Hae-Kwon Jeong

List of Publications by Year
in descending order

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91	9,110	76326	43889
papers	citations	40 h-index	91 g-index

91	91	91	8255
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhancing the propylene/propane separation performances of ZIF-8 membranes by post-synthetic surface polymerization. Journal of Materials Chemistry A, 2022, 10, 1940-1947.	10.3	13
2	Effective aperture tuning of a zeolitic-imidazole framework CdIF-1 by controlled thermal amorphization. Journal of Materials Chemistry A, 2022, 10, 4992-4998.	10.3	3
3	Zeolitic Imidazolate Framework Membranes: Novel Synthesis Methods and Progress Toward Industrial Use. Annual Review of Chemical and Biomolecular Engineering, 2022, 13, 529-555.	6.8	14
4	Influence of 2-ethylimidazole linker-doping in ZIF-8 crystals on intracrystalline self-diffusion of gas molecules by high field diffusion NMR. Microporous and Mesoporous Materials, 2021, 315, 110897.	4.4	2
5	‹scp›Metalâ€“organic‹/scp› framework membranes: Unprecedented opportunities for gas separations. AICHE Journal, 2021, 67, e17258.	3.6	15
6	Enhancing air-dehumidification performance of polyimide membranes by generating hydrophilic Poly(amic acid) domains using partial hydrolysis. Journal of Membrane Science, 2021, 621, 119006.	8.2	4
7	Metalâ€“organic framework membranes: Unprecedented opportunities for gas separations. AICHE Journal, 2021, 67, e17258.	3.6	2
8	Delayed Linker Addition (DLA) Synthesis for Hybrid SOD ZIFs withâ€‰Unsubstituted Imidazolate Linkers for Propylene/Propane and nâ€Butane/iâ€Butane Separations. Angewandte Chemie, 2021, 133, 10191-10199.	2.0	5
9	Delayed Linker Addition (DLA) Synthesis for Hybrid SOD ZIFs withâ€‰Unsubstituted Imidazolate Linkers for Propylene/Propane and nâ€Butane/iâ€Butane Separations. Angewandte Chemie - International Edition, 2021, 60, 10103-10111.	13.8	23
10	Zeolitic imidazolate framework membranes for gas separations: Current state-of-the-art, challenges, and opportunities. Journal of Industrial and Engineering Chemistry, 2021, 98, 17-41.	5.8	40
11	Polycrystalline metal-organic framework (MOF) membranes for molecular separations: Engineering prospects and challenges. Journal of Membrane Science, 2021, 640, 119802.	8.2	48
12	In-situ linker doping as an effective means to tune zeolitic-imidazolate framework-8 (ZIF-8) fillers in mixed-matrix membranes for propylene/propane separation. Journal of Membrane Science, 2020, 596, 117689.	8.2	35
13	Effects of metal-organic framework-derived iron carbide phases for CO hydrogenation activity to hydrocarbons. Fuel, 2020, 281, 118779.	6.4	17
14	Highly H‹sub›2‹/sub›O permeable ionic liquid encapsulated metalâ€“organic framework membranes for energy-efficient air-dehumidification. Journal of Materials Chemistry A, 2020, 8, 23645-23653.	10.3	19
15	Polyimide/ZIF-7 mixed-matrix membranes: understanding the ‹i›in situ‹/i› confined formation of the ZIF-7 phases inside a polymer and their effects on gas separations. Journal of Materials Chemistry A, 2020, 8, 11210-11217.	10.3	40
16	Flow synthesis of polycrystalline ZIF-8 membranes on polyvinylidene fluoride hollow fibers for recovery of hydrogen and propylene. Journal of Industrial and Engineering Chemistry, 2020, 88, 319-327.	5.8	12
17	Transforming polymer hollow fiber membrane modules to mixed-matrix hollow fiber membrane modules for propylene/propane separation. Journal of Membrane Science, 2020, 612, 118429.	8.2	20
18	Self-diffusion of pure and mixed gases in mixed-linker zeolitic imidazolate framework-7-8 by high field diffusion NMR. Microporous and Mesoporous Materials, 2019, 288, 109603.	4.4	11

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19	Synthesis of Ultrathin Zeolitic Imidazolate Framework ZIF-8 Membranes on Polymer Hollow Fibers Using a Polymer Modification Strategy for Propylene/Propane Separation. Industrial & Engineering Chemistry Research, 2019, 58, 14947-14953.	3.7	22
20	Highly Propylene-Selective Mixed-Matrix Membranes by in Situ Metalâ€“Organic Framework Formation Using a Polymer-Modification Strategy. ACS Applied Materials & Interfaces, 2019, 11, 25949-25957.	8.0	32
21	Linker-Doped Zeolitic Imidazolate Frameworks (ZIFs) and Their Ultrathin Membranes for Tunable Gas Separations. ACS Applied Materials & Interfaces, 2019, 11, 18377-18385.	8.0	44
22	Nano-gate opening pressures for the adsorption of isobutane, n-butane, propane, and propylene gases on bimetallic Coâ€“Zn based zeolitic imidazolate frameworks. Dalton Transactions, 2019, 48, 4685-4695.	3.3	11
23	In situ formation of zeolitic-imidazolate framework thin films and composites using modified polymer substrates. Journal of Materials Chemistry A, 2019, 7, 9680-9689.	10.3	40
24	Adsorption Equilibrium and Kinetics of Nitrogen, Methane and Carbon Dioxide Gases onto ZIF-8, Cu_{10%}/ZIF-8, and Cu_{30%}/ZIF-8. Industrial & Engineering Chemistry Research, 2019, 58, 6653-6661.	3.7	19
25	Crystallographic Study of Water Distribution, Dehydration, Rehydration, Demethylation, and Decomposition Processes in Zeolitic Imidazolate Framework ZIF-8. Journal of Physical Chemistry C, 2019, 123, 31032-31042.	3.1	1
26	On the nanogate-opening pressures of copper-doped zeolitic imidazolate framework ZIF-8 for the adsorption of propane, propylene, isobutane, and n-butane. Journal of Materials Science, 2019, 54, 5513-5527.	3.7	46
27	Influence of doped metal center on morphology and pore structure of ZIF-8. MRS Communications, 2019, 9, 288-291.	1.8	11
28	Adsorption of Carbon Dioxide, Methane, and Nitrogen Gases onto ZIF Compounds with Zinc, Cobalt, and Zinc/Cobalt Metal Centers. Journal of Nanomaterials, 2019, 2019, 1-11.	2.7	11
29	Rapid One-Pot Microwave Synthesis of Mixed-Linker Hybrid Zeolitic-Imidazolate Framework Membranes for Tunable Gas Separations. ACS Applied Materials & Interfaces, 2018, 10, 5586-5593.	8.0	87
30	Facile synthesis of Cd-substituted zeolitic-imidazolate framework Cd-ZIF-8 and mixed-metal CdZn-ZIF-8. Microporous and Mesoporous Materials, 2018, 264, 35-42.	4.4	51
31	Highâ€Flux Zeolitic Imidazolate Framework Membranes for Propylene/Propane Separation by Postsynthetic Linker Exchange. Angewandte Chemie, 2018, 130, 162-167.	2.0	34
32	Ultrathin zeolitic-imidazolate framework ZIF-8 membranes on polymeric hollow fibers for propylene/propane separation. Journal of Membrane Science, 2018, 559, 28-34.	8.2	94
33	Structure of a cyclohexane sorption complex of partially dehydrated, fully Mn2+-exchanged zeolite Y (FAU, Si/Alâ€“=â€“1.56). Microporous and Mesoporous Materials, 2018, 264, 139-146.	4.4	3
34	Effects of zinc salts on the microstructure and performance of zeolitic-imidazolate framework ZIF-8 membranes for propylene/propane separation. Microporous and Mesoporous Materials, 2018, 259, 155-162.	4.4	53
35	Synergistic effects of Nb 2 O 5 promoter on Ru/Al 2 O 3 for an aqueous-phase hydrodeoxygenation of glycerol to hydrocarbons. Applied Catalysis A: General, 2018, 551, 49-62.	4.3	20
36	Highâ€Flux Zeolitic Imidazolate Framework Membranes for Propylene/Propane Separation by Postsynthetic Linker Exchange. Angewandte Chemie - International Edition, 2018, 57, 156-161.	13.8	143

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37	Propylene-Selective Thin Zeolitic Imidazolate Framework Membranes on Ceramic Tubes by Microwave Seeding and Solvothermal Secondary Growth. Crystals, 2018, 8, 373.	2.2	12
38	On the Efficient Separation of Gas Mixtures with the Mixed-Linker Zeolitic-Imidazolate Framework-7-8. ACS Applied Materials & Interfaces, 2018, 10, 39631-39644.	8.0	32
39	Ethane diffusion in mixed linker zeolitic imidazolate framework-7-8 by pulsed field gradient NMR in combination with single crystal IR microscopy. Physical Chemistry Chemical Physics, 2018, 20, 23967-23975.	2.8	31
40	Rational design of epoxy/ ZIF-8 nanocomposites for enhanced suppression of copper ion migration. Polymer, 2018, 150, 159-168.	3.8	18
41	Synthesis of amine-functionalized ZIF-8 with 3-amino-1,2,4-triazole by postsynthetic modification for efficient CO‹sub›2‹/sub›-selective adsorbents and beyond. Journal of Materials Chemistry A, 2018, 6, 18912-18919.	10.3	87
42	Continuous synthesis of high quality metalâ€“organic framework HKUST-1 crystals and composites via aerosol-assisted synthesis. Polyhedron, 2018, 153, 226-233.	2.2	13
43	Computational Design of Functional Amyloid Materials with Cesium Binding, Deposition, and Capture Properties. Journal of Physical Chemistry B, 2018, 122, 7555-7568.	2.6	12
44	Recent advances on mixed-matrix membranes for gas separation: Opportunities and engineering challenges. Korean Journal of Chemical Engineering, 2018, 35, 1577-1600.	2.7	108
45	Defect-dependent stability of highly propylene-selective zeolitic-imidazolate framework ZIF-8 membranes. Journal of Membrane Science, 2017, 529, 105-113.	8.2	51
46	Rapid microwave-assisted synthesis of hybrid zeoliticâ€“imidazolate frameworks with mixed metals and mixed linkers. Journal of Materials Chemistry A, 2017, 5, 6090-6099.	10.3	161
47	Selective Removal of Radioactive Cesium from Nuclear Waste by Zeolites: On the Origin of Cesium Selectivity Revealed by Systematic Crystallographic Studies. Journal of Physical Chemistry C, 2017, 121, 10594-10608.	3.1	49
48	A new superior competitor for exceptional propylene/propane separations: ZIF-67 containing mixed matrix membranes. Journal of Membrane Science, 2017, 526, 367-376.	8.2	94
49	Fine-sized Pt nanoparticles dispersed on PdPt bimetallic nanocrystals with non-covalently functionalized graphene toward synergistic effects on the oxygen reduction reaction. Electrochimica Acta, 2017, 257, 412-422.	5.2	14
50	Super-hierarchical Ni/porous-Ni/V2O5 nanocomposites. RSC Advances, 2017, 7, 40383-40391.	3.6	12
51	Selective adsorption of carbon dioxide, methane and nitrogen using resorcinol-formaldehyde-xerogel activated carbon. Adsorption, 2017, 23, 933-944.	3.0	15
52	Fabrication of Thin Metal-Organic Framework MOF Films on Metal-Ion-crosslinked GO-modified Supports. MRS Advances, 2017, 2, 2497-2504.	0.9	2
53	Recent Progress on Metal-Organic Framework Membranes for Gas Separations: Conventional Synthesis vs. Microwave-Assisted Synthesis. Membrane Journal, 2017, 27, 1-42.	0.4	5
54	Simultaneous enhancement of mechanical properties and CO2 selectivity of ZIF-8 mixed matrix membranes: Interfacial toughening effect of ionic liquid. Journal of Membrane Science, 2016, 511, 130-142.	8.2	242

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55	Defect-induced ripening of zeolitic-imidazolate framework ZIF-8 and its implication to vapor-phase membrane synthesis. Chemical Communications, 2016, 52, 11669-11672.	4.1	62
56	Time-Dependent Ni2+-Ion Exchange in Zeolites Y (FAU, Si/Al = 1.56) and Their Single-Crystal Structures. Journal of Physical Chemistry C, 2016, 120, 28563-28574.	3.1	4
57	ZIF-67 Framework: A Promising New Candidate for Propylene/Propane Separation. Experimental Data and Molecular Simulations. Journal of Physical Chemistry C, 2016, 120, 8116-8124.	3.1	121
58	Use of silver nanoparticles for managing Gibberella fujikuroi on rice seedlings. Crop Protection, 2015, 74, 65-69.	2.1	25
59	The polymeric upper bound for N 2 /NF 3 separation and beyond; ZIF-8 containing mixed matrix membranes. Journal of Membrane Science, 2015, 486, 29-39.	8.2	16
60	Hot Electrons Generated from Doped Quantum Dots via Upconversion of Excitons to Hot Charge Carriers for Enhanced Photocatalysis. Journal of the American Chemical Society, 2015, 137, 5549-5554.	13.7	96
61	Heteroepitaxially Grown Zeolitic Imidazolate Framework Membranes with Unprecedented Propylene/Propane Separation Performances. Journal of the American Chemical Society, 2015, 137, 12304-12311.	13.7	381
62	Improving propylene/propane separation performance of Zeolitic-Imidazolate framework ZIF-8 Membranes. Chemical Engineering Science, 2015, 124, 20-26.	3.8	94
63	Building multiple adsorption sites in porous polymer networks for carbon capture applications. Energy and Environmental Science, 2013, 6, 3559.	30.8	130
64	Highly propylene-selective supported zeolite-imidazolate framework (ZIF-8) membranes synthesized by rapid microwave-assisted seeding and secondary growth. Chemical Communications, 2013, 49, 3854.	4.1	207
65	In Situ Synthesis of Thin Zeoliticâ€“Imidazolate Framework ZIF-8 Membranes Exhibiting Exceptionally High Propylene/Propane Separation. Journal of the American Chemical Society, 2013, 135, 10763-10768.	13.7	512
66	An Unconventional Rapid Synthesis of High Performance Metalâ€“Organic Framework Membranes. Langmuir, 2013, 29, 7896-7902.	3.5	97
67	One step in situ synthesis of supported zeolitic imidazolate framework ZIF-8 membranes: Role of sodium formate. Microporous and Mesoporous Materials, 2013, 165, 63-69.	4.4	140
68	Current Status of Metalâ€“Organic Framework Membranes for Gas Separations: Promises and Challenges. Industrial & Engineering Chemistry Research, 2012, 51, 2179-2199.	3.7	466
69	Generation of covalently functionalized hierarchical IRMOF-3 by post-synthetic modification. Chemical Engineering Journal, 2012, 181-182, 740-745.	12.7	34
70	Isoreticular Metalâ”Organic Frameworks and Their Membranes with Enhanced Crack Resistance and Moisture Stability by Surfactant-Assisted Drying. Langmuir, 2011, 27, 2652-2657.	3.5	132
71	Synthesis and gas permeation properties of highly b-oriented MFI silicalite-1 thin membranes with controlled microstructure. Microporous and Mesoporous Materials, 2011, 141, 175-183.	4.4	21
72	Carbon dioxide capture-related gas adsorption and separation in metal-organic frameworks. Coordination Chemistry Reviews, 2011, 255, 1791-1823.	18.8	1,805

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73	HKUST-1 membranes on porous supports using secondary growth. Journal of Materials Chemistry, 2010, 20, 3938.	6.7	218
74	Synthesis of Zeolitic Imidazolate Framework Films and Membranes with Controlled Microstructures. Langmuir, 2010, 26, 14636-14641.	3.5	416
75	Heteroepitaxial Growth of Isoreticular Metalâ˜Organic Frameworks and Their Hybrid Films. Crystal Growth and Design, 2010, 10, 1283-1288.	3.0	107
76	Synthesis of continuous MOF-5 membranes on porous Î±-alumina substrates. Microporous and Mesoporous Materials, 2009, 118, 296-301.	4.4	347
77	Fabrication of MOF-5 membranes using microwave-induced rapid seeding and solvothermal secondary growth. Microporous and Mesoporous Materials, 2009, 123, 100-106.	4.4	293
78	Î¼-Tiles and mortar approach: A simple technique for the facile fabrication of continuous b-oriented MFI silicalite-1 thin films. Microporous and Mesoporous Materials, 2009, 122, 288-293.	4.4	30
79	Grain Boundary Defect Elimination in a Zeolite Membrane by Rapid Thermal Processing. Science, 2009, 325, 590-593.	12.6	289
80	Generation of Monodisperse Mesoporous Silica Microspheres with Controllable Size and Surface Morphology in a Microfluidic Device. Advanced Functional Materials, 2008, 18, 4014-4021.	14.9	82
81	Rapid fabrication of metal organic framework thin films using microwave-induced thermal deposition. Chemical Communications, 2008, , 2441.	4.1	209
82	Strain of MFI crystals in membranes: An in situ synchrotron X-ray study. Microporous and Mesoporous Materials, 2005, 84, 332-337.	4.4	38
83	Translational dynamics of water in a nanoporous layered silicate. Physical Review B, 2005, 71, .	3.2	26
84	Rapid Thermal Processing of Mesoporous Silica Films:Â A Simple Method to Fabricate Films Micrometers Thick for Microelectromechanical Systems (MEMS) Applications. Industrial & Engineering Chemistry Research, 2005, 44, 8933-8937.	3.7	5
85	Zeolite (MFI) Crystal Morphology Control Using Organic Structure-Directing Agents. Chemistry of Materials, 2004, 16, 5697-5705.	6.7	164
86	Fabrication of Polymer/Selective-Flake Nanocomposite Membranes and Their Use in Gas Separation. Chemistry of Materials, 2004, 16, 3838-3845.	6.7	152
87	A highly crystalline layered silicate with three-dimensionally microporous layers. Nature Materials, 2003, 2, 53-58.	27.5	120
88	Oriented Molecular Sieve Membranes by Heteroepitaxial Growth. Journal of the American Chemical Society, 2002, 124, 12966-12968.	13.7	91
89	Synthesis of a new open framework cerium silicate and its structure determination by single crystal X-ray diffractionElectronic supplementary information (ESI) available: powder XRD patterns, TG data. See http://www.rsc.org/suppdata/cc/b2/b206738m/. Chemical Communications, 2002, , 2398-2399.	4.1	28
90	Synthesis and Structure Determination of ETS-4 Single Crystals. Chemistry of Materials, 2001, 13, 4247-4254.	6.7	115

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91	Conversion of methane to higher hydrocarbons in pulsed DC barrier discharge at atmospheric pressure. Korean Journal of Chemical Engineering, 2001, 18, 196-201.	2.7	34