Young-Nam Kwon

List of Publications by Year
in descending order

79 papers	5,253 citations	117571 34 h-index	82499 72 g-index
79 all docs	79 docs citations	79 times ranked	4746 citing authors

#	Article	IF	Citations
1	Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes. Desalination, 2009, 242, 149-167.	4.0	818
2	Probing the nano- and micro-scales of reverse osmosis membranesâ€"A comprehensive characterization of physiochemical properties of uncoated and coated membranes by XPS, TEM, ATR-FTIR, and streaming potential measurements. Journal of Membrane Science, 2007, 287, 146-156.	4.1	582
3	Effect of membrane chemistry and coating layer on physiochemical properties of thin film composite polyamide RO and NF membranes. Desalination, 2009, 242, 168-182.	4.0	424
4	Fouling of reverse osmosis and nanofiltration membranes by humic acidâ€"Effects of solution composition and hydrodynamic conditions. Journal of Membrane Science, 2007, 290, 86-94.	4.1	328
5	Hypochlorite degradation of crosslinked polyamide membranesII. Changes in hydrogen bonding behavior and performance. Journal of Membrane Science, 2006, 282, 456-464.	4.1	308
6	Characterization of Humic Acid Fouled Reverse Osmosis and Nanofiltration Membranes by Transmission Electron Microscopy and Streaming Potential Measurements. Environmental Science & Technology, 2007, 41, 942-949.	4.6	173
7	Fate of engineered nanoparticles: Implications in the environment. Coordination Chemistry Reviews, 2015, 287, 64-78.	9.5	171
8	Hypochlorite degradation of crosslinked polyamide membranes. Journal of Membrane Science, 2006, 283, 21-26.	4.1	165
9	The role of foulantâ€"foulant electrostatic interaction on limiting flux for RO and NF membranes during humic acid foulingâ€"Theoretical basis, experimental evidence, and AFM interaction force measurement. Journal of Membrane Science, 2009, 326, 526-532.	4.1	138
10	Preparation of cellulose triacetate/cellulose acetate (CTA/CA)-based membranes for forward osmosis. Journal of Membrane Science, 2013, 433, 49-59.	4.1	128
11	Protection of polymeric membranes with antifouling surfacing via surface modifications. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 190-201.	2.3	119
12	Surface modification of a polyamide reverse osmosis membrane for chlorine resistance improvement. Journal of Membrane Science, 2012, 415-416, 192-198.	4.1	105
13	Synthesis of grapheneâ€"carbon sphere hybrid aerogel with silver nanoparticles and its catalytic and adsorption applications. Chemical Engineering Journal, 2014, 244, 160-167.	6.6	100
14	Interfacially synthesized chlorine-resistant polyimide thin film composite (TFC) reverse osmosis (RO) membranes. Desalination, 2013, 309, 18-26.	4.0	86
15	Effect of chlorination condition and permeability of chlorine species on the chlorination of a polyamide membrane. Water Research, 2012, 46, 5389-5400.	5.3	76
16	Effect of acidic aqueous solution on chemical and physical properties of polyamide NF membranes. Applied Surface Science, 2018, 444, 387-398.	3.1	71
17	Microplastics waste in environment: A perspective on recycling issues from PPE kits and face masks during the COVID-19 pandemic. Environmental Technology and Innovation, 2022, 26, 102290.	3.0	71
18	Use of atomic force microscopy and fractal geometry to characterize the roughness of nano-, micro-, and ultrafiltration membranes. Journal of Membrane Science, 2009, 340, 117-132.	4.1	69

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19	Acid-catalyzed hydrolysis of semi-aromatic polyamide NF membrane and its application to water softening and antibiotics enrichment. Chemical Engineering Journal, 2018, 332, 419-430.	6.6	61
20	Change of membrane performance due to chlorination of crosslinked polyamide membranes. Journal of Applied Polymer Science, 2006, 102, 5895-5902.	1.3	59
21	Synthesis and characterization of metal-doped reduced graphene oxide composites, and their application in removal of Escherichia coli, arsenic and 4-nitrophenol. Journal of Industrial and Engineering Chemistry, 2015, 29, 282-288.	2.9	57
22	Change of chemical composition and hydrogen bonding behavior due to chlorination of crosslinked polyamide membranes. Journal of Applied Polymer Science, 2008, 108, 2061-2066.	1.3	56
23	Raspberry derived mesoporous carbon-tubules and fixed-bed adsorption of pharmaceutical drugs. Journal of Industrial and Engineering Chemistry, 2014, 20, 1126-1132.	2.9	56
24	Adsorption of perfluorinated compounds on thinâ€film composite polyamide membranes. Journal of Applied Polymer Science, 2012, 124, 1042-1049.	1.3	53
25	Adsorption of As(V) by boehmite and alumina of different morphologies prepared under hydrothermal conditions. Chemosphere, 2017, 169, 99-106.	4.2	53
26	Surface modification of SWRO membranes using hydroxyl poly(oxyethylene) methacrylate and zwitterionic carboxylated polyethyleneimine. Journal of Membrane Science, 2015, 486, 97-105.	4.1	51
27	Surface modification of seawater reverse osmosis (SWRO) membrane using methyl methacrylate-hydroxy poly(oxyethylene) methacrylate (MMA-HPOEM) comb-polymer and its performance. Desalination, 2012, 291, 1-7.	4.0	47
28	Realization of continuous Zachariasen carbon monolayer. Science Advances, 2017, 3, e1601821.	4.7	46
29	Comparison of integrally asymmetric and thin film composite structures for a desirable fashion of forward osmosis membranes. Journal of Membrane Science, 2015, 495, 457-470.	4.1	44
30	Tailoring interlayer structure of molecular layer-by-layer assembled polyamide membranes for high separation performance. Applied Surface Science, 2015, 356, 659-667.	3.1	38
31	Protocol for development of various plants leaves extract in single-pot synthesis of metal nanoparticles. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 103, 134-142.	2.0	37
32	The application of polyethyleneimine draw solution in a combined forward osmosis/nanofiltration system. Journal of Applied Polymer Science, 2015, 132, .	1.3	36
33	Preparation and applications of poly vinyl alcohol (PVA) modified cellulose acetate (CA) membranes for forward osmosis (FO) processes. Desalination and Water Treatment, 2015, 53, 1-7.	1.0	36
34	Chemical and surface engineered superhydrophobic patterned membrane with enhanced wetting and fouling resistance for improved membrane distillation performance. Journal of Membrane Science, 2021, 629, 119280.	4.1	35
35	Effect of bromide on the chlorination of a polyamide membrane. Desalination, 2011, 280, 80-86.	4.0	34
36	The chlorination mechanism of integrally asymmetric cellulose triacetate (CTA)-based and thin film composite polyamide-based forward osmosis membrane. Journal of Membrane Science, 2017, 523, 111-121.	4.1	34

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37	Degradation of full aromatic polyamide NF membrane by sulfuric acid and hydrogen halides: Change of the surface/permeability properties. Polymer Degradation and Stability, 2019, 162, 1-11.	2.7	33
38	Effect of feed spacer thickness on the fouling behavior in reverse osmosis process â€" A pilot scale study. Desalination, 2016, 379, 155-163.	4.0	30
39	Surface innovation to enhance anti-droplet and hydrophobic behavior of breathable compressed-polyurethane masks. Environmental Technology and Innovation, 2020, 20, 101093.	3.0	30
40	Distinct adsorption enhancement of bi-component metals (cobalt and nickel) by Fireweed-derived carbon compared to activated carbon: Incorporation of surface group distributions for increased efficiency. Chemical Engineering Journal, 2015, 281, 713-723.	6.6	29
41	Review on Blueprint of Designing Anti-Wetting Polymeric Membrane Surfaces for Enhanced Membrane Distillation Performance. Polymers, 2020, 12, 23.	2.0	29
42	Assessing the effects of bacterial predation on membrane biofouling. Water Research, 2013, 47, 6024-6032.	5.3	26
43	Investigation of Hydrate-induced Ice Desalination (HIID) and its application to a pretreatment of reverse osmosis (RO) process. Desalination, 2016, 395, 8-16.	4.0	26
44	Cellulose acetate graft-(glycidylmethacrylate-g-PEG) for modification of AMC ultrafiltration membranes to mitigate organic fouling. RSC Advances, 2015, 5, 48290-48300.	1.7	25
45	Long-Term Stability of Low-Pressure Reverse Osmosis (RO) Membrane Operationâ€"A Pilot Scale Study. Water (Switzerland), 2018, 10, 93.	1.2	21
46	Single-step green synthesis of imine-functionalized carbon spheres and their application in uranium removal from aqueous solution. RSC Advances, 2014, 4, 46114-46121.	1.7	20
47	Surface modification of TFC FO membrane using N-isopropylacrylamide (NIPAM) to enhance fouling resistance and cleaning efficiency. , 0, 65, 11-21.		17
48	Poly(isophthalamide) based graft copolymer for the modification of cellulose acetate ultrafiltration membranes and a fouling study by AFM imaging. Journal of Membrane Science, 2014, 465, 117-128.	4.1	16
49	Concentration polarization effect and preferable membrane configuration at pressure-retarded osmosis operation. Desalination, 2016, 389, 58-67.	4.0	16
50	Surface modification of polyvinylidene fluoride membrane for enhanced wetting resistance. Applied Surface Science, 2019, 491, 32-42.	3.1	16
51	Application of a FO/MD-combined system for the desalination of saline solution. Desalination and Water Treatment, 2016, 57, 14347-14354.	1.0	14
52	Preparation and characterization of antifouling poly(vinylidene fluoride) blended membranes. Journal of Applied Polymer Science, 2012, 123, 286-291.	1.3	13
53	Investigation on the factors determining permeate pH in reverse osmosis membrane processes. Desalination, 2018, 430, 147-158.	4.0	13
54	Exploration of time series model for predictive evaluation of long-term performance of membrane distillation desalination. Chemical Engineering Research and Design, 2022, 160, 1-12.	2.7	12

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55	Distinctive green recovery of silver species from modified cellulose: Mechanism and spectroscopic studies. International Journal of Biological Macromolecules, 2015, 76, 109-118.	3.6	10
56	Fouling control through the hydrophilic surface modification of poly(vinylidene fluoride) membranes. Journal of Applied Polymer Science, 2015, 132, .	1.3	10
57	Facile approach for designing a novel micropatterned antiwetting membrane by utilizing 3D printed molds for improved desalination performance. Journal of Membrane Science, 2021, 637, 119641.	4.1	10
58	Development of fouling-resistant RO membranes using PEGA macromer. Desalination and Water Treatment, 2010, 15, 54-61.	1.0	9
59	Suppression of gold nanoparticle agglomeration and its separation via nylon membranes. Chinese Journal of Chemical Engineering, 2017, 25, 931-937.	1.7	8
60	Preparation of newly synthesized forward osmosis membrane. Desalination and Water Treatment, 2013, 51, 5191-5195.	1.0	7
61	Pretreatment with alum or powdered activated carbon reduces bacterial predation-associated irreversible fouling of membranes. Biofouling, 2014, 30, 1225-1233.	0.8	6
62	Fluorine-free anti-droplet surface modification by hexadecyltrimethoxysilane-modified silica nanoparticles-coated carbon nanofibers for self-cleaning applications. Progress in Organic Coatings, 2021, 153, 106165.	1.9	6
63	Acid-Resistance Enhancement of Thin-Film Composite Membrane Using Barrier Effect of Graphene Oxide Nanosheets. Materials, 2021, 14, 3151.	1.3	6
64	Preparation of dualâ€layer acetylated methyl cellulose hollow fiber membranes via coâ€extrusion using thermally induced phase separation and nonâ€solvent induced phase separation methods. Journal of Applied Polymer Science, 2015, 132, .	1.3	4
65	Application of AMC UF membranes blended with hydrophilic CA-graft copolymer for rejection of Fe(II)/(III) ions using various ligands. Journal of Industrial and Engineering Chemistry, 2017, 51, 54-63.	2.9	4
66	Acid stability of polyamide membranes. Polymer, 2022, 241, 124516.	1.8	4
67	Preparation of ultrafiltration membrane by newly synthesized AMC polymer. Desalination and Water Treatment, 2013, 51, 5196-5203.	1.0	3
68	Preparation of EVOH and aramid-modified polar nylon membrane for the removal of hard and soft colloidal particles. Journal of Industrial and Engineering Chemistry, 2018, 65, 72-81.	2.9	3
69	Three-layered hollow fiber (HF) membrane and its modification to enhance wetting resistance for membrane distillation (MD). Environmental Technology and Innovation, 2021, 21, 101227.	3.0	3
70	Enhancing the anti-fouling property of the SWRO membrane through the surface coating with the Styrene-PEGA copolymer. Desalination and Water Treatment, 2010, 15, 183-189.	1.0	2
71	Investigation of a Gas Hydrate Dissociation-Energy-Based Quick-Freezing Treatment for Sludge Cell Lysis and Dewatering. International Journal of Environmental Research and Public Health, 2019, 16, 3611.	1.2	2
72	Structured pattern hollow fiber membrane designed via reverse thermally induced phase separation method for ultrafiltration applications. Journal of Applied Polymer Science, 2022, 139, .	1.3	2

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73	Preparation and Characterization of Titania-Deposited Silica Composite Hollow Fiber Membranes with High Hydrothermal Stability. Journal of Nanoscience and Nanotechnology, 2013, 13, 7658-7663.	0.9	1
74	Preparation of a Methylcelluloseâ€graftâ€Methyl Methacrylate Copolymer as an Ultrafiltration Membrane Material. Macromolecular Symposia, 2015, 351, 8-18.	0.4	1
75	Science Walden: Exploring the Convergence of Environmental Technologies with Design and Art. Sustainability, 2017, 9, 35.	1.6	1
76	Surface modification of TFC FO membrane using N-isopropylacrylamide (NIPAM) to enhance fouling resistance and cleaning efficiency. , 0, , 11-21.		0
77	Effects of interfacial polymerization conditions on performance of polyamide reverse osmosis membranes and optimization of polymerization conditions by statistical methodology. , 0, 74, 1-11.		0
78	Improved water quality and phenol degradation via a combination of electron-beam irradiation (EBI) and activated carbon fiber (ACF). , 0, 64, 118-126.		0
79	Enhanced boron rejection of a thin-film composite membrane by embedding additives including hydroxyl groups. , 0, 162, 112-116.		0