Yiqun Fan

List of Publications by Year in descending order

132 papers	4,367 citations	81900 39 h-index	144013 57 g-index
133 all docs	133 docs citations	133 times ranked	3535 citing authors

#	Article	IF	Citations
1	A reduced graphene oxide nanofiltration membrane intercalated by well-dispersed carbon nanotubes for drinking water purification. Nanoscale, 2016, 8, 5696-5705.	5.6	215
2	Molecular Bridges Stabilize Graphene Oxide Membranes in Water. Angewandte Chemie - International Edition, 2020, 59, 1689-1695.	13.8	166
3	One step co-sintering process for low-cost fly ash based ceramic microfiltration membrane in oil-in-water emulsion treatment. Separation and Purification Technology, 2019, 210, 511-520.	7.9	116
4	Nanoparticles@rGO membrane enabling highly enhanced water permeability and structural stability with preserved selectivity. AICHE Journal, 2017, 63, 5054-5063.	3.6	107
5	High gas permeability of SiC porous ceramics reinforced by mullite fibers. Journal of the European Ceramic Society, 2016, 36, 3909-3917.	5.7	92
6	Preparation of high-flux Î³-alumina nanofiltration membranes by using a modified solâ€“gel method. Microporous and Mesoporous Materials, 2015, 214, 195-203.	4.4	84
7	Underwater superoleophobic-underoil superhydrophobic Janus ceramic membrane with its switchable separation in oil/water emulsions. Journal of Membrane Science, 2018, 565, 303-310.	8.2	84
8	Modification of ceramic membranes for pore structure tailoring: The atomic layer deposition route. Journal of Membrane Science, 2012, 397-398, 17-23.	8.2	80
9	A new route for the fabrication of TiO2 ultrafiltration membranes with suspension derived from a wet chemical synthesis. Journal of Membrane Science, 2006, 270, 179-186.	8.2	79
10	Improving the filtration performance of ZrO2 membrane in non-polar organic solvents by surface hydrophobic modification. Journal of Membrane Science, 2011, 375, 276-283.	8.2	77
11	Synthesis of visible-light responsive C, N and Ce co-doped TiO2 mesoporous membranes via weak alkaline solâ€“gel process. Journal of Materials Chemistry, 2012, 22, 15309.	6.7	71
12	One-step preparation of high-performance bilayer Î±-alumina ultrafiltration membranes via co-sintering process. Journal of Membrane Science, 2017, 524, 141-150.	8.2	70
13	Tubular hydrophobic ceramic membrane with asymmetric structure for water desalination via vacuum membrane distillation process. Desalination, 2018, 443, 212-220.	8.2	70
14	Effect of TiO2 doping on the characteristics of macroporous Al2O3/TiO2 membrane supports. Journal of the European Ceramic Society, 2010, 30, 1317-1325.	5.7	69
15	Fabrication of TiO2-doped ZrO2 nanofiltration membranes by using a modified colloidal sol-gel process and its application in simulative radioactive effluent. Journal of Membrane Science, 2016, 514, 476-486.	8.2	68
16	One-step engineering of low-cost kaolin/fly ash ceramic membranes for efficient separation of oil-water emulsions. Journal of Membrane Science, 2021, 621, 118954.	8.2	68
17	Co-sintering synthesis of tubular bilayer Î±-alumina membrane. Journal of Membrane Science, 2007, 288, 20-27.	8.2	66
18	Preparation and Characterization of SiC Whisker-Reinforced SiC Porous Ceramics for Hot Gas Filtration. Industrial & Engineering Chemistry Research, 2015, 54, 226-232.	3.7	65

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19	Efficient Catalytic Decomposition of CO₂ to CO and O₂ over Pd/Mixed-Conducting Oxide Catalyst in an Oxygen-Permeable Membrane Reactor. Environmental Science & Technology, 2008, 42, 3064-3068.	10.0	64
20	Thermal decomposition of carbon dioxide coupled with POM in a membrane reactor. AICHE Journal, 2006, 52, 2545-2550.	3.6	60
21	Effect of the surface properties on filtration performance of Al2O3â€“TiO2 composite membrane. Separation and Purification Technology, 2009, 66, 306-312.	7.9	60
22	Co-sintering synthesis of bi-layer titania ultrafiltration membranes with intermediate layer of sol-coated nanofibers. Journal of Membrane Science, 2010, 365, 225-231.	8.2	57
23	Preparation of zirconia nanofiltration membranes through an aqueous solâ€“gel process modified by glycerol for the treatment of wastewater with high salinity. Journal of Membrane Science, 2016, 504, 29-39.	8.2	55
24	Designing High-Performance Nanofiltration Membranes for High-Salinity Separation of Sulfate and Chloride in the Chlor-Alkali Process. Industrial & Engineering Chemistry Research, 2019, 58, 12280-12290.	3.7	54
25	State-of-the-art developments in fabricating ceramic membranes with low energy consumption. Ceramics International, 2021, 47, 14966-14987.	4.8	54
26	Facile co-sintering process to fabricate sustainable antifouling silver nanoparticles (AgNPs)-enhanced tight ceramic ultrafiltration membranes for protein separation. Journal of Membrane Science, 2020, 593, 117402.	8.2	52
27	Ceramic nanofiltration and membrane distillation hybrid membrane processes for the purification and recycling of boric acid from simulative radioactive waste water. Journal of Membrane Science, 2019, 579, 294-301.	8.2	50
28	Modified dip-coating method for preparation of pinhole-free ceramic membranes. Journal of Membrane Science, 2011, 367, 14-20.	8.2	49
29	Modified alumina nanofiber membranes for protein separation. Separation and Purification Technology, 2013, 120, 239-244.	7.9	49
30	An aqueous solâ€“gel process for the fabrication of high-flux YSZ nanofiltration membranes as applied to the nanofiltration of dye wastewater. Separation and Purification Technology, 2015, 152, 37-45.	7.9	49
31	Preparation of high-performance Al 2 O 3 /PES composite hollow fiber UF membranes via facile in-situ vapor induced hydrolyzation. Journal of Membrane Science, 2017, 539, 65-75.	8.2	49
32	Structure and Transport Properties of Water and Hydrated Ions in Nanoâ€Confined Channels. Advanced Theory and Simulations, 2019, 2, 1900016.	2.8	47
33	Flux-enhanced Î±-alumina tight ultrafiltration membranes for effective treatment of dye/salt wastewater at high temperatures. Separation and Purification Technology, 2019, 215, 143-154.	7.9	46
34	Integrated Membrane Process for the Purification of Lactic Acid from a Fermentation Broth Neutralized with Sodium Hydroxide. Industrial & Engineering Chemistry Research, 2013, 52, 2412-2417.	3.7	45
35	Novel pore size tuning method for the fabrication of ceramic multi-channel nanofiltration membrane. Journal of Membrane Science, 2018, 552, 77-85.	8.2	44
36	A novel thermal spraying technique to fabricate fly ash/alumina composite membranes for oily emulsion and spent tin wastewater treatment. Separation and Purification Technology, 2019, 219, 127-136.	7.9	43

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37	Self-Cleaning Piezoelectric Membrane for Oil-in-Water Separation. ACS Applied Materials & Interfaces, 2018, 10, 18093-18103.	8.0	42
38	The effect of membrane thickness on the co-sintering process of bi-layer ZrO2/Al2O3 membrane. Journal of Membrane Science, 2007, 305, 20-26.	8.2	41
39	Design and fabrication of whisker hybrid ceramic membranes with narrow pore size distribution and high permeability via co-sintering process. Ceramics International, 2018, 44, 21159-21169.	4.8	41
40	Fabrication of a charged PDA/PEI/Al2O3 composite nanofiltration membrane for desalination at high temperatures. Separation and Purification Technology, 2021, 263, 118388.	7.9	41
41	Modified ceramic membranes for low fouling separation of water-in-oil emulsions. Journal of Materials Science, 2016, 51, 6379-6388.	3.7	37
42	Pore evolution model of ceramic membrane during constrained sintering. Journal of Materials Science, 2009, 44, 689-699.	3.7	36
43	Reactor and Technical Feasibility Aspects of a CO2Decomposition-Based Power Generation Cycle, Utilizing a High-Temperature Membrane Reactor. Industrial & Engineering Chemistry Research, 2003, 42, 2618-2626.	3.7	35
44	Pilot study on the ceramic membrane pre-treatment for seawater desalination with reverse osmosis in Tianjin Bohai Bay. Desalination, 2011, 279, 190-194.	8.2	35
45	Low temperature sintering preparation of high-permeability TiO2/Ti composite membrane via facile coating method. Applied Surface Science, 2015, 349, 8-16.	6.1	35
46	Fabrication and in-situ fouling mitigation of a supported carbon nanotube/Î³-alumina ultrafiltration membrane. Journal of Membrane Science, 2018, 550, 26-35.	8.2	35
47	Preparation of a new ceramic microfiltration membrane with a separation layer of attapulgite nanofibers. Materials Letters, 2015, 143, 27-30.	2.6	34
48	Synthesis of Si-MCM-48 membrane by solvent extraction of the surfactant template. Journal of Non-Crystalline Solids, 2008, 354, 2010-2016.	3.1	33
49	Facile Mixing Process To Fabricate Fly-Ash-Enhanced Alumina-Based Membrane Supports for Industrial Microfiltration Applications. Industrial & Engineering Chemistry Research, 2019, 58, 8712-8723.	3.7	33
50	Fabrication of Supported Mesoporous TiO₂ Membranes: Matching the Assembled and Interparticle Pores for an Improved Ultrafiltration Performance. ACS Applied Materials & Interfaces, 2009, 1, 1607-1612.	8.0	32
51	PZT/Ti composite piezoceramic membranes for liquid filtration: Fabrication and self-cleaning properties. Journal of Membrane Science, 2019, 581, 28-37.	8.2	32
52	Preparation of titania microfiltration membranes supported on porous Tiâ€“Al alloys. Journal of Membrane Science, 2008, 325, 546-552.	8.2	31
53	Preparation of supported zirconia ultrafiltration membranes with the aid of polymeric additives. Journal of Membrane Science, 2010, 348, 252-259.	8.2	31
54	Characterization of the adhesion of thin palladium membranes supported on tubular porous ceramics. Thin Solid Films, 2007, 515, 5233-5240.	1.8	28

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55	Improving Performance of a Dense Membrane Reactor for Thermal Decomposition of CO2via Surface Modification. Industrial & Engineering Chemistry Research, 2007, 46, 2000-2005.	3.7	27
56	A facile route for the preparation of morphology-controlled NaTaO3 films. Applied Surface Science, 2008, 255, 2803-2807.	6.1	27
57	Fabrication of a visible-light response mesoporous TiO2 membrane with superior water permeability via a weak alkaline solâ€“gel process. Chemical Communications, 2011, 47, 3457.	4.1	27
58	Improving protein resistance of Î±-Al2O3 membranes by modification with POEGMA brushes. Applied Surface Science, 2011, 258, 1038-1044.	6.1	27
59	Integrating efficient filtration and visible-light photocatalysis by loading Ag-doped zeolite Y particles on filtration membrane of alumina nanofibers. Journal of Membrane Science, 2011, 375, 69-74.	8.2	27
60	Enhanced performance arising from low-temperature preparation of Î±-alumina membranes via titania doping assisted sol-gel method. Journal of Membrane Science, 2018, 559, 19-27.	8.2	27
61	Improved photocatalytic deposition of palladium membranes. Journal of Membrane Science, 2006, 282, 1-6.	8.2	26
62	An improved Parks equation for prediction of surface charge properties of composite ceramic membranes. Journal of Membrane Science, 2008, 318, 100-106.	8.2	26
63	Fabrication of mesoporous TiO 2 membranes by a nanoparticle-modified polymeric sol process. Journal of Colloid and Interface Science, 2014, 433, 43-48.	9.4	26
64	Toward effective membranes for hydrogen separation: Multichannel composite palladium membranes. Journal of Power Sources, 2008, 181, 135-139.	7.8	25
65	Feasibility analysis of SO2 absorption using a hydrophilic ceramic membrane contactor. Chinese Journal of Chemical Engineering, 2018, 26, 2139-2147.	3.5	24
66	Preparation of dense Pd composite membranes on porous Tiâ€“Al alloy supports by electroless plating. Journal of Membrane Science, 2012, 387-388, 24-29.	8.2	22
67	A Dual-Membrane Airlift Reactor for Cyclohexanone Ammoximation over Titanium Silicalite-1. Industrial & Engineering Chemistry Research, 2014, 53, 6372-6379.	3.7	22
68	Optimization of microstructure and geometry of hydrophobic ceramic membrane for SO₂ absorption from ship exhaust. AICHE Journal, 2019, 65, 409-420.	3.6	22
69	Optimization of UV-curable alumina suspension for digital light processing of ceramic membranes. Journal of Membrane Science, 2022, 643, 120066.	8.2	22
70	Membrane-based reactive separations for power generation applications: oxygen lancing. Chemical Engineering Science, 2003, 58, 1043-1052.	3.8	21
71	On the Membrane Reactor Concept for One-Step Hydroxylation of Benzene to Phenol with Oxygen and Hydrogen. Journal of Physical Chemistry C, 2009, 113, 19618-19622.	3.1	21
72	Dynamic layerâ€byâ€layer selfâ€assembly of organicâ€“inorganic composite hollow fiber membranes. AICHE Journal, 2012, 58, 3176-3182.	3.6	21

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73	Enhancing mechanical and photocatalytic performances on TiO2/Ti composite ultrafiltration membranes via Ag doping method. Separation and Purification Technology, 2015, 145, 29-38.	7.9	21
74	Ultrasound Assisted Synthesis of Size-Controlled Aqueous Colloids for the Fabrication of Nanoporous Zirconia Membrane. Frontiers in Chemistry, 2019, 7, 337.	3.6	21
75	One-pot in situ synthesis of Cu-SAPO-34/SiC catalytic membrane with enhanced binding strength and chemical resistance for combined removal of NO and dust. Chemical Engineering Journal, 2021, 420, 130425.	12.7	21
76	Toughening macroporous alumina membrane supports with YSZ powders. Ceramics International, 2009, 35, 1641-1646.	4.8	20
77	Effect of Cross-flow Velocity on the Critical Flux of Ceramic Membrane Filtration as a Pre-treatment for Seawater Desalination. Chinese Journal of Chemical Engineering, 2013, 21, 341-347.	3.5	20
78	A facile nanoparticle doping solâ€“gel method for the fabrication of defect-free nanoporous ceramic membranes. Colloids and Interface Science Communications, 2015, 5, 12-15.	4.1	20
79	Three-dimensional printing of high-flux ceramic membranes with an asymmetric structure via digital light processing. Ceramics International, 2022, 48, 304-312.	4.8	20
80	High-performance self-cleaning piezoelectric membrane integrated with in-situ ultrasound for wastewater treatment. Journal of the European Ceramic Society, 2020, 40, 3632-3641.	5.7	20
81	Modified ceramic membrane with pH/ethanol induced switchable superwettability for antifouling separation of oil-in-acidic water emulsions. Separation and Purification Technology, 2022, 293, 121022.	7.9	19
82	Evaluation of the oleophilicity of different alkoxysilane modified ceramic membranes through wetting dynamic measurements. Applied Surface Science, 2013, 283, 863-870.	6.1	18
83	Facile pore size tuning and characterization of nanoporous ceramic membranes for the purification of polysaccharide. Journal of Membrane Science, 2020, 597, 117631.	8.2	18
84	Effective and efficient fabrication of high-flux tight ZrO2 ultrafiltration membranes using a nanocrystalline precursor. Journal of Membrane Science, 2021, 634, 119378.	8.2	18
85	Hydrophilic membrane contactor for improving selective removal of SO2 by NaOH solution. Separation and Purification Technology, 2020, 250, 117134.	7.9	18
86	Environment-benign preparation of Ag toughening TiO2/Ti tight ultrafiltration membrane via aqueous solâ€“gel route. Journal of Materials Science, 2015, 50, 5307-5317.	3.7	17
87	Preparation of ceramic membranes on porous Tiâ€“Al alloy supports by an in-situ oxidation method. Journal of Membrane Science, 2015, 476, 554-560.	8.2	17
88	Robust CNT-based conductive ultrafiltration membrane with tunable surface potential for in situ fouling mitigation. Applied Surface Science, 2019, 497, 143786.	6.1	17
89	Mass-Transfer Characteristics and Optimization of a Hydrophilic Ceramic Membrane Contactor for SO₂ Absorption. Industrial & Engineering Chemistry Research, 2019, 58, 20828-20837.	3.7	17
90	Molecular Bridges Stabilize Graphene Oxide Membranes in Water. Angewandte Chemie, 2020, 132, 1706-1712.	2.0	17

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91	Investigation of Mass Transfer Characteristics of SO₂ Absorption into NaOH in a Multichannel Ceramic Membrane Contactor. Industrial & Engineering Chemistry Research, 2020, 59, 11054-11062.	3.7	17
92	Efficient construction of a robust PTFE/Al2O3 hydrophobic membrane for effective oil purification. Chemical Engineering Journal, 2022, 435, 134972.	12.7	17
93	Liquid phase hydroxylation of benzene to phenol over vanadyl acetylacetonate supported on amine functionalized SBA-15. Reaction Kinetics, Mechanisms and Catalysis, 2015, 116, 535-547.	1.7	16
94	Enhanced Performance of Fly Ash-Based Supports for Low-Cost Ceramic Membranes with the Addition of Bauxite. Membranes, 2021, 11, 711.	3.0	16
95	Fabrication of mesoporous titaniaâ€“zirconia composite membranes based on nanoparticles improved hydrosol. Journal of Colloid and Interface Science, 2016, 478, 136-144.	9.4	15
96	Design and Efficient Construction of Bilayer Al₂O₃/ZrO₂ Mesoporous Membranes for Effective Treatment of Suspension Systems. Industrial & Engineering Chemistry Research, 2020, 59, 4721-4731.	3.7	15
97	Determination of Infinite Dilution Diffusion Coefficients of Polycyclic Aromatic Hydrocarbons in Heptane and in Octane. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 1043-1045.	0.9	14
98	Preparation and Characterization of Alumina Membranes on Capillary Supports: Effect of Film-coating on Crack-free Membrane Preparation. Chinese Journal of Chemical Engineering, 2010, 18, 377-383.	3.5	14
99	Influence of alumina binders on adhesion and cohesion during preparation of Cuâ€<scp>SAPO</scp>â€34/monolith catalysts. International Journal of Applied Ceramic Technology, 2018, 15, 1490-1501.	2.1	14
100	Non-equilibrium molecular dynamics simulation on permeation and separation of H2/CO in nanoporous carbon membranes. Separation and Purification Technology, 2008, 64, 71-77.	7.9	13
101	Fabrication of a Ceramic Membrane with Antifouling PTFE Coating for Gas-Absorption Desulfurization. Industrial & Engineering Chemistry Research, 2021, 60, 2492-2500.	3.7	13
102	A new method for preparing Î±-alumina ultrafiltration membrane at low sintering temperature. Journal of Membrane Science, 2022, 642, 119992.	8.2	13
103	A dense oxygen separation membrane deriving from nanosized mixed conducting oxide. Journal of Membrane Science, 2007, 291, 172-179.	8.2	12
104	Ceramic membrane filtration as seawater RO pre-treatment: influencing factors on the ceramic membrane flux and quality. Desalination and Water Treatment, 2013, 51, 2575-2583.	1.0	12
105	Modified wet chemical method synthesis of nano-ZrO2 and its application in preparing membranes. Ceramics International, 2021, 47, 13432-13439.	4.8	11
106	Effect of intermetallic diffusion between Pd and Tiâ€“Al alloy on the performance of Pd/Tiâ€“Al alloy composite membranes. Journal of Membrane Science, 2011, 377, 221-230.	8.2	10
107	Preparation Conditions and Porosity of Porous Titanium Sintered under Positive Pressure. Materials and Manufacturing Processes, 2013, 28, 1166-1170.	4.7	10
108	Influence of compatibility between sol and intermediate layer on the performance of yttria-stabilized zirconia nanofiltration membrane. Ceramics International, 2021, 47, 22801-22809.	4.8	10

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109	Self-cleaning performance of in-situ ultrasound generated by quartz-based piezoelectric membrane. Separation and Purification Technology, 2022, 282, 120031.	7.9	10
110	Preparation of composite palladium-silver alloy membranes by photocatalytic deposition. Thin Solid Films, 2008, 516, 7282-7285.	1.8	9
111	Preparation and Characterization of Ultrathin Palladium Membranes. Industrial & Engineering Chemistry Research, 2009, 48, 2061-2065.	3.7	9
112	Construction of high-performance CeO2 ultrafiltration membrane for high-temperature dye/salt separation. Journal of Membrane Science, 2021, 637, 119608.	8.2	9
113	Charged modified tight ceramic ultrafiltration membranes for treatment of cationic dye wastewater. Chinese Journal of Chemical Engineering, 2022, 41, 267-277.	3.5	9
114	1.11 Ceramic Membranes. , 2017, , 270-297.		8
115	Zwitterionic monolayer grafted ceramic membrane with an antifouling performance for the efficient oilâ€“water separation. Chinese Journal of Chemical Engineering, 2022, 42, 227-235.	3.5	8
116	Effect of EDTA on preparation of Pd membranes by photocatalytic deposition. Desalination, 2006, 192, 117-124.	8.2	7
117	Diffusion of H2, CO, N2, O2 and CH4 Through Nanoporous Carbon Membranes. Chinese Journal of Chemical Engineering, 2008, 16, 709-714.	3.5	7
118	Preparation and properties of high toughness RBAO macroporous membrane support. Ceramics International, 2010, 36, 2025-2031.	4.8	7
119	Critical gas velocity of hydrophobic ceramic membrane contactors for SO2 absorption. Chemical Engineering Science, 2021, 231, 116327.	3.8	7
120	Study on adsorption phenomenon of diffusion dialysis for acid recovery. Separation and Purification Technology, 2013, 110, 144-149.	7.9	6
121	Preparation of Three-dimensionally ordered Macroporous SiO2Membranes with Controllable Pore Size. Chemistry Letters, 2007, 36, 464-465.	1.3	5
122	Permeability and Stability of Hydrophobic Tubular Ceramic Membrane Contactor for CO2 Desorption from MEA Solution. Membranes, 2022, 12, 8.	3.0	5
123	Application of piezoelectric quartz for self-cleaning membrane preparation. Ceramics International, 2022, 48, 16599-16610.	4.8	5
124	Preparation of High Stability Pd/Ceramic/Ti-Al Alloy Composite Membranes by Electroless Plating. Frontiers in Chemistry, 2020, 8, 202.	3.6	4
125	Geometry effect on membrane absorption for <scp>CO₂</scp> capture. Part I: A hybrid modeling approach. AICHE Journal, 2022, 68, e17471.	3.6	4
126	Fabrication of a dual-layer ceramic mesoporous membrane with high flux via a co-sintering process. Microporous and Mesoporous Materials, 2022, 334, 111764.	4.4	4

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127	Efficient Estimation of Permeate Flux of Asymmetric Ceramic Membranes for Vacuum Membrane Distillation. Molecules, 2022, 27, 1057.	3.8	3
128	Preparation of Closed Macroporous Al2O3 Membranes with a Three-dimensionally Ordered Structure. Chemistry Letters, 2008, 37, 420-421.	1.3	2
129	Effects of Sintering Atmosphere on the Microstructure and Surface Properties of Symmetric TiO2 Membranes. Chinese Journal of Chemical Engineering, 2009, 17, 739-745.	3.5	2
130	Mesoporous Si-MCM-48 membrane prepared by pore-filling method. Science China Technological Sciences, 2010, 53, 1064-1068.	4.0	2
131	Research progress in materials-oriented chemical engineering in China. Reviews in Chemical Engineering, 2019, 35, 917-927.	4.4	2
132	Suitable membrane absorption mode for diluted gas absorption - hydrophobic or hydrophilic. Separation and Purification Technology, 2022, 298, 121646.	7.9	2