Citations
433	Effect of Membrane Surface Roughness on Colloidâ˜Membrane DLVO Interactions. Langmuir, 2003, 19, 4836-4847.	1.6	419
434	Control of Calcium Sulfate (Gypsum) Scale in Nanofiltration of Saline Agricultural Drainage Water. Environmental Engineering Science, 2002, 19, 387-397.	0.8	40
435	Mobilization of Natural Colloids from an Iron Oxide-Coated Sand Aquifer:Â Effect of pH and Ionic Strength. Environmental Science & Technology, 2002, 36, 314-322.	4.6	65
436	Micropatterning Microscopic Charge Heterogeneity on Flat Surfaces for Studying the Interaction between Colloidal Particles and Heterogeneously Charged Surfaces. Nano Letters, 2002, 2, 393-396.	4.5	44
437	Peer Reviewed: The Promise of Bank Filtration. Environmental Science & Technology, 2002, 36, 422A-428A.	4.6	224
438	Influence of Crossflow Membrane Filter Geometry and Shear Rate on Colloidal Fouling in Reverse Osmosis and Nanofiltration Separations. Environmental Engineering Science, 2002, 19, 357-372.	0.8	254
439	Membrane Separations in Aquatic Systems. Environmental Engineering Science, 2002, 19, 341-341.	0.8	17
440	Field and Laboratory Investigations of Inactivation of Viruses (PRD1 and MS2) Attached to Iron Oxide-Coated Quartz Sand. Environmental Science & Technology, 2002, 36, 2403-2413.	4.6	141
441	A Novel Asymmetric Clamping Cell for Measuring Streaming Potential of Flat Surfaces. Langmuir, 2002, 18, 2193-2198.	1.6	167
442	Virus transport in physically and geochemically heterogeneous subsurface porous media. Journal of Contaminant Hydrology, 2002, 57, 161-187.	1.6	89
443	Coupling between chemical and physical interactions in natural organic matter (NOM) fouling of nanofiltration membranes: implications for fouling control. Journal of Membrane Science, 2002, 203, 245-255.	4.1	360
444	Calcium sulfate (gypsum) scaling in nanofiltration of agricultural drainage water. Journal of Membrane Science, 2002, 205, 279-291.	4.1	129
445	Role of Charge (Donnan) Exclusion in Removal of Arsenic from Water by a Negatively Charged Porous Nanofiltration Membrane. Environmental Engineering Science, 2001, 18, 105-113.	0.8	232
446	Shear-Induced Reorganization of Deformable Molecular Assemblages:Â Monte Carlo Studies. Langmuir, 2001, 17, 552-561.	1.6	7
447	Sensitivity analysis and parameter identifiability for colloid transport in geochemically heterogeneous porous media. Water Resources Research, 2001, 37, 209-222.	1.7	44
448	Influence of membrane surface properties on initial rate of colloidal fouling of reverse osmosis and nanofiltration membranes. Journal of Membrane Science, 2001, 188, 115-128.	4.1	1,010
449	Role of spatial distribution of porous medium surface charge heterogeneity in colloid transport. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 191, 3-15.	2.3	89
450	Aggregation and deposition kinetics of mobile colloidal particles in natural porous media. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 191, 179-188.	2.3	112

#	Article	IF	Citations
451	Coupled model of concentration polarization and pore transport in crossflow nanofiltration. AICHE Journal, 2001, 47, 2733-2745.	1.8	108
452	A novel two-dimensional model for colloid transport in physically and geochemically heterogeneous porous media. Journal of Contaminant Hydrology, 2001, 49, 173-199.	1.6	52
453	Coupled Influence of Colloidal and Hydrodynamic Interactions on the RSA Dynamic Blocking Function for Particle Deposition onto Packed Spherical Collectors. Journal of Colloid and Interface Science, 2000, 229, 554-567.	5.0	49
454	Transport of Iron Oxide Colloids in Packed Quartz Sand Media: Monolayer and Multilayer Deposition. Journal of Colloid and Interface Science, 2000, 231, 32-41.	5.0	115
455	DLVO interaction energy between spheroidal particles and a flat surface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 165, 143-156.	2.3	93
456	The â€œShadow Effectâ€•in Colloid Transport and Deposition Dynamics in Granular Porous Media:Â Measurements and Mechanisms. Environmental Science & Technology, 2000, 34, 3681-3689.	4.6	153
457	Silica-Coated Titania and Zirconia Colloids for Subsurface Transport Field Experiments. Environmental Science & Technology, 2000, 34, 2000-2005.	4.6	49
458	Relative Insignificance of Mineral Grain Zeta Potential to Colloid Transport in Geochemically Heterogeneous Porous Media. Environmental Science & Technology, 2000, 34, 2143-2148.	4.6	245
459	Relating Nanofiltration Membrane Performance to Membrane Charge (Electrokinetic) Characteristics. Environmental Science & Technology, 2000, 34, 3710-3716.	4.6	591
460	Particulate and THM Precursor Removal with Ferric Chloride. Journal of Environmental Engineering, ASCE, 1999, 125, 1054-1061.	0.7	16
461	Concentration Polarization of Interacting Solute Particles in Cross-Flow Membrane Filtration. Journal of Colloid and Interface Science, 1999, 212, 81-99.	5.0	100
462	Mobile Subsurface Colloids and Their Role in Contaminant Transport. Advances in Agronomy, 1999, 66, 121-193.	2.4	531
463	Bacteriophage PRD1 and Silica Colloid Transport and Recovery in an Iron Oxide-Coated Sand Aquifer. Environmental Science & Technology, 1999, 33, 63-73.	4.6	199
464	Gravity-Induced Coagulation of Spherical Particles of Different Size and Density. Journal of Colloid and Interface Science, 1998, 197, 334-347.	5.0	16
465	Effect of Interparticle Electrostatic Double Layer Interactions on Permeate Flux Decline in Crossflow Membrane Filtration of Colloidal Suspensions: An Experimental Investigation. Journal of Colloid and Interface Science, 1998, 204, 77-86.	5.0	152
466	A novel approach for modeling concentration polarization in crossflow membrane filtration based on the equivalence of osmotic pressure model and filtration theory. Journal of Membrane Science, 1998, 145, 223-241.	4.1	131
467	Transport of in Situ Mobilized Colloidal Particles in Packed Soil Columns. Environmental Science & Technology, 1998, 32, 3562-3569.	4.6	219
468	DLVO Interaction between Rough Surfaces. Langmuir, 1998, 14, 3365-3375.	1.6	331

#	Article	IF	Citations
469	Removing particles and THM precursors by enhanced coagulation. Journal - American Water Works Association, 1998, 90, 139-150.	0.2	29
470	Arsenic removal by RO and NF membranes. Journal - American Water Works Association, 1997, 89, 102-114.	0.2	139
471	Arsenic Removal from Drinking Water during Coagulation. Journal of Environmental Engineering, ASCE, 1997, 123, 800-807.	0.7	297
472	Colloidal Fouling of Reverse Osmosis Membranes:Â Measurements and Fouling Mechanisms. Environmental Science & Technology, 1997, 31, 3654-3662.	4.6	307
473	Role of membrane surface morphology in colloidal fouling of cellulose acetate and composite aromatic polyamide reverse osmosis membranes. Journal of Membrane Science, 1997, 127, 101-109.	4.1	517
474	Chemical and physical aspects of natural organic matter (NOM) fouling of nanofiltration membranes. Journal of Membrane Science, 1997, 132, 159-181.	4.1	1,153
475	Surface Element Integration: A Novel Technique for Evaluation of DLVO Interaction between a Particle and a Flat Plate. Journal of Colloid and Interface Science, 1997, 193, 273-285.	5.0	316
476	Kinetics of Permeate Flux Decline in Crossflow Membrane Filtration of Colloidal Suspensions. Journal of Colloid and Interface Science, 1997, 196, 267-277.	5.0	129
477	Colloid Transport in Geochemically Heterogeneous Porous Media:Â Modeling and Measurements. Environmental Science & Technology, 1996, 30, 3284-3293.	4.6	349
478	Arsenic removal by ferric chloride. Journal - American Water Works Association, 1996, 88, 155-167.	0.2	310
479	Colloid mobilization and transport in groundwater. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 107, 1-56.	2.3	990
480	Effect of solution chemistry on the surface charge of polymeric reverse osmosis and nanofiltration membranes. Journal of Membrane Science, 1996, 119, 253-268.	4.1	849
481	Experimental techniques in particle deposition kinetics. , 1995, , 290-309.		1
482	Particle Deposition onto a Permeable Surface in Laminar Flow. Journal of Colloid and Interface Science, 1995, 173, 165-180.	5.0	123
483	Modelling of particle deposition onto ideal collectors. , 1995, , 113-156.		3
484	Theoretical predictions compared to experimental observations in particle deposition kinetics. , 1995, , 310-343.		1
485	Transport of colloidal materials in ground water. , 1995, , 361-375.		0
486	Experimental techniques for aggregation studies. , 1995, , 263-289.		0

#	Article	IF	Citations
487	Electrical properties of interfaces. , 1995, , 9-32.		7
488	Colloid Deposition Dynamics in Flow-Through Porous Media: Role of Electrolyte Concentration. Environmental Science & Technology, 1995, 29, 2963-2973.	4.6	172
489	Dynamics of Colloid Deposition in Porous Media: Blocking Based on Random Sequential Adsorption. Langmuir, 1995, 11, 801-812.	1.6	329
490	Theory of concentration polarization in crossflow filtration. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 3389.	1.7	288
491	Fouling of Reverse Osmosis Membranes by Aluminum Oxide Colloids. Journal of Environmental Engineering, ASCE, 1995, 121, 884-892.	0.7	83
492	Electrical properties of interfaces. , 1995, , 9-32.		3
493	Modelling of particle deposition onto ideal collectors. , 1995, , 113-156.		1
494	Experimental techniques for aggregation studies. , 1995, , 263-289.		0
495	Experimental techniques in particle deposition kinetics. , 1995, , 290-309.		1
496	Theoretical predictions compared to experimental observations in particle deposition kinetics. , 1995, , 310-343.		0
497	Transport of colloidal materials in ground water. , 1995, , 361-375.		0
498	Measuring the zeta (electrokinetic) potential of reverse osmosis membranes by a streaming potential analyzer. Desalination, 1994, 95, 269-286.	4.0	413
499	The search for a chlorine-resistant reverse osmosis membrane. Desalination, 1994, 95, 325-345.	4.0	310
500	Effect of Particle Size on the Kinetics of Particle Deposition under Attractive Double Layer Interactions. Journal of Colloid and Interface Science, 1994, 164, 190-199.	5.0	108
501	Transient Deposition of Colloidal Particles in Heterogeneous Porous Media. Journal of Colloid and Interface Science, 1994, 167, 301-313.	5.0	85
502	Kinetics of Colloid Deposition onto Heterogeneously Charged Surfaces in Porous Media. Environmental Science & Technology, 1994, 28, 1164-1171.	4.6	225
503	Dynamics of coagulation of kaolin particles with ferric chloride. Water Research, 1994, 28, 559-569.	5.3	106
504	Particle deposition on ideal collectors from dilute flowing suspensions: Mathematical formulation, numerical solution, and simulations. Separation and Purification Technology, 1994, 4, 186-212.	0.7	144

#	Article	IF	Citations
505	Dynamics of Coagulation of Clay Particles with Aluminum Sulfate. Journal of Environmental Engineering, ASCE, 1994, 120, 169-189.	0.7	28
506	The effect of particle density on collisions between sinking particles: implications for particle aggregation in the ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 1994, 41, 469-483.	0.6	50
507	Dynamics of colloid deposition in porous media: Modeling the role of retained particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1993, 73, 49-63.	2.3	119
508	Calculation of particle deposition rate under unfavourable particleâ€“surface interactions. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 3443-3452.	1.7	38
509	Dynamics of colloid deposition in porous media: modeling the role of retained particles. , 1993, , 49-63.		0
510	Deposition of Colloids in Porous Media. ACS Symposium Series, 1992, , 26-39.	0.5	3
511	Theoretical investigation of colloid separation from dilute aqueous suspensions by oppositely charged granular media. Separation and Purification Technology, 1992, 2, 2-12.	0.7	34
512	Predicting collision efficiencies of colloidal particles in porous media. Water Research, 1992, 26, 1-8.	5.3	133
513	Determination of absolute coagulation rate constants by multiangle light scattering. Journal of Colloid and Interface Science, 1992, 154, 1-7.	5.0	76
514	Deposition of Brownian particles in porous media: Modified boundary conditions for the sphere-in-cell model. Journal of Colloid and Interface Science, 1992, 153, 294-297.	5.0	23
515	Kinetics of capture of colloidal particles in packed beds under attractive double layer interactions. Journal of Colloid and Interface Science, 1991, 146, 337-352.	5.0	136
516	Discussion of â€œColloid Filtration in Fluidized Bedsâ€•by George Sprouse and Bruce E. Rittmann (March/April 1990, Vol. 116, No. 2). Journal of Environmental Engineering, ASCE, 1991, 117, 706-708.	0.7	1
517	Effect of electrolyte type on the electrophoretic mobility of polystyrene latex colloids. Colloids and Surfaces, 1990, 44, 165-178.	0.9	198
518	Indirect evidence for hydration forces in the deposition of polystyrene latex colloids on glass surfaces. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 1623.	1.7	46
519	Effect of particle size on collision efficiency in the deposition of Brownian particles with electrostatic energy barriers. Langmuir, 1990, 6, 1153-1163.	1.6	356
520	Kinetics of deposition of colloidal particles in porous media. Environmental Science & Technology, 1990, 24, 1528-1536.	4.6	470
521	Particle Filtration for Wastewater Irrigation. Journal of Irrigation and Drainage Engineering - ASCE, 1989, 115, 474-487.	0.6	50
522	Particle deposition onto solid surfaces with microscopic charge heterogeneity: the "bump effect". , 0, , .		0

#	Article	IF	Citations
523	Development of a Megasonic System for Cleaning Flat Panel Display. Solid State Phenomena, 0, 187, 181-184.	0.3	0