

Chanhee Boo

List of Publications by Year in descending order

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39
papers

4,852
citations

159358

30
h-index

288905

40
g-index

40
all docs

40
docs citations

40
times ranked

3790
citing authors

#	ARTICLE	IF	CITATIONS
1	Membrane distillation at the water-energy nexus: limits, opportunities, and challenges. <i>Energy and Environmental Science</i> , 2018, 11, 1177-1196.	15.6	740
2	Comparison of fouling behavior in forward osmosis (FO) and reverse osmosis (RO). <i>Journal of Membrane Science</i> , 2010, 365, 34-39.	4.1	645
3	Omniphobic Polyvinylidene Fluoride (PVDF) Membrane for Desalination of Shale Gas Produced Water by Membrane Distillation. <i>Environmental Science & Technology</i> , 2016, 50, 12275-12282.	4.6	307
4	Omniphobic Membrane for Robust Membrane Distillation. <i>Environmental Science and Technology Letters</i> , 2014, 1, 443-447.	3.9	288
5	Development of Omniphobic Desalination Membranes Using a Charged Electrospun Nanofiber Scaffold. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11154-11161.	4.0	218
6	High Performance Nanofiltration Membrane for Effective Removal of Perfluoroalkyl Substances at High Water Recovery. <i>Environmental Science & Technology</i> , 2018, 52, 7279-7288.	4.6	218
7	Fouling control in a forward osmosis process integrating seawater desalination and wastewater reclamation. <i>Journal of Membrane Science</i> , 2013, 444, 148-156.	4.1	214
8	Engineering Surface Energy and Nanostructure of Microporous Films for Expanded Membrane Distillation Applications. <i>Environmental Science & Technology</i> , 2016, 50, 8112-8119.	4.6	203
9	High-Performance Thin-Film Composite Membrane with an Ultrathin Spray-Coated Carbon Nanotube Interlayer. <i>Environmental Science and Technology Letters</i> , 2018, 5, 243-248.	3.9	176
10	Photocatalytic Reactive Ultrafiltration Membrane for Removal of Antibiotic Resistant Bacteria and Antibiotic Resistance Genes from Wastewater Effluent. <i>Environmental Science & Technology</i> , 2018, 52, 8666-8673.	4.6	157
11	Engineered Slippery Surface to Mitigate Gypsum Scaling in Membrane Distillation for Treatment of Hypersaline Industrial Wastewaters. <i>Environmental Science & Technology</i> , 2018, 52, 14362-14370.	4.6	148
12	Relating Silica Scaling in Reverse Osmosis to Membrane Surface Properties. <i>Environmental Science & Technology</i> , 2017, 51, 4396-4406.	4.6	136
13	Engineering flat sheet microporous PVDF films for membrane distillation. <i>Journal of Membrane Science</i> , 2015, 492, 355-363.	4.1	118
14	Self-cleaning anti-fouling hybrid ultrafiltration membranes via side chain grafting of poly(aryl ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.1	104
15	Performance evaluation of trimethylamine-carbon dioxide thermolytic draw solution for engineered osmosis. <i>Journal of Membrane Science</i> , 2015, 473, 302-309.	4.1	100
16	Bidirectional Diffusion of Ammonium and Sodium Cations in Forward Osmosis: Role of Membrane Active Layer Surface Chemistry and Charge. <i>Environmental Science & Technology</i> , 2014, 48, 14369-14376.	4.6	95
17	Post-fabrication modification of electrospun nanofiber mats with polymer coating for membrane distillation applications. <i>Journal of Membrane Science</i> , 2017, 530, 158-165.	4.1	91
18	Relating Organic Fouling in Membrane Distillation to Intermolecular Adhesion Forces and Interfacial Surface Energies. <i>Environmental Science & Technology</i> , 2018, 52, 14198-14207.	4.6	87

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19	Membrane-Based Osmotic Heat Engine with Organic Solvent for Enhanced Power Generation from Low-Grade Heat. <i>Environmental Science & Technology</i> , 2015, 49, 5820-5827.	4.6	76
20	Improving the feasibility and applicability of flow-electrode capacitive deionization (FCDI): Review of process optimization and energy efficiency. <i>Desalination</i> , 2021, 502, 114930.	4.0	64
21	Carbon nanotubes keep up the heat. <i>Nature Nanotechnology</i> , 2017, 12, 501-503.	15.6	62
22	Inorganic Scaling in Membrane Desalination: Models, Mechanisms, and Characterization Methods. <i>Environmental Science & Technology</i> , 2022, 56, 7484-7511.	4.6	60
23	Zwitterionic coating on thin-film composite membranes to delay gypsum scaling in reverse osmosis. <i>Journal of Membrane Science</i> , 2021, 618, 118568.	4.1	58
24	Membrane-less and Non-Evaporative Desalination of Hypersaline Brines by Temperature Swing Solvent Extraction. <i>Environmental Science and Technology Letters</i> , 2019, 6, 359-364.	3.9	54
25	Zero Liquid Discharge of Ultrahigh-Salinity Brines with Temperature Swing Solvent Extraction. <i>Environmental Science & Technology</i> , 2020, 54, 9124-9131.	4.6	52
26	Surface functionalization of reverse osmosis membranes with sulfonic groups for simultaneous mitigation of silica scaling and organic fouling. <i>Water Research</i> , 2020, 185, 116203.	5.3	50
27	Novel Isothermal Membrane Distillation with Acidic Collector for Selective and Energy-Efficient Recovery of Ammonia from Urine. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7324-7334.	3.2	49
28	Engineering Carbon Nanotube Forest Superstructure for Robust Thermal Desalination Membranes. <i>Advanced Functional Materials</i> , 2019, 29, 1903125.	7.8	48
29	Modeling of colloidal fouling in forward osmosis membrane: Effects of reverse draw solution permeation. <i>Desalination</i> , 2013, 314, 115-123.	4.0	43
30	Removal of Emerging Wastewater Organic Contaminants by Polyelectrolyte Multilayer Nanofiltration Membranes with Tailored Selectivity. <i>ACS ES&T Engineering</i> , 2021, 1, 404-414.	3.7	41
31	Transport and structural properties of osmotic membranes in high-salinity desalination using cascading osmotically mediated reverse osmosis. <i>Desalination</i> , 2020, 479, 114335.	4.0	31
32	Investigating the potential of ammonium retention by graphene oxide ceramic nanofiltration membranes for the treatment of semiconductor wastewater. <i>Chemosphere</i> , 2022, 286, 131745.	4.2	26
33	Simultaneous retention of organic and inorganic contaminants by a ceramic nanofiltration membrane for the treatment of semiconductor wastewater. <i>Chemical Engineering Research and Design</i> , 2022, 159, 525-533.	2.7	25
34	Influence of Solute Molecular Diameter on Permeability-Selectivity Tradeoff of Thin-Film Composite Polyamide Membranes in Aqueous Separations. <i>Water Research</i> , 2021, 201, 117311.	5.3	20
35	Thermomorphic Hydrophilicity Base-Induced Precipitation for Effective Descaling of Hypersaline Brines. <i>ACS ES&T Engineering</i> , 2021, 1, 1351-1359.	3.7	11
36	Low-temperature heat utilization with vapor pressure-driven osmosis: Impact of membrane properties on mass and heat transfer. <i>Journal of Membrane Science</i> , 2019, 588, 117181.	4.1	10

#	ARTICLE	IF	CITATIONS
37	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.	4.6	10
38	Multifunctional photo-Fenton-active membrane for solar-driven water purification. Journal of Membrane Science, 2022, 660, 120832.	4.1	10
39	Elucidating the Roles of Polyamide Layer Structural Properties in the Permeabilityâ€“Selectivity Tradeoff Governing Aqueous Separations. ACS ES&T Engineering, 2022, 2, 1857-1870.	3.7	4