Sanghyun Jeong

List of Publications by Year
in descending order

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	Investigation of fouling mechanism in membrane distillation using in-situ optical coherence tomography with green regeneration of fouled membrane. Journal of Membrane Science, 2022, 641, 119894.	4.1	11
2	Colloidal silica fouling mechanism in direct-contact membrane distillation. Desalination, 2022, 527, 115554.	4.0	11
3	Effect of temperature on turbidity removal by coagulation: Sludge recirculation for rapid settling. Journal of Water Process Engineering, 2022, 46, 102559.	2.6	13
4	Membrane distillation bioreactor (MDBR) for wastewater treatment, water reuse, and resource recovery: A review. Journal of Water Process Engineering, 2022, 47, 102687.	2.6	29
5	Multifunctional in-situ ferrate treatment and its removal mechanisms of membrane bioreactor residual pollutants. Chemical Engineering Journal, 2022, 446, 136956.	6.6	5
6	Reusable carbon nanotube-embedded polystyrene/polyacrylonitrile nanofibrous sorbent for managing oil spills. Desalination, 2022, 537, 115865.	4.0	7
7	Thermally treated Mytilus coruscus shells for fluoride removal and their adsorption mechanism. Chemosphere, 2021, 263, 128328.	4.2	43
8	Application of aluminum-modified food waste biochar as adsorbent of fluoride in aqueous solutions and optimization of production using response surface methodology. Microporous and Mesoporous Materials, 2021, 312, 110764.	2.2	41
9	Technical and economic analysis of an advanced multi-stage flash crystallizer for the treatment of concentrated brine. Desalination, 2021, 503, 114925.	4.0	17
10	Efficient Removal of Azo Dye from Wastewater Using the Non-Toxic Potassium Ferrate Oxidationâ€“Coagulation Process. Applied Sciences (Switzerland), 2021, 11, 6825.	1.3	11
11	Discharge of microplastics fibres from wet wipes in aquatic and solid environments under different release conditions. Science of the Total Environment, 2021, 784, 147144.	3.9	26
12	Removal of triclosan from aqueous solution via adsorption by kenafâ€derived biochar: Its adsorption mechanism study via spectroscopic and experimental approaches. Journal of Environmental Chemical Engineering, 2021, 9, 106343.	3.3	32
13	Non-chemical biofouling mitigation systems for seawater cooling tower using granular activated carbon biofiltration and ultrafiltration. Journal of Environmental Chemical Engineering, 2021, 9, 106784.	3.3	5
14	Elucidating the fouling mechanism in pharmaceutical wastewater treatment by membrane distillation. Desalination, 2020, 475, 114148.	4.0	42
15	High turbidity water treatment by ceramic microfiltration membrane: Fouling identification and process optimization. Environmental Technology and Innovation, 2020, 17, 100578.	3.0	27
16	Fouling and transport of organic matter in cellulose triacetate forward-osmosis membrane for wastewater reuse and seawater desalination. Chemical Engineering Journal, 2020, 384, 123341.	6.6	32
17	Techno-economic evaluation of an element-scale forward osmosis-reverse osmosis hybrid process for seawater desalination. Desalination, 2020, 476, 114240.	4.0	44
18	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

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19	Emerging investigator series: control of membrane fouling by dissolved algal organic matter using pre-oxidation with coagulation as seawater pretreatment. Environmental Science: Water Research and Technology, 2020, 6, 935-944.	1.2	17
20	Removal behaviors and fouling mechanisms of charged antibiotics and nanoparticles on forward osmosis membrane. Journal of Environmental Management, 2019, 247, 385-393.	3.8	17
21	Chemical-free scale inhibition method for seawater reverse osmosis membrane process: Air micro-nano bubbles. Desalination, 2019, 461, 1-9.	4.0	50
22	A critical review on remediation, reuse, and resource recovery from acid mine drainage. Environmental Pollution, 2019, 247, 1110-1124.	3.7	276
23	Effect of charged nano-particles on ceramic microfiltration membrane fouling. Journal of Industrial and Engineering Chemistry, 2019, 72, 125-132.	2.9	14
24	Optimization of simplified freeze desalination with surface scraped freeze crystallizer for producing irrigation water without seeding. Desalination, 2019, 452, 68-74.	4.0	21
25	Acid mine drainage treatment by integrated submerged membrane distillationâ€“sorption system. Chemosphere, 2019, 218, 955-965.	4.2	50
26	Fractional-submerged membrane distillation crystallizer (F-SMDC) for treatment of high salinity solution. Desalination, 2018, 440, 59-67.	4.0	30
27	Nanoparticle charge affects water and reverse salt fluxes in forward osmosis process. Desalination, 2018, 438, 10-18.	4.0	15
28	Mechanistic insight into thein vitrotoxicity of graphene oxide against biofilm forming bacteria using laser-induced breakdown spectroscopy. Nanoscale, 2018, 10, 4475-4487.	2.8	58
29	Evaluation of an element-scale plate-type forward osmosis: Effect of structural parameters and operational conditions. Desalination, 2018, 430, 15-23.	4.0	19
30	Organic fouling characterization of a CTA-based spiral-wound forward osmosis (SWFO) membrane used in wastewater reuse and seawater desalination. Chemical Engineering Journal, 2018, 336, 141-151.	6.6	37
31	Fouling behavior of negatively charged PVDF membrane in membrane distillation for removal of antibiotics from wastewater. Journal of Membrane Science, 2018, 551, 12-19.	4.1	106
32	Fouling development in direct contact membrane distillation: Non-invasive monitoring and destructive analysis. Water Research, 2018, 132, 34-41.	5.3	80
33	Feasibility evaluation of element scale forward osmosis for direct connection with reverse osmosis. Journal of Membrane Science, 2018, 549, 366-376.	4.1	21
34	Application of forward osmosis membrane in nanofiltration mode to treat reverse osmosis concentrate from wastewater reclamation plants. Water Science and Technology, 2018, 77, 1990-1997.	1.2	10
35	Performance assessment of oxidants as a biocide for biofouling control in industrial seawater cooling towers. Journal of Industrial and Engineering Chemistry, 2018, 59, 127-133.	2.9	17
36	The use of ultrasound to reduce internal concentration polarization in forward osmosis. Ultrasonics Sonochemistry, 2018, 41, 475-483.	3.8	22

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37	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
38	Application of volume-retarded osmosis and low-pressure membrane hybrid process for water reclamation. Chemosphere, 2018, 194, 76-84.	4.2	12
39	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
40	Influence of high range of mass transfer coefficient and convection heat transfer on direct contact membrane distillation performance. Desalination, 2018, 426, 127-134.	4.0	18
41	Valuable rubidium extraction from potassium reduced seawater brine. Journal of Cleaner Production, 2018, 174, 1079-1088.	4.6	39
42	Relating solute properties of contaminants of emerging concern and their rejection by forward osmosis membrane. Science of the Total Environment, 2018, 639, 673-678.	3.9	39
43	Mitigation of algal organic matter released from Chaetoceros affinis and Hymenomonas by in situ generated ferrate. Chemosphere, 2018, 206, 718-726.	4.2	16
44	Nutrient utilization and oxygen production by Chlorella vulgaris in a hybrid membrane bioreactor and algal membrane photobioreactor system. Bioresource Technology, 2017, 237, 64-71.	4.8	27
45	Enhanced vapor transport in membrane distillation via functionalized carbon nanotubes anchored into electrospun nanofibres. Scientific Reports, 2017, 7, 41562.	1.6	97
46	Gravity-driven membrane system for secondary wastewater effluent treatment: Filtration performance and fouling characterization. Separation and Purification Technology, 2017, 184, 26-33.	3.9	69
47	CNTs reinforced super-hydrophobic-oleophilic electrospun polystyrene oil sorbent for enhanced sorption capacity and reusability. Chemical Engineering Journal, 2017, 314, 526-536.	6.6	97
48	Theoretical modeling and experimental validation of transport and separation properties of carbon nanotube electrospun membrane distillation. Journal of Membrane Science, 2017, 526, 395-408.	4.1	79
49	Effect of organic on chemical oxidation for biofouling control in pilot-scale seawater cooling towers. Journal of Water Process Engineering, 2017, 20, 1-7.	2.6	10
50	Time-resolved monitoring of biofouling development on a flat sheet membrane using optical coherence tomography. Scientific Reports, 2017, 7, 15.	1.6	75
51	Effect of engineered environment on microbial community structure in biofilter and biofilm on reverse osmosis membrane. Water Research, 2017, 124, 227-237.	5.3	24
52	New concept of pump-less forward osmosis (FO) and low-pressure membrane (LPM) process. Scientific Reports, 2017, 7, 14569.	1.6	11
53	Experimental comparison of submerged membrane distillation configurations for concentrated brine treatment. Desalination, 2017, 420, 54-62.	4.0	58
54	Rubidium extraction from seawater brine by an integrated membrane distillation-selective sorption system. Water Research, 2017, 123, 321-331.	5.3	70

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55	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
56	PDMS/PVDF hybrid electrospun membrane with superhydrophobic property and drop impact dynamics for dyeing wastewater treatment using membrane distillation. Journal of Membrane Science, 2017, 525, 57-67.	4.1	310
57	Transport phenomena and fouling in vacuum enhanced direct contact membrane distillation: Experimental and modelling. Separation and Purification Technology, 2017, 172, 285-295.	3.9	39
58	In-situ assessment of biofilm formation in submerged membrane system using optical coherence tomography and computational fluid dynamics. Journal of Membrane Science, 2017, 521, 84-94.	4.1	70
59	Membrane distillation for wastewater reverse osmosis concentrate treatment with water reuse potential. Journal of Membrane Science, 2017, 524, 565-575.	4.1	122
60	4.3 Membrane Biofouling: Biofouling Assessment and Reduction Strategies in Seawater Reverse Osmosis Desalination. , 2017, , 48-71.		5
61	Integrated approach to characterize fouling on a flat sheet membrane gravity driven submerged membrane bioreactor. Bioresource Technology, 2016, 222, 335-343.	4.8	49
62	Application of pressure assisted forward osmosis for water purification and reuse of reverse osmosis concentrate from a water reclamation plant. Separation and Purification Technology, 2016, 171, 182-190.	3.9	38
63	High flux and antifouling properties of negatively charged membrane for dyeing wastewater treatment by membrane distillation. Water Research, 2016, 103, 362-371.	5.3	193
64	Understanding the risk of scaling and fouling in hollow fiber forward osmosis membrane application. Chemical Engineering Research and Design, 2016, 104, 452-464.	2.7	10
65	Progress and challenges of carbon nanotube membrane in water treatment. Critical Reviews in Environmental Science and Technology, 2016, 46, 999-1046.	6.6	70
66	Performance evaluation of carbon nanotube enhanced membranes for SWRO pretreatment application. Journal of Industrial and Engineering Chemistry, 2016, 38, 123-131.	2.9	3
67	A review on fouling of membrane distillation. Desalination and Water Treatment, 2016, 57, 10052-10076.	1.0	83
68	Removal of natural organic matter at the Gunbower water treatment plant in northern Victoria, Australia. Desalination and Water Treatment, 2016, 57, 9061-9069.	1.0	2
69	In-depth analyses of organic matters in a full-scale seawater desalination plant and an autopsy of reverse osmosis membrane. Separation and Purification Technology, 2016, 162, 171-179.	3.9	72
70	Advanced organic and biological analysis of dual media filtration used as a pretreatment in a full-scale seawater desalination plant. Desalination, 2016, 385, 83-92.	4.0	24
71	Effect of microbial community structure on organic removal and biofouling in membrane adsorption bioreactor used in seawater pretreatment. Chemical Engineering Journal, 2016, 294, 30-39.	6.6	15
72	Marine bacterial transparent exopolymer particles (TEP) and TEP precursors: Characterization and RO fouling potential. Desalination, 2016, 379, 68-74.	4.0	42

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73	Fouling study on vacuum-enhanced direct contact membrane distillation for seawater desalination. Desalination and Water Treatment, 2016, 57, 10042-10051.	1.0	4
74	Assessment of biological activated carbon treatment to control membrane fouling in reverse osmosis of secondary effluent for reuse in irrigation. Desalination, 2015, 364, 90-95.	4.0	32
75	Practical use of standard pore blocking index as an indicator of biofouling potential in seawater desalination. Desalination, 2015, 365, 8-14.	4.0	17
76	Submerged membrane â€“ (GAC) adsorption hybrid system in reverse osmosis concentrate treatment. Separation and Purification Technology, 2015, 146, 8-14.	3.9	33
77	Interaction of humic substances on fouling in membrane distillation for seawater desalination. Chemical Engineering Journal, 2015, 262, 946-957.	6.6	92
78	Seawater biofiltration pre-treatment system: comparison of filter media performance. Desalination and Water Treatment, 2014, 52, 6325-6332.	1.0	7
79	Experimental investigation and modeling of dissolved organic carbon removal by coagulation from seawater. Chemosphere, 2014, 95, 310-316.	4.2	17
80	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
81	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
82	Effect of granular activated carbon filter on the subsequent flocculation in seawater treatment. Desalination, 2014, 354, 9-16.	4.0	17
83	Application of vacuum membrane distillation for small scale drinking water production. Desalination, 2014, 354, 53-61.	4.0	32
84	Application of ultrasound to mitigate calcium sulfate scaling and colloidal fouling. Desalination, 2014, 336, 153-159.	4.0	39
85	Long-term effect on membrane fouling in a new membrane bioreactor as a pretreatment to seawater desalination. Bioresource Technology, 2014, 165, 60-68.	4.8	25
86	Organic fouling behavior in direct contact membrane distillation. Desalination, 2014, 347, 230-239.	4.0	134
87	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
88	Assessment of biological activity in contact flocculation filtration used as a pretreatment in seawater desalination. Chemical Engineering Journal, 2013, 228, 976-983.	6.6	15
89	Bacterial community structure in a biofilter used as a pretreatment for seawater desalination. Ecological Engineering, 2013, 60, 370-381.	1.6	17
90	Foulant analysis of a reverse osmosis membrane used pretreated seawater. Journal of Membrane Science, 2013, 428, 434-444.	4.1	52

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91	Submerged membrane adsorption bioreactor as a pretreatment in seawater desalination for biofouling control. Bioresource Technology, 2013, 141, 57-64.	4.8	36
92	A rapid bioluminescence-based test of assimilable organic carbon for seawater. Desalination, 2013, 317, 160-165.	4.0	27
93	Microbial activity in biofilter used as a pretreatment for seawater desalination. Desalination, 2013, 309, 254-260.	4.0	60
94	Ti-salt flocculation for dissolved organic matter removal in seawater. Desalination and Water Treatment, 2013, 51, 3591-3596.	1.0	5
95	The performance of contact flocculationâ€“filtration as pretreatment of seawater reverse osmosis. Desalination and Water Treatment, 2012, 43, 246-252.	1.0	2
96	Biofouling Potential Reductions Using a Membrane Hybrid System as a Pre-treatment to Seawater Reverse Osmosis. Applied Biochemistry and Biotechnology, 2012, 167, 1716-1727.	1.4	23
97	Submerged membrane hybrid systems as pretreatment in seawater reverse osmosis (SWRO): Optimisation and fouling mechanism determination. Journal of Membrane Science, 2012, 411-412, 173-181.	4.1	29
98	Submerged membrane coagulation hybrid system as pretreatment to organic matter removal from seawater. Water Science and Technology: Water Supply, 2011, 11, 352-357.	1.0	11
99	Pretreatment for seawater desalination by flocculation: Performance of modified poly ferric silicate (PFSi-Î) and ferric chloride as flocculants. Desalination, 2011, 283, 106-110.	4.0	8