

# Alicia Kyoungjin An

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

101  
papers

3,022  
citations

31  
h-index

52  
g-index

105  
ext. papers

3,898  
ext. citations

9.1  
avg, IF

6.13  
L-index

#	Paper	IF	Citations
101	Conductive reverse osmosis membrane for electrochemical chlorine reduction and sustainable brackish water treatment. <i>Chemical Engineering Journal</i> , <b>2022</b> , 435, 134858	14.7	0
100	Hybrid forward/reverse osmosis (HFRO): an approach for optimized operation and sustainable resource recovery <b>2022</b> , 69-94		
99	Superhydrophobic and superoleophilic PH-CNT membrane for emulsified oil-water separation. <i>Desalination</i> , <b>2022</b> , 526, 115536	10.3	4
98	Colloidal silica fouling mechanism in direct-contact membrane distillation. <i>Desalination</i> , <b>2022</b> , 527, 115540	10.3	1
97	Hybrid nanobubble-forward osmosis system for aquaculture wastewater treatment and reuse. <i>Chemical Engineering Journal</i> , <b>2022</b> , 435, 135164	14.7	3
96	Aminoalkyl-organo-silane treated sand for the adsorptive removal of arsenic from the groundwater: Immobilizing the mobilized geogenic contaminants.. <i>Journal of Hazardous Materials</i> , <b>2022</b> , 425, 127916	12.8	0
95	Incorporation of negatively charged silver nanoparticles in outer-selective hollow fiber forward osmosis (OSHF-FO) membrane for wastewater dewatering. <i>Desalination</i> , <b>2022</b> , 522, 115402	10.3	5
94	Photothermally enabled MXene hydrogel membrane with integrated solar-driven evaporation and photodegradation for efficient water purification. <i>Chemical Engineering Journal</i> , <b>2022</b> , 430, 133054	14.7	10
93	A systematic study on the impact of feed composition and substrate wettability on wetting and fouling of omniphobic and janus membranes in membrane distillation. <i>Journal of Membrane Science</i> , <b>2022</b> , 641, 119873	9.6	2
92	Membrane distillation bioreactor (MDBR) for wastewater treatment, water reuse, and resource recovery: A review. <i>Journal of Water Process Engineering</i> , <b>2022</b> , 47, 102687	6.7	5
91	An integrated techno-economic analysis on wastewater reclamation in Hong Kong: A comprehensive cost benefit analysis with life cycle assessment. <i>Journal of Cleaner Production</i> , <b>2022</b> , 131838	10.3	0
90	Amino-embedded carbon quantum dots incorporated thin-film nanocomposite membrane for desalination by pervaporation. <i>Desalination</i> , <b>2022</b> , 533, 115742	10.3	2
89	Understanding the influence of hydraulic conditions on colloidal fouling development by using the micro-patterned nanofiltration membrane: Experiments and numerical simulation. <i>Journal of Membrane Science</i> , <b>2022</b> , 654, 120559	9.6	0
88	Life Cycle Assessment of the Polyvinylidene Fluoride Polymer with Applications in Various Emerging Technologies. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2022</b> , 10, 5708-5718	8.3	
87	Elucidating the role of graphene oxide layers in enhancing N-Nitrosodimethylamine (NDMA) rejection and antibiofouling property of RO membrane simultaneously. <i>Journal of Membrane Science</i> , <b>2021</b> , 120043	9.6	1
86	Nanobubble-assisted scaling inhibition in membrane distillation for the treatment of high-salinity brine.. <i>Water Research</i> , <b>2021</b> , 209, 117954	12.5	1
85	Robust dual-layered omniphobic electrospun membrane with anti-wetting and anti-scaling functionalised for membrane distillation application. <i>Journal of Membrane Science</i> , <b>2021</b> , 624, 119089	9.6	20

84	Low-pressure volume retarded osmosis for removal of per- and polyfluoroalkyl substances. <i>Water Research</i> , <b>2021</b> , 194, 116929	12.5	2
83	Resources recycle of traditional Chinese medicine (TCM) wastewater 1: Effectiveness of the UF-MD hybrid system and MD process optimization. <i>Desalination</i> , <b>2021</b> , 504, 114953	10.3	2
82	Technical and economic analysis of an advanced multi-stage flash crystallizer for the treatment of concentrated brine. <i>Desalination</i> , <b>2021</b> , 503, 114925	10.3	5
81	Analyzing the effects of institutional capacity on sustainable water governance. <i>Sustainability Science</i> , <b>2021</b> , 16, 169-181	6.4	4
80	PAA@ZIF-8 incorporated nanofibrous membrane for high-efficiency PM2.5 capture. <i>Chemical Engineering Journal</i> , <b>2021</b> , 405, 126584	14.7	20
79	Self-Assembled Hydrophobic/Hydrophilic Porphyrin-TiCT MXene Janus Membrane for Dual-Functional Enabled Photothermal Desalination. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 3762-3770	9.5	25
78	A Conductive Hydrophobic Polyaniline Sandwiched Polyvinylidene Fluoride Membrane for Early Detection of Surfactant-Induced Wetting in Membrane Distillation Using Impedance. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 679-690	4.3	1
77	Effective suppression of concentration polarization by nanofiltration membrane surface pattern manipulation: Numerical modeling based on LIF visualization. <i>Journal of Membrane Science</i> , <b>2021</b> , 622, 119021	9.6	5
76	Whole sugar 2,3-butanediol fermentation for oil palm empty fruit bunches biorefinery by a newly isolated <i>Klebsiella pneumoniae</i> PM2. <i>Bioresource Technology</i> , <b>2021</b> , 333, 125206	11	8
75	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> , <b>2021</b> , 641, 119894	9.6	2
74	Submerged versus side-stream osmotic membrane bioreactors using an outer-selective hollow fiber osmotic membrane for desalination. <i>Desalination</i> , <b>2021</b> , 515, 115196	10.3	1
73	Multifunctional hybrid UF membrane from poly(ether sulfone) and quaternized polydopamine anchored reduced graphene oxide nanohybrid for water treatment. <i>Journal of Membrane Science</i> , <b>2021</b> , 639, 119779	9.6	4
72	Hierarchical Janus membrane via a sequential electro spray coating method with wetting and fouling resistance for membrane distillation. <i>Desalination</i> , <b>2021</b> , 520, 115313	10.3	9
71	Fabrication of robust green superhydrophobic hybrid nanofiber-nanosphere membrane for membrane distillation. <i>Desalination</i> , <b>2021</b> , 520, 115314	10.3	4
70	Plasmonic Titanium Nitride Nano-enabled Membranes with High Structural Stability for Efficient Photothermal Desalination. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 3805-3815	9.5	11
69	Molecular engineering low-surface energy membranes by grafting perfluoro-tert-butoxy chains containing fluorosilica aerogels. <i>Green Chemistry</i> , <b>2020</b> , 22, 3283-3295	10	9
68	Superhydrophobic (polyvinylidene fluoride-co-hexafluoropropylene)/ (polystyrene) composite membrane via a novel hybrid electro spin-electro spray process. <i>Journal of Membrane Science</i> , <b>2020</b> , 611, 118360	9.6	16
67	Solvothermal synthesis of copper-doped BiOBr microflowers with enhanced adsorption and visible-light driven photocatalytic degradation of norfloxacin. <i>Chemical Engineering Journal</i> , <b>2020</b> , 401, 126012	14.7	60

66	High-efficiency solar-driven water desalination using a thermally isolated plasmonic membrane. <i>Journal of Cleaner Production</i> , <b>2020</b> , 271, 122684	10.3	11
65	Low-cost bio-based sustainable removal of lead and cadmium using a polyphenolic bioactive Indian curry leaf ( <i>Murraya koengii</i> ) powder. <i>International Journal of Hygiene and Environmental Health</i> , <b>2020</b> , 226, 113471	6.9	21
64	Macro-corrugated and nano-patterned hierarchically structured superomniphobic membrane for treatment of low surface tension oily wastewater by membrane distillation. <i>Water Research</i> , <b>2020</b> , 174, 115600	12.5	39
63	High-performance nanofiltration membrane structured with enhanced stripe nano-morphology. <i>Journal of Membrane Science</i> , <b>2020</b> , 600, 117852	9.6	28
62	Evaluation of anti-bacterial adhesion performance of polydopamine cross-linked graphene oxide RO membrane via in situ optical coherence tomography. <i>Desalination</i> , <b>2020</b> , 479, 114339	10.3	18
61	Environment Modeling for Sustainable Development <b>2020</b> , 229-253		
60	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> , <b>2020</b> , 6, 935-944	4.2	13
59	Elucidating the fouling mechanism in pharmaceutical wastewater treatment by membrane distillation. <i>Desalination</i> , <b>2020</b> , 475, 114148	10.3	18
58	Superhydrophobic membrane by hierarchically structured PDMS-POSS electro spray coating with cauliflower-shaped beads for enhanced MD performance. <i>Journal of Membrane Science</i> , <b>2020</b> , 597, 117638	9.6	29
57	Patterned superhydrophobic polyvinylidene fluoride (PVDF) membranes for membrane distillation: Enhanced flux with improved fouling and wetting resistance. <i>Journal of Membrane Science</i> , <b>2020</b> , 595, 117596	9.6	45
56	A fluorescence-based indicator for nanofiltration fouling propensity caused by effluent organic matter (EfOM). <i>Process Biochemistry</i> , <b>2020</b> , 91, 260-270	4.8	
55	Flame-made amorphous solid acids with tunable acidity for the aqueous conversion of glucose to levulinic acid. <i>Green Chemistry</i> , <b>2020</b> , 22, 688-698	10	10
54	Removal of organic micropollutants using advanced membrane-based water and wastewater treatment: A review. <i>Journal of Membrane Science</i> , <b>2020</b> , 598, 117672	9.6	99
53	Study of the salinity effects on the cooling and desalination performance of an adsorption cooling cum desalination system with a novel composite adsorbent. <i>Applied Thermal Engineering</i> , <b>2020</b> , 181, 115879	5.8	12
52	Life cycle assessment (LCA) of food waste treatment in Hong Kong: On-site fermentation methodology. <i>Journal of Environmental Management</i> , <b>2019</b> , 240, 343-351	7.9	29
51	Electrospun Nanofiber Membranes Incorporating PDMS-Aerogel Superhydrophobic Coating with Enhanced Flux and Improved Antiwettability in Membrane Distillation. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 4948-4958	10.3	64
50	Omniphobic re-entrant PVDF membrane with ZnO nanoparticles composite for desalination of low surface tension oily seawater. <i>Water Research</i> , <b>2019</b> , 165, 114982	12.5	56
49	Enhanced ammonia recovery from wastewater by Nafion membrane with highly porous honeycomb nanostructure and its mechanism in membrane distillation. <i>Journal of Membrane Science</i> , <b>2019</b> , 590, 117265	9.6	21

48	Regeneration of superhydrophobic TiO <sub>2</sub> electrospun membranes in seawater desalination by water flushing in membrane distillation. <i>Desalination</i> , <b>2019</b> , 468, 114054	10.3	44
47	Estimation of energy efficiency for educational buildings in Hong Kong. <i>Journal of Cleaner Production</i> , <b>2019</b> , 235, 453-460	10.3	8
46	Self-cleaning BiOBr/Ag photocatalytic membrane for membrane regeneration under visible light in membrane distillation. <i>Chemical Engineering Journal</i> , <b>2019</b> , 378, 122137	14.7	30
45	Electrospun Nanofiber Membranes for Membrane Distillation <b>2019</b> , 107-140		1
44	Understanding fouling dynamics on functionalized CNT-based membranes: Mechanisms and reversibility. <i>Desalination</i> , <b>2019</b> , 456, 74-84	10.3	28
43	Smart Food Waste Recycling Bin (S-FRB) to turn food waste into green energy resources. <i>Journal of Environmental Management</i> , <b>2019</b> , 234, 290-296	7.9	21
42	Efficient removal of zinc from water and wastewater effluents by hydroxylated and carboxylated carbon nanotube membranes: Behaviors and mechanisms of dynamic filtration. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 365, 64-73	12.8	40
41	Reinforced superhydrophobic membrane coated with aerogel-assisted polymeric microspheres for membrane distillation. <i>Journal of Membrane Science</i> , <b>2019</b> , 573, 570-578	9.6	42
40	Mechanistic insight into the in vitro toxicity of graphene oxide against biofilm forming bacteria using laser-induced breakdown spectroscopy. <i>Nanoscale</i> , <b>2018</b> , 10, 4475-4487	7.7	41
39	Fouling behavior of negatively charged PVDF membrane in membrane distillation for removal of antibiotics from wastewater. <i>Journal of Membrane Science</i> , <b>2018</b> , 551, 12-19	9.6	72
38	Simple Method for Calculating Hydraulic Behavior of Combined Sewer Overflow from Rainfall Event Data. <i>Journal of Water Resources Planning and Management - ASCE</i> , <b>2018</b> , 144, 04018061	2.8	5
37	Optimization of acid pretreatment and enzymatic hydrolysis on the production of ethanol fuel from waste banana peels. <i>Energy and Environment</i> , <b>2018</b> , 29, 1354-1364	2.4	8
36	Potential for energy recovery and greenhouse gas reduction through waste-to-energy technologies. <i>Journal of Cleaner Production</i> , <b>2018</b> , 176, 503-511	10.3	57
35	Mitigation of algal organic matter released from <i>Chaetoceros affinis</i> and <i>Hymenomonas</i> by in situ generated ferrate. <i>Chemosphere</i> , <b>2018</b> , 206, 718-726	8.4	15
34	Bacterial inactivation and in situ monitoring of biofilm development on graphene oxide membrane using optical coherence tomography. <i>Journal of Membrane Science</i> , <b>2018</b> , 564, 22-34	9.6	26
33	Electrospun dual-layer nonwoven membrane for desalination by air gap membrane distillation. <i>Desalination</i> , <b>2017</b> , 403, 187-198	10.3	107
32	Hong Kong's greenhouse gas emissions from the waste sector and its projected changes by integrated waste management facilities. <i>Journal of Cleaner Production</i> , <b>2017</b> , 149, 690-700	10.3	11
31	Enhanced vapor transport in membrane distillation via functionalized carbon nanotubes anchored into electrospun nanofibres. <i>Scientific Reports</i> , <b>2017</b> , 7, 41562	4.9	71

30	Anti-wetting behavior of negatively charged superhydrophobic PVDF membranes in direct contact membrane distillation of emulsified wastewaters. <i>Journal of Membrane Science</i> , <b>2017</b> , 535, 230-238	9.6	101
29	Increased adsorption of aqueous zinc species by Ar/O <sub>2</sub> plasma-treated carbon nanotubes immobilized in hollow-fiber ultrafiltration membrane. <i>Chemical Engineering Journal</i> , <b>2017</b> , 325, 239-248	14.7	31
28	Effects of Coagulant with Different Basicity on Membrane-based Biological Treatment for Removing Phosphorus. <i>Journal of Coastal Research</i> , <b>2017</b> , 79, 65-69	0.6	1
27	CNTs reinforced super-hydrophobic-oleophilic electrospun polystyrene oil sorbent for enhanced sorption capacity and reusability. <i>Chemical Engineering Journal</i> , <b>2017</b> , 314, 526-536	14.7	77
26	Advanced multi-nozzle electrospun functionalized titanium dioxide/polyvinylidene fluoride-co-hexafluoropropylene (TiO <sub>2</sub> /PVDF-HFP) composite membranes for direct contact membrane distillation. <i>Journal of Membrane Science</i> , <b>2017</b> , 524, 712-720	9.6	99
25	Theoretical modeling and experimental validation of transport and separation properties of carbon nanotube electrospun membrane distillation. <i>Journal of Membrane Science</i> , <b>2017</b> , 526, 395-408	9.6	59
24	Engineering the Re-Entrant Hierarchy and Surface Energy of PDMS-PVDF Membrane for Membrane Distillation Using a Facile and Benign Microsphere Coating. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 10117-10126	10.3	76
23	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> , <b>2017</b> , 525, 57-67	9.6	243
22	Influence of ligands on metal speciation, transport and toxicity in a tropical river during wet (monsoon) period. <i>Chemosphere</i> , <b>2016</b> , 163, 322-333	8.4	26
21	Electrospun nanofiber membranes incorporating fluorosilane-coated TiO <sub>2</sub> nanocomposite for direct contact membrane distillation. <i>Journal of Membrane Science</i> , <b>2016</b> , 520, 145-154	9.6	135
20	High flux and antifouling properties of negatively charged membrane for dyeing wastewater treatment by membrane distillation. <i>Water Research</i> , <b>2016</b> , 103, 362-371	12.5	151
19	Hydrophobic surface modification of membrane distillation (MD) membranes using water-repelling polymer based on urethane rubber. <i>Desalination and Water Treatment</i> , <b>2016</b> , 57, 10031-10041		12
18	Characterizing flat sheet membrane resistance fraction of chemically enhanced backflush. <i>Chemical Engineering Journal</i> , <b>2016</b> , 284, 61-67	14.7	34
17	A mechanistic study of in situ chemical cleaning-in-place for a PTFE flat sheet membrane: fouling mitigation and membrane characterization. <i>Biofouling</i> , <b>2016</b> , 32, 301-12	3.3	12
16	Multi-purpose rainwater harvesting for water resource recovery and the cooling effect. <i>Water Research</i> , <b>2015</b> , 86, 116-21	12.5	36
15	Significance of effective surface area of activated carbons on elucidating the adsorption mechanism of large dye molecules. <i>Journal of Environmental Chemical Engineering</i> , <b>2015</b> , 3, 1029-1037	6.8	24
14	Removal of oil from water using magnetic bicomponent composite nanofibers fabricated by electrospinning. <i>Composites Part B: Engineering</i> , <b>2015</b> , 77, 311-318	10	104
13	Development of the compact city index and its application to Japanese cities. <i>Urban Studies</i> , <b>2015</b> , 52, 1054-1070	3.2	35

12	Aluminosilicate-based adsorbent in equimolar and non-equimolar binary-component heavy metal removal systems. <i>Water Science and Technology</i> , <b>2015</b> , 72, 2166-78	2.2	10
11	Significance of microporosity on the interaction of phenol with porous graphitic carbon. <i>Chemical Engineering Journal</i> , <b>2015</b> , 269, 20-26	14.7	30
10	Quantifying and managing regional greenhouse gas emissions: waste sector of Daejeon, Korea. <i>Journal of Environmental Sciences</i> , <b>2014</b> , 26, 1249-59	6.4	8
9	Partial nitrification for subsequent Anammox to treat high-ammonium leachate. <i>Environmental Technology (United Kingdom)</i> , <b>2013</b> , 34, 1063-8	2.6	10
8	Cluster analysis for characterization of rainfalls and CSO behaviours in an urban drainage area of Tokyo. <i>Water Science and Technology</i> , <b>2013</b> , 68, 544-51	2.2	24
7	Evaluation of Rainwater Utilization for Miscellaneous Water Demands in Different Types of Buildings Using Geographic Information System. <i>Environmental Engineering Research</i> , <b>2013</b> , 18, 85-90	3.6	1
6	Regional energy-related carbon emission characteristics and potential mitigation in eco-industrial parks in South Korea: Logarithmic mean Divisia index analysis based on the Kaya identity. <i>Energy</i> , <b>2012</b> , 46, 231-241	7.9	62
5	The influence of field-oriented environmental education on leadership development. <i>Procedia, Social and Behavioral Sciences</i> , <b>2011</b> , 15, 1271-1275		3
4	Completely Autotrophic Nitrogen-Removal for Treatment of High Ammonia Leachate. <i>Advanced Materials Research</i> , <b>2010</b> , 113-116, 662-665	0.5	
3	Chemical Oxygen Demand and the Mechanism of Excess Sludge Reduction in an Oxidic-Settling-Anaerobic Activated Sludge Process. <i>Journal of Environmental Engineering, ASCE</i> , <b>2008</b> , 134, 469-477	2	32
2	Pilot study for the potential application of a shortcut nitrification and denitrification process in landfill leachate treatment with MBR. <i>Water Science and Technology: Water Supply</i> , <b>2006</b> , 6, 147-154	1.4	14
1	Possible cause of excess sludge reduction in an oxidic-settling-anaerobic activated sludge process (OSA process). <i>Water Research</i> , <b>2003</b> , 37, 3855-66	12.5	109