

# Choe Peng Leo

## List of Publications by Year in descending order

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113  
papers

4,363  
citations

126708

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114  
docs citations

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times ranked

4686  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ionic liquidâ€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
2	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
3	Recent advances of natural biopolymeric culture scaffold: synthesis and modification. <i>Bioengineered</i> , 2022, 13, 2226-2247.	1.4	15
4	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
5	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
6	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
7	Non-Solvent Influence of Hydrophobic Polymeric Layer Deposition on PVDF Hollow Fiber Membrane for CO <sub>2</sub> Gas Absorption. <i>Membranes</i> , 2022, 12, 41.	1.4	0
8	Phosphate Removal with pHâ€Responsive Calcium Carbonate Nanoparticles. <i>Chemical Engineering and Technology</i> , 2022, 45, 1976-1981.	0.9	1
9	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
10	Air-liquid interface cultivation of <i>Navicula incerta</i> using hollow fiber membranes. <i>Chemosphere</i> , 2022, 307, 135625.	4.2	2
11	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
12	Recent progress in the development of ionic liquidâ€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
13	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
14	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
15	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
16	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
17	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
18	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

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19	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
20	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
21	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
22	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
23	Non-solvent Flux Augmentation of an LDPE-Coated Polytetrafluoroethylene Hollow Fiber Membrane for Direct Contact Membrane Distillation. <i>ACS Omega</i> , 2021, 6, 25201-25210.	1.6	1
24	Lignin modified PVDF membrane with antifouling properties for oil filtration. <i>Journal of Water Process Engineering</i> , 2021, 43, 102248.	2.6	8
25	Current advances in membrane technologies for saline wastewater treatment: A comprehensive review. <i>Desalination</i> , 2021, 517, 115170.	4.0	91
26	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
27	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
28	Carbon-dot dispersal in PVA thin film for food colorant sensing. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103187.	3.3	15
29	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
30	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
31	Future perspectives of nanocellulose-based membrane for water treatment. <i>Journal of Water Process Engineering</i> , 2020, 37, 101502.	2.6	60
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	Microwave-assisted conversion of palm kernel shell biomass waste to photoluminescent carbon dots. <i>Scientific Reports</i> , 2020, 10, 21199.	1.6	27
34	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
35	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
36	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

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37	Polysulfone-POSS membrane impregnated with ionic liquid for CO <sub>2</sub> gas separation. AIP Conference Proceedings, 2019, , .	0.3	2
38	Polysulfone/SAPO-34 zeolite membrane impregnated with 1-ethyl-3-methyl imidazolium bis(tri-fluoromethylsulfonyl)imide ionic liquid for CO <sub>2</sub> removal. AIP Conference Proceedings, 2019, , .	0.3	2
39	Reinforced lignin-phenol-glyoxal (LPG) wood adhesives from coconut husk. International Journal of Biological Macromolecules, 2019, 141, 185-196.	3.6	42
40	Translucent and adsorptive PVA thin film containing microfibrillated cellulose intercalated with TiO <sub>2</sub> nanoparticles for dye removal. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 578, 123590.	2.3	31
41	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. Chinese Journal of Polymer Science (English Edition), 2019, 37, 609-616.	2.0	25
42	The coherence between TiO <sub>2</sub> nanoparticles and microfibrillated cellulose in thin film for enhanced dispersal and photodegradation of dye. Progress in Organic Coatings, 2019, 132, 70-75.	1.9	23
43	Effects of solvent and ionic liquid properties on ionic liquid enhanced polysulfone/SAPO-34 mixed matrix membrane for CO <sub>2</sub> removal. Microporous and Mesoporous Materials, 2019, 283, 64-72.	2.2	35
44	Swelling reduction of polyvinylidene fluoride hollow fiber membrane incorporated with silicoaluminophosphate-34 zeotype filler for membrane gas absorption. Separation and Purification Technology, 2019, 212, 941-951.	3.9	10
45	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. Separation and Purification Technology, 2018, 197, 439-448.	3.9	42
46	Fouling evaluation on membrane distillation used for reducing solvent in polyphenol rich propolis extract. Chinese Journal of Chemical Engineering, 2018, 26, 477-483.	1.7	4
47	Membrane distillation of saline and oily water using nearly superhydrophobic PVDF membrane incorporated with SiO <sub>2</sub> nanoparticles. Water Science and Technology, 2018, 78, 2532-2541.	1.2	11
48	Amine wetting evaluation on hydrophobic silane modified polyvinylidene fluoride/silicoaluminophosphate zeolite membrane for membrane gas absorption. Journal of Natural Gas Science and Engineering, 2018, 58, 115-125.	2.1	10
49	MEMBRANE WETTING IN CARBON DIOXIDE ABSORPTION PROCESS USING MEMBRANE CONTACTORS: A REVIEW. Environmental Engineering and Management Journal, 2018, 17, 723-738.	0.2	7
50	Hydrogen Purification Using Polybenzimidazole Mixed Matrix Membranes with Stabilized Palladium Nanoparticles. Chemical Engineering and Technology, 2017, 40, 631-638.	0.9	14
51	Superhydrophobic coating of silica with photoluminescence properties synthesized from rice husk ash. Progress in Organic Coatings, 2017, 111, 29-37.	1.9	33
52	Superhydrophobic rice husk ash coating on concrete. Construction and Building Materials, 2017, 144, 385-391.	3.2	69
53	CO <sub>2</sub> removal using membrane gas absorption with PVDF membrane incorporated with POSS and SAPO-34 zeolite. Chemical Engineering Research and Design, 2017, 118, 238-247.	2.7	31
54	Selective removal of dyes by molecular imprinted TiO <sub>2</sub> nanoparticles in polysulfone ultrafiltration membrane. Journal of Environmental Chemical Engineering, 2017, 5, 3991-3998.	3.3	72

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55	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
56	Modification of gas selective SAPO zeolites using imidazolium ionic liquid to develop polysulfone mixed matrix membrane for CO <sub>2</sub> gas separation. Microporous and Mesoporous Materials, 2017, 244, 21-30.	2.2	67
57	Microwave Assisted Extraction of Defatted Roselle ( <i>Hibiscus sabdariffa</i> L.) Seed at Subcritical Conditions with Statistical Analysis. Journal of Food Quality, 2017, 2017, 1-10.	1.4	18
58	Membrane distillation of saline with phenolic compound using superhydrophobic PVDF membrane incorporated with TiO <sub>2</sub> nanoparticles: Separation, fouling and self-cleaning evaluation. Desalination, 2017, 418, 79-88.	4.0	69
59	Fouling prevention in the membrane distillation of phenolic-rich solution using superhydrophobic PVDF membrane incorporated with TiO <sub>2</sub> nanoparticles. Separation and Purification Technology, 2016, 167, 79-87.	3.9	73
60	Near superhydrophobic coating synthesized from rice husk ash: Anti-fouling evaluation. Progress in Organic Coatings, 2016, 99, 140-146.	1.9	32
61	Hybrid coagulation-UF membrane process for brackish water treatment: Effect of antiscalant on water characteristics and membrane fouling. Desalination, 2016, 393, 144-150.	4.0	35
62	Separation of CO <sub>2</sub> from hydrogen using membrane gas absorption with PVDF/PBI membrane. International Journal of Hydrogen Energy, 2016, 41, 4855-4861.	3.8	33
63	PVDF/PBI membrane incorporated with SAPO-34 zeolite for membrane gas absorption. Journal of the Taiwan Institute of Chemical Engineers, 2016, 63, 143-150.	2.7	16
64	Modelling microwave heating of discrete samples of oil palm kernels. Applied Thermal Engineering, 2016, 98, 702-726.	3.0	35
65	Fouling evaluation on nanofiltration for concentrating phenolic and flavonoid compounds in propolis extract. Membrane Water Treatment, 2016, 7, 327-339.	0.5	1
66	Model-based analysis of polymeric membranes performance in high pressure CO <sub>2</sub> removal from natural gas. Journal of Polymer Research, 2015, 22, 1.	1.2	16
67	Prediction of plasticization pressure of polymeric membranes for CO <sub>2</sub> removal from natural gas. Journal of Membrane Science, 2015, 480, 39-46.	4.1	45
68	Ultrasonic Enhancement on Propolis Extraction at Varied pH and Alcohol Content. Journal of Food Process Engineering, 2015, 38, 562-570.	1.5	16
69	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. Journal of Applied Polymer Science, 2015, 132, .	1.3	28
70	Microwave-Assisted Extraction of <i>Trigona</i> Propolis: The Effects of Processing Parameters. International Journal of Food Engineering, 2015, 11, 861-870.	0.7	20
71	Fluorocarbon functionalized SAPO-34 zeolite incorporated in asymmetric mixed matrix membranes for carbon dioxide separation in wet gases. Microporous and Mesoporous Materials, 2015, 206, 23-33.	2.2	51
72	A review on the applicability of integrated/hybrid membrane processes in water treatment and desalination plants. Desalination, 2015, 363, 2-18.	4.0	316

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73	Membranes with Great Hydrophobicity: A Review on Preparation and Characterization. Separation and Purification Reviews, 2015, 44, 109-134.	2.8	134
74	CO <sub>2</sub> Absorption in Membrane Contactor using Piperazine, Monoethanolamine and Diethanolamine: A Mass Transfer and Performance Study. Jurnal Teknologi (Sciences and Engineering), 2014, 69, .	0.3	1
75	Carbon dioxide separation using asymmetric polysulfone mixed matrix membranes incorporated with SAPO-34 zeolite. Fuel Processing Technology, 2014, 118, 125-132.	3.7	84
76	Phosphorus removal by NF90 membrane: Optimisation using central composite design. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 1260-1269.	2.7	17
77	Effects of THF as cosolvent in the preparation of polydimethylsiloxane/polyethersulfone membrane for gas separation. Polymer Engineering and Science, 2014, 54, 2177-2186.	1.5	8
78	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. Microporous and Mesoporous Materials, 2014, 192, 52-59.	2.2	75
79	Development of nanofiltration membrane with high salt selectivity and performance stability using polyelectrolyte multilayers. Desalination, 2014, 351, 19-26.	4.0	63
80	Preparation and characterization of polysulfone mixed-matrix membrane incorporated with palladium nanoparticles dispersed in polyvinylpyrrolidone for hydrogen separation. Journal of Polymer Research, 2014, 21, 1.	1.2	20
81	Preparation and characterization of polysulfone mixed matrix membrane incorporated with palladium nanoparticles in the inversed microemulsion for hydrogen separation. Chemical Engineering and Processing: Process Intensification, 2014, 77, 30-37.	1.8	8
82	Preparation and gas transport properties of dual-layer polysulfone membranes for high pressure CO <sub>2</sub> removal from natural gas. Journal of Applied Polymer Science, 2014, 131, .	1.3	17
83	Performance studies of phosphorus removal using cross-flow nanofiltration. Desalination and Water Treatment, 2014, 52, 5974-5982.	1.0	11
84	Synthesis of superhydrophobic alumina membrane: Effects of sol-gel coating, steam impingement and water treatment. Applied Surface Science, 2013, 284, 556-564.	3.1	38
85	Preparation and characterization of a porous superhydrophobic polymeric surface via facile technique. Journal of Polymer Research, 2013, 20, 1.	1.2	11
86	Superhydrophobic alumina membrane by steam impingement: Minimum resistance in microfiltration. Separation and Purification Technology, 2013, 107, 187-194.	3.9	43
87	Deposition of a polymeric porous superhydrophobic thin layer on the surface of poly(vinylidene fluoride) hollow fiber membrane. Polish Journal of Chemical Technology, 2013, 15, 1-6.	0.3	18
88	Optimisation of polyethersulfone/polyaniline blended membranes using response surface methodology approach. Desalination, 2013, 311, 182-191.	4.0	42
89	Carbon dioxide removal from methane by using polysulfone/SAPO-44 mixed matrix membranes. Fuel Processing Technology, 2013, 112, 1-6.	3.7	43
90	Current challenges in membrane separation of CO <sub>2</sub> from natural gas: A review. International Journal of Greenhouse Gas Control, 2013, 17, 46-65.	2.3	323

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91	Polymeric membranes incorporated with metal/metal oxide nanoparticles: A comprehensive review. <i>Desalination</i> , 2013, 308, 15-33.	4.0	805
92	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
93	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
94	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
95	Fabrication and characterization of superhydrophobic surface by using water vapor impingement method. <i>Applied Surface Science</i> , 2012, 258, 6739-6744.	3.1	14
96	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
97	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
98	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
99	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
100	Effects of $\gamma$ -aminopropyltriethoxysilane on morphological characteristics of hybrid nylon-66-based membranes before electron beam irradiation. <i>Journal of Applied Polymer Science</i> , 2011, 122, 3339-3350.	1.3	8
101	Phosphorus removal using nanofiltration membranes. <i>Water Science and Technology</i> , 2011, 64, 199-205.	1.2	52
102	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
103	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
104	Flux decline study during ultrafiltration of glycerin-rich fatty acid solutions. <i>Journal of Membrane Science</i> , 2010, 351, 75-86.	4.1	46
105	Analysis of deposition mechanism during ultrafiltration of glycerin-rich solutions. <i>Desalination</i> , 2010, 261, 313-320.	4.0	26
106	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
107	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
108	Tailoring of a $\gamma$ -Alumina 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

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109	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
110	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
111	Synthesis and Characterization of Polymeric $V_2O_5/AlO(OH)$ with Nanopores on Alumina Support. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 3910-3914.	0.9	4
112	Membrane Separation of $CO_2$ 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
113	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