

Sanghyun Jeong

List of Publications by Year in descending order

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99
papers

4,240
citations

87723

38
h-index

123241

61
g-index

99
all docs

99
docs citations

99
times ranked

3790
citing authors

#	ARTICLE	IF	CITATIONS
1	PDMS/PVDF hybrid electrospun membrane with superhydrophobic property and drop impact dynamics for dyeing wastewater treatment using membrane distillation. <i>Journal of Membrane Science</i> , 2017, 525, 57-67.	4.1	310
2	A critical review on remediation, reuse, and resource recovery from acid mine drainage. <i>Environmental Pollution</i> , 2019, 247, 1110-1124.	3.7	276
3	High flux and antifouling properties of negatively charged membrane for dyeing wastewater treatment by membrane distillation. <i>Water Research</i> , 2016, 103, 362-371.	5.3	193
4	Organic fouling behavior in direct contact membrane distillation. <i>Desalination</i> , 2014, 347, 230-239.	4.0	134
5	Membrane distillation for wastewater reverse osmosis concentrate treatment with water reuse potential. <i>Journal of Membrane Science</i> , 2017, 524, 565-575.	4.1	122
6	Fouling behavior of negatively charged PVDF membrane in membrane distillation for removal of antibiotics from wastewater. <i>Journal of Membrane Science</i> , 2018, 551, 12-19.	4.1	106
7	Enhanced vapor transport in membrane distillation via functionalized carbon nanotubes anchored into electrospun nanofibres. <i>Scientific Reports</i> , 2017, 7, 41562.	1.6	97
8	CNTs reinforced super-hydrophobic-oleophilic electrospun polystyrene oil sorbent for enhanced sorption capacity and reusability. <i>Chemical Engineering Journal</i> , 2017, 314, 526-536.	6.6	97
9	Interaction of humic substances on fouling in membrane distillation for seawater desalination. <i>Chemical Engineering Journal</i> , 2015, 262, 946-957.	6.6	92
10	A review on fouling of membrane distillation. <i>Desalination and Water Treatment</i> , 2016, 57, 10052-10076.	1.0	83
11	Fouling development in direct contact membrane distillation: Non-invasive monitoring and destructive analysis. <i>Water Research</i> , 2018, 132, 34-41.	5.3	80
12	Theoretical modeling and experimental validation of transport and separation properties of carbon nanotube electrospun membrane distillation. <i>Journal of Membrane Science</i> , 2017, 526, 395-408.	4.1	79
13	Time-resolved monitoring of biofouling development on a flat sheet membrane using optical coherence tomography. <i>Scientific Reports</i> , 2017, 7, 15.	1.6	75
14	In-depth analyses of organic matters in a full-scale seawater desalination plant and an autopsy of reverse osmosis membrane. <i>Separation and Purification Technology</i> , 2016, 162, 171-179.	3.9	72
15	Progress and challenges of carbon nanotube membrane in water treatment. <i>Critical Reviews in Environmental Science and Technology</i> , 2016, 46, 999-1046.	6.6	70
16	Rubidium extraction from seawater brine by an integrated membrane distillation-selective sorption system. <i>Water Research</i> , 2017, 123, 321-331.	5.3	70
17	In-situ assessment of biofilm formation in submerged membrane system using optical coherence tomography and computational fluid dynamics. <i>Journal of Membrane Science</i> , 2017, 521, 84-94.	4.1	70
18	Gravity-driven membrane system for secondary wastewater effluent treatment: Filtration performance and fouling characterization. <i>Separation and Purification Technology</i> , 2017, 184, 26-33.	3.9	69

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19	Influence of feed/permeate velocity on scaling development in a direct contact membrane distillation. Separation and Purification Technology, 2014, 125, 291-300.	3.9	66
20	An advanced online monitoring approach to study the scaling behavior in direct contact membrane distillation. Journal of Membrane Science, 2018, 546, 50-60.	4.1	64
21	Microbial activity in biofilter used as a pretreatment for seawater desalination. Desalination, 2013, 309, 254-260.	4.0	60
22	Experimental comparison of submerged membrane distillation configurations for concentrated brine treatment. Desalination, 2017, 420, 54-62.	4.0	58
23	Mechanistic insight into the <i>in vitro</i> toxicity of graphene oxide against biofilm forming bacteria using laser-induced breakdown spectroscopy. Nanoscale, 2018, 10, 4475-4487.	2.8	58
24	Protein fouling in carbon nanotubes enhanced ultrafiltration membrane: Fouling mechanism as a function of pH and ionic strength. Separation and Purification Technology, 2017, 176, 323-334.	3.9	56
25	Foulant analysis of a reverse osmosis membrane used pretreated seawater. Journal of Membrane Science, 2013, 428, 434-444.	4.1	52
26	Chemical-free scale inhibition method for seawater reverse osmosis membrane process: Air micro-nano bubbles. Desalination, 2019, 461, 1-9.	4.0	50
27	Acid mine drainage treatment by integrated submerged membrane distillation-adsorption system. Chemosphere, 2019, 218, 955-965.	4.2	50
28	Integrated approach to characterize fouling on a flat sheet membrane gravity driven submerged membrane bioreactor. Bioresource Technology, 2016, 222, 335-343.	4.8	49
29	Experiments and modeling of a vacuum membrane distillation for high saline water. Journal of Industrial and Engineering Chemistry, 2014, 20, 2174-2183.	2.9	47
30	Fouling investigation of a full-scale seawater reverse osmosis desalination (SWRO) plant on the Red Sea: Membrane autopsy and pretreatment efficiency. Desalination, 2020, 496, 114536.	4.0	46
31	Techno-economic evaluation of an element-scale forward osmosis-reverse osmosis hybrid process for seawater desalination. Desalination, 2020, 476, 114240.	4.0	44
32	Thermally treated Mytilus coruscus shells for fluoride removal and their adsorption mechanism. Chemosphere, 2021, 263, 128328.	4.2	43
33	A detailed organic matter characterization of pretreated seawater using low pressure microfiltration hybrid systems. Journal of Membrane Science, 2013, 428, 290-300.	4.1	42
34	Marine bacterial transparent exopolymer particles (TEP) and TEP precursors: Characterization and RO fouling potential. Desalination, 2016, 379, 68-74.	4.0	42
35	Elucidating the fouling mechanism in pharmaceutical wastewater treatment by membrane distillation. Desalination, 2020, 475, 114148.	4.0	42
36	Effect of chemical and physical factors on the crystallization of calcium sulfate in seawater reverse osmosis brine. Desalination, 2018, 426, 78-87.	4.0	41

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37	Application of aluminum-modified food waste biochar as adsorbent of fluoride in aqueous solutions and optimization of production using response surface methodology. <i>Microporous and Mesoporous Materials</i> , 2021, 312, 110764.	2.2	41
38	Application of ultrasound to mitigate calcium sulfate scaling and colloidal fouling. <i>Desalination</i> , 2014, 336, 153-159.	4.0	39
39	Transport phenomena and fouling in vacuum enhanced direct contact membrane distillation: Experimental and modelling. <i>Separation and Purification Technology</i> , 2017, 172, 285-295.	3.9	39
40	Valuable rubidium extraction from potassium reduced seawater brine. <i>Journal of Cleaner Production</i> , 2018, 174, 1079-1088.	4.6	39
41	Relating solute properties of contaminants of emerging concern and their rejection by forward osmosis membrane. <i>Science of the Total Environment</i> , 2018, 639, 673-678.	3.9	39
42	Application of pressure assisted forward osmosis for water purification and reuse of reverse osmosis concentrate from a water reclamation plant. <i>Separation and Purification Technology</i> , 2016, 171, 182-190.	3.9	38
43	Organic fouling characterization of a CTA-based spiral-wound forward osmosis (SWFO) membrane used in wastewater reuse and seawater desalination. <i>Chemical Engineering Journal</i> , 2018, 336, 141-151.	6.6	37
44	Submerged membrane adsorption bioreactor as a pretreatment in seawater desalination for biofouling control. <i>Bioresource Technology</i> , 2013, 141, 57-64.	4.8	36
45	Submerged membrane GAC adsorption hybrid system in reverse osmosis concentrate treatment. <i>Separation and Purification Technology</i> , 2015, 146, 8-14.	3.9	33
46	Application of vacuum membrane distillation for small scale drinking water production. <i>Desalination</i> , 2014, 354, 53-61.	4.0	32
47	Assessment of biological activated carbon treatment to control membrane fouling in reverse osmosis of secondary effluent for reuse in irrigation. <i>Desalination</i> , 2015, 364, 90-95.	4.0	32
48	Fouling and transport of organic matter in cellulose triacetate forward-osmosis membrane for wastewater reuse and seawater desalination. <i>Chemical Engineering Journal</i> , 2020, 384, 123341.	6.6	32
49	Removal of triclosan from aqueous solution via adsorption by kenaf-derived biochar: Its adsorption mechanism study via spectroscopic and experimental approaches. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106343.	3.3	32
50	Fractional-submerged membrane distillation crystallizer (F-SMDC) for treatment of high salinity solution. <i>Desalination</i> , 2018, 440, 59-67.	4.0	30
51	Submerged membrane hybrid systems as pretreatment in seawater reverse osmosis (SWRO): Optimisation and fouling mechanism determination. <i>Journal of Membrane Science</i> , 2012, 411-412, 173-181.	4.1	29
52	Membrane distillation bioreactor (MDBR) for wastewater treatment, water reuse, and resource recovery: A review. <i>Journal of Water Process Engineering</i> , 2022, 47, 102687.	2.6	29
53	A rapid bioluminescence-based test of assimilable organic carbon for seawater. <i>Desalination</i> , 2013, 317, 160-165.	4.0	27
54	Nutrient utilization and oxygen production by <i>Chlorella vulgaris</i> in a hybrid membrane bioreactor and algal membrane photobioreactor system. <i>Bioresource Technology</i> , 2017, 237, 64-71.	4.8	27

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55	High turbidity water treatment by ceramic microfiltration membrane: Fouling identification and process optimization. <i>Environmental Technology and Innovation</i> , 2020, 17, 100578.	3.0	27
56	Discharge of microplastics fibres from wet wipes in aquatic and solid environments under different release conditions. <i>Science of the Total Environment</i> , 2021, 784, 147144.	3.9	26
57	Long-term effect on membrane fouling in a new membrane bioreactor as a pretreatment to seawater desalination. <i>Bioresource Technology</i> , 2014, 165, 60-68.	4.8	25
58	Advanced organic and biological analysis of dual media filtration used as a pretreatment in a full-scale seawater desalination plant. <i>Desalination</i> , 2016, 385, 83-92.	4.0	24
59	Effect of engineered environment on microbial community structure in biofilter and biofilm on reverse osmosis membrane. <i>Water Research</i> , 2017, 124, 227-237.	5.3	24
60	Biofouling Potential Reductions Using a Membrane Hybrid System as a Pre-treatment to Seawater Reverse Osmosis. <i>Applied Biochemistry and Biotechnology</i> , 2012, 167, 1716-1727.	1.4	23
61	The use of ultrasound to reduce internal concentration polarization in forward osmosis. <i>Ultrasonics Sonochemistry</i> , 2018, 41, 475-483.	3.8	22
62	Feasibility evaluation of element scale forward osmosis for direct connection with reverse osmosis. <i>Journal of Membrane Science</i> , 2018, 549, 366-376.	4.1	21
63	Optimization of simplified freeze desalination with surface scraped freeze crystallizer for producing irrigation water without seeding. <i>Desalination</i> , 2019, 452, 68-74.	4.0	21
64	Evaluation of an element-scale plate-type forward osmosis: Effect of structural parameters and operational conditions. <i>Desalination</i> , 2018, 430, 15-23.	4.0	19
65	Influence of high range of mass transfer coefficient and convection heat transfer on direct contact membrane distillation performance. <i>Desalination</i> , 2018, 426, 127-134.	4.0	18
66	Bacterial community structure in a biofilter used as a pretreatment for seawater desalination. <i>Ecological Engineering</i> , 2013, 60, 370-381.	1.6	17
67	Experimental investigation and modeling of dissolved organic carbon removal by coagulation from seawater. <i>Chemosphere</i> , 2014, 95, 310-316.	4.2	17
68	Effect of granular activated carbon filter on the subsequent flocculation in seawater treatment. <i>Desalination</i> , 2014, 354, 9-16.	4.0	17
69	Practical use of standard pore blocking index as an indicator of biofouling potential in seawater desalination. <i>Desalination</i> , 2015, 365, 8-14.	4.0	17
70	Performance assessment of oxidants as a biocide for biofouling control in industrial seawater cooling towers. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 59, 127-133.	2.9	17
71	Removal behaviors and fouling mechanisms of charged antibiotics and nanoparticles on forward osmosis membrane. <i>Journal of Environmental Management</i> , 2019, 247, 385-393.	3.8	17
72	Technical and economic analysis of an advanced multi-stage flash crystallizer for the treatment of concentrated brine. <i>Desalination</i> , 2021, 503, 114925.	4.0	17

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73	Emerging investigator series: control of membrane fouling by dissolved algal organic matter using pre-oxidation with coagulation as seawater pretreatment. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 935-944.	1.2	17
74	Mitigation of algal organic matter released from <i>Chaetoceros affinis</i> and <i>Hymenomonas</i> by in situ generated ferrate. <i>Chemosphere</i> , 2018, 206, 718-726.	4.2	16
75	Assessment of biological activity in contact flocculation filtration used as a pretreatment in seawater desalination. <i>Chemical Engineering Journal</i> , 2013, 228, 976-983.	6.6	15
76	Effect of microbial community structure on organic removal and biofouling in membrane adsorption bioreactor used in seawater pretreatment. <i>Chemical Engineering Journal</i> , 2016, 294, 30-39.	6.6	15
77	Nanoparticle charge affects water and reverse salt fluxes in forward osmosis process. <i>Desalination</i> , 2018, 438, 10-18.	4.0	15
78	Effect of charged nano-particles on ceramic microfiltration membrane fouling. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 72, 125-132.	2.9	14
79	Effect of temperature on turbidity removal by coagulation: Sludge recirculation for rapid settling. <i>Journal of Water Process Engineering</i> , 2022, 46, 102559.	2.6	13
80	Application of volume-retarded osmosis and low-pressure membrane hybrid process for water reclamation. <i>Chemosphere</i> , 2018, 194, 76-84.	4.2	12
81	Submerged membrane coagulation hybrid system as pretreatment to organic matter removal from seawater. <i>Water Science and Technology: Water Supply</i> , 2011, 11, 352-357.	1.0	11
82	New concept of pump-less forward osmosis (FO) and low-pressure membrane (LPM) process. <i>Scientific Reports</i> , 2017, 7, 14569.	1.6	11
83	Efficient Removal of Azo Dye from Wastewater Using the Non-Toxic Potassium Ferrate Oxidation-Coagulation Process. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6825.	1.3	11
84	Investigation of fouling mechanism in membrane distillation using in-situ optical coherence tomography with green regeneration of fouled membrane. <i>Journal of Membrane Science</i> , 2022, 641, 119894.	4.1	11
85	Colloidal silica fouling mechanism in direct-contact membrane distillation. <i>Desalination</i> , 2022, 527, 115554.	4.0	11
86	Understanding the risk of scaling and fouling in hollow fiber forward osmosis membrane application. <i>Chemical Engineering Research and Design</i> , 2016, 104, 452-464.	2.7	10
87	Effect of organic on chemical oxidation for biofouling control in pilot-scale seawater cooling towers. <i>Journal of Water Process Engineering</i> , 2017, 20, 1-7.	2.6	10
88	Application of forward osmosis membrane in nanofiltration mode to treat reverse osmosis concentrate from wastewater reclamation plants. <i>Water Science and Technology</i> , 2018, 77, 1990-1997.	1.2	10
89	Pretreatment for seawater desalination by flocculation: Performance of modified poly ferric silicate (PFSi- \dot{I}) and ferric chloride as flocculants. <i>Desalination</i> , 2011, 283, 106-110.	4.0	8
90	Seawater biofiltration pre-treatment system: comparison of filter media performance. <i>Desalination and Water Treatment</i> , 2014, 52, 6325-6332.	1.0	7

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91	Reusable carbon nanotube-embedded polystyrene/polyacrylonitrile nanofibrous sorbent for managing oil spills. <i>Desalination</i> , 2022, 537, 115865.	4.0	7
92	Ti-salt flocculation for dissolved organic matter removal in seawater. <i>Desalination and Water Treatment</i> , 2013, 51, 3591-3596.	1.0	5
93	4.3 Membrane Biofouling: Biofouling Assessment and Reduction Strategies in Seawater Reverse Osmosis <i>Desalination</i> . , 2017, , 48-71.		5
94	Non-chemical biofouling mitigation systems for seawater cooling tower using granular activated carbon biofiltration and ultrafiltration. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106784.	3.3	5
95	Multifunctional in-situ ferrate treatment and its removal mechanisms of membrane bioreactor residual pollutants. <i>Chemical Engineering Journal</i> , 2022, 446, 136956.	6.6	5
96	Fouling study on vacuum-enhanced direct contact membrane distillation for seawater desalination. <i>Desalination and Water Treatment</i> , 2016, 57, 10042-10051.	1.0	4
97	Performance evaluation of carbon nanotube enhanced membranes for SWRO pretreatment application. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 38, 123-131.	2.9	3
98	The performance of contact flocculationâ€“filtration as pretreatment of seawater reverse osmosis. <i>Desalination and Water Treatment</i> , 2012, 43, 246-252.	1.0	2
99	Removal of natural organic matter at the Gunbower water treatment plant in northern Victoria, Australia. <i>Desalination and Water Treatment</i> , 2016, 57, 9061-9069.	1.0	2