

# Choe Peng Leo

## List of Publications by Year in descending order

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113  
papers

4,363  
citations

126708

33  
h-index

114278

63  
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114  
all docs

114  
docs citations

114  
times ranked

4686  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polymeric membranes incorporated with metal/metal oxide nanoparticles: A comprehensive review. <i>Desalination</i> , 2013, 308, 15-33.	4.0	805
2	Current challenges in membrane separation of CO <sub>2</sub> from natural gas: A review. <i>International Journal of Greenhouse Gas Control</i> , 2013, 17, 46-65.	2.3	323
3	A review on the applicability of integrated/hybrid membrane processes in water treatment and desalination plants. <i>Desalination</i> , 2015, 363, 2-18.	4.0	316
4	Polysulfone membranes blended with ZnO nanoparticles for reducing fouling by oleic acid. <i>Separation and Purification Technology</i> , 2012, 89, 51-56.	3.9	186
5	Membranes with Great Hydrophobicity: A Review on Preparation and Characterization. <i>Separation and Purification Reviews</i> , 2015, 44, 109-134.	2.8	134
6	Current advances in membrane technologies for saline wastewater treatment: A comprehensive review. <i>Desalination</i> , 2021, 517, 115170.	4.0	91
7	Carbon dioxide separation using asymmetric polysulfone mixed matrix membranes incorporated with SAPO-34 zeolite. <i>Fuel Processing Technology</i> , 2014, 118, 125-132.	3.7	84
8	The effects of solvents on the modification of SAPO-34 zeolite using 3-aminopropyl trimethoxy silane for the preparation of asymmetric polysulfone mixed matrix membrane in the application of CO <sub>2</sub> separation. <i>Microporous and Mesoporous Materials</i> , 2014, 192, 52-59.	2.2	75
9	Fouling prevention in the membrane distillation of phenolic-rich solution using superhydrophobic PVDF membrane incorporated with TiO <sub>2</sub> nanoparticles. <i>Separation and Purification Technology</i> , 2016, 167, 79-87.	3.9	73
10	Selective removal of dyes by molecular imprinted TiO <sub>2</sub> nanoparticles in polysulfone ultrafiltration membrane. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 3991-3998.	3.3	72
11	Superhydrophobic rice husk ash coating on concrete. <i>Construction and Building Materials</i> , 2017, 144, 385-391.	3.2	69
12	Membrane distillation of saline with phenolic compound using superhydrophobic PVDF membrane incorporated with TiO <sub>2</sub> nanoparticles: Separation, fouling and self-cleaning evaluation. <i>Desalination</i> , 2017, 418, 79-88.	4.0	69
13	Comparison between hydrothermal and microwave-assisted synthesis of carbon dots from biowaste and chemical for heavy metal detection: A review. <i>Microchemical Journal</i> , 2021, 165, 106116.	2.3	69
14	Modification of gas selective SAPO zeolites using imidazolium ionic liquid to develop polysulfone mixed matrix membrane for CO <sub>2</sub> gas separation. <i>Microporous and Mesoporous Materials</i> , 2017, 244, 21-30.	2.2	67
15	Optimizing the incorporation of silica nanoparticles in polysulfone/poly(vinyl alcohol) membranes with response surface methodology. <i>Journal of Applied Polymer Science</i> , 2011, 121, 1804-1814.	1.3	66
16	Development of nanofiltration membrane with high salt selectivity and performance stability using polyelectrolyte multilayers. <i>Desalination</i> , 2014, 351, 19-26.	4.0	63
17	Future perspectives of nanocellulose-based membrane for water treatment. <i>Journal of Water Process Engineering</i> , 2020, 37, 101502.	2.6	60
18	The potential of SAPO-44 zeolite filler in fouling mitigation of polysulfone ultrafiltration membrane. <i>Separation and Purification Technology</i> , 2013, 103, 84-91.	3.9	56

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19	Phosphorus removal using nanofiltration membranes. <i>Water Science and Technology</i> , 2011, 64, 199-205.	1.2	52
20	Fluorocarbon functionalized SAPO-34 zeolite incorporated in asymmetric mixed matrix membranes for carbon dioxide separation in wet gases. <i>Microporous and Mesoporous Materials</i> , 2015, 206, 23-33.	2.2	51
21	A review on the emerging applications of cellulose, cellulose derivatives and nanocellulose in carbon capture. <i>Environmental Research</i> , 2021, 197, 111100.	3.7	50
22	Nanofiltration of glucose solution containing salts: Effects of membrane characteristics, organic component and salts on retention. <i>Journal of Food Engineering</i> , 2010, 97, 510-518.	2.7	48
23	Flux decline study during ultrafiltration of glycerin-rich fatty acid solutions. <i>Journal of Membrane Science</i> , 2010, 351, 75-86.	4.1	46
24	Prediction of plasticization pressure of polymeric membranes for CO <sub>2</sub> removal from natural gas. <i>Journal of Membrane Science</i> , 2015, 480, 39-46.	4.1	45
25	Superhydrophobic alumina membrane by steam impingement: Minimum resistance in microfiltration. <i>Separation and Purification Technology</i> , 2013, 107, 187-194.	3.9	43
26	Carbon dioxide removal from methane by using polysulfone/SAPO-44 mixed matrix membranes. <i>Fuel Processing Technology</i> , 2013, 112, 1-6.	3.7	43
27	Optimisation of polyethersulfone/polyaniline blended membranes using response surface methodology approach. <i>Desalination</i> , 2013, 311, 182-191.	4.0	42
28	Interfacial sealing and functionalization of polysulfone/SAPO-34 mixed matrix membrane using acetate-based ionic liquid in post-impregnation for CO <sub>2</sub> capture. <i>Separation and Purification Technology</i> , 2018, 197, 439-448.	3.9	42
29	Reinforced lignin-phenol-glyoxal (LPG) wood adhesives from coconut husk. <i>International Journal of Biological Macromolecules</i> , 2019, 141, 185-196.	3.6	42
30	A feasibility investigation on ultrafiltration of palm oil and oleic acid removal from glycerin solutions: Flux decline, fouling pattern, rejection and membrane characterizations. <i>Journal of Membrane Science</i> , 2012, 389, 245-256.	4.1	40
31	Synthesis of superhydrophobic alumina membrane: Effects of sol-gel coating, steam impingement and water treatment. <i>Applied Surface Science</i> , 2013, 284, 556-564.	3.1	38
32	A critical review to bridge the gaps between carbon capture, storage and use of CaCO <sub>3</sub> . <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 42, 101333.	3.3	37
33	Hybrid coagulation-NF membrane process for brackish water treatment: Effect of antiscalant on water characteristics and membrane fouling. <i>Desalination</i> , 2016, 393, 144-150.	4.0	35
34	Modelling microwave heating of discrete samples of oil palm kernels. <i>Applied Thermal Engineering</i> , 2016, 98, 702-726.	3.0	35
35	Effects of solvent and ionic liquid properties on ionic liquid enhanced polysulfone/SAPO-34 mixed matrix membrane for CO <sub>2</sub> removal. <i>Microporous and Mesoporous Materials</i> , 2019, 283, 64-72.	2.2	35
36	Separation of CO <sub>2</sub> from hydrogen using membrane gas absorption with PVDF/PBI membrane. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 4855-4861.	3.8	33

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37	Superhydrophobic coating of silica with photoluminescence properties synthesized from rice husk ash. <i>Progress in Organic Coatings</i> , 2017, 111, 29-37.	1.9	33
38	Near superhydrophobic coating synthesized from rice husk ash: Anti-fouling evaluation. <i>Progress in Organic Coatings</i> , 2016, 99, 140-146.	1.9	32
39	CO <sub>2</sub> removal using membrane gas absorption with PVDF membrane incorporated with POSS and SAPO-34 zeolite. <i>Chemical Engineering Research and Design</i> , 2017, 118, 238-247.	2.7	31
40	Translucent and adsorptive PVA thin film containing microfibrillated cellulose intercalated with TiO <sub>2</sub> nanoparticles for dye removal. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 578, 123590.	2.3	31
41	Comparative studies on the effects of casting solvent on physicochemical and gas transport properties of dense polysulfone membrane used for CO <sub>2</sub> /CH <sub>4</sub> separation. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	28
42	Recent progress in the development of ionic liquid-based mixed matrix membrane for CO <sub>2</sub> separation: A review. <i>International Journal of Energy Research</i> , 2021, 45, 9800-9830.	2.2	28
43	Effects of palm oil-based fatty acids on fouling of ultrafiltration membranes during the clarification of glycerin-rich solution. <i>Journal of Food Engineering</i> , 2010, 101, 264-272.	2.7	27
44	Microwave-assisted conversion of palm kernel shell biomass waste to photoluminescent carbon dots. <i>Scientific Reports</i> , 2020, 10, 21199.	1.6	27
45	Analysis of deposition mechanism during ultrafiltration of glycerin-rich solutions. <i>Desalination</i> , 2010, 261, 313-320.	4.0	26
46	Superhydrophobic PVDF/TiO <sub>2</sub> -SiO <sub>2</sub> Membrane with Hierarchical Roughness in Membrane Distillation for Water Recovery from Phenolic Rich Solution Containing Surfactant. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2019, 37, 609-616.	2.0	25
47	The coherence between TiO <sub>2</sub> nanoparticles and microfibrillated cellulose in thin film for enhanced dispersal and photodegradation of dye. <i>Progress in Organic Coatings</i> , 2019, 132, 70-75.	1.9	23
48	Tailoring of a γ-Al <sub>2</sub> O <sub>3</sub> Membrane with a Bimodal Pore Size Distribution for Improved Permeability. <i>Journal of the American Ceramic Society</i> , 2008, 91, 246-251.	1.9	20
49	Preparation and characterization of polysulfone mixed-matrix membrane incorporated with palladium nanoparticles dispersed in polyvinylpyrrolidone for hydrogen separation. <i>Journal of Polymer Research</i> , 2014, 21, 1.	1.2	20
50	Microwave-Assisted Extraction of <i>Trigona</i> Propolis: The Effects of Processing Parameters. <i>International Journal of Food Engineering</i> , 2015, 11, 861-870.	0.7	20
51	Deposition of a polymeric porous superhydrophobic thin layer on the surface of poly(vinylidene fluoride) hollow fiber membrane. <i>Polish Journal of Chemical Technology</i> , 2013, 15, 1-6.	0.3	18
52	Fouling mitigation in humic acid ultrafiltration using polysulfone/SAPO-34 mixed matrix membrane. <i>Water Science and Technology</i> , 2013, 67, 2102-2109.	1.2	18
53	Microwave Assisted Extraction of Defatted Roselle ( <i>Hibiscus sabdariffa</i> L.) Seed at Subcritical Conditions with Statistical Analysis. <i>Journal of Food Quality</i> , 2017, 2017, 1-10.	1.4	18
54	Phosphorus removal by NF90 membrane: Optimisation using central composite design. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2014, 45, 1260-1269.	2.7	17

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55	Preparation and gas transport properties of dual-layer polysulfone membranes for high pressure CO <sub>2</sub> removal from natural gas. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	1.3	17
56	Superhydrophobic PVDF/micro fibrillated cellulose membrane for membrane distillation crystallization of struvite. <i>Chemical Engineering Research and Design</i> , 2021, 170, 54-68.	2.7	17
57	Model-based analysis of polymeric membranes performance in high pressure CO <sub>2</sub> removal from natural gas. <i>Journal of Polymer Research</i> , 2015, 22, 1.	1.2	16
58	Ultrasonic Enhancement on Propolis Extraction at Varied pH and Alcohol Content. <i>Journal of Food Process Engineering</i> , 2015, 38, 562-570.	1.5	16
59	PVDF/PBI membrane incorporated with SAPO-34 zeolite for membrane gas absorption. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 63, 143-150.	2.7	16
60	Carbon-dot dispersal in PVA thin film for food colorant sensing. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103187.	3.3	15
61	Recent advances of natural biopolymeric culture scaffold: synthesis and modification. <i>Bioengineered</i> , 2022, 13, 2226-2247.	1.4	15
62	3D imprinted superhydrophobic polyvinylidene fluoride/carbon black membrane for membrane distillation with electrochemical cleaning evaluation. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107346.	3.3	15
63	An assessment of technological development and applications of decentralized water reuse: A critical review and conceptual framework. <i>Wiley Interdisciplinary Reviews: Water</i> , 2022, 9, .	2.8	15
64	Fabrication and characterization of superhydrophobic surface by using water vapor impingement method. <i>Applied Surface Science</i> , 2012, 258, 6739-6744.	3.1	14
65	Hydrogen Purification Using Polybenzimidazole Mixed-Matrix Membranes with Stabilized Palladium Nanoparticles. <i>Chemical Engineering and Technology</i> , 2017, 40, 631-638.	0.9	14
66	Numerical study on performance and efficiency of batch submerged vacuum membrane distillation for desalination. <i>Chemical Engineering Research and Design</i> , 2020, 163, 217-229.	2.7	14
67	Air bubbling assisted solar-driven submerged vacuum membrane distillation for aquaculture seawater desalination. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107088.	3.3	14
68	Surface Modification of Polytetrafluoroethylene Hollow Fiber Membrane for Direct Contact Membrane Distillation through Low-Density Polyethylene Solution Coating. <i>ACS Omega</i> , 2021, 6, 4609-4618.	1.6	13
69	Microalgal exopolymeric substances fouling in submerged vacuum membrane distillation and its mitigation via enhanced air bubbling. <i>Desalination</i> , 2021, 508, 115047.	4.0	12
70	Preparation and characterization of a porous superhydrophobic polymeric surface via facile technique. <i>Journal of Polymer Research</i> , 2013, 20, 1.	1.2	11
71	Performance studies of phosphorus removal using cross-flow nanofiltration. <i>Desalination and Water Treatment</i> , 2014, 52, 5974-5982.	1.0	11
72	Membrane distillation of saline and oily water using nearly superhydrophobic PVDF membrane incorporated with SiO <sub>2</sub> nanoparticles. <i>Water Science and Technology</i> , 2018, 78, 2532-2541.	1.2	11

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73	Correlating scalants characteristic and air bubbling rate in submerged vacuum membrane distillation: A fouling control strategy. <i>Journal of Membrane Science</i> , 2021, 621, 118991.	4.1	11
74	Effects of APTEOS content and electron beam irradiation on physical and separation properties of hybrid nylon-66 membranes. <i>Materials Chemistry and Physics</i> , 2012, 133, 110-117.	2.0	10
75	Amine wetting evaluation on hydrophobic silane modified polyvinylidene fluoride/silicoaluminophosphate zeolite membrane for membrane gas absorption. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 58, 115-125.	2.1	10
76	Swelling reduction of polyvinylidene fluoride hollow fiber membrane incorporated with silicoaluminophosphate-34 zeotype filler for membrane gas absorption. <i>Separation and Purification Technology</i> , 2019, 212, 941-951.	3.9	10
77	Ionic liquid $\alpha$ -modified materials as polymer electrolyte membrane and electrocatalyst in fuel cell application: An update. <i>International Journal of Energy Research</i> , 2022, 46, 2166-2211.	2.2	10
78	Preparation of Silica/ $\gamma$ -Alumina Membrane with Bimodal Porous Layer for Improved Permeation in Ions Separation. <i>Journal of the American Ceramic Society</i> , 2008, 91, 2009-2014.	1.9	9
79	Potential of nanofiltration and low pressure reverse osmosis in the removal of phosphorus for aquaculture. <i>Water Science and Technology</i> , 2013, 67, 831-837.	1.2	9
80	Polishing monoclonal antibody using pH-responsive TiO <sub>2</sub> /polysulfone membrane in dual size-exclusion strategy. <i>Separation and Purification Technology</i> , 2019, 213, 359-367.	3.9	9
81	Effects of $\gamma$ -aminopropyltriethoxysilane on morphological characteristics of hybrid nylon $\alpha$ -based membranes before electron beam irradiation. <i>Journal of Applied Polymer Science</i> , 2011, 122, 3339-3350.	1.3	8
82	Effects of THF as cosolvent in the preparation of polydimethylsiloxane/polyethersulfone membrane for gas separation. <i>Polymer Engineering and Science</i> , 2014, 54, 2177-2186.	1.5	8
83	Preparation and characterization of polysulfone mixed matrix membrane incorporated with palladium nanoparticles in the inverted microemulsion for hydrogen separation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 77, 30-37.	1.8	8
84	N-modified carbon quantum dot in 3D-network of microfibrillated cellulose for building photoluminescent thin film as tartrazine sensor. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 389, 112286.	2.0	8
85	Carbon dioxide conversion into calcium carbonate nanoparticles using membrane gas absorption. <i>Journal of CO<sub>2</sub> Utilization</i> , 2021, 48, 101533.	3.3	8
86	Lignin modified PVDF membrane with antifouling properties for oil filtration. <i>Journal of Water Process Engineering</i> , 2021, 43, 102248.	2.6	8
87	Enhancement on the CO <sub>2</sub> separation performance of mixed matrix membrane using ionic liquid. <i>Materials Letters</i> , 2021, 304, 130736.	1.3	8
88	Preparation of $\gamma$ -alumina thin layer with bimodal pore size distribution for diminution of transport resistance in bi-layered membrane. <i>Thin Solid Films</i> , 2008, 516, 4319-4324.	0.8	7
89	Statistical design of experiments for dye-salt-water separation study using bimodal porous silica/ $\gamma$ -alumina membrane. <i>Desalination and Water Treatment</i> , 2009, 5, 80-90.	1.0	7
90	Membrane Separation of CO <sub>2</sub> from Natural Gas: A State-of-the-Art Review on Material Development. <i>Defect and Diffusion Forum</i> , 0, 333, 135-147.	0.4	7

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91	MEMBRANE WETTING IN CARBON DIOXIDE ABSORPTION PROCESS USING MEMBRANE CONTACTORS: A REVIEW. <i>Environmental Engineering and Management Journal</i> , 2018, 17, 723-738.	0.2	7
92	Progress in polyvinyl alcohol membranes with facilitated transport properties for carbon capture. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106783.	3.3	7
93	Hydrogen separation using polybenzimidazole membrane with palladium nanoparticles stabilized by polyvinylpyrrolidone. <i>International Journal of Energy Research</i> , 2021, 45, 15171-15181.	2.2	6
94	3D-imprinted superhydrophobic polyvinylidene fluoride membrane contactor incorporated with CaCO <sub>3</sub> nanoparticles for carbon capture. <i>Separation and Purification Technology</i> , 2022, 287, 120519.	3.9	6
95	Carbon capture by alkaline absorbent using octadecyltrichlorosilane modified PVDF/TiO <sub>2</sub> membrane. <i>Korean Journal of Chemical Engineering</i> , 2020, 37, 505-512.	1.2	5
96	The effects of DMAEMA polyelectrolyte and TiO <sub>2</sub> photocatalyst on the tartrazine quenching of N-doped carbon dot immobilized in PVA/microfibrillated cellulose film. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104850.	3.3	5
97	Sustainable cultivation of <i>Navicula incerta</i> using cellulose-based scaffold incorporated with nanoparticles in air-liquid interface cultivation system. <i>Chemosphere</i> , 2021, 273, 129657.	4.2	5
98	Electrochemical cleaning of superhydrophobic polyvinylidene fluoride/polymethyl methacrylate/carbon black membrane after membrane distillation. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2022, 138, 104448.	2.7	5
99	Synthesis and Characterization of Polymeric V<SUB>2</SUB>O<SUB>5</SUB>/AlO(OH) with Nanopores on Alumina Support. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 3910-3914.	0.9	4
100	Vanadium oxide supported $\gamma$ -alumina with bimodal porous structure for intra-particle diffusion enhancement in styrene oxidation reaction. <i>Journal of Porous Materials</i> , 2009, 16, 33-40.	1.3	4
101	Fouling evaluation on membrane distillation used for reducing solvent in polyphenol rich propolis extract. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 477-483.	1.7	4
102	Preparation and Characterization of Polysulfone Mixed Matrix Membrane Incorporated with Thermodynamically Stable Nano-Palladium for Hydrogen Separation. <i>Advanced Materials Research</i> , 0, 832, 143-148.	0.3	2
103	Effect of polymer loading on superhydrophobic PVDF/TiO <sub>2</sub> supported membrane for membrane distillation. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	2
104	Polysulfone-POSS membrane impregnated with ionic liquid for CO <sub>2</sub> gas separation. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	2
105	Polysulfone/SAPO-34 zeolite membrane impregnated with 1-ethyl-3-methyl imidazolium bis(tri-fluoromethylsulfonyl)imide ionic liquid for CO <sub>2</sub> removal. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	2
106	Stability evaluation and formula optimization of cellulose-based scaffold for the air-liquid interface cultivation of <i>Navicula incerta</i> . <i>Environmental Research</i> , 2021, 199, 111298.	3.7	2
107	Air-liquid interface cultivation of <i>Navicula incerta</i> using hollow fiber membranes. <i>Chemosphere</i> , 2022, 307, 135625.	4.2	2
108	CO <sub>2</sub> Absorption in Membrane Contactor using Piperazine, Monoethanolamine and Diethanolamine: A Mass Transfer and Performance Study. <i>Jurnal Teknologi (Sciences and Engineering)</i> , 2014, 69, .	0.3	1

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109	Comparative microstructure study of oil palm fruit bunch fibre, mesocarp and kernels after microwave pre-treatment. IOP Conference Series: Materials Science and Engineering, 2017, 217, 012026.	0.3	1
110	Non-solvent Flux Augmentation of an LDPE-Coated Polytetrafluoroethylene Hollow Fiber Membrane for Direct Contact Membrane Distillation. ACS Omega, 2021, 6, 25201-25210.	1.6	1
111	Fouling evaluation on nanofiltration for concentrating phenolic and flavonoid compounds in propolis extract. Membrane Water Treatment, 2016, 7, 327-339.	0.5	1
112	Phosphate Removal with pH-Responsive Calcium Carbonate Nanoparticles. Chemical Engineering and Technology, 2022, 45, 1976-1981.	0.9	1
113	Non-Solvent Influence of Hydrophobic Polymeric Layer Deposition on PVDF Hollow Fiber Membrane for CO <sub>2</sub> Gas Absorption. Membranes, 2022, 12, 41.	1.4	0