Chanhee Boo

List of Publications by Year in Descending Order

36 papers	3,358 citations	24 h-index	40 g-index
40 ext. papers	4,093 ext. citations	11.2 avg, IF	5.94 L-index

#	Paper	IF	Citations
36	Simultaneous retention of organic and inorganic contaminants by a ceramic nanofiltration membrane for the treatment of semiconductor wastewater. *Chemical Engineering Research and Design*, **2022**, 159, 525-533	5.5	4
35	Investigating the potential of ammonium retention by graphene oxide ceramic nanofiltration membranes for the treatment of semiconductor wastewater. *Chemosphere*, **2022**, 286, 131745	8.4	8
34	Improving the feasibility and applicability of flow-electrode capacitive deionization (FCDI): Review of process optimization and energy efficiency. *Desalination*, **2021**, 502, 114930	10.3	22
33	Zwitterionic coating on thin-film composite membranes to delay gypsum scaling in reverse osmosis. *Journal of Membrane Science*, **2021**, 618, 118568	9.6	27
32	Removal of Emerging Wastewater Organic Contaminants by Polyelectrolyte Multilayer Nanofiltration Membranes with Tailored Selectivity. *ACS ES&T Engineering*, **2021**, 1, 404-414		13
31	Thermomorphic Hydrophilicity Base-Induced Precipitation for Effective Descaling of Hypersaline Brines. *ACS ES&T Engineering*, **2021**, 1, 1351-1359		3
30	Influence of Solute Molecular Diameter on Permeability-Selectivity Tradeoff of Thin-Film Composite Polyamide Membranes in Aqueous Separations. *Water Research*, **2021**, 201, 117311	12.5	6
29	Zero Liquid Discharge of Ultrahigh-Salinity Brines with Temperature Swing Solvent Extraction. *Environmental Science & Technology*, **2020**, 54, 9124-9131	10.3	20
28	Novel Isothermal Membrane Distillation with Acidic Collector for Selective and Energy-Efficient Recovery of Ammonia from Urine. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 7324-7334	8.3	16
27	Transport and structural properties of osmotic membranes in high-salinity desalination using cascading osmotically mediated reverse osmosis. *Desalination*, **2020**, 479, 114335	10.3	17
26	Surface functionalization of reverse osmosis membranes with sulfonic groups for simultaneous mitigation of silica scaling and organic fouling. *Water Research*, **2020**, 185, 116203	12.5	22
25	Water deoxygenation using a hollow fiber membrane contactor to prevent pipe corrosion for sustainable management of district heating systems: A pilot-scale study. *Journal of Cleaner Production*, **2020**, 277, 124049	10.3	4
24	Engineering Carbon Nanotube Forest Superstructure for Robust Thermal Desalination Membranes. *Advanced Functional Materials*, **2019**, 29, 1903125	15.6	31
23	Low-temperature heat utilization with vapor pressure-driven osmosis: Impact of membrane properties on mass and heat transfer. *Journal of Membrane Science*, **2019**, 588, 117181	9.6	9
22	Membrane-less and Non-Evaporative Desalination of Hypersaline Brines by Temperature Swing Solvent Extraction. *Environmental Science and Technology Letters*, **2019**, 6, 359-364	11	25
21	High-Performance Thin-Film Composite Membrane with an Ultrathin Spray-Coated Carbon Nanotube Interlayer. *Environmental Science and Technology Letters*, **2018**, 5, 243-248	11	122
20	Membrane distillation at the water-energy nexus: limits, opportunities, and challenges. *Energy and Environmental Science*, **2018**, 11, 1177-1196	35.4	458

19	Photocatalytic Reactive Ultrafiltration Membrane for Removal of Antibiotic Resistant Bacteria and Antibiotic Resistance Genes from Wastewater Effluent. *Environmental Science & Technology*, **2018**, 52, 8666-8673	10.3	101
18	Engineered Slippery Surface to Mitigate Gypsum Scaling in Membrane Distillation for Treatment of Hypersaline Industrial Wastewaters. *Environmental Science & Technology*, **2018**, 52, 14362-14370	10.3	86
17	Relating Organic Fouling in Membrane Distillation to Intermolecular Adhesion Forces and Interfacial Surface Energies. *Environmental Science & Technology*, **2018**, 52, 14198-14207	10.3	56
16	High Performance Nanofiltration Membrane for Effective Removal of Perfluoroalkyl Substances at High Water Recovery. *Environmental Science & Technology*, **2018**, 52, 7279-7288	10.3	112
15	Self-cleaning anti-fouling hybrid ultrafiltration membranes via side chain grafting of poly(aryl ether sulfone) and titanium dioxide. *Journal of Membrane Science*, **2017**, 529, 1-10	9.6	81
14	Post-fabrication modification of electrospun nanofiber mats with polymer coating for membrane distillation applications. *Journal of Membrane Science*, **2017**, 530, 158-165	9.6	70
13	Thermal desalination membranes: Carbon nanotubes keep up the heat. *Nature Nanotechnology*, **2017**, 12, 501-503	28.7	48
12	Relating Silica Scaling in Reverse Osmosis to Membrane Surface Properties. *Environmental Science & Technology*, **2017**, 51, 4396-4406	10.3	84
11	Omniphobic Polyvinylidene Fluoride (PVDF) Membrane for Desalination of Shale Gas Produced Water by Membrane Distillation. *Environmental Science & Technology*, **2016**, 50, 12275-12282	10.3	232
10	Engineering Surface Energy and Nanostructure of Microporous Films for Expanded Membrane Distillation Applications. *Environmental Science & Technology*, **2016**, 50, 8112-9	10.3	151
9	Development of Omniphobic Desalination Membranes Using a Charged Electrospun Nanofiber Scaffold. *ACS Applied Materials & Interfaces*, **2016**, 8, 11154-61	9.5	169
8	Engineering flat sheet microporous PVDF films for membrane distillation. *Journal of Membrane Science*, **2015**, 492, 355-363	9.6	98
7	Membrane-based osmotic heat engine with organic solvent for enhanced power generation from low-grade heat. *Environmental Science & Technology*, **2015**, 49, 5820-7	10.3	67
6	Performance evaluation of trimethylamine–carbon dioxide thermolytic draw solution for engineered osmosis. *Journal of Membrane Science*, **2015**, 473, 302-309	9.6	86
5	Omniphobic Membrane for Robust Membrane Distillation. *Environmental Science and Technology Letters*, **2014**, 1, 443-447	11	224
4	Bidirectional diffusion of ammonium and sodium cations in forward osmosis: role of membrane active layer surface chemistry and charge. *Environmental Science & Technology*, **2014**, 48, 14369-76	10.3	85
3	Modeling of colloidal fouling in forward osmosis membrane: Effects of reverse draw solution permeation. *Desalination*, **2013**, 314, 115-123	10.3	38
2	Fouling control in a forward osmosis process integrating seawater desalination and wastewater reclamation. *Journal of Membrane Science*, **2013**, 444, 148-156	9.6	188

1	Comparison of fouling behavior in forward osmosis (FO) and reverse osmosis (RO). *Journal of Membrane Science*, **2010**, 365, 34-39	9.6	568