Matthias Wessling

List of Publications by Year
in descending order

595 papers	30,446 citations	5430 85 h-index	11946 139 g-index
608 all docs	608 docs citations	608 times ranked	24749 citing authors

#	Article	IF	Citations
1	Simulationâ€based guidance for improving CO2${m CO}_{2}$ reduction on silver gas diffusion electrodes. Electrochemical Science Advances, 2023, 3, .	1.2	13
2	Monolithic SiC supports with tailored hierarchical porosity for molecularly selective membranes and supported liquid-phase catalysis. Catalysis Today, 2022, 383, 44-54.	2.2	8
3	Porous PEDOT:PSS Particles and their Application as Tunable Cell Culture Substrate. Advanced Materials Technologies, 2022, 7, 2100836.	3.0	13
4	Threeâ€dimensional membranes for artificial lungs: Comparison of flowâ€induced hemolysis. Artificial Organs, 2022, 46, 412-426.	1.0	6
5	Rotating microstructured spinnerets produce helical ridge membranes to overcome mass transfer limitations. Journal of Membrane Science, 2022, 643, 119988.	4.1	8
6	Additive manufacturing of composite porosity mixer electrodes. Electrochemistry Communications, 2022, 134, 107176.	2.3	10
7	Open and dense hollow fiber nanofiltration membranes through a streamlined polyelectrolyte-based spinning process. Journal of Membrane Science, 2022, 644, 120100.	4.1	9
8	Two-level porosity electrodes from metal-polymer dispersions. Electrochemistry Communications, 2022, 135, 107205.	2.3	2
9	Why device design is crucial for membrane adsorbers. Journal of Chromatography Open, 2022, 2, 100029.	0.8	16
10	Linking the effect of temperature on adsorption from aqueous solution with solute dissociation. Journal of Hazardous Materials, 2022, 429, 128291.	6.5	6
11	Surface Charge Affecting Fluidâ€“Fluid Displacement at Pore Scale. Advanced Materials Interfaces, 2022, 9, .	1.9	5
12	Chemistry in a spinneretâ€”Polydopamine functionalized hollow fiber membranes. Journal of Membrane Science, 2022, 648, 120324.	4.1	11
13	In-Line Characterization of the Temperature-Responsive Behavior of Surface-Bound Microgel Coatings by QCM-D: A Novel Strategy for Protein Repellence Evaluation. ACS Applied Materials & Interfaces, 2022, 14, 10907-10916.	4.0	4
14	Fabrication, Flow Assembly, and Permeation of Microscopic Anyâ€Shape Particles. Small, 2022, 18, e2107508.	5.2	10
15	Evaluation of the membrane performance of ultra-smooth silicon organic coatings depending on the process energy density. Thin Solid Films, 2022, 748, 139169.	0.8	4
16	Single-step chitosan functionalized membranes for heparinization. Journal of Membrane Science, 2022, 655, 120567.	4.1	9
17	Rotation-in-a-Spinneret integrates static mixers inside hollow fiber membranes. Journal of Membrane Science, 2022, 656, 120599.	4.1	7
18	TPMS-based membrane lung with locally-modified permeabilities for optimal flow distribution. Scientific Reports, 2022, 12, 7160.	1.6	5

#	Article	IF	Citations
19	Direct Electrosynthesis of 2-Butanone from Fermentation Supernatant. ACS Sustainable Chemistry and Engineering, 2022, 10, 6483-6492.	3.2	3
20	Organosilica coating layer prevents aging of a polymer with intrinsic microporosity. Plasma Processes and Polymers, 2022, 19, .	1.6	2
21	One-pot synthesized, Fe-incorporated self-standing carbons with a hierarchical porosity remove carbamazepine and sulfamethoxazole through heterogeneous electro-Fenton. Chemical Engineering Journal, 2022, 446, 137006.	6.6	12
22	Towards synergistic oscillations in enzymatically active hydrogel spheres. Soft Matter, 2021, 17, 592-599.	1.2	8
23	Designing tubular composite membranes of polyelectrolyte multilayer on ceramic supports with nanofiltration and reverse osmosis transport properties. Journal of Membrane Science, 2021, 620, 118851.	4.1	18
24	Hydrogel membranes made from crosslinked microgel multilayers with tunable density. Journal of Membrane Science, 2021, 620, 118912.	4.1	18
25	On the organic solvent free preparation of ultrafiltration and nanofiltration membranes using polyelectrolyte complexation in an all aqueous phase inversion process. Journal of Membrane Science, 2021, 618, 118632.	4.1	44
26	Ultra-low temperature waterâ€“gas shift reaction catalyzed by homogeneous Ru-complexes in a membrane reactor â€“ membrane development and proof of concept. Catalysis Science and Technology, 2021, 11, 1558-1570.	2.1	9
27	Polyelectrolyte Complex Tubular Membranes via a Salt Dilution Induced Phase Inversion Process. Advanced Engineering Materials, 2021, 23, 2001401.	1.6	18
28	CNT Microtubes with Entrapped Fe₃O₄ Nanoparticles Remove Micropollutants through a Heterogeneous Electroâ€Fenton Process at Neutral pH. Advanced Sustainable Systems, 2021, 5, 2100001.	2.7	20
29	In-situ investigation of wetting patterns in polymeric multibore membranes via magnetic resonance imaging. Journal of Membrane Science, 2021, 622, 119026.	4.1	4
30	Efficient Electrocatalytic N₂ Reduction on Three-Phase Interface Coupled in a Three-Compartment Flow Reactor for the Ambient NH₃ Synthesis. ACS Applied Materials & Interfaces, 2021, 13, 21411-21425.	4.0	29
31	A scalable bubbleâ€free membrane aerator for biosurfactant production. Biotechnology and Bioengineering, 2021, 118, 3545-3558.	1.7	13
32	3Dâ€Printed Bioreactor with Integrated Impedance Spectroscopy for Cell Barrier Monitoring. Advanced Materials Technologies, 2021, 6, 2100009.	3.0	7
33	Recycling and Separation of Homogeneous Catalyst from Aqueous Multicomponent Mixture by Organic Solvent Nanofiltration. Membranes, 2021, 11, 423.	1.4	4
34	Wetâ€Spun PEDOT/CNT Composite Hollow Fibers as Flexible Electrodes for H₂O₂ Production**. ChemElectroChem, 2021, 8, 1665-1673.	1.7	7
35	Reconstruction of Ultraâ€thin Alveolarâ€capillary Basement Membrane Mimics. Advanced Biology, 2021, 5, e2000427.	1.4	9
36	Particle movements provoke avalanche-like compaction in soft colloid filter cakes. Scientific Reports, 2021, 11, 12836.	1.6	5

#	Article	IF	Citations
37	Polymeric Membranes With Sufficient Thermoâ€Mechanical Stability to Deploy Temperature Enhanced Backwash. Chemie-Ingenieur-Technik, 2021, 93, 1417-1422.	0.4	0
38	Mitigating Water Crossover by Crosslinked Coating of Cationâ€Exchange Membranes for Brine Concentration. Advanced Materials Technologies, 2021, 6, 2100202.	3.0	6
39	Tollens Reactionâ€Based Integration of Thin Film Wall Electrodes into Microfluidic PDMS Devices. Advanced Materials Technologies, 2021, 6, 2100250.	3.0	1
40	Combining Manning's theory and the ionic conductivity experimental approach to characterize selectivity of cation exchange membranes. Journal of Membrane Science, 2021, 629, 119263.	4.1	15
41	Biocompatible Micronâ€Scale Silk Fibers Fabricated by Microfluidic Wet Spinning. Advanced Healthcare Materials, 2021, 10, e2100898.	3.9	19
42	Metal Recovery from Multi-elementary Electroplating Wastewater Using Passion Fruit Powder. Journal of Sustainable Metallurgy, 2021, 7, 1091-1101.	1.1	5
43	In-line Monitoring of Microgel Synthesis: Flow versus Batch Reactor. Organic Process Research and Development, 2021, 25, 2039-2051.	1.3	7
44	Freestanding Nitrogenâ€Doped Carbons with Hierarchical Porosity for Environmental Applications: A Green Templating Route with Bioâ€Based Precursors. Global Challenges, 2021, 5, 2100062.	1.8	1
45	Wetting-Induced Polyelectrolyte Pore Bridging. Membranes, 2021, 11, 671.	1.4	0
46	Structure and gas separation properties of ultra-smooth PE-CVD silicon organic coated composite membranes. Surface and Coatings Technology, 2021, 421, 127338.	2.2	11
47	Structure-dependent gas transfer performance of 3D-membranes for artificial membrane lungs. Journal of Membrane Science, 2021, 634, 119371.	4.1	16
48	Automated tangential-flow diafiltration device. HardwareX, 2021, 10, e00200.	1.1	4
49	Mapping Cell Viability Quantitatively and Independently From Cell Density in 3D Gels Noninvasively. IEEE Transactions on Biomedical Engineering, 2021, 68, 2940-2947.	2.5	0
50	Charge distribution in polyelectrolyte multilayer nanofiltration membranes affects ion separation and scaling propensity. Journal of Membrane Science, 2021, 636, 119533.	4.1	15
51	How does porosity heterogeneity affect the transport properties of multibore filtration membranes?. Journal of Membrane Science, 2021, 636, 119520.	4.1	5
52	A mini-module with built-in spacers for high-throughput ultrafiltration. Journal of Membrane Science, 2021, 637, 119602.	4.1	12
53	Tuning the excess charge and inverting the salt rejection hierarchy of polyelectrolyte multilayer membranes. Journal of Membrane Science, 2021, 639, 119636.	4.1	15
54	Direct 3D observation and unraveling of electroconvection phenomena during concentration polarization at ion-exchange membranes. Journal of Membrane Science, 2021, 640, 119846.	4.1	15

#	Article	IF	Citations
55	Templating the morphology of soft microgel assemblies using a nanolithographic 3D-printed membrane. Scientific Reports, 2021, 11, 812.	1.6	8
56	Platelet count reduction during in vitro membrane oxygenation affects platelet activation, neutrophil extracellular trap formation and clot stability, but does not prevent clotting. Perfusion (United Kingdom), 2021, , 026765912198923.	0.5	10
57	Short and spaced twisted tapes to mitigate fouling in tubular membranes. Journal of Membrane Science, 2020, 595, 117426.	4.1	18
58	Metallized hollow fiber membranes for electrochemical fouling control. Journal of Membrane Science, 2020, 594, 117397.	4.1	19
59	Tracking homogeneous reactions during electrodialysis of organic acids via EIS. Journal of Membrane Science, 2020, 595, 117592.	4.1	26
60	Monodisperse Porous Microspheres with pH-Responsive Permeability and Reactivity. ACS Applied Polymer Materials, 2020, 2, 932-938.	2.0	7
61	Soft temperature-responsive microgels of complex shape in stop-flow lithography. Lab on A Chip, 2020, 20, 285-295.	3.1	34
62	Coâ€generation of Ammonia and H 2 from H 2 O Vapor and N 2 Using a Membrane Electrode Assembly. Chemie-Ingenieur-Technik, 2020, 92, 62-69.	0.4	2
63	Ion mobility and partition determine the counter-ion selectivity of ion exchange membranes. Journal of Membrane Science, 2020, 597, 117645.	4.1	49
64	Tubular hollow fibre electrodes for CO2 reduction made from copper aluminum alloy with drastically increased intrinsic porosity. Electrochemistry Communications, 2020, 111, 106645.	2.3	20
65	The hydrothermal solution for self-sustaining drinking water purification at point of use. Water Research, 2020, 170, 115338.	5.3	8
66	CO₂/CH₄ Pure- and Mixed-Gas Dilation and Sorption in Thin (â^¼500 nm) and Ultrathin (â^¼50 nm) Polymers of Intrinsic Microporosity. Macromolecules, 2020, 53, 8765-8774.	2.2	16
67	Process model for high salinity flow-electrode capacitive deionization processes with ion-exchange membranes. Journal of Membrane Science, 2020, 616, 118614.	4.1	13
68	How is mixed-gas permeation through poly(1-trimethylsilyl-1-propyne) membranes influenced by elevated temperatures?. Journal of Membrane Science, 2020, 615, 118430.	4.1	8
69	Can PDMS membranes separate aldehydes and alkenes at high temperatures?. Journal of Membrane Science, 2020, 615, 118334.	4.1	8
70	Continuous gas-phase hydroformylation of but-1-ene in a membrane reactor by supported liquid-phase (SLP) catalysis. Green Chemistry, 2020, 22, 5691-5700.	4.6	26
71	Wetâ€Spinning of Biocompatible Coreâ€“Shell Polyelectrolyte Complex Fibers for Tissue Engineering. Advanced Materials Interfaces, 2020, 7, 2000849.	1.9	21
72	Direct membrane heating for temperature induced fouling prevention. Journal of Membrane Science, 2020, 612, 118431.	4.1	5

#	Article	IF	Citations
73	About a Membrane with Microfluidic Porous-Wall Channels of Cylindrical Shape for Droplet Formation. Langmuir, 2020, 36, 9935-9943.	1.6	2
74	Unravelling colloid filter cake motions in membrane cleaning procedures. Scientific Reports, 2020, 10, 20043.	1.6	9
75	Stimuli-Responsive Zwitterionic Coreâ€“Shell Microgels for Antifouling Surface Coatings. ACS Applied Materials & Interfaces, 2020, 12, 58223-58238.	4.0	33
76	Trypsinâ€Free Cultivation of 3D Miniâ€Tissues in an Adaptive Membrane Bioreactor. Advanced Biology, 2020, 4, e2000081.	3.0	2
77	Microtubular Gas Diffusion Electrode Based on Rutheniumâ€Carbon Nanotubes for Ambient Electrochemical Nitrogen Reduction to Ammonia. ChemElectroChem, 2020, 7, 4679-4684.	1.7	17
78	Multi-scale membrane process optimization with high-fidelity ion transport models through machine learning. Journal of Membrane Science, 2020, 608, 118208.	4.1	38
79	Cell barrier characterization in transwell inserts by electrical impedance spectroscopy. Biosensors and Bioelectronics, 2020, 165, 112345.	5.3	23
80	Early-stage evaluation of emerging CO₂utilization technologies at low technology readiness levels. Green Chemistry, 2020, 22, 3842-3859.	4.6	71
81	Catalytically Active Hollow Fiber Membranes with Enzymeâ€Embedded Metalâ€“Organic Framework Coating. Angewandte Chemie, 2020, 132, 16181-16187.	1.6	6
82	Catalytically Active Hollow Fiber Membranes with Enzymeâ€Embedded Metalâ€“Organic Framework Coating. Angewandte Chemie - International Edition, 2020, 59, 16047-16053.	7.2	32
83	Modeling hindered diffusion of antibodies in agarose beads considering pore size reduction due to adsorption. Journal of Chromatography A, 2020, 1626, 461319.	1.8	8
84	Steady-state electrochemical synthesis of HKUST-1 with polarity reversal. Microporous and Mesoporous Materials, 2020, 303, 110218.	2.2	19
85	Flow-electrode capacitive deionization enables continuous and energy-efficient brine concentration. Desalination, 2020, 490, 114453.	4.0	37
86	A comprehensive mathematical model of water splitting in bipolar membranes: Impact of the spatial distribution of fixed charges and catalyst at bipolar junction. Journal of Membrane Science, 2020, 603, 118010.	4.1	62
87	Enhancing the separation properties of plasma polymerized membranes on polydimethylsiloxane substrates by adjusting the auxiliary gas in the PECVD processes. Journal Physics D: Applied Physics, 2020, 53, 445301.	1.3	10
88	Atomic layer deposition for efficient oxygen evolution reaction at Pt/Ir catalyst layers. Beilstein Journal of Nanotechnology, 2020, 11, 952-959.	1.5	6
89	What are the microscopic events during membrane backwashing?. Journal of Membrane Science, 2020, 602, 117886.	4.1	21
90	Chemistry in a spinneret â€“ Formation of hollow fiber membranes with a cross-linked polyelectrolyte separation layer. Journal of Membrane Science, 2020, 612, 118325.	4.1	19

#	Article	IF	Citations
91	Freestanding PAC/CNT microtubes remove sulfamethoxazole from water through a temperature-assisted cyclic process. Journal of Hazardous Materials, 2020, 392, 122133.	6.5	13
92	Hydrotropic Solutions Enable Homogeneous Fenton Treatment of Lignin. Industrial & Engineering Chemistry Research, 2020, 59, 4229-4238.	1.8	5
93	Rational Design of Ion Exchange Membrane Material Properties Limits the Crossover of CO₂ Reduction Products in Artificial Photosynthesis Devices. ACS Applied Materials & Interfaces, 2020, 12, 12030-12042.	4.0	31
94	Simultaneous rational design of ion separation membranes and processes. Journal of Membrane Science, 2020, 600, 117860.	4.1	29
95	On the permselectivity of cation-exchange membranes bearing an ion selective coating. Journal of Membrane Science, 2020, 600, 117854.	4.1	36
96	Modular modeling of electrochemical reactors: Comparison of CO2-electolyzers. Computers and Chemical Engineering, 2020, 139, 106890.	2.0	19
97	Assessment of Layer-By-Layer Modified Nanofiltration Membrane Stability in Phosphoric Acid. Membranes, 2020, 10, 61.	1.4	12
98	Unraveling the effect of charge distribution in a polyelectrolyte multilayer nanofiltration membrane on its ion transport properties. Journal of Membrane Science, 2020, 611, 118045.	4.1	33
99	Membrane-electrode assemblies for flow-electrode capacitive deionization. Journal of Membrane Science, 2020, 605, 118095.	4.1	25
100	Combining electrochemical hydrogen separation and temperature vacuum swing adsorption for the separation of N2, H2 and CO2. International Journal of Hydrogen Energy, 2020, 45, 9811-9820.	3.8	6
101	On the Resistances of a Slurry Electrode Vanadium Redox Flow Battery. ChemElectroChem, 2020, 7, 2165-2172.	1.7	12
102	A Tubular Electrochemical Reactor for Slurry Electrodes. ChemElectroChem, 2020, 7, 2665-2671.	1.7	11
103	Noninvasive Quantification of Cell Density in Three-Dimensional Gels by MRI. IEEE Transactions on Biomedical Engineering, 2019, 66, 821-830.	2.5	3
104	Layer-by-layer membrane modification allows scandium recovery by nanofiltration. Environmental Science: Water Research and Technology, 2019, 5, 1683-1688.	1.2	24
105	Homogeneous Catalyst Recycling and Separation of a Multicomponent Mixture Using Organic Solvent Nanofiltration. Chemical Engineering and Technology, 2019, 42, 2187-2194.	0.9	9
106	Charged microgels adsorbed on porous membranes - A study of their mobility and molecular retention. Journal of Membrane Science, 2019, 588, 117190.	4.1	12
107	Lithography: Two-Photon Vertical-Flow Lithography for Microtube Synthesis (Small 33/2019). Small, 2019, 15, 1970177.	5.2	7
108	Multi-walled carbon nanotube-based composite materials as catalyst support for waterâ€“gas shift and hydroformylation reactions. RSC Advances, 2019, 9, 27732-27742.	1.7	16

#	Article	IF	Citations
109	Unraveling charge transport in carbon flow-electrodes: Performance prediction for desalination applications. Carbon, 2019, 145, 507-520.	5.4	71
110	Optimizing hybrid membrane-pressure swing adsorption processes for biogenic hydrogen recovery. Chemical Engineering Journal, 2019, 364, 452-461.	6.6	35
111	Chilled membranesâ€"Efficient gas permeation at sub-ambient temperatures. Journal of Membrane Science, 2019, 576, 171-181.	4.1	6
112	Improved phosphoric acid recovery from sewage sludge ash using layer-by-layer modified membranes. Journal of Membrane Science, 2019, 587, 117162.	4.1	51
113	Twoâ€Photon Verticalâ€Flow Lithography for Microtube Synthesis. Small, 2019, 15, e1901356.	5.2	24
114	Shell and lumen side flow and pressure communication during permeation and filtration in a multibore polymer membrane module. Journal of Membrane Science, 2019, 584, 254-267.	4.1	15
115	Chemistry in a spinneret â€" Sinusoidal-shaped composite hollow fiber membranes. Journal of Membrane Science, 2019, 585, 115-125.	4.1	22
116	Converting two wastes to value. Nature Energy, 2019, 4, 440-441.	19.8	8
117	The electrolyte matters: Stable systems for high rate electrochemical CO2 reduction. Journal of CO2 Utilization, 2019, 32, 202-213.	3.3	68
118	Cell Encapsulation in Soft, Anisometric Poly(ethylene) Glycol Microgels Using a Novel Radicalâ€Free Microfluidic System. Small, 2019, 15, e1900692.	5.2	39
119	Electrical swing adsorption on functionalized hollow fibers. Chemical Engineering Journal, 2019, 371, 107-117.	6.6	29
120	Preparation and characterization of crosslinked poly(vinylimidazolium) anion exchange membranes for artificial photosynthesis. Journal of Materials Chemistry A, 2019, 7, 23818-23829.	5.2	21
121	On charge percolation in slurry electrodes used in vanadium redox flow batteries. Electrochemistry Communications, 2019, 101, 104-108.	2.3	34
122	Phosphorus recovery in an acidic environment using layer-by-layer modified membranes. Journal of Membrane Science, 2019, 582, 254-263.	4.1	40
123	Lewis acidic water as a new carrier for facilitating CO₂ transport. Journal of Materials Chemistry A, 2019, 7, 5190-5194.	5.2	6
124	High-Throughput Production of Micrometer Sized Double Emulsions and Microgel Capsules in Parallelized 3D Printed Microfluidic Devices. Polymers, 2019, 11, 1887.	2.0	15
125	Direct Observation of Deformation in Microgel Filtration. Scientific Reports, 2019, 9, 18998.	1.6	20
126	Effect of the 3D Swelling of Microgels on Their 2D Phase Behavior at the Liquidâ€"Liquid Interface. Langmuir, 2019, 35, 16780-16792.	1.6	47

#	Article	IF	Citations
127	Can the variance in membrane performance influence the design of organic solvent nanofiltration processes?. Journal of Membrane Science, 2019, 575, 217-228.	4.1	28
128	Aqueous-Phase Temperature Swing Adsorption for Pesticide Removal. Environmental Science & Technology, 2019, 53, 919-927.	4.6	21
129	Aerating static mixers prevent fouling. Journal of Membrane Science, 2019, 570-571, 537-546.	4.1	21
130	Carbon nanotube silica composite hollow fibers impregnated with polyethylenimine for CO2 capture. Chemical Engineering Journal, 2019, 359, 476-484.	6.6	40
131	Beyond the catalyst: How electrode and reactor design determine the product spectrum during electrochemical CO2 reduction. Chemical Engineering Journal, 2019, 364, 89-101.	6.6	160
132	Influence of flow alterations on bacteria retention during microfiltration. Journal of Membrane Science, 2019, 575, 147-159.	4.1	7
133	2D Patterned Ionâ€Exchange Membranes Induce Electroconvection. Advanced Materials Interfaces, 2019, 6, 1801309.	1.9	40
134	Indirect 3D Printed Electrode Mixers. ChemElectroChem, 2019, 6, 378-382.	1.7	20
135	Methanol production via direct carbon dioxide hydrogenation using hydrogen from photocatalytic water splitting: Process development and techno-economic analysis. Journal of Cleaner Production, 2019, 208, 1446-1458.	4.6	58
136	Carboxylic Acids Production via Electrochemical Depolymerization of Lignin. ChemElectroChem, 2019, 6, 1434-1442.	1.7	38
137	Electrochemical Membrane Reactor Modeling for Lignin Depolymerization. ACS Sustainable Chemistry and Engineering, 2019, 7, 2091-2099.	3.2	9
138	Rational design of ion separation membranes. Journal of Membrane Science, 2019, 569, 209-219.	4.1	46
139	Fouling minimization at membranes having a 3D surface topology with microgels as soft model colloids. Journal of Membrane Science, 2019, 569, 7-16.	4.1	28
140	Chemistry in a spinneret â€“ Composite hollow fiber membranes in a single step process. Journal of Membrane Science, 2018, 554, 48-58.	4.1	27
141	3D MRI velocimetry of non-transparent 3D-printed staggered herringbone mixers. Chemical Engineering Journal, 2018, 343, 54-60.	6.6	24
142	3D-printed conductive static mixers enable all-vanadium redox flow battery using slurry electrodes. Journal of Power Sources, 2018, 379, 228-233.	4.0	44
143	What are the microscopic events of colloidal membrane fouling?. Journal of Membrane Science, 2018, 553, 90-98.	4.1	45
144	Corrosion of metal electrodes in deep eutectic solvents. Electrochemistry Communications, 2018, 90, 101-105.	2.3	32

#	Article	IF	Citations
145	3D nanofabrication inside rapid prototyped microfluidic channels showcased by wet-spinning of single micrometre fibres. Lab on A Chip, 2018, 18, 1341-1348.	3.1	55
146	Continuous hyperpolarization with parahydrogen in a membrane reactor. Journal of Magnetic Resonance, 2018, 291, 8-13.	1.2	39
147	Tuning the ion selectivity of porous poly(2,5-benzimidazole) membranes by phase separation for all vanadium redox flow batteries. Journal of Membrane Science, 2018, 556, 164-177.	4.1	34
148	Closing the cycle: Phosphorus removal and recovery from diluted effluents using acid resistive membranes. Chemical Engineering Journal, 2018, 346, 640-648.	6.6	47
149	Fouling mitigation in tubular membranes by 3D-printed turbulence promoters. Journal of Membrane Science, 2018, 554, 156-163.	4.1	68
150	Flow and filtration imaging of single use sterile membrane filters. Journal of Membrane Science, 2018, 552, 274-285.	4.1	15
151	Unravelling Electrochemical Lignin Depolymerization. ACS Sustainable Chemistry and Engineering, 2018, 6, 7565-7573.	3.2	29
152	Monolayer microgel composite membranes with tunable permeability. Journal of Membrane Science, 2018, 555, 473-482.	4.1	33
153	Selectivity of ion exchange membranes: A review. Journal of Membrane Science, 2018, 555, 429-454.	4.1	722
154	Optimized Hollow Fiber Sorbents and Pressure Swing Adsorption Process for H₂ Recovery. Industrial & Engineering Chemistry Research, 2018, 57, 5093-5105.	1.8	19
155	3D-printed rotating spinnerets create membranes with a twist. Journal of Membrane Science, 2018, 555, 7-19.	4.1	39
156	High-Pressure CO₂ Sorption in Polymers of Intrinsic Microporosity under Ultrathin Film Confinement. ACS Applied Materials & Interfaces, 2018, 10, 11369-11376.	4.0	23
157	In-situ non-invasive imaging of liquid-immersed thin film composite membranes. Journal of Membrane Science, 2018, 546, 206-214.	4.1	12
158	Modeling continuous flow-electrode capacitive deionization processes with ion-exchange membranes. Journal of Membrane Science, 2018, 546, 188-196.	4.1	60
159	High capacity polyethylenimine impregnated microtubes made of carbon nanotubes for CO2 capture. Carbon, 2018, 126, 338-345.	5.4	89
160	Feed flow patterns of combined Rayleigh-BÃ©nard convection and membrane permeation. Journal of Membrane Science, 2018, 549, 60-66.	4.1	9
161	Interplay between physical cleaning, membrane pore size and fluid rheology during the evolution of fouling in membrane bioreactors. Water Research, 2018, 147, 393-402.	5.3	29
162	From beech wood to itaconic acid: case study on biorefinery process integration. Biotechnology for Biofuels, 2018, 11, 279.	6.2	52

#	Article	IF	Citations
163	Microfluidic cell sorting: Towards improved biocompatibility of extracorporeal lung assist devices. Scientific Reports, 2018, 8, 8031.	1.6	21
164	Adsorption of carbon dioxide on solid amine-functionalized sorbents: A dual kinetic model. Separation and Purification Technology, 2018, 204, 13-20.	3.9	29
165	Double layer mixed matrix membrane adsorbers improving capacity and safety hemodialysis. IOP Conference Series: Materials Science and Engineering, 2018, 352, 012048.	0.3	7
166	From Batch to Continuous Precipitation Polymerization of Thermoresponsive Microgels. ACS Applied Materials & Interfaces, 2018, 10, 24799-24806.	4.0	61
167	Parallel online determination of ethylene release rate by Shaken Parsley cell cultures using a modified RAMOS device. BMC Plant Biology, 2018, 18, 101.	1.6	14
168	On the rejection and reversibility of fouling in ultrafiltration as assessed by hydraulic impedance spectroscopy. Journal of Membrane Science, 2018, 564, 532-542.	4.1	10
169	Membrane based direct pH parametric pumping. Journal of Membrane Science, 2018, 558, 78-85.	4.1	6
170	Temperature Enhanced Backwash. Water Research, 2018, 142, 18-25.	5.3	10
171	Human Co- and Triple-Culture Model of the Alveolar-Capillary Barrier on a Basement Membrane Mimic. Tissue Engineering - Part C: Methods, 2018, 24, 495-503.	1.1	25
172	Energy Recovery and Process Design in Continuous Flowâ€“Electrode Capacitive Deionization Processes. ACS Sustainable Chemistry and Engineering, 2018, 6, 13007-13015.	3.2	81
173	Preliminary Study on the Application of Temperature Swing Adsorption in Aqueous Phase for Pesticide Removal. IOP Conference Series: Earth and Environmental Science, 2018, 159, 012013.	0.2	2
174	Basement Membrane Mimics of Biofunctionalized Nanofibers for a Bipolar-Cultured Human Primary Alveolar-Capillary Barrier Model. Biomacromolecules, 2017, 18, 719-727.	2.6	32
175	Systematic optimization of H 2 recovery from water splitting process using membranes and N 2 diluent. International Journal of Hydrogen Energy, 2017, 42, 6000-6011.	3.8	13
176	Hydrophobic membrane with nanopores developed for efficient energy storage. Membrane Technology, 2017, 2017, 8.	0.5	0
177	Tunable permeability and selectivity: Heatable inorganic porous hollow fiber membrane with a thermo-responsive microgel coating. Journal of Membrane Science, 2017, 539, 451-457.	4.1	55
178	Hydraulic impedance spectroscopy tracks colloidal matter accumulation during ultrafiltration. Journal of Membrane Science, 2017, 535, 294-300.	4.1	5
179	Sinusoidal shaped hollow fibers for enhanced mass transfer. Journal of Membrane Science, 2017, 533, 302-308.	4.1	28
180	Flow-Electrode Capacitive Deionization for Double Displacement Reactions. ACS Sustainable Chemistry and Engineering, 2017, 5, 3906-3912.	3.2	39

#	Article	IF	Citations
181	Mixed-Penetrant Sorption in Ultrathin Films of Polymer of Intrinsic Microporosity PIM-1. Journal of Physical Chemistry B, 2017, 121, 10190-10197.	1.2	14
182	3Dâ€Printed Electrodes with Improved Mass Transport Properties. ChemElectroChem, 2017, 4, 3309-3313.	1.7	40
183	Emulsion electro-oxidation of kraft lignin. Green Chemistry, 2017, 19, 4778-4784.	4.6	52
184	Effect of high salt concentration on phosphorus recovery from sewage sludge and dewatering properties. Journal of Water Process Engineering, 2017, 19, 277-282.	2.6	12
185	CO2 aided H2 recovery from water splitting processes. International Journal of Hydrogen Energy, 2017, 42, 21793-21805.	3.8	10
186	Helium recovery using membrane processes. Separation and Purification Technology, 2017, 189, 433-440.	3.9	40
187	Project house water: a novel interdisciplinary framework to assess the environmental and socioeconomic consequences of flood-related impacts. Environmental Sciences Europe, 2017, 29, 23.	2.6	9
188	Membrane impedance porometry. Journal of Membrane Science, 2017, 542, 352-366.	4.1	8
189	How Do Organic Vapors Swell Ultrathin Films of Polymer of Intrinsic Microporosity PIM-1?. Journal of Physical Chemistry B, 2017, 121, 7210-7220.	1.2	22
190	Laserless Additive Manufacturing of Membrane Electrode Assemblies. ChemElectroChem, 2017, 4, 2760-2763.	1.7	6
191	Modeling heat and mass transfer in cross-counterflow enthalpy exchangers. Journal of Membrane Science, 2017, 525, 68-76.	4.1	16
192	Droplet-based liquidâ€“liquid extraction inside a porous capillary. Chemical Engineering Journal, 2017, 307, 143-149.	6.6	27
193	Liquid/liquid extraction of biomass-derived lignin from lignocellulosic pretreatments. Green Chemistry, 2017, 19, 93-97.	4.6	29
194	Towards a Biohybrid Lung: Endothelial Cells Promote Oxygen Transfer through Gas Permeable Membranes. BioMed Research International, 2017, 2017, 1-8.	0.9	13
195	Ultraâ€High Proton/Vanadium Selectivity for Hydrophobic Polymer Membranes with Intrinsic Nanopores for Redox Flow Battery. Advanced Energy Materials, 2016, 6, 1600517.	10.2	123
196	On the Dynamical Regimes of Pattern-Accelerated Electroconvection. Scientific Reports, 2016, 6, 22505.	1.6	120
197	An integrated electrochemical process to convert lignin to value-added products under mild conditions. Green Chemistry, 2016, 18, 4999-5007.	4.6	63
198	Ultrafiltration of charge-stabilized dispersions at low salinity. Soft Matter, 2016, 12, 4638-4653.	1.2	16

#	Article	IF	Citations
199	Regenerable polymer/ceramic hybrid nanofiltration membrane based on polyelectrolyte assembly by layer-by-layer technique. Journal of Membrane Science, 2016, 520, 924-932.	4.1	67
200	Online monitoring of transient L/L phase separation using locally resolved impedance measurements. Chemical Engineering Research and Design, 2016, 115, 251-259.	2.7	0
201	Mechanistic modeling of the dielectric impedance of layered membrane architectures. Journal of Membrane Science, 2016, 520, 29-36.	4.1	28
202	Electrochemical depolymerisation of lignin in a deep eutectic solvent. Green Chemistry, 2016, 18, 6021-6028.	4.6	116
203	How Much Do Ultrathin Polymers with Intrinsic Microporosity Swell in Liquids?. Journal of Physical Chemistry B, 2016, 120, 10403-10410.	1.2	27
204	Electrochemical impedance spectroscopy fingerprints the ion selectivity of microgel functionalized ion-exchange membranes. Electrochemistry Communications, 2016, 72, 113-117.	2.3	24
205	Microfiltration of deformable microgels. Soft Matter, 2016, 12, 6512-6517.	1.2	23
206	Coupling between Buoyancy Forces and Electroconvective Instability near Ion-Selective Surfaces. Physical Review Letters, 2016, 116, 194501.	2.9	50
207	Dual-Charged Hollow Fiber Membranes for Low-Pressure Nanofiltration Based on Polyelectrolyte Complexes: One-Step Fabrication with Tailored Functionalities. ACS Applied Materials & Interfaces, 2016, 8, 19145-19157.	4.0	56
208	Chaotic Flow Dynamics Investigated by 3D MRI and CFD Analysis. Chemie-Ingenieur-Technik, 2016, 88, 1280-1280.	0.4	1
209	Mikrogel-Kompositmembranen mit schaltbarer PermeabilitÃt. Chemie-Ingenieur-Technik, 2016, 88, 1323-1323.	0.4	0
210	StrÃ¶mungsprofil von Ã¼berlagerter Permeation und Rayleigh-BÃ©nard-Konvektion. Chemie-Ingenieur-Technik, 2016, 88, 1332-1332.	0.4	0
211	Additive Fertigung elektrochemischer Reaktoren und Elektroden. Chemie-Ingenieur-Technik, 2016, 88, 1210-1210.	0.4	0
212	NÃchste Generation von Produkten und Prozessen. Chemie-Ingenieur-Technik, 2016, 88, 1183-1183.	0.4	0
213	Bipolar Electrodialysis for Purification of Fermentation-Based Products. Chemie-Ingenieur-Technik, 2016, 88, 1403-1403.	0.4	0
214	Identifizierung optimaler Membraneigenschaften und -konfigurationen fÃ¼r die Gastrennung. Chemie-Ingenieur-Technik, 2016, 88, 1384-1385.	0.4	0
215	Ion Tranport through Electrolyte/Polyelectrolyte Architectures. Chemie-Ingenieur-Technik, 2016, 88, 1298-1298.	0.4	0
216	Dynamic Modelling of Membrane-based pH Parametric Pumping. Chemie-Ingenieur-Technik, 2016, 88, 1332-1332.	0.4	0

#	Article	IF	Citations
217	Microfluidic colloid filtration. Scientific Reports, 2016, 6, 22376.	1.6	50
218	Direktes Spinnverfahren zur Herstellung von Komposit-Hohlfasermembranen. Chemie-Ingenieur-Technik, 2016, 88, 1323-1324.	0.4	0
219	Erfassung des Koaleszenz- und Sedimentationsverhaltens von trÃ¼ben Systemen in einer standardisierten Absetzzelle. Chemie-Ingenieur-Technik, 2016, 88, 1289-1289.	0.4	0
220	Membranprozesse zur Heliumgewinnung. Chemie-Ingenieur-Technik, 2016, 88, 1379-1379.	0.4	0
221	Hohlfasern aus KohlenstoffnanorÃ¶hrchen mit immobilisiertem Polyethylenimin zur CO2-Trennung. Chemie-Ingenieur-Technik, 2016, 88, 1340-1340.	0.4	0
222	Additive Manufacturing in Fluid Process Engineering. Chemie-Ingenieur-Technik, 2016, 88, 535-552.	0.4	34
223	Spacer enhanced heat and mass transfer in membrane-based enthalpy exchangers. Journal of Membrane Science, 2016, 520, 566-573.	4.1	21
224	On-line monitoring of cake layer structure during fouling on porous membranes by in situ electrical impedance analysis. Journal of Membrane Science, 2016, 503, 188-198.	4.1	27
225	Precise tuning of salt retention of backwashable polyelectrolyte multilayer hollow fiber nanofiltration membranes. Journal of Membrane Science, 2016, 499, 396-405.	4.1	67
226	Porous poly(benzimidazole) membrane for all vanadium redox flow battery. Journal of Power Sources, 2016, 312, 45-54.	4.0	135
227	Rejection modeling of ceramic membranes in organic solvent nanofiltration. Journal of Membrane Science, 2016, 510, 191-200.	4.1	21
228	On individual resistances of selective skin, porous support and diffusion boundary layer in water vapor permeation. Journal of Membrane Science, 2016, 507, 179-187.	4.1	19
229	Rope coiling spinning of curled and meandering hollow-fiber membranes. Journal of Membrane Science, 2016, 506, 86-94.	4.1	23
230	Tubular carbon nanotube-based gas diffusion electrode removes persistent organic pollutants by a cyclic adsorption â€“ Electro-Fenton process. Journal of Hazardous Materials, 2016, 307, 1-6.	6.5	97
231	Solvent dependent solute solubility governs retention in silicone based organic solvent nanofiltration. Journal of Membrane Science, 2016, 497, 47-54.	4.1	30
232	Overcoming lignin heterogeneity: reliably characterizing the cleavage of technical lignin. Green Chemistry, 2016, 18, 531-540.	4.6	42
233	Optimization of membrane based nitrogen removal from natural gas. Journal of Membrane Science, 2016, 498, 291-301.	4.1	63
234	Droplet formation and shrinking in aqueous two-phase systems using a membrane emulsification method. Biomicrofluidics, 2015, 9, 044122.	1.2	8

#	Article	IF	Citations
235	Immobilization of myoglobin in sodium alginate composite membranes. Polimeros, 2015, 25, 265-270.	0.2	1
236	High-Throughput Generation of Emulsions and Microgels in Parallelized Microfluidic Drop-Makers Prepared by Rapid Prototyping. ACS Applied Materials & Interfaces, 2015, 7, 12635-12638.	4.0	99
237	Efficient gasâ€“liquid contact using microfluidic membrane devices with staggered herringbone mixers. Lab on A Chip, 2015, 15, 3132-3137.	3.1	22
238	A membrane stirrer for product recovery and substrate feeding. Biotechnology and Bioengineering, 2015, 112, 331-338.	1.7	12
239	Print your membrane: Rapid prototyping of complex 3D-PDMS membranes via a sacrificial resist. Journal of Membrane Science, 2015, 478, 12-18.	4.1	90
240	Drying of supercritical carbon dioxide with membrane processes. Journal of Supercritical Fluids, 2015, 98, 137-146.	1.6	10
241	Gasâ€“Gas Separation byÂMembranes. , 2015, , 557-584.		6
242	Single module flow-electrode capacitive deionization for continuous water desalination. Electrochemistry Communications, 2015, 60, 34-37.	2.3	117
243	Ion transport through electrolyte/polyelectrolyte multi-layers. Scientific Reports, 2015, 5, 11583.	1.6	57
244	Highly permeable and mechanically robust silicon carbide hollow fiber membranes. Journal of Membrane Science, 2015, 475, 480-487.	4.1	49
245	Proton-exchange membranes based on sulfonated poly(ether ether ketone)/polyaniline blends for all- and air-vanadium redox flow battery applications. Journal of Energy Storage, 2015, 1, 65-71.	3.9	34
246	Dynamic process simulation and process control of biogas permeation processes. Journal of Membrane Science, 2015, 484, 107-118.	4.1	12
247	Estimation of the structure dependent performance of 3-D rapid prototyped membranes. Chemical Engineering Journal, 2015, 273, 438-445.	6.6	102
248	Enzymatically Active Ultrathin Pepsin Membranes. Angewandte Chemie - International Edition, 2015, 54, 5910-5914.	7.2	24
249	Bioactive Gyroid Scaffolds Formed by Sacrificial Templating of Nanocellulose and Nanochitin Hydrogels as Instructive Platforms for Biomimetic Tissue Engineering. Advanced Materials, 2015, 27, 2989-2995.	11.1	195
250	Water vapor permeance: The interplay of feed and permeate activity. Journal of Membrane Science, 2015, 485, 69-78.	4.1	34
251	Controlled depolymerization of lignin in an electrochemical membrane reactor. Electrochemistry Communications, 2015, 61, 49-52.	2.3	62
252	Galvanic deposition of Rh and Ru on randomly structured Ti felts for the electrochemical NH₃synthesis. Physical Chemistry Chemical Physics, 2015, 17, 3768-3782.	1.3	131

#	Article	IF	Citations
253	Sorption Behavior of Compressed CO₂ and CH₄ on Ultrathin Hybrid Poly(POSS-imide) Layers. ACS Applied Materials & Interfaces, 2015, 7, 26977-26988.	4.0	20
254	A membrane electrode assembly for the electrochemical synthesis of hydrocarbons from CO2(g) and H2O(g). Electrochemistry Communications, 2015, 50, 64-68.	2.3	32
255	Do silicone- based membranes permeate or reject salts?. Desalination, 2015, 357, 121-130.	4.0	1
256	Characterization of hollow fiber membranes by impedance spectroscopy. Journal of Membrane Science, 2015, 473, 318-326.	4.1	28
257	In situ ellipsometry studies on swelling of thin polymer films: A review. Progress in Polymer Science, 2015, 42, 42-78.	11.8	127
258	Structural optimization of membrane-based biogas upgrading processes. Journal of Membrane Science, 2015, 474, 1-10.	4.1	85
259	Quasi-continuous fermentation in a reverse-flow diafiltration bioreactor. Biochemical Engineering Journal, 2014, 91, 265-275.	1.8	1
260	Temperaturgesteuerte Wasserfiltration mit Mikrogelâ€modifizierten Hohlfasermembranen. Angewandte Chemie, 2014, 126, 5814-5818.	1.6	9
261	Mixed Matrix Membranes: A New Asset for Blood Purification Therapies. Blood Purification, 2014, 37, 1-3.	0.9	33
262	Development of multilayer constructs for tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 106-119.	1.3	10
263	Microtubes made of carbon nanotubes. Carbon, 2014, 68, 818-820.	5.4	23
264	Development of thin palladium membranes supported on large porous 310L tubes for a steam reformer operated with gas-to-liquid fuel. Chemical Engineering and Processing: Process Intensification, 2014, 81, 13-23.	1.8	19
265	Helically microstructured spacers improve mass transfer and fractionation selectivity in ultrafiltration. Journal of Membrane Science, 2014, 463, 41-48.	4.1	61
266	Electrodialysis of itaconic acid: A short-cut model quantifying the electrical resistance in the overlimiting current density region. Journal of Membrane Science, 2014, 453, 275-281.	4.1	24
267	Multicomponent mass transport in organic solvent nanofiltration with solvent mixtures. Journal of Membrane Science, 2014, 466, 361-369.	4.1	26
268	Effects of time, temperature, and pressure in the vicinity of the glass transition of a swollen polymer. Journal of Membrane Science, 2014, 464, 80-85.	4.1	14
269	Temperatureâ€Modulated Water Filtration Using Microgelâ€Functionalized Hollowâ€Fiber Membranes. Angewandte Chemie - International Edition, 2014, 53, 5706-5710.	7.2	106
270	Layer-by-Layer Modification of Cation Exchange Membranes Controls Ion Selectivity and Water Splitting. ACS Applied Materials & Interfaces, 2014, 6, 1843-1854.	4.0	207

#	Article	IF	Citations
271	Sieving of Hot Gases by Hyper-Cross-Linked Nanoscale-Hybrid Membranes. Journal of the American Chemical Society, 2014, 136, 330-335.	6.6	56
272	Towards a carbon independent and CO₂-free electrochemical membrane process for NH₃ synthesis. Physical Chemistry Chemical Physics, 2014, 16, 6129-6138.	1.3	56
273	Hybrid membrane with TiO 2 based bio-catalytic nanoparticle suspension system for the degradation of bisphenol-A. Bioresource Technology, 2014, 169, 475-483.	4.8	73
274	The effect of NaCl and glucose concentration on retentions for nanofiltration membranes processing concentrated solutions. Separation and Purification Technology, 2014, 134, 46-57.	3.9	54
275	A microtubular all CNT gas diffusion electrode. Electrochemistry Communications, 2014, 46, 44-47.	2.3	27
276	Tubular macro-porous titanium membranes. Journal of Membrane Science, 2014, 461, 139-145.	4.1	36
277	In situ product recovery of singleâ€chain antibodies in a membrane bioreactor. Biotechnology and Bioengineering, 2014, 111, 1566-1576.	1.7	8
278	Hybrid Polyhedral Oligomeric Silsesquioxanesâ€“Imides with Tailored Intercage Spacing for Sieving of Hot Gases. Chemistry of Materials, 2014, 26, 3660-3664.	3.2	28
279	Effective medium approximations for penetrant sorption in glassy polymers accounting for excess free volume. Polymer, 2014, 55, 1737-1744.	1.8	18
280	Polymer Relaxations in Thin Films in the Vicinity of a Penetrant- or Temperature-Induced Glass Transition. Macromolecules, 2014, 47, 3654-3660.	2.2	21
281	Nanofiltration for the recovery of phosphorus â€” Development of a mass transport model. Desalination, 2014, 346, 70-78.	4.0	47
282	Batch mode and continuous desalination of water using flowing carbon deionization (FCDI) technology. Electrochemistry Communications, 2014, 46, 152-156.	2.3	137
283	Print your own membrane: direct rapid prototyping of polydimethylsiloxane. Lab on A Chip, 2014, 14, 2610.	3.1	124
284	On the droplet formation in hollow-fiber emulsification. Journal of Membrane Science, 2014, 467, 109-115.	4.1	13
285	In situ cell retention of a <scp>CHO</scp> culture by a reverseâ€flow diafiltration membrane bioreactor. Biotechnology Progress, 2014, 30, 1348-1355.	1.3	3
286	Nanometer-thick lateral polyelectrolyte micropatterns induce macrosopic electro-osmotic chaotic fluid instabilities. Scientific Reports, 2014, 4, 4294.	1.6	43
287	Membrane processes in biorefinery applications. Journal of Membrane Science, 2013, 444, 285-317.	4.1	198
288	On negative retentions in organic solvent nanofiltration. Journal of Membrane Science, 2013, 447, 57-65.	4.1	57

#	Article	IF	Citations
289	Relaxation induced optical anisotropy during dynamic overshoot swelling of zwitterionic polymer films. Thin Solid Films, 2013, 545, 320-326.	0.8	12
290	Membrane-based recovery of glucose from enzymatic hydrolysis of ionic liquid pretreated cellulose. Bioresource Technology, 2013, 149, 58-64.	4.8	54
291	How to determine the correct sample volume by gravimetric sorption measurements. Adsorption, 2013, 19, 1117-1125.	1.4	23
292	Mixed matrix hollow fiber membranes for removal of protein-bound toxins from human plasma. Biomaterials, 2013, 34, 7819-7828.	5.7	124
293	Catalytic Polyelectrolyte Multilayers at the Bipolar Membrane Interface. ACS Applied Materials & Interfaces, 2013, 5, 10445-10455.	4.0	56
294	Conjugated polymer particles: towards self-assembling organic photonics. Proceedings of SPIE, 2013, , .	0.8	1
295	Enzymatic Conversion in Ion-Exchange Mixed Matrix Hollow Fiber Membranes. Industrial & Engineering Chemistry Research, 2013, 52, 8635-8644.	1.8	8
296	Modeling Gas Permeation by Linking Nonideal Effects. Industrial & Engineering Chemistry Research, 2013, 52, 1079-1088.	1.8	59
297	Overcoming the drawbacks of microsieves with micromeshes for in situ product recovery. Journal of Membrane Science, 2013, 436, 16-27.	4.1	9
298	n-Hexane induced swelling of thin PDMS films under non-equilibrium nanofiltration permeation conditions, resolved by spectroscopic ellipsometry. Journal of Membrane Science, 2013, 437, 313-323.	4.1	40
299	Microstructured spacers for submerged membrane filtration systems. Journal of Membrane Science, 2013, 446, 189-200.	4.1	55
300	Temperature-induced transition of the diffusion mechanism of n-hexane in ultra-thin polystyrene films, resolved by in-situ Spectroscopic Ellipsometry. Polymer, 2013, 54, 341-348.	1.8	45
301	Corrugated round fibers to improve cell adhesion and proliferation in tissue engineering scaffolds. Acta Biomaterialia, 2013, 9, 6928-6935.	4.1	23
302	Continuous production and recovery of itaconic acid in a membrane bioreactor. Bioresource Technology, 2013, 137, 179-187.	4.8	48
303	Challenges and advances in the field of self-assembled membranes. Chemical Society Reviews, 2013, 42, 6578.	18.7	96
304	n-Hexane induced swelling of thin PDMS films under non-equilibrium nanofiltration permeation conditions, resolved by spectroscopic ellipsometry. Journal of Membrane Science, 2013, 431, 233-243.	4.1	24
305	Transforming biogas into biomethane using membrane technology. Renewable and Sustainable Energy Reviews, 2013, 17, 199-212.	8.2	225
306	New crosslinking method of polyamideâ€“imide membranes for potential application in harsh polar aprotic solvents. Separation and Purification Technology, 2013, 102, 142-146.	3.9	48

#	Article	IF	Citations
307	Techno-economic Analysis of Membrane-Based Argon Recovery in a Silicon Carbide Process. Industrial & Engineering Chemistry Research, 2013, 52, 10460-10466.	1.8	13
308	Techno-economic Analysis of Hybrid Processes for Biogas Upgrading. Industrial & Engineering Chemistry Research, 2013, 52, 16929-16938.	1.8	85
309	On the Design of a 4-End Spiral-Wound L/L Extraction Membrane Module. Industrial & Engineering Chemistry Research, 2013, 52, 1004-1014.	1.8	17
310	Correction for Unadkat et al., An algorithm-based topographical biomaterials library to instruct cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5731-5731.	3.3	1
311	â€žNext Generation Processes and Productsâ€¡. Chemie-Ingenieur-Technik, 2013, 85, 1159-1159.	0.4	0
312	Limitations, improvements and alternatives of the silt density index. Desalination and Water Treatment, 2013, 51, 1104-1113.	1.0	11
313	Probing the Surface Swelling in Ultraâ€Thin Supported Polystyrene Films During Case II Diffusion of nâ€Hexane. Macromolecular Chemistry and Physics, 2013, 214, 2480-2488.	1.1	24
314	Correction for Unadkat et al., An algorithm-based topographical biomaterials library to instruct cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5905-5905.	3.3	6
315	Optimizing Argon Recovery: Membrane Separation of Carbon Monoxide at High Concentrations via the Water Gas Shift. Industrial & Engineering Chemistry Research, 2012, 51, 12463-12470.	1.8	15
316	A microgrooved membrane based gasâ€“liquid contactor. Microfluidics and Nanofluidics, 2012, 13, 499-509.	1.0	12
317	Characterization of antibacterial polyethersulfone membranes using the respiration activity monitoring system (RAMOS). Water Research, 2012, 46, 5401-5409.	5.3	23
318	Structured Membranes. Procedia Engineering, 2012, 44, 316-317.	1.2	0
319	Influence of geometrical and operational parameters on the performance of porous catalytic membrane reactors. Chemical Engineering Journal, 2012, 207-208, 814-821.	6.6	24
320	iPOSS Nano Ultra-thin Hybrid Polyhedral Silsesquioxane-polyamide Films with Potentially Unlimited Dimensions. Procedia Engineering, 2012, 44, 1209.	1.2	0
321	Ultra-thin hybrid polyhedral silsesquioxaneâ€“polyamide films with potentially unlimited 2D dimensions. Journal of Materials Chemistry, 2012, 22, 14835.	6.7	52
322	Limitations for transferring lab-scale microfiltration results to large-scale membrane bioreactor (MBR) processes. Separation and Purification Technology, 2012, 95, 202-215.	3.9	11
323	Water hammer reduces fouling during natural water ultrafiltration. Water Research, 2012, 46, 1113-1120.	5.3	11
324	Modeling of gasâ€“liquid reactions in porous membrane microreactors. Journal of Membrane Science, 2012, 419-420, 57-64.	4.1	12

#	Article	IF	Citations
325	Porous membrane structures as stationary phase for capillary electrochromatography. Electrophoresis, 2012, 33, 2892-2895.	1.3	1
326	Reverse-flow diafiltration for continuous in situ product recovery. Journal of Membrane Science, 2012, 421-422, 39-50.	4.1	18
327	Ultrafiltration Membranes Modified using the Layer-by-Layer Assembly of Polyelectrolytes for Enhanced Performance. Procedia Engineering, 2012, 44, 1624-1625.	1.2	1
328	A Generic Method for Inorganic Porous Hollow Fibers Preparation with Shrinkage-controlled Small Radial Dimensions. Procedia Engineering, 2012, 44, 644-645.	1.2	0
329	Spectroscopic Ellipsometry Analysis of a Thin Film Composite Membrane Consisting of Polysulfone on a Porous Î±-Alumina Support. ACS Applied Materials & Interfaces, 2012, 4, 935-943.	4.0	50
330	An Adaptive Selfâ€Healing Ionic Liquid Nanocomposite Membrane for Olefinâ€Paraffin Separations. Advanced Materials, 2012, 24, 4306-4310.	11.1	41
331	A novel approach for blood purification: Mixed-matrix membranes combining diffusion and adsorption in one step. Acta Biomaterialia, 2012, 8, 2279-2287.	4.1	108
332	Using SDI, SDI+ and MFI to evaluate fouling in a UF/RO desalination pilot plant. Desalination, 2012, 285, 153-162.	4.0	31
333	â€œChemistry in a spinneretâ€•to fabricate hollow fibers for organic solvent filtration. Separation and Purification Technology, 2012, 86, 183-189.	3.9	38
334	Siloxane removal using siliconeâ€“rubber membranes. Separation and Purification Technology, 2012, 89, 234-244.	3.9	33
335	In situ product recovery: Submerged membranes vs. external loop membranes. Journal of Membrane Science, 2012, 394-395, 1-36.	4.1	89
336	Important factors influencing molecular weight cut-off determination of membranes in organic solvents. Journal of Membrane Science, 2012, 390-391, 211-217.	4.1	36
337	Simple purification of ionic liquid solvents by nanofiltration in biorefining of lignocellulosic substrates. Journal of Membrane Science, 2012, 405-406, 1-10.	4.1	42
338	Towards a generic method for inorganic porous hollow fibers preparation with shrinkage-controlled small radial dimensions, applied to Al2O3, Ni, SiC, stainless steel, and YSZ. Journal of Membrane Science, 2012, 407-408, 155-163.	4.1	41
339	New cross-linked PVA based polymer electrolyte membranes for alkaline fuel cells. Journal of Membrane Science, 2012, 409-410, 191-199.	4.1	101
340	Hierarchically Structured Assembly of Polymer Microsieves, made by a Combination of Phase Separation Micromolding and Floatâ€Casting. Advanced Materials, 2012, 24, 1551-1557.	11.1	34
341	Microsieves: Hierarchically Structured Assembly of Polymer Microsieves, made by a Combination of Phase Separation Micromolding and Floatâ€Casting (Adv. Mater. 12/2012). Advanced Materials, 2012, 24, 1498-1498.	11.1	2
342	Fabrication of cell container arrays with overlaid surface topographies. Biomedical Microdevices, 2012, 14, 95-107.	1.4	40

#	Article	IF	Citations
343	Ionic liquid silver salt complexes for propene/propane separation. Physical Chemistry Chemical Physics, 2011, 13, 725-731.	1.3	35
344	Fouling Behavior of Microstructured Hollow Fiber Membranes in Dead-End Filtrations: Critical Flux Determination and NMR Imaging of Particle Deposition. Langmuir, 2011, 27, 1643-1652.	1.6	60
345	Fouling behavior of microstructured hollow fiber membranes in submerged and aerated filtrations. Water Research, 2011, 45, 1865-1871.	5.3	37
346	Chapter 7. Membrane Gas Separation Processes for Post-combustion CO2 Capture. , 2011, , 196-214.		3
347	Inovatividade, envolvimento, atitude e experiÃªncia na adoÃ§Ã£o da compra on-line. RAE Revista De Administracao De Empresas, 2011, 51, 568-584.	0.1	11
348	Sulfonated poly(ether ether ketone) based composite membranes for nanofiltration of acidic and alkaline media. Journal of Membrane Science, 2011, 381, 81-89.	4.1	79
349	Effect of testing conditions and filtration mechanisms on SDI. Journal of Membrane Science, 2011, 381, 142-151.	4.1	33
350	Carbon nanofibers in catalytic membrane microreactors. Journal of Membrane Science, 2011, 381, 244-250.	4.1	27
351	On the isolation of single acidic amino acids for biorefinery applications using electrodialysis. Journal of Membrane Science, 2011, 384, 166-175.	4.1	39
352	CFD simulation of single- and multi-phase flows through submerged membrane units with irregular fiber arrangement. Journal of Membrane Science, 2011, 384, 184-197.	4.1	46
353	The influence of membrane properties on the Silt Density Index. Journal of Membrane Science, 2011, 384, 205-218.	4.1	40
354	Porous Photocatalytic Membrane Microreactor (P2M2): A new reactor concept for photochemistry. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 225, 36-41.	2.0	61
355	Porous stainless steel hollow fibers with shrinkage-controlled small radial dimensions. Scripta Materialia, 2011, 65, 25-28.	2.6	27
356	Tailoring of free standing microchannels structures via microtemplating. Materials Research Bulletin, 2011, 46, 505-511.	2.7	3
357	SDI normalization and alternatives. Desalination, 2011, 279, 390-403.	4.0	15
358	A polyelectrolyte membrane-based vanadium/air redox flow battery. Electrochemistry Communications, 2011, 13, 751-754.	2.3	54
359	Tailoring the surface charge of an ultrafiltration hollow fiber by addition of a polyanion to the coagulation bore liquid. Journal of Membrane Science, 2011, 369, 59-67.	4.1	17
360	Porous stainless steel hollow fiber membranes via dryâ€“wet spinning. Journal of Membrane Science, 2011, 370, 124-130.	4.1	71

#	Article	IF	Citations
361	Anion exchange membranes for alkaline fuel cells: A review. Journal of Membrane Science, 2011, 377, 1-35.	4.1	1,486
362	Highly hydrophilic, rubbery membranes for CO2 capture and dehydration of flue gas. International Journal of Greenhouse Gas Control, 2011, 5, 26-36.	2.3	83
363	Porous ceramic mesoreactors: A new approach for gasâ€“liquid contacting in multiphase microreaction technology. Chemical Engineering Journal, 2011, 169, 239-246.	6.6	48
364	Solvent-resistant P84-based mixed matrix membrane adsorbers. Separation and Purification Technology, 2011, 80, 306-314.	3.9	8
365	Thermoforming of Filmâ€Based Biomedical Microdevices. Advanced Materials, 2011, 23, 1311-1329.	11.1	98
366	Integration of hollow fiber membranes improves nutrient supply in three-dimensional tissue constructs. Acta Biomaterialia, 2011, 7, 3312-3324.	4.1	48
367	Silt Density Index and Modified Fouling Index relation, and effect of pressure, temperature and membrane resistance. Desalination, 2011, 273, 48-56.	4.0	46
368	Pushing the limits of block copolymer membranes for CO2 separation. Journal of Membrane Science, 2011, 378, 479-484.	4.1	97
369	On the effects of plasticization in CO2/light gas separation using polymeric solubility selective membranes. Journal of Membrane Science, 2011, 367, 33-44.	4.1	97
370	Visual characterization of fouling with bidisperse solution. Journal of Membrane Science, 2011, 368, 110-115.	4.1	15
371	Hollow fiber ultrafiltration membranes with microstructured inner skin. Journal of Membrane Science, 2011, 369, 221-227.	4.1	50
372	Chemistry in a spinneretâ€”On the interplay of crosslinking and phase inversion during spinning of novel hollow fiber membranes. Journal of Membrane Science, 2011, 369, 308-318.	4.1	42
373	NMR imaging of local cumulative permeate flux and local cake growth in submerged microfiltration processes. Journal of Membrane Science, 2011, 371, 52-64.	4.1	52
374	Development of poly(l-lactic acid) hollow fiber membranes for artificial vasculature in tissue engineering scaffolds. Journal of Membrane Science, 2011, 371, 117-126.	4.1	46
375	Composite capillary membrane for solvent resistant nanofiltration. Journal of Membrane Science, 2011, 372, 182-190.	4.1	50
376	Fouling behavior of microstructured hollow fibers in cross-flow filtrations: Critical flux determination and direct visual observation of particle deposition. Journal of Membrane Science, 2011, 372, 210-218.	4.1	47
377	Effect of pH on the performance of polyamide/polyacrylonitrile based thin film composite membranes. Journal of Membrane Science, 2011, 372, 228-238.	4.1	124
378	Geometrical influence on mixing in helical porous membrane microcontactors. Journal of Membrane Science, 2011, 378, 351-358.	4.1	41

#	Article	IF	Citations
379	Model to Design Multilayer Tissue Engineering Scaffolds. Macromolecular Symposia, 2011, 309-310, 84-92.	0.4	2
380	An algorithm-based topographical biomaterials library to instruct cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16565-16570.	3.3	355
381	On image pre-processing for PIV of single- and two-phase flows over reflecting objects. Experiments in Fluids, 2010, 49, 525-530.	1.1	28
382	A facile method to fabricate poly(l-lactide) nano-fibrous morphologies by phase inversion. Acta Biomaterialia, 2010, 6, 2477-2483.	4.1	30
383	Tuning of mass transport properties of multi-block copolymers for CO2 capture applications. Journal of Membrane Science, 2010, 359, 54-63.	4.1	66
384	Micro-patterned Nafion membranes for direct methanol fuel cell applications. Journal of Membrane Science, 2010, 349, 231-236.	4.1	35
385	Membrane with integrated spacer. Journal of Membrane Science, 2010, 360, 185-189.	4.1	84
386	Particle deposition and biofilm formation on microstructured membranes. Journal of Membrane Science, 2010, 364, 43-51.	4.1	37
387	Highly Selective Amino Acid Salt Solutions as Absorption Liquid for CO₂ Capture in Gasâ€“Liquid Membrane Contactors. ChemSusChem, 2010, 3, 939-947.	3.6	26
388	Synthesis and properties of hydrophilic segmented block copolymers based on poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382	1.3	7
389	Surface texturing inside ceramic macro/micro channels. Journal of the European Ceramic Society, 2010, 30, 1345-1350.	2.8	1
390	Transport limitations in ion exchange membranes at low salt concentrations. Journal of Membrane Science, 2010, 346, 163-171.	4.1	283
391	CO2 permeation properties of poly(ethylene oxide)-based segmented block copolymers. Journal of Membrane Science, 2010, 346, 194-201.	4.1	78
392	Microstructured hollow fibers for ultrafiltration. Journal of Membrane Science, 2010, 347, 32-41.	4.1	78
393	Polymeric microsieves via phase separation microfabrication: Process and design optimization. Journal of Membrane Science, 2010, 347, 93-100.	4.1	34
394	Ion conductive spacers for increased power generation in reverse electrodialysis. Journal of Membrane Science, 2010, 347, 101-107.	4.1	174
395	Shrinkage effects during polymer phase separation on microfabricated molds. Journal of Membrane Science, 2010, 347, 141-149.	4.1	29
396	On the resistances of membrane, diffusion boundary layer and double layer in ion exchange membrane transport. Journal of Membrane Science, 2010, 349, 369-379.	4.1	296

#	Article	IF	Citations
397	Poly(ethylene glycol) and poly(dimethyl siloxane): Combining their advantages into efficient CO2 gas separation membranes. Journal of Membrane Science, 2010, 352, 126-135.	4.1	247
398	How do polymerized room-temperature ionic liquid membranes plasticize during high pressure CO2 permeation?. Journal of Membrane Science, 2010, 360, 202-209.	4.1	79
399	Use of Particle Imaging Velocimetry to measure liquid velocity profiles in liquid and liquid/gas flows through spacer filled channels. Journal of Membrane Science, 2010, 362, 143-153.	4.1	41
400	A method for characterizing membranes during nanofiltration at extreme pH. Journal of Membrane Science, 2010, 363, 188-194.	4.1	59
401	Tailoring the interface layer of the bipolar membrane. Journal of Membrane Science, 2010, 365, 389-398.	4.1	57
402	CO2 sorption and transport behavior of ODPA-based polyetherimide polymer films. Polymer, 2010, 51, 3907-3917.	1.8	58
403	A microfluidic membrane chip for in situ fouling characterization. Journal of Membrane Science, 2010, 346, 202-207.	4.1	36
404	Coiled fiber membrane chromatography. Journal of Membrane Science, 2010, 346, 327-334.	4.1	8
405	Influence of membrane properties on fouling in submerged membrane bioreactors. Journal of Membrane Science, 2010, 348, 66-74.	4.1	133
406	Ceramic microfluidic monoliths by ice templating. Microporous and Mesoporous Materials, 2010, 134, 216-219.	2.2	25
407	Kinetics of CO₂Absorption in Aqueous Sarcosine Salt Solutions: Influence of Concentration, Temperature, and CO₂Loading. Industrial & Engineering Chemistry Research, 2010, 49, 9693-9702.	1.8	72
408	Insights into the role of material surface topography and wettability on cell-material interactions. Soft Matter, 2010, 6, 4377.	1.2	90
409	Evaporation-Triggered Wetting Transition for Water Droplets upon Hydrophobic Microstructures. Physical Review Letters, 2010, 104, 116102.	2.9	187
410	Block Copolymer Derived Membranes for Sustained Carbon Dioxideâ˜Methane Separations. Industrial & Engineering Chemistry Research, 2010, 49, 12051-12059.	1.8	8
411	Subambient Temperature CO₂ and Light Gas Permeation Through Segmented Block Copolymers with Tailored Soft Phase. ACS Applied Materials & Interfaces, 2010, 2, 551-560.	4.0	51
412	CO₂Nucleation in Membrane Spacer Channels Remove Biofilms and Fouling Deposits. Industrial & Engineering Chemistry Research, 2010, 49, 10034-10039.	1.8	28
413	Quantifying effective slip length over micropatterned hydrophobic surfaces. Physics of Fluids, 2009, 21, .	1.6	162
414	High-throughput screening of cell-surface topographic interactions. , 2009, , .		0

#	Article	IF	Citations
415	Influence of Pyrolysis Parameters on the Performance of CMSM. International Journal of Chemical Engineering, 2009, 2009, 1-7.	1.4	3
416	Designing porosity and topography of poly(1,3-trimethylene carbonate) scaffolds. Acta Biomaterialia, 2009, 5, 3281-3294.	4.1	36
417	Impregnated membranes for direct methanol fuel cells at high methanol concentrations. Journal of Membrane Science, 2009, 328, 127-133.	4.1	21
418	Bubbles in spacers: Direct observation of bubble behavior in spacer filled membrane channels. Journal of Membrane Science, 2009, 333, 38-44.	4.1	34
419	An improved flux-step method to determine the critical flux and the critical flux for irreversibility in a membrane bioreactor. Journal of Membrane Science, 2009, 332, 24-29.	4.1	133
420	Mixed water vapor/gas transport through the rubbery polymer PEBAXÂ® 1074. Journal of Membrane Science, 2009, 338, 11-16.	4.1	119
421	Unraveling ultrafiltration of polysaccharides with flow field flow fractionation. Journal of Membrane Science, 2009, 338, 67-74.	4.1	19
422	A novel method for the fabrication of freestanding PZT features on substrates. Journal of the European Ceramic Society, 2009, 29, 3227-3233.	2.8	0
423	High permeable PTMSP/PAN composite membranes for solvent nanofiltration. Journal of Membrane Science, 2009, 333, 88-93.	4.1	95
424	NafionÂ®/H-ZSM-5 composite membranes with superior performance for direct methanol fuel cells. Journal of Membrane Science, 2009, 338, 75-83.	4.1	27
425	Gasâ€“liquid membrane contactors for CO2 removal. Journal of Membrane Science, 2009, 340, 214-220.	4.1	124
426	Towards spacer free electrodialysis. Journal of Membrane Science, 2009, 341, 131-138.	4.1	42
427	Development and analysis of multi-layer scaffolds for tissue engineering. Biomaterials, 2009, 30, 6228-6239.	5.7	97
428	Cassie-Baxter to Wenzel state wetting transition: Scaling of the front velocity. European Physical Journal E, 2009, 29, 391-397.	0.7	81
429	Micropatterned Polymer Films by Vapor-Induced Phase Separation Using Permeable Molds. ACS Applied Materials & Interfaces, 2009, 1, 2856-2861.	4.0	43
430	Practical Potential of Reverse Electrodialysis As Process for Sustainable Energy Generation. Environmental Science & Technology, 2009, 43, 6888-6894.	4.6	308
431	Microcontact Printing of Dendrimers, Proteins, and Nanoparticles by Porous Stamps. Journal of the American Chemical Society, 2009, 131, 797-803.	6.6	63
432	Sorption induced relaxations during water diffusion in S-PEEK. Physical Chemistry Chemical Physics, 2009, 11, 298-308.	1.3	36

#	Article	IF	Citations
433	Hollow fiber dead-end ultrafiltration: Influence of ionic environment on filtration of alginates. Journal of Membrane Science, 2008, 308, 218-229.	4.1	97
434	Hollow fiber dead-end ultrafiltration: Axial transport variations during humic acid filtration. Journal of Membrane Science, 2008, 314, 112-122.	4.1	12
435	Comparing flat and micro-patterned surfaces: Gas permeation and tensile stress measurements. Journal of Membrane Science, 2008, 320, 173-178.	4.1	30
436	Hollow fiber ultrafiltration: The concept of partial backwashing. Journal of Membrane Science, 2008, 320, 319-324.	4.1	18
437	Dimensionally stable Nafionâ€“polyethylene composite membranes for direct methanol fuel cell applications. Journal of Membrane Science, 2008, 321, 364-372.	4.1	53
438	Modeling on swelling behavior of a confined polymer network. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1589-1593.	2.4	11
439	Micro-fabricated metal nozzle plates used for water-in-oil and oil-in-water emulsification. Journal of Membrane Science, 2008, 310, 374-383.	4.1	28
440	Boltorn-modified polyimide gas separation membranes. Journal of Membrane Science, 2008, 310, 512-521.	4.1	18
441	Auto and mutual plasticization in single and mixed gas C3 transport through Matrimid-based hollow fiber membranes. Journal of Membrane Science, 2008, 312, 84-96.	4.1	37
442	Flue gas dehydration using polymer membranes. Journal of Membrane Science, 2008, 313, 263-276.	4.1	279
443	A sacrificial-layer approach to prepare microfiltration membranes. Journal of Membrane Science, 2008, 320, 1-7.	4.1	34
444	Particle-loaded hollow-fiber membrane adsorbers for lysozyme separation. Journal of Membrane Science, 2008, 322, 306-313.	4.1	51
445	Frozen slurry catalytic reactor: A new structured catalyst for transient studies in liquid phase. Applied Catalysis A: General, 2008, 351, 159-165.	2.2	10
446	Preparation and characterization of nanofiltration membranes by coating polyethersulfone hollow fibers with sulfonated poly(ether ether ketone) (SPEEK). Journal of Membrane Science, 2008, 307, 62-72.	4.1	115
447	Medical applications of membranes: Drug delivery, artificial organs and tissue engineering. Journal of Membrane Science, 2008, 308, 1-34.	4.1	401
448	Generation of Local Concentration Gradients by Gasâ^'Liquid Contacting. Analytical Chemistry, 2008, 80, 3190-3197.	3.2	20
449	Current status of ion exchange membranes for power generation from salinity gradients. Journal of Membrane Science, 2008, 319, 214-222.	4.1	451
450	Multiple time scale dynamics in the breakdown of superhydrophobicity. Europhysics Letters, 2008, 81, 66002.	0.7	52

#	Article	IF	Citations
451	Direct Observation of a Nonequilibrium Electro-Osmotic Instability. Physical Review Letters, 2008, 101, 236101.	2.9	260
452	Spontaneous Breakdown of Superhydrophobicity. Physical Review Letters, 2007, 99, 156001.	2.9	142
453	Boltorn-Modified Poly(2,6-dimethyl-1,4-phenylene oxide) Gas Separation Membranes. Macromolecules, 2007, 40, 5400-5410.	2.2	41
454	When Do Sorption-Induced Relaxations in Glassy Polymers Set In?. Macromolecules, 2007, 40, 4992-5000.	2.2	76
455	Morphology and Microtopology of Cation-Exchange Polymers and the Origin of the Overlimiting Current. Journal of Physical Chemistry B, 2007, 111, 2152-2165.	1.2	174
456	Free Volume in C₆₀ Modified PPO Polymer Membranes by Positron Annihilation Lifetime Spectroscopy. Journal of Physical Chemistry B, 2007, 111, 13914-13918.	1.2	26
457	Response to Comment on â€œOutside-In Trimming of Humic Substances During Ozonation in a Membrane Contactorâ€. Environmental Science & Technology, 2007, 41, 5162-5164.	4.6	2
458	Porous Microfluidic Devices â€“ Fabrication and Applications. Chemical Engineering and Technology, 2007, 30, 309-315.	0.9	21
459	Tailoring surface properties for controlling droplet formation at microsieve membranes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 292, 224-235.	2.3	34
460	One-step fabrication of porous micropatterned scaffolds to control cell behavior. Biomaterials, 2007, 28, 1998-2009.	5.7	138
461	Asymmetric bipolar membrane: A tool to improve product purity. Journal of Membrane Science, 2007, 287, 246-256.	4.1	58
462	Materials dependence of mixed gas plasticization behavior in asymmetric membranes. Journal of Membrane Science, 2007, 306, 16-28.	4.1	166
463	Interfacial aspects of water drop formation at micro-engineered orifices. Journal of Colloid and Interface Science, 2007, 312, 460-469.	5.0	46
464	Silicon for the perfect membrane. Nature, 2007, 445, 726-726.	13.7	60
465	Electrochemical acidification of milk by whey desalination. Journal of Membrane Science, 2007, 303, 213-220.	4.1	39
466	Membranes and microfluidics: a review. Lab on A Chip, 2006, 6, 1125.	3.1	414
467	Fullerene-Modified Poly(2,6-dimethyl-1,4-phenylene oxide) Gas Separation Membranes:â€‰ Why Binding Is Better than Dispersing. Macromolecules, 2006, 39, 9234-9242.	2.2	45
468	Outside-In Trimming of Humic Substances During Ozonation in a Membrane Contactor. Environmental Science & Technology, 2006, 40, 6460-6465.	4.6	26

#	Article	IF	Citations
469	Polymer-in-a-Silica-Crust Membranes:â€‰ Macroporous Materials with Tunable Surface Functionality. Langmuir, 2006, 22, 5459-5468.	1.6	11
470	Superhydrophobic Surfaces Having Two-Fold Adjustable Roughness Prepared in a Single Step. Langmuir, 2006, 22, 3125-3130.	1.6	84
471	Oestrogen removal from biological pretreated wastewater within decentralised sanitation and re-use concepts. Water Science and Technology, 2006, 53, 141-150.	1.2	3
472	Adsorption behavior of cation-exchange resin-mixed polyethersulfone-based fibrous adsorbents with bovine serum albumin. Desalination, 2006, 192, 224-233.	4.0	9
473	New membrane material for SRNF applications. Desalination, 2006, 199, 251-252.	4.0	18
474	Hybrid silica â€“ polymer macroporous membranes with tunable surface functionality. Desalination, 2006, 199, 296-298.	4.0	0
475	Integration of biohydrogen fermentation and gas separation processes to recover and enrich hydrogen. International Journal of Hydrogen Energy, 2006, 31, 1490-1495.	3.8	52
476	Flux stabilization of silicon nitride microsieves by backpulsing and surface modification with PEG moieties. Journal of Colloid and Interface Science, 2006, 299, 831-840.	5.0	21
477	Protein aggregate deposition and fouling reduction strategies with high-flux silicon nitride microsieves. Journal of Membrane Science, 2006, 273, 68-76.	4.1	32
478	Observations on the permeation performance of solvent resistant nanofiltration membranes. Journal of Membrane Science, 2006, 279, 424-433.	4.1	55
479	Multi-layer spacer geometries with improved mass transport. Journal of Membrane Science, 2006, 282, 351-361.	4.1	110
480	Water recycling from mixed chromic acid waste effluents by membrane technology. Separation and Purification Technology, 2006, 49, 76-83.	3.9	41
481	Electrochemical reduction of dilute chromate solutions on carbon felt electrodes. Journal of Applied Electrochemistry, 2006, 36, 323-332.	1.5	18
482	Enzyme capturing and concentration with mixed matrix membrane adsorbers. Journal of Membrane Science, 2006, 280, 406-417.	4.1	66
483	Poly[1-(trimethylsilyl)-1-propyne] as a solvent resistance nanofiltration membrane material. Journal of Membrane Science, 2006, 281, 351-357.	4.1	49
484	Polymeric microsieves produced by phase separation micromolding. Journal of Membrane Science, 2006, 283, 411-424.	4.1	78
485	Vibrating polymeric microsieves: Antifouling strategies for microfiltration. Journal of Membrane Science, 2006, 285, 323-333.	4.1	32
486	On the subtle balance between competitive sorption and plasticization effects in asymmetric hollow fiber gas separation membranes. Journal of Membrane Science, 2005, 252, 265-277.	4.1	138

#	Article	IF	Citations
487	High performance micro-engineered hollow fiber membranes by smart spinneret design. Journal of Membrane Science, 2005, 256, 209-209.	4.1	36
488	Chromic acid recovery by electro-electrodialysisI. Evaluation of anion-exchange membrane. Journal of Membrane Science, 2005, 261, 49-57.	4.1	43
489	The effect of WWTP effluent zeta-potential on direct nanofiltration performance. Journal of Membrane Science, 2005, 266, 80-93.	4.1	25
490	Hollow fiber membrane contactorsâ€"A means to study the reaction kinetics of humic substance ozonation. Journal of Membrane Science, 2005, 257, 48-59.	4.1	40
491	Transport of water vapor and inert gas mixtures through highly selective and highly permeable polymer membranes. Journal of Membrane Science, 2005, 251, 29-41.	4.1	218
492	Regeneration of mixed solvent by electrodialysis: selective removal of chloride and sulfate. Journal of Membrane Science, 2005, 250, 113-133.	4.1	38
493	Solar driven membrane pervaporation for desalination processes. Journal of Membrane Science, 2005, 250, 235-246.	4.1	96
494	The role of wetting on the water flux performance of microsieve membranes. Journal of Membrane Science, 2005, 259, 55-64.	4.1	40
495	Preparation and characterisation of monovalent ion selective cation exchange membranes based on sulphonated poly(ether ether ketone). Journal of Membrane Science, 2005, 263, 137-145.	4.1	140
496	Effect of PDMS cross-linking degree on the permeation performance of PAN/PDMS composite nanofiltration membranes. Separation and Purification Technology, 2005, 45, 220-231.	3.9	150
497	Ag-Functionalized Carbon Molecular-Sieve Membranes Based on Polyelectrolyte/Polyimide Blend Precursors. Advanced Functional Materials, 2005, 15, 69-75.	7.8	42
498	Affinity membranes for hormone removal from aqueous solutions. Journal of Membrane Science, 2005, 259, 91-102.	4.1	18
499	Mixed gas water vapor/N transport in poly(ethylene oxide) poly(butylene terephthalate) block copolymers. Journal of Membrane Science, 2005, 266, 51-61.	4.1	76
500	Gas foaming of segmented poly(ester amide) films. Polymer, 2005, 46, 9396-9403.	1.8	76
501	Phase Separation Micromolding: A New Generic Approach for Microstructuring Various Materials. Small, 2005, 1, 645-655.	5.2	118
502	New replication technique for the fabrication of thin polymeric microfluidic devices with tunable porosity. Lab on A Chip, 2005, 5, 1240.	3.1	42
503	Nutrient removal by NF and RO membranes in a decentralized sanitation system. Water Research, 2005, 39, 3657-3667.	5.3	104
504	Composite hollow fiber gasâ€"liquid membrane contactors for olefin/paraffin separation. Separation and Purification Technology, 2004, 37, 209-220.	3.9	51

#	Article	IF	Citations
505	Selection of top layer materials for gas-liquid membrane contactors. Journal of Applied Polymer Science, 2004, 92, 323-334.	1.3	28
506	Chemical and Thermal Stability of Alkylsilane Based Coatings for Membrane Emulsification. Advanced Engineering Materials, 2004, 6, 749-754.	1.6	28
507	Novel Gas Separation Membranes Containing Covalently Bonded Fullerenes. Macromolecular Rapid Communications, 2004, 25, 1674-1678.	2.0	28
508	Insight into the transport of hexaneâ€“solute systems through tailor-made composite membranes. Journal of Membrane Science, 2004, 228, 103-116.	4.1	123
509	Mixed matrix microporous hollow fibers with ion-exchange functionality. Journal of Membrane Science, 2004, 231, 109-115.	4.1	48
510	Intermediate polymer to carbon gas separation membranes based on Matrimid PI. Journal of Membrane Science, 2004, 238, 93-102.	4.1	118
511	Application of gas separation to recover biohydrogen produced by Thiocapsa roseopersicina. Desalination, 2004, 163, 261-265.	4.0	10
512	Adsorptive membranes for bilirubin removal. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2004, 803, 215-223.	1.2	64
513	Polymer intrusion into narrow pores at the interface between a poor solvent and adsorbing and non-adsorbing surfaces. Polymer, 2004, 45, 3027-3036.	1.8	9
514	Super selective membranes in gasâ€“liquid membrane contactors for olefin/paraffin separation. Journal of Membrane Science, 2004, 232, 107-114.	4.1	60
515	Composite hollow fiber membranes for organic solvent-based liquidâ€“liquid extraction. Journal of Membrane Science, 2004, 234, 1-10.	4.1	35
516	Role of membrane surface in concentration polarization at cation exchange membranes. Journal of Membrane Science, 2004, 239, 119-128.	4.1	112
517	Towards single step production of multi-layer inorganic hollow fibers. Journal of Membrane Science, 2004, 239, 265-269.	4.1	70
518	Anion-exchange membranes containing diamines: preparation and stability in alkaline solution. Journal of Membrane Science, 2004, 244, 25-34.	4.1	220
519	Electro-catalytic membrane reactors and the development of bipolar membrane technology. Chemical Engineering and Processing: Process Intensification, 2004, 43, 1115-1127.	1.8	69
520	Gas-Permeation Properties of Poly(ethylene oxide) Poly(butylene terephthalate) Block Copolymers. Macromolecules, 2004, 37, 4590-4597.	2.2	154
521	Olefin-Selective Membranes in Gasâ˜Liquid Membrane Contactors for Olefin/Paraffin Separation. Industrial & Engineering Chemistry Research, 2004, 43, 720-727.	1.8	17
522	Analysis of the Complexation Reaction between Ag+ and Ethylene. Industrial & Engineering Chemistry Research, 2004, 43, 2627-2635.	1.8	45

#	Article	IF	Citations
523	Phase Separation Micromoldingâ€”PSÎ¼M. Advanced Materials, 2003, 15, 1385-1389.	11.1	118
524	CO2 Plasticization of polyethersulfone/polyimide gas-separation membranes. AICHE Journal, 2003, 49, 1702-1711.	1.8	70
525	Dynamic behavior of adsorber membranes for protein recovery. Biotechnology and Bioengineering, 2003, 84, 564-572.	1.7	38
526	Preparation of porous hollow fiber membranes with a triple-orifice spinneret. Journal of Applied Polymer Science, 2003, 87, 2151-2157.	1.3	43
527	Mixed-matrix membrane adsorbers for protein separation. Journal of Chromatography A, 2003, 1006, 171-183.	1.8	77
528	Characterization of polyethersulfone-polyimide hollow fiber membranes by atomic force microscopy and contact angle goniometery. Journal of Membrane Science, 2003, 226, 63-73.	4.1	46
529	Functionalised ethylene vinyl alcohol copolymer (EVAL) membranes for affinity protein separation. Journal of Membrane Science, 2003, 216, 177-193.	4.1	46
530	Preparation and characterization of highly selective dense and hollow fiber asymmetric membranes based on BTDA-TDI/MDI co-polyimide. Journal of Membrane Science, 2003, 216, 195-205.	4.1	95
531	Functionalized Carbon Molecular Sieve membranes containing Ag-nanoclusters. Journal of Membrane Science, 2003, 219, 47-57.	4.1	66
532	Preparation of mixed matrix adsorber membranes for protein recovery. Journal of Membrane Science, 2003, 218, 219-233.	4.1	103
533	Ion Adsorption Parameters Determined from Zeta Potential and Titration Data for a Î³-Alumina Nanofiltration Membrane. Langmuir, 2003, 19, 5861-5868.	1.6	48
534	Thermodynamics of Water Vapor Sorption in Poly(ethylene oxide) Poly(butylene terephthalate) Block Copolymers. Journal of Physical Chemistry B, 2003, 107, 13629-13635.	1.2	27
535	Analysis of Cell-Stabilizing Additives in Low-Density Polyethylene Foams Using Low-Frequency Dielectric Spectroscopy. Macromolecules, 2003, 36, 6817-6823.	2.2	2
536	Heme-Protein Active Site Models via Self-Assembly in Water. Organic Letters, 2003, 5, 3367-3370.	2.4	34
537	Monte Carlo Calculations of Polymer Adsorption at the Entrance of Cylindrical Pores in Flat Adsorbing Surfaces. Soft Materials, 2003, 1, 295-312.	0.8	5
538	Porous Monofilaments by Continuous Solid-State Foaming. Industrial & Engineering Chemistry Research, 2002, 41, 1195-1204.	1.8	15
539	Monte Carlo Simulation of Partially Confined Flexible Polymers. Macromolecules, 2002, 35, 5267-5272.	2.2	29
540	Open Nanoporous Morphologies from Polymeric Blends by Carbon Dioxide Foaming. Macromolecules, 2002, 35, 1738-1745.	2.2	171

#	Article	IF	Citations
541	Asymmetric Bipolar Membranes in Acidâ^'Base Electrodialysis. Industrial & Engineering Chemistry Research, 2002, 41, 579-586.	1.8	54
542	Ultralow-k Dielectrics Made by Supercritical Foaming of Thin Polymer Films. Advanced Materials, 2002, 14, 1041.	11.1	164
543	Tailoring the Properties of Asymmetric Cellulose Acetate Membranes by Gas Plasma Etching. Journal of Colloid and Interface Science, 2002, 245, 338-348.	5.0	24
544	Cation permeable membranes from blends of sulfonated poly(ether ether ketone) and poly(ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.1	133
545	Comparison of bipolar membranes by means of chronopotentiometry. Journal of Membrane Science, 2002, 199, 177-190.	4.1	33
546	Carbon molecular sieve membranes prepared from porous fiber precursor. Journal of Membrane Science, 2002, 205, 239-246.	4.1	70
547	Preparation of composite hollow fiber membranes: co-extrusion of hydrophilic coatings onto porous hydrophobic support structures. Journal of Membrane Science, 2002, 207, 143-156.	4.1	123
548	Preparation of ethylene vinylalcohol copolymer membranes suitable for ligand coupling in affinity separation. Journal of Membrane Science, 2002, 210, 155-173.	4.1	44
549	New ways to produce porous polymeric membranes by carbon dioxide foaming. Desalination, 2002, 144, 5-7.	4.0	20
550	Effect of spinning conditions on the structure and the gas permeation properties of high flux polyethersulfoneâ€"polyimide blend hollow fibers. Desalination, 2002, 144, 121-125.	4.0	60
551	Preparation and characterization of gas separation hollow fiber membranes based on polyethersulfone-polyimide miscible blends. Desalination, 2002, 145, 353-357.	4.0	46
552	Monte Carlo simulations of polymer conformations at the bulk/membrane interface. Desalination, 2002, 145, 393-395.	4.0	2
553	Water vapor and gas transport through a poly(butylene terephthalate) poly(ethylene oxide) block copolymer. Desalination, 2002, 148, 303-307.	4.0	29
554	Synthesis of novel nanostructured mixed matrix membranes. Desalination, 2002, 148, 401-405.	4.0	4
555	The development of electro-membrane filtration for the isolation of bioactive peptides: the effect of membrane selection and operating parameters on the transport rate. Desalination, 2002, 149, 369-374.	4.0	69
556	Title is missing!. Journal of Applied Electrochemistry, 2002, 32, 455-465.	1.5	18
557	Microcellular Foaming of Amorphous High-TgPolymers Using Carbon Dioxide. Macromolecules, 2001, 34, 874-884.	2.2	181
558	Bicontinuous Nanoporous Polymers by Carbon Dioxide Foaming. Macromolecules, 2001, 34, 8792-8801.	2.2	169

#	Article	IF	Citations
559	Optimisation strategies for the preparation of bipolar membranes with reduced salt ion leakage in acidâ€“base electrodialysis. Journal of Membrane Science, 2001, 182, 13-28.	4.1	81
560	Novel open-cellular polysulfone morphologies produced with trace concentrations of solvents as pore opener. Journal of Membrane Science, 2001, 187, 181-192.	4.1	55
561	Phase behavior of polymerâ€“diluent systems characterized by temperature modulated differential scanning calorimetry. Thermochimica Acta, 2001, 378, 27-34.	1.2	10
562	Suppression of gas separation membrane plasticization by homogeneous polymer blending. AICHE Journal, 2001, 47, 1088-1093.	1.8	159
563	Chronopotentiometry for the advanced currentâ€“voltage characterisation of bipolar membranes. Journal of Electroanalytical Chemistry, 2001, 502, 152-166.	1.9	71
564	The role of the salt electrolyte on the electrical conductive properties of a polymeric bipolar membrane. Journal of Electroanalytical Chemistry, 2001, 513, 36-44.	1.9	9
565	Desalting a process cooling water using nanofiltration. Separation and Purification Technology, 2001, 22-23, 159-168.	3.9	8
566	Capillary hollow fiber nanofiltration membranes. Separation and Purification Technology, 2001, 22-23, 499-506.	3.9	62
567	Accelerated plasticization of thin-film composite membranes used in gas separation. Separation and Purification Technology, 2001, 24, 223-233.	3.9	101
568	Two-dimensional stochastic modeling of membrane fouling. Separation and Purification Technology, 2001, 24, 375-387.	3.9	17
569	CO2-induced plasticization phenomena in glassy polymers. Journal of Membrane Science, 1999, 155, 67-78.	4.1	464
570	Concentration polarization with monopolar ion exchange membranes: currentÃ¢Â€Â“voltage curves and water dissociation. Journal of Membrane Science, 1999, 162, 145-154.	4.1	290
571	Chronopotentiometry and overlimiting ion transport through monopolar ion exchange membranes. Journal of Membrane Science, 1999, 162, 155-164.	4.1	178
572	Limitations of the lifetime stabilization of supported liquid membrane by polyamides layers. Separation and Purification Technology, 1999, 17, 147-157.	3.9	7
573	The sorption induced glass transition in amorphous glassy polymers. Journal of Chemical Physics, 1999, 110, 11061-11069.	1.2	61
574	Plasticization-resistant glassy polyimide membranes for CO2/CO4 separations. Separation and Purification Technology, 1998, 14, 27-39.	3.9	271
575	Behaviour of bipolar membranes at high current densityWater diffusion limitation. Separation and Purification Technology, 1998, 14, 41-52.	3.9	65
576	Coupled transport phenomena in overlimiting current electrodialysis. Separation and Purification Technology, 1998, 14, 255-267.	3.9	125

#	Article	IF	Citations
577	Suppression of CO2-plasticization by semiinterpenetrating polymer network formation. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 1547-1556.	2.4	118
578	Supported liquid membranes modification with sulphonated poly(ether ether ketone). Journal of Membrane Science, 1998, 147, 117-130.	4.1	83
579	A nonequilibrium simulation method for calculating tracer diffusion coefficients of small solutes in n-alkane liquids and polymers. Journal of Chemical Physics, 1998, 108, 9558-9565.	1.2	20
580	Analysis of the kinetics of vapor absorption/desorption in/from silicone rubber and cellulose acetate membranes in the presence of stagnant boundary layers. Journal of Membrane Science, 1997, 125, 165-175.	4.1	6
581	Optical vs. direct sorption and swelling measurements for the study of stiff-chain polymer-penetrant interactions. Journal of Membrane Science, 1997, 130, 75-83.	4.1	22
582	Free energy calculations of small molecules in dense amorphous polymers. Effect of the initial guess configuration in molecular dynamics studies. Journal of Chemical Physics, 1996, 105, 8849-8857.	1.2	78
583	Time-dependent permeation of carbon dioxide through a polyimide membrane above the plasticization pressure. Journal of Applied Polymer Science, 1995, 58, 1959-1966.	1.3	45
584	Dilation kinetics of glassy, aromatic polyimides induced by carbon dioxide sorption. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1371-1384.	2.4	49
585	Carbon dioxide foaming of glassy polymers. Journal of Applied Polymer Science, 1994, 53, 1497-1512.	1.3	36
586	Modelling the permeability of polymers: a neural network approach. Journal of Membrane Science, 1994, 86, 193-198.	4.1	13
587	Transport of gases through polymeric membranes. Makromolekulare Chemie Macromolecular Symposia, 1993, 70-71, 379-396.	0.6	8
588	Gas transport and sub-Tg relaxations in unmodified and nitrated polyarylethersulfones. Journal of Membrane Science, 1992, 74, 193-201.	4.1	11
589	Pervaporation of aromatic C8-isomers. Journal of Membrane Science, 1991, 57, 257-270.	4.1	55
590	Diffusion through rubbery and glassy polymer membranes. Makromolekulare Chemie Macromolecular Symposia, 1991, 45, 237-257.	0.6	21
591	Plasticization of gas separation membranes. Separation and Purification Technology, 1991, 5, 222-228.	0.3	156
592	Porous PVDF Monoliths with Templated Geometry. Advanced Materials Technologies, 0, , 2100325.	3.0	6
593	Sensitivity of SDI for experimental errors. , 0, 40, 100-117.		1
594	Evaluating water purification at household level in India. , 0, 91, 311-319.		3

#	Article	IF	Citations
595	Coupled Ionicâ€“Electronic Charge Transport in Organic Neuromorphic Devices. Advanced Theory and Simulations, 0, , 2100492.	1.3	5