

# Chen Zhang

## List of Publications by Year in descending order

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38  
papers

4,853  
citations

201385

27  
h-index

360668

35  
g-index

41  
all docs

41  
docs citations

41  
times ranked

4637  
citing authors

#	ARTICLE	IF	CITATIONS
1	Materials for next-generation molecularly selective synthetic membranes. <i>Nature Materials</i> , 2017, 16, 289-297.	13.3	831
2	Unexpected Molecular Sieving Properties of Zeolitic Imidazolate Framework-8. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2130-2134.	2.1	530
3	Mixed matrix formulations with MOF molecular sieving for key energy-intensive separations. <i>Nature Materials</i> , 2018, 17, 283-289.	13.3	449
4	High performance ZIF-8/6FDA-DAM mixed matrix membrane for propylene/propane separations. <i>Journal of Membrane Science</i> , 2012, 389, 34-42.	4.1	418
5	Alcohol and water adsorption in zeolitic imidazolate frameworks. <i>Chemical Communications</i> , 2013, 49, 3245.	2.2	278
6	Exploring the Framework Hydrophobicity and Flexibility of ZIF-8: From Biofuel Recovery to Hydrocarbon Separations. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3618-3622.	2.1	277
7	Carbon molecular sieve structure development and membrane performance relationships. <i>Carbon</i> , 2017, 115, 237-248.	5.4	190
8	Enabling Fluorinated MOF-Based Membranes for Simultaneous Removal of H <sub>2</sub> S and CO <sub>2</sub> from Natural Gas. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14811-14816.	7.2	176
9	Membrane-based ethylene/ethane separation: The upper bound and beyond. <i>AIChE Journal</i> , 2013, 59, 3475-3489.	1.8	156
10	Investigating the Intrinsic Ethanol/Water Separation Capability of ZIF-8: An Adsorption and Diffusion Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 7214-7225.	1.5	153
11	Crystal-Size-Dependent Structural Transitions in Nanoporous Crystals: Adsorption-Induced Transitions in ZIF-8. <i>Journal of Physical Chemistry C</i> , 2014, 118, 20727-20733.	1.5	145
12	Highly scalable ZIF-based mixed matrix hollow fiber membranes for advanced hydrocarbon separations. <i>AIChE Journal</i> , 2014, 60, 2625-2635.	1.8	132
13	Ultrasensitive Carbon Molecular Sieve Membranes with Tailored Synergistic Sorption Selective Properties. <i>Advanced Materials</i> , 2017, 29, 1701631.	11.1	129
14	Zeolitic Imidazolate Framework-Enabled Membranes: Challenges and Opportunities. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3841-3849.	2.1	115
15	New insights into structural evolution in carbon molecular sieve membranes during pyrolysis. <i>Carbon</i> , 2019, 141, 238-246.	5.4	109
16	Next generation membranes using tailored carbon. <i>Carbon</i> , 2018, 127, 688-698.	5.4	92
17	Enhanced CO <sub>2</sub> /CH <sub>4</sub> Separation Performance of a Mixed Matrix Membrane Based on Tailored MOF-Polymer Formulations. <i>Advanced Science</i> , 2018, 5, 1800982.	5.6	88
18	Gas Separation via Hybrid Metal-Organic Framework/Polymer Membranes. <i>Trends in Chemistry</i> , 2020, 2, 254-269.	4.4	71

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19	Zeolite-like MOF nanocrystals incorporated 6FDA-polyimide mixed-matrix membranes for CO <sub>2</sub> /CH <sub>4</sub> separation. <i>Journal of Membrane Science</i> , 2018, 565, 186-193.	4.1	64
20	Formation of defect-free 6FDA-DAM asymmetric hollow fiber membranes for gas separations. <i>Journal of Membrane Science</i> , 2014, 459, 223-232.	4.1	60
21	Relationship between mixed and pure gas self-diffusion for ethane and ethene in ZIF-8/6FDA-DAM mixed-matrix membrane by pulsed field gradient NMR. <i>Journal of Membrane Science</i> , 2016, 499, 12-19.	4.1	41
22	Thin-skinned intrinsically defect-free asymmetric mono-esterified hollow fiber precursors for crosslinkable polyimide gas separation membranes. <i>Journal of Membrane Science</i> , 2015, 493, 252-262.	4.1	36
23	Purification of Aggressive Supercritical Natural Gas Using Carbon Molecular Sieve Hollow Fiber Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 10482-10490.	1.8	36
24	Ultra-thin skin carbon hollow fiber membranes for sustainable molecular separations. <i>AIChE Journal</i> , 2019, 65, e16611.	1.8	36
25	Highly permeable carbon molecular sieve membranes for efficient CO <sub>2</sub> /N <sub>2</sub> separation at ambient and subambient temperatures. <i>Journal of Membrane Science</i> , 2019, 583, 9-15.	4.1	33
26	Relationship between long-range diffusion and diffusion in the ZIF-8 and polymer phases of a mixed-matrix membrane by high field NMR diffusometry. <i>Journal of Membrane Science</i> , 2015, 477, 123-130.	4.1	32
27	Titanium Silicalite-1 Nanosheet-Supported Platinum for Non-oxidative Ethane Dehydrogenation. <i>ACS Catalysis</i> , 2021, 11, 9970-9985.	5.5	30
28	Hydrocarbon separations by glassy polymer membranes. <i>Journal of Polymer Science</i> , 2020, 58, 2482-2517.	2.0	29
29	Tailoring the Transport Properties of Zeolitic Imidazolate Frameworks by Post-Synthetic Thermal Modification. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 23407-23411.	4.0	26
30	Simultaneously tuning dense skin and porous substrate of asymmetric hollow fiber membranes for efficient purification of aggressive natural gas. <i>AIChE Journal</i> , 2019, 65, 1269-1280.	1.8	20
31	Composite Carbon Molecular Sieve Hollow Fiber Membranes: Resisting Support Densification via Silica Particle Stabilization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 16051-16058.	1.8	19
32	Enabling Fluorinated MOF-Based Membranes for Simultaneous Removal of H <sub>2</sub> S and CO <sub>2</sub> from Natural Gas. <i>Angewandte Chemie</i> , 2018, 130, 15027-15032.	1.6	17
33	Carbon molecular sieve hollow fiber membranes derived from dip-coated precursor hollow fibers comprising nanoparticles. <i>Journal of Membrane Science</i> , 2022, 649, 120279.	4.1	16
34	High-temperature hydrogen/propane separations in asymmetric carbon molecular sieve hollow fiber membranes. <i>Journal of Membrane Science</i> , 2022, 642, 119978.	4.1	13
35	Alkane and Alkene Separation by Membrane Operations. , 2014, , 1-2.		0
36	Alkane and Alkene Separation by Membrane Operations. , 2016, , 55-56.		0

#	ARTICLE	IF	CITATIONS
37	Petrified Hollow Fiber Membranes with Hierarchical Pores. , 2022, 4, 938-943.		0
38	Effects of Silica Support Properties on the Performance of Immobilized Metallocene Catalysts for Ethylene Polymerization. Macromolecular Reaction Engineering, 0, , 2200020.	0.9	0