Efficient purification of ethene by an ethane-trapping n

Nature Communications 6, 8697 DOI: 10.1038/ncomms9697

Citation Report

#	Article	IF	CITATIONS
1	Encapsulating a Co(II) Molecular Photocatalyst in Metal–Organic Framework for Visible-Light-Driven H ₂ Production: Boosting Catalytic Efficiency via Spatial Charge Separation. ACS Catalysis, 2016, 6, 5359-5365.	5.5	184
2	3D Luminescent Copper(I) Iodide Coordination Polymer Based on Cu ₄ I ₄ Clusters and an Ethylâ€bridging Bis(triazole) Ligand. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2016, 642, 731-735.	0.6	10
3	Selective Sorption of Light Hydrocarbons on a Family of Metal–Organic Frameworks with Different Imidazolate Pillars. Inorganic Chemistry, 2016, 55, 3928-3932.	1.9	29
4	Novel C-PDA adsorbents with high uptake and preferential adsorption of ethane over ethylene. Chemical Engineering Science, 2016, 155, 338-347.	1.9	75
5	Potential of microporous metal–organic frameworks for separation of hydrocarbon mixtures. Energy and Environmental Science, 2016, 9, 3612-3641.	15.6	530
6	Ionothermal synthesis, magnetic transformation and hydration–dehydration properties of Co(<scp>ii</scp>)-based coordination polymers. RSC Advances, 2016, 6, 71952-71957.	1.7	4
7	Emerging Multifunctional Metal–Organic Framework Materials. Advanced Materials, 2016, 28, 8819-8860.	11.1	1,227
8	Putting an ultrahigh concentration of amine groups into a metal–organic framework for CO ₂ capture at low pressures. Chemical Science, 2016, 7, 6528-6533.	3.7	197
9	Applications of water stable metal–organic frameworks. Chemical Society Reviews, 2016, 45, 5107-5134.	18.7	991
10	Doubly Interpenetrated Metal–Organic Framework for Highly Selective C ₂ H ₂ /CH ₄ and C ₂ H ₂ /CO ₂ Separation at Room Temperature. Crystal Growth and Design, 2016, 16, 7194-7197.	1.4	80
11	Imparting amphiphobicity on single-crystalline porous materials. Nature Communications, 2016, 7, 13300.	5.8	126
12	Ethane selective adsorbent Ni(bdc)(ted)0.5 with high uptake and its significance in adsorption separation of ethane and ethylene. Chemical Engineering Science, 2016, 148, 275-281.	1.9	141
13	Control of interpenetration in a microporous metal–organic framework for significantly enhanced C ₂ H ₂ /CO ₂ separation at room temperature. Chemical Communications, 2016, 52, 3494-3496.	2.2	94
14	Seed-Mediated Synthesis of Metal–Organic Frameworks. Journal of the American Chemical Society, 2016, 138, 5316-5320.	6.6	104
15	The effect of the nanosize on surface properties of NiO nanoparticles for the adsorption of Quinolin-65. Physical Chemistry Chemical Physics, 2016, 18, 6839-6849.	1.3	43
16	A pillared-layer framework with high uptake and selective sorption of light hydrocarbons. Dalton Transactions, 2016, 45, 7004-7007.	1.6	15
17	Asphalt-derived high surface area activated porous carbons for the effective adsorption separation of ethane and ethylene. Chemical Engineering Science, 2017, 162, 192-202.	1.9	92
18	Bioimmobilization Matrices with Ultrahigh Efficiency Based on Combined Polymerizations of Chemical Oxidation and Metal Organic Coordination for Biosensing. Journal of Physical Chemistry C, 2017, 121, 6229-6236	1.5	4

#	Article	IF	CITATIONS
19	Unique Proton Dynamics in an Efficient MOF-Based Proton Conductor. Journal of the American Chemical Society, 2017, 139, 3505-3512.	6.6	283
20	Beyond Equilibrium: Metal–Organic Frameworks for Molecular Sieving and Kinetic Gas Separation. Crystal Growth and Design, 2017, 17, 2291-2308.	1.4	109
21	Significant Enhancement of C ₂ H ₂ /C ₂ H ₄ Separation by a Photochromic Diarylethene Unit: A Temperature―and Lightâ€Responsive Separation Switch. Angewandte Chemie, 2017, 129, 8008-8014.	1.6	22
22	Significant Enhancement of C ₂ H ₂ /C ₂ H ₄ Separation by a Photochromic Diarylethene Unit: A Temperature―and Lightâ€Responsive Separation Switch. Angewandte Chemie - International Edition, 2017, 56, 7900-7906.	7.2	145
23	Silver-Decorated Hafnium Metal–Organic Framework for Ethylene/Ethane Separation. Industrial & Engineering Chemistry Research, 2017, 56, 4508-4516.	1.8	58
24	Tuning the selectivity of light hydrocarbons in natural gas in a family of isoreticular MOFs. Journal of Materials Chemistry A, 2017, 5, 11032-11039.	5.2	36
25	Controlling guest conformation for efficient purification of butadiene. Science, 2017, 356, 1193-1196.	6.0	559
26	A highly stable metalâ€organic framework with optimum aperture size for CO ₂ capture. AICHE Journal, 2017, 63, 4103-4114.	1.8	85
27	Microstructural Engineering and Architectural Design of Metal–Organic Framework Membranes. Advanced Materials, 2017, 29, 1606949.	11.1	150
28	Ultrahigh and Selective SO ₂ Uptake in Inorganic Anionâ€Pillared Hybrid Porous Materials. Advanced Materials, 2017, 29, 1606929.	11.1	183
29	Thermally Stable Metal-Organic Framework-Templated Synthesis of Hierarchically Porous Metal Sulfides: Enhanced Photocatalytic Hydrogen Production. Small, 2017, 13, 1700632.	5.2	73
30	Flexible–Robust Metal–Organic Framework for Efficient Removal of Propyne from Propylene. Journal of the American Chemical Society, 2017, 139, 7733-7736.	6.6	242
31	A Modulatorâ€Induced Defectâ€Formation Strategy to Hierarchically Porous Metal–Organic Frameworks with High Stability. Angewandte Chemie - International Edition, 2017, 56, 563-567.	7.2	486
32	A Modulatorâ€Induced Defectâ€Formation Strategy to Hierarchically Porous Metal–Organic Frameworks with High Stability. Angewandte Chemie, 2017, 129, 578-582.	1.6	96
33	Facile Fabrication of Multifunctional Metal–Organic Framework Hollow Tubes To Trap Pollutants. Journal of the American Chemical Society, 2017, 139, 16482-16485.	6.6	96
34	Sorting of C ₄ Olefins with Interpenetrated Hybrid Ultramicroporous Materials by Combining Molecular Recognition and Sizeâ€5ieving. Angewandte Chemie, 2017, 129, 16500-16505.	1.6	41
35	Sorting of C ₄ Olefins with Interpenetrated Hybrid Ultramicroporous Materials by Combining Molecular Recognition and Size‧ieving. Angewandte Chemie - International Edition, 2017, 56, 16282-16287.	7.2	146
36	A Triphasic Modulated Hydrothermal Approach for the Synthesis of Multivariate Metal–Organic Frameworks with Hydrophobic Moieties for Highly Efficient Moistureâ€Resistant CO ₂ Capture. Advanced Sustainable Systems, 2017, 1, 1700092.	2.7	43

#	Article	IF	CITATIONS
37	Low-cost CuNi@MIL-101 as an excellent catalyst toward cascade reaction: integration of ammonia borane dehydrogenation with nitroarene hydrogenation. Chemical Communications, 2017, 53, 12361-12364.	2.2	92
38	Sizeâ€Dependent Reactivity of Nanoâ€Sized Neutral Manganese Oxide Clusters toward Ethylene. Chemistry - A European Journal, 2017, 23, 15820-15826.	1.7	13
39	Construction of a Multi-Cage-Based MOF with a Unique Network for Efficient CO ₂ Capture. ACS Applied Materials & Interfaces, 2017, 9, 26177-26183.	4.0	75
40	Efficient separation of ethylene from acetylene/ethylene mixtures by a flexible-robust metal–organic framework. Journal of Materials Chemistry A, 2017, 5, 18984-18988.	5.2	88
41	Novel glucose-based adsorbents (Glc-As) with preferential adsorption of ethane over ethylene and high capacity. Chemical Engineering Science, 2017, 172, 612-621.	1.9	30
42	Tuning ethylene gas adsorption via metal node modulation: Cu-MOF-74 for a high ethylene deliverable capacity. Chemical Communications, 2017, 53, 9376-9379.	2.2	59
43	An Ideal Molecular Sieve for Acetylene Removal from Ethylene with Record Selectivity and Productivity. Advanced Materials, 2017, 29, 1704210.	11.1	310
44	Nanoscale MOF/organosilica membranes on tubular ceramic substrates for highly selective gas separation. Energy and Environmental Science, 2017, 10, 1812-1819.	15.6	95
45	Adsorption performance of MIL-100(Fe) for separation of olefin–paraffin mixtures. Journal of the Taiwan Institute of Chemical Engineers, 2017, 70, 74-78.	2.7	27
46	Reverse selectivity of zeolites and metal-organic frameworks in the ethane/ethylene separation by adsorption. Separation Science and Technology, 2017, 52, 51-57.	1.3	16
47	Two novel lanthanide(III) organic frameworks based on a biphenyltetracarboxylate ligand: synthesis, structure and magnetic and luminescence properties. Acta Crystallographica Section C, Structural Chemistry, 2018, 74, 386-391.	0.2	7
48	π–π Interaction Between Metal–Organic Framework and Reduced Graphene Oxide for Visible-Light Photocatalytic H ₂ Production. ACS Applied Energy Materials, 2018, 1, 1913-1923.	2.5	168
49	Ethaneâ€selective carbon composites CPDA@Aâ€ACs with high uptake and its enhanced ethane/ethylene adsorption selectivity. AICHE Journal, 2018, 64, 3390-3399.	1.8	41
50	Competitive Binding of Ethylene, Water, and Carbon Monoxide in Metal–Organic Framework Materials with Open Cu Sites. Journal of Physical Chemistry C, 2018, 122, 8960-8966.	1.5	35
51	C2 adsorption in zeolites: <i>in silico</i> screening and sensitivity to molecular models. Molecular Systems Design and Engineering, 2018, 3, 619-626.	1.7	11
52	Guest-dependent pressure induced gate-opening effect enables effective separation of propene and propane in a flexible MOF. Chemical Engineering Journal, 2018, 346, 489-496.	6.6	87
53	Selective Adsorption of Ethane over Ethylene in PCN-245: Impacts of Interpenetrated Adsorbent. ACS Applied Materials & amp; Interfaces, 2018, 10, 8366-8373.	4.0	112
54	Light-enhanced acid catalysis over a metal–organic framework. Chemical Communications, 2018, 54, 2498-2501.	2.2	21

#	Article	IF	CITATIONS
55	Metal–organic framework technologies for water remediation: towards a sustainable ecosystem. Journal of Materials Chemistry A, 2018, 6, 4912-4947.	5.2	369
56	A Singleâ€Molecule Propyne Trap: Highly Efficient Removal of Propyne from Propylene with Anionâ€Pillared Ultramicroporous Materials. Advanced Materials, 2018, 30, 1705374.	11.1	133
57	Siteâ€Selective Catalysis of a Multifunctional Linear Molecule: The Steric Hindrance of Metal–Organic Framework Channels. Advanced Materials, 2018, 30, e1800643.	11.1	62
58	Supercritical Carbon Dioxide Enables Rapid, Clean, and Scalable Conversion of a Metal Oxide into Zeolitic Metal–Organic Frameworks. Crystal Growth and Design, 2018, 18, 3222-3228.	1.4	36
59	Fine Tuning and Specific Binding Sites with a Porous Hydrogen-Bonded Metal-Complex Framework for Gas Selective Separations. Journal of the American Chemical Society, 2018, 140, 4596-4603.	6.6	181
60	Rational design of phosphonocarboxylate metal–organic frameworks for light hydrocarbon separations. Materials Chemistry Frontiers, 2018, 2, 1436-1440.	3.2	13
61	Highly Adsorptive Separation of Ethane/Ethylene by An Ethane-Selective MOF MIL-142A. Industrial & Engineering Chemistry Research, 2018, 57, 4063-4069.	1.8	88
62	Heat capacity and thermodynamic functions of crystalline and amorphous forms of the metal organic framework zinc 2-ethylimidazolate, Zn(Etlm)2. Journal of Chemical Thermodynamics, 2018, 116, 341-351.	1.0	19
63	An ethane-trapping MOF PCN-250 for highly selective adsorption of ethane over ethylene. Chemical Engineering Science, 2018, 175, 110-117.	1.9	177
64	A new strategy for constructing a disulfide-functionalized ZIF-8 analogue using structure-directing ligand–ligand covalent interaction. Chemical Communications, 2018, 54, 12109-12112.	2.2	31
65	Tuning Binding Tendencies of Small Molecules in Metal–Organic Frameworks with Open Metal Sites by Metal Substitution and Linker Functionalization. Journal of Physical Chemistry C, 2018, 122, 27486-27494.	1.5	34
66	Nanospace within metal–organic frameworks for gas storage and separation. Materials Today Nano, 2018, 2, 21-49.	2.3	77
67	Adsorption of Ethane and Ethylene over 3D-Printed Ethane-Selective Monoliths. ACS Sustainable Chemistry and Engineering, 2018, 6, 15228-15237.	3.2	35
68	Molecular Sieving of Ethane from Ethylene through the Molecular Crossâ€5ection Size Differentiation in Gallateâ€based Metal–Organic Frameworks. Angewandte Chemie, 2018, 130, 16252-16257.	1.6	72
69	Molecular Sieving of Ethane from Ethylene through the Molecular Crossâ€Section Size Differentiation in Gallateâ€based Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2018, 57, 16020-16025.	7.2	202
70	Enhanced Breakthrough Efficiency by a Chemically Stable Porous Coordination Polymer with Optimized Nanochannel. ACS Applied Materials & amp; Interfaces, 2018, 10, 39025-39031.	4.0	22
71	Ethane/ethylene separation in a metal-organic framework with iron-peroxo sites. Science, 2018, 362, 443-446.	6.0	763
72	Simultaneous Trapping of C ₂ H ₂ and C ₂ H ₆ from a Ternary Mixture of C ₂ H ₂ /C ₂ /C ₂ /C ₂ H ₆ in a Robust Metal–Organic Framework for the Purification of C ₂ H ₄ . Angewandte Chemie	7.2	223

#	ARTICLE Simultaneous Trapping of C ₂ H ₂ and C ₂ H ₆ from a Ternam Mixture of	IF	CITATIONS
73	C ₂ H ₂ /C ₂ H ₄ /C ₂ H ₆ in a Robust Metal–Organic Framework for the Purification of C ₂ H ₄ . Angewandte Chemie, 2018 130 16299-16303	1.6	71
74	Direct Evidence: Enhanced C ₂ H ₆ and C ₂ H ₄ Adsorption and Separation Performances by Introducing Open Nitrogen-Donor Sites in a MOF. Inorganic Chemistry, 2018, 57, 12417-12423.	1.9	34
75	Boosting Ethane/Ethylene Separation within Isoreticular Ultramicroporous Metal–Organic Frameworks. Journal of the American Chemical Society, 2018, 140, 12940-12946.	6.6	309
76	A novel fructose-based adsorbent with high capacity and its ethane-selective adsorption property. Journal of Solid State Chemistry, 2018, 268, 190-197.	1.4	12
77	Hexafluorogermanate (GeFSIX) Anion-Functionalized Hybrid Ultramicroporous Materials for Efficiently Trapping Acetylene from Ethylene. Industrial & Engineering Chemistry Research, 2018, 57, 7266-7274.	1.8	70
78	Present and future of MOF research in the field of adsorption and molecular separation. Current Opinion in Chemical Engineering, 2018, 20, 132-142.	3.8	152
79	Robust Ultramicroporous Metal–Organic Frameworks with Benchmark Affinity for Acetylene. Angewandte Chemie, 2018, 130, 11137-11141.	1.6	85
80	Metal–Organic Frameworks for Separation. Advanced Materials, 2018, 30, e1705189.	11.1	835
81	Robust Ultramicroporous Metal–Organic Frameworks with Benchmark Affinity for Acetylene. Angewandte Chemie - International Edition, 2018, 57, 10971-10975.	7.2	365
82	Solvent-induced framework-interpenetration isomers of Cu MOFs for efficient light hydrocarbon separation. Inorganic Chemistry Frontiers, 2018, 5, 2408-2412.	3.0	27
83	Highly selective adsorption separation of light hydrocarbons with a porphyrinic zirconium metal-organic framework PCN-224. Separation and Purification Technology, 2018, 207, 262-268.	3.9	67
84	Efficient separation of C ₂ hydrocarbons in a permanently porous hydrogen-bonded organic framework. Chemical Communications, 2018, 54, 9360-9363.	2.2	58
85	Design of 2D materials for selective adsorption: a comparison between Monte Carlo simulations and direct numerical integration. Molecular Systems Design and Engineering, 2018, 3, 636-644.	1.7	5
86	Complexes of CO2 with the Azoles: Tetrel Bonds, Hydrogen Bonds and Other Secondary Interactions. Molecules, 2018, 23, 906.	1.7	35
87	An Asymmetric Anionâ€Pillared Metal–Organic Framework as a Multisite Adsorbent Enables Simultaneous Removal of Propyne and Propadiene from Propylene. Angewandte Chemie, 2018, 130, 13329-13333.	1.6	34
88	An Asymmetric Anionâ€Pillared Metal–Organic Framework as a Multisite Adsorbent Enables Simultaneous Removal of Propyne and Propadiene from Propylene. Angewandte Chemie - International Edition, 2018, 57, 13145-13149.	7.2	85
89	Shapeâ€Persistent Tetrahedral [4+6] Boronic Ester Cages with Different Degrees of Fluoride Substitution. Chemistry - A European Journal, 2018, 24, 11438-11443.	1.7	47
90	Synthesis, crystal structure and adsorption property of a microporous Cd(II) metal–organic framework based on 1H-imidazo[4,5-f][1,10]phenanthroline. Polyhedron, 2018, 152, 17-21.	1.0	1

#	Article	IF	CITATIONS
91	Olefin/paraffin separation through membranes: from mechanisms to critical materials. Journal of Materials Chemistry A, 2019, 7, 23489-23511.	5.2	63
92	Van der Waals Heterostructured MOFâ€onâ€MOF Thin Films: Cascading Functionality to Realize Advanced Chemiresistive Sensing. Angewandte Chemie, 2019, 131, 15057-15061.	1.6	45
93	Trends in Solid Adsorbent Materials Development for CO ₂ Capture. ACS Applied Materials & Interfaces, 2019, 11, 34533-34559.	4.0	215
94	Van der Waals Heterostructured MOFâ€onâ€MOF Thin Films: Cascading Functionality to Realize Advanced Chemiresistive Sensing. Angewandte Chemie - International Edition, 2019, 58, 14915-14919.	7.2	186
95	Enhancement of Ethane Selectivity in Ethane–Ethylene Mixtures by Perfluoro Groups in Zr-Based Metal-Organic Frameworks. ACS Applied Materials & Interfaces, 2019, 11, 27410-27421.	4.0	69
96	Porous metal-organic frameworks for gas storage and separation: Status and challenges. EnergyChem, 2019, 1, 100006.	10.1	434
97	Enhanced Gas Uptake in a Microporous Metal–Organic Framework <i>via</i> a Sorbate Induced-Fit Mechanism. Journal of the American Chemical Society, 2019, 141, 17703-17712.	6.6	152
98	Synergistic sorbent separation for one-step ethylene purification from a four-component mixture. Science, 2019, 366, 241-246.	6.0	360
99	Adsorptive Separation of Acetylene from Ethylene in Isostructural Gallateâ€Based Metal–Organic Frameworks. Chemistry - A European Journal, 2019, 25, 15516-15524.	1.7	27
100	Current Status of Microporous Metal–Organic Frameworks for Hydrocarbon Separations. Topics in Current Chemistry, 2019, 377, 33.	3.0	31
101	Enhancing C ₂ H ₂ /C ₂ H ₄ separation by incorporating low-content sodium in covalent organic frameworks. Inorganic Chemistry Frontiers, 2019, 6, 2921-2926.	3.0	24
102	Tuning the Molecular and Cationic Affinity in a Series of Multifunctional Metal–Organic Frameworks Based on Dodecanuclear Zn(II) Carboxylate Wheels. Journal of the American Chemical Society, 2019, 141, 17260-17269.	6.6	83
103	Hydrogen Isotope Separation in Confined Nanospaces: Carbons, Zeolites, Metal–Organic Frameworks, and Covalent Organic Frameworks. Advanced Materials, 2019, 31, e1805293.	11.1	98
104	Fine-Tuning the Pore Environment of the Microporous Cu-MOF for High Propylene Storage and Efficient Separation of Light Hydrocarbons. ACS Central Science, 2019, 5, 1261-1268.	5.3	128
105	Ethane-Selective Behavior Achieved on a Nickel-Based Metal–Organic Framework: Impact of Pore Effect and Hydrogen Bonds. Industrial & Engineering Chemistry Research, 2019, 58, 10516-10523.	1.8	15
106	N-donor linker based metal-organic frameworks (MOFs): Advancement and prospects as functional materials. Coordination Chemistry Reviews, 2019, 395, 146-192.	9.5	98
107	Robust Microporous Metal–Organic Frameworks for Highly Efficient and Simultaneous Removal of Propyne and Propadiene from Propylene. Angewandte Chemie, 2019, 131, 10315-10320.	1.6	16
108	Pore Space Partitioning of Metal–Organic Framework for C ₂ H _{<i>x</i>} Separation from Methane. Inorganic Chemistry, 2019, 58, 5410-5413.	1.9	29

#	Article	IF	CITATIONS
109	Moisture stability of ethaneâ€selective Ni(II), Fe(III), Zr(IV)â€based metal–organic frameworks. AICHE Journal, 2019, 65, e16616.	1.8	28
110	Robust Microporous Metal–Organic Frameworks for Highly Efficient and Simultaneous Removal of Propyne and Propadiene from Propylene. Angewandte Chemie - International Edition, 2019, 58, 10209-10214.	7.2	69
111	Pore environment engineering in metal–organic frameworks for efficient ethane/ethylene separation. Journal of Materials Chemistry A, 2019, 7, 13585-13590.	5.2	91
112	Alternatives to Cryogenic Distillation: Advanced Porous Materials in Adsorptive Light Olefin/Paraffin Separations. Small, 2019, 15, e1900058.	5.2	187
113	Selectively Trapping Ethane from Ethylene on Metal–Organic Framework MIL-53(Al)-FA. Industrial & Engineering Chemistry Research, 2019, 58, 8290-8295.	1.8	39
114	Microporous Metal–Organic Frameworks for Adsorptive Separation of C5–C6 Alkane Isomers. Accounts of Chemical Research, 2019, 52, 1968-1978.	7.6	160
115	Selective Aerobic Oxidation of a Metal–Organic Framework Boosts Thermodynamic and Kinetic Propylene/Propane Selectivity. Angewandte Chemie, 2019, 131, 7774-7778.	1.6	36
116	Selective Aerobic Oxidation of a Metal–Organic Framework Boosts Thermodynamic and Kinetic Propylene/Propane Selectivity. Angewandte Chemie - International Edition, 2019, 58, 7692-7696.	7.2	111
117	A Robust Ethane-Trapping Metal–Organic Framework with a High Capacity for Ethylene Purification. Journal of the American Chemical Society, 2019, 141, 5014-5020.	6.6	272
118	Specific K ⁺ Binding Sites as CO ₂ Traps in a Porous MOF for Enhanced CO ₂ 2 Selective Sorption. Small, 2019, 15, e1900426.	5.2	67
120	Recent Progress Towards Light Hydrocarbon Separations Using Metal–Organic Frameworks. Trends in Chemistry, 2019, 1, 159-171.	4.4	141
121	A novel interpenetrated anion-pillared porous material with high water tolerance afforded efficient C ₂ H ₂ /C ₂ H ₄ separation. Chemical Communications, 2019, 55, 5001-5004.	2.2	41
122	Pore Space Partition within a Metal–Organic Framework for Highly Efficient C ₂ H ₂ /CO ₂ Separation. Journal of the American Chemical Society, 2019, 141, 4130-4136.	6.6	338
123	Conformation-induced separation of 3-chloropropene from 1-chloropropane through nanoporous monolayer graphenes. Physical Chemistry Chemical Physics, 2019, 21, 5170-5177.	1.3	2
124	Pore Size Reduction in Zirconium Metal–Organic Frameworks for Ethylene/Ethane Separation. ACS Sustainable Chemistry and Engineering, 2019, 7, 7118-7126.	3.2	39
125	Metal–Organic Framework Containing Planar Metal-Binding Sites: Efficiently and Cost-Effectively Enhancing the Kinetic Separation of C ₂ H ₂ /C ₂ H ₄ . Journal of the American Chemical Society, 2019, 141, 3807-3811.	6.6	144
126	Pillar iodination in functional boron cage hybrid supramolecular frameworks for high performance separation of light hydrocarbons. Journal of Materials Chemistry A, 2019, 7, 27560-27566.	5.2	71
127	Cage-Interconnected Metal–Organic Framework with Tailored Apertures for Efficient C ₂ H ₆ /C ₂ H ₄ Separation under Humid Conditions.	6.6	212

#	Article	IF	CITATIONS
128	Heat capacities and thermodynamic functions of the ZIF organic linkers imidazole, 2-methylimidazole, and 2-ethylimidazole. Journal of Chemical Thermodynamics, 2019, 132, 129-141.	1.0	8
129	CO ₂ Capture in Metal–Organic Framework Adsorbents: An Engineering Perspective. Advanced Sustainable Systems, 2019, 3, 1800080.	2.7	217
130	An indium-based ethane-trapping MOF for efficient selective separation of C2H6/C2H4 mixture. Separation and Purification Technology, 2019, 212, 51-56.	3.9	49
131	Biased adsorption of ethane over ethylene on low-cost hyper-crosslinked polymers. Journal of Solid State Chemistry, 2019, 271, 199-205.	1.4	15
132	Novel glucosamine-based carbon adsorbents with high capacity and its enhanced mechanism of preferential adsorption of C2H6 over C2H4. Chemical Engineering Journal, 2019, 358, 1114-1125.	6.6	48
133	MFM-300: From air pollution remediation to toxic gas detection. Polyhedron, 2019, 157, 495-504.	1.0	12
134	Two Stable Zn-Cluster-Based Metal–Organic Frameworks with Breathing Behavior: Synthesis, Structure, and Adsorption Properties. Inorganic Chemistry, 2019, 58, 391-396.	1.9	26
135	Metal–Organic Framework Materials for the Separation and Purification of Light Hydrocarbons. Advanced Materials, 2020, 32, e1806445.	11.1	408
136	Synthesis and modification of moisture-stable coordination pillared-layer metal-organic framework (CPL-MOF) CPL-2 for ethylene/ethane separation. Microporous and Mesoporous Materials, 2020, 293, 109784.	2.2	30
137	Reversed ethane/ethylene adsorption in a metal–organic framework via introduction of oxygen. Chinese Journal of Chemical Engineering, 2020, 28, 593-597.	1.7	19
138	Manufacturing Nanoporous Materials for Energy-Efficient Separations. , 2020, , 33-81.		8
139	Selective adsorption of ethane over ethylene on M(bdc)(ted)0.5 (M = Co, Cu, Ni, Zn) metal-organic frameworks (MOFs). Microporous and Mesoporous Materials, 2020, 292, 109724.	2.2	48
140	Metal-organic framework-based CO2 capture: From precise material design to high-efficiency membranes. Frontiers of Chemical Science and Engineering, 2020, 14, 188-215.	2.3	31
141	Engineering microporous ethane-trapping metal–organic frameworks for boosting ethane/ethylene separation. Journal of Materials Chemistry A, 2020, 8, 3613-3620.	5.2	120
142	Halogen–C ₂ H ₂ Binding in Ultramicroporous Metal–Organic Frameworks (MOFs) for Benchmark C ₂ H ₂ /CO ₂ Separation Selectivity. Chemistry - A European Journal, 2020, 26, 4923-4929.	1.7	72
143	Microporous Metal–Organic Framework with a Completely Reversed Adsorption Relationship for C ₂ Hydrocarbons at Room Temperature. ACS Applied Materials & Interfaces, 2020, 12, 6105-6111.	4.0	63
144	Novel cage-like MOF for gas separation, CO ₂ conversion and selective adsorption of an organic dye. Inorganic Chemistry Frontiers, 2020, 7, 746-755.	3.0	99
145	Microporous Metal-Organic Framework Materials for Gas Separation. CheM, 2020, 6, 337-363.	5.8	528

#	Article	IF	CITATIONS
146	Polycatenated Molecular Cage-Based Propane Trap for Propylene Purification with Recorded Selectivity. ACS Applied Materials & amp; Interfaces, 2020, 12, 2525-2530.	4.0	50
147	Selective Ethane/Ethylene Separation in a Robust Microporous Hydrogen-Bonded Organic Framework. Journal of the American Chemical Society, 2020, 142, 633-640.	6.6	183
148	Room temperature synthesis of Cu(Qc)2 and its application for ethane capture from light hydrocarbons. Chemical Engineering Science, 2020, 213, 115355.	1.9	25
149	A Hydrogenâ€Bonded yet Hydrophobic Porous Molecular Crystal for Molecularâ€Sievingâ€like Separation of Butane and Isobutane. Angewandte Chemie, 2020, 132, 23522-23528.	1.6	29
150	Recent advances in hybrid perovskite nanogenerators. EcoMat, 2020, 2, e12057.	6.8	23
151	Optimizing supramolecular interactions in metal–organic frameworks for C ₂ separation. Dalton Transactions, 2020, 49, 15548-15559.	1.6	14
152	Efficient Trapping of Trace Acetylene from Ethylene in an Ultramicroporous Metal–Organic Framework: Synergistic Effect of Highâ€Density Open Metal and Electronegative Sites. Angewandte Chemie - International Edition, 2020, 59, 18927-18932.	7.2	121
153	Metrics for Evaluation and Screening of Metal–Organic Frameworks for Applications in Mixture Separations. ACS Omega, 2020, 5, 16987-17004.	1.6	56
154	A metal–organic framework based inner ear delivery system for the treatment of noise-induced hearing loss. Nanoscale, 2020, 12, 16359-16365.	2.8	20
155	Hydrogen bonding-induced hydrophobic assembly yields strong affinity of an adsorptive membrane for ultrafast removal of trace organic micropollutants from water. Journal of Materials Chemistry A, 2020, 8, 16487-16496.	5.2	14
156	Microregulation of Pore Channels in Covalent-Organic Frameworks Used for the Selective and Efficient Separation of Ethane. ACS Applied Materials & amp; Interfaces, 2020, 12, 52819-52825.	4.0	35
157	7-Connected Fe ^{III} ₃ -Based Bio-MOF: Pore Space Partition and Gas Separations. Inorganic Chemistry, 2020, 59, 16829-16832.	1.9	7
158	Highly efficient synthesis of non-planar macrocycles possessing intriguing self-assembling behaviors and ethene/ethyne capture properties. Nature Communications, 2020, 11, 5806.	5.8	22
159	Membraneâ€Based Olefin/Paraffin Separations. Advanced Science, 2020, 7, 2001398.	5.6	105
160	Fine-Tuning and Selective-Binding within an Anion-Functionalized Ultramicroporous Metal–Organic Framework for Efficient Olefin/Paraffin Separation. ACS Applied Materials & Interfaces, 2020, 12, 40229-40235.	4.0	44
161	Effect of framework rigidity in metal-organic frameworks for adsorptive separation of ethane/ethylene. Microporous and Mesoporous Materials, 2020, 307, 110473.	2.2	20
162	A Series of Mesoporous Metalâ€Organic Frameworks with Tunable Windows Sizes and Exceptionally High Ethane over Ethylene Adsorption Selectivity. Angewandte Chemie - International Edition, 2020, 59, 20561-20567.	7.2	90
163	Crystal engineering of porous coordination networks to enable separation of C2 hydrocarbons. Chemical Communications, 2020, 56, 10419-10441.	2.2	123

	CITATION	Report	
#	Article	IF	CITATIONS
164	A Series of Mesoporous Metalâ€Organic Frameworks with Tunable Windows Sizes and Exceptionally High Ethane over Ethylene Adsorption Selectivity. Angewandte Chemie, 2020, 132, 20742-20748.	1.6	21
165	Efficient Trapping of Trace Acetylene from Ethylene in an Ultramicroporous Metal–Organic Framework: Synergistic Effect of Highâ€Density Open Metal and Electronegative Sites. Angewandte Chemie, 2020, 132, 19089-19094.	1.6	43
166	Rational design and synthesis of ultramicroporous metal-organic frameworks for gas separation. Coordination Chemistry Reviews, 2020, 423, 213485.	9.5	127
167	Effect of Pore Size on the Separation of Ethylene from Ethane in Three Isostructural Metal Azolate Frameworks. Inorganic Chemistry, 2020, 59, 13019-13023.	1.9	6
168	A Hydrogenâ€Bonded yet Hydrophobic Porous Molecular Crystal for Molecularâ€Sievingâ€like Separation of Butane and Isobutane. Angewandte Chemie - International Edition, 2020, 59, 23322-23328.	7.2	49
169	Enhancing Selective Adsorption in a Robust Pillared-Layer Metal–Organic Framework via Channel Methylation for the Recovery of C2–C3 from Natural Gas. ACS Applied Materials & Interfaces, 2020, 12, 51499-51505.	4.0	50
170	Pore engineering of metal–organic frameworks for ethylene purification. Dalton Transactions, 2020, 49, 17093-17105.	1.6	7
171	Thhorium Metal–Organic Framework Showing Proton Transformation from [NH ₂ (CH ₃) ₂] ⁺ to the Carboxyl Group to Enhance Porosity for Selective Adsorption of D ₂ over H ₂ and Ammonia Capture. Crystal Growth and Design 2020 20 3605-3610	1.4	5
172	Opportunities and critical factors of porous metal–organic frameworks for industrial light olefins separation. Materials Chemistry Frontiers, 2020, 4, 1954-1984.	3.2	48
173	Microporous 3D Graphene-like Zeolite-Templated Carbons for Preferential Adsorption of Ethane. ACS Applied Materials & Interfaces, 2020, 12, 28484-28495.	4.0	25
174	Optimizing Pore Space for Flexible-Robust Metal–Organic Framework to Boost Trace Acetylene Removal. Journal of the American Chemical Society, 2020, 142, 9744-9751.	6.6	154
175	Copper and nickel doped MIL-101: Highly efficient adsorbents for separation of ethylene-ethane mixture. Chemical Engineering Research and Design, 2020, 159, 315-327.	2.7	7
176	Porous hydrogen-bonded organic frameworks (HOFs): From design to potential applications. Chemical Engineering Journal, 2020, 399, 125873.	6.6	132
177	New Discovery of Metal–Organic Framework UTSA-280: Ultrahigh Adsorption Selectivity of Krypton over Xenon. Journal of Physical Chemistry C, 2020, 124, 14603-14612.	1.5	19
178	A robust Th-azole framework for highly efficient purification of C2H4 from a C2H4/C2H2/C2H6 mixture. Nature Communications, 2020, 11, 3163.	5.8	192
179	Synthesis of Ionic Ultramicroporous Polymers for Selective Separation of Acetylene from Ethylene. Advanced Materials, 2020, 32, e1907601.	11.1	54
180	Optimizing Multivariate Metal–Organic Frameworks for Efficient C ₂ H ₂ /CO ₂ Separation. Journal of the American Chemical Society, 2020, 142, 8728-8737.	6.6	289
181	Robust Bimetallic Ultramicroporous Metal–Organic Framework for Separation and Purification of Noble Gases. Inorganic Chemistry, 2020, 59, 4868-4873.	1.9	39

#	Article	IF	CITATIONS
182	Adsorptive separation of C2H6/C2H4 on metal-organic frameworks (MOFs) with pillared-layer structures. Separation and Purification Technology, 2020, 242, 116819.	3.9	40
183	Direct Functionalization of the Open Metal Sites in Rare Earth-Based Metal–Organic Frameworks Used for the Efficient Separation of Ethylene. Industrial & Engineering Chemistry Research, 2020, 59, 6123-6129.	1.8	17
184	General Approach for Constructing Mechanoresponsive and Redox-Active Metal–Organic and Covalent Organic Frameworks by Solid–Liquid Reaction: Ferrocene as the Versatile Function Unit. Inorganic Chemistry, 2020, 59, 5271-5275.	1.9	10
185	Propane-selective design of zirconium-based MOFs for propylene purification. Chemical Engineering Science, 2020, 219, 115604.	1.9	20
186	Energy-efficient separation alternatives: metal–organic frameworks and membranes for hydrocarbon separation. Chemical Society Reviews, 2020, 49, 5359-5406.	18.7	370
187	Designer Metal–Organic Frameworks for Sizeâ€Exclusionâ€Based Hydrocarbon Separations: Progress and Challenges. Advanced Materials, 2020, 32, e2002603.	11.1	182
188	Gallate-Based Metal–Organic Frameworks for Highly Efficient Removal of Trace Propyne from Propylene. Industrial & Engineering Chemistry Research, 2020, 59, 13716-13723.	1.8	13
189	Understanding ethane/ethylene adsorption selectivity in ethane-selective microporous materials. Separation and Purification Technology, 2020, 241, 116635.	3.9	16
190	Construction of a functionalized hierarchical pore metal–organic framework <i>via</i> a palladium-reduction induced strategy. Nanoscale, 2020, 12, 6250-6255.	2.8	13
191	Fluorinated Biphenyldicarboxylate-Based Metal–Organic Framework Exhibiting Efficient Propyne/Propylene Separation. Inorganic Chemistry, 2020, 59, 4030-4036.	1.9	28
192	Immobilization of Oxygen Atoms in the Pores of Microporous Metal–Organic Frameworks for C ₂ H ₂ Separation and Purification. ACS Applied Nano Materials, 2020, 3, 2911-2919.	2.4	88
193	Efficient gas and alcohol uptake and separation driven by two types of channels in a porous MOF: an experimental and theoretical investigation. Journal of Materials Chemistry A, 2020, 8, 5227-5233.	5.2	36
194	Microporous metal-organic framework with specific functional sites for efficient removal of ethane from ethane/ethylene mixtures. Chemical Engineering Journal, 2020, 387, 124137.	6.6	36
195	Pore-Space-Partition-Enabled Exceptional Ethane Uptake and Ethane-Selective Ethane–Ethylene Separation. Journal of the American Chemical Society, 2020, 142, 2222-2227.	6.6	199
196	Anion-regulated selective growth ultrafine copper templates in carbon nanosheets network toward highly efficient gas capture. Journal of Colloid and Interface Science, 2020, 564, 296-302.	5.0	17
197	Exploiting equilibrium-kinetic synergetic effect for separation of ethylene and ethane in a microporous metal-organic framework. Science Advances, 2020, 6, eaaz4322.	4.7	107
198	In Situ Pyrolysis Tracking and Realâ€Time Phase Evolution: From a Binary Zinc Cluster to Supercapacitive Porous Carbon. Angewandte Chemie - International Edition, 2020, 59, 13232-13237.	7.2	44
199	In Situ Pyrolysis Tracking and Realâ€Time Phase Evolution: From a Binary Zinc Cluster to Supercapacitive Porous Carbon. Angewandte Chemie, 2020, 132, 13334-13339	1.6	6

#	Article	IF	CITATIONS
200	Crystal Engineering of Hybrid Coordination Networks: From Form to Function. Trends in Chemistry, 2020, 2, 506-518.	4.4	55
201	Tuning the Structures of Metal–Organic Frameworks <i>via</i> a Mixed-Linker Strategy for Ethylene/Ethane Kinetic Separation. Chemistry of Materials, 2020, 32, 3715-3722.	3.2	44
202	Separation of hexane isomers by introducing "triangular-like and quadrilateral-like channels―in a bcu-type metal-organic framework. Nano Research, 2021, 14, 526-531.	5.8	14
203	Dual-functionalization actuated trimodal attribute in an ultra-robust MOF: exceptionally selective capture and effectual fixation of CO ₂ with fast-responsive, nanomolar detection of assorted organo-contaminants in water. Materials Chemistry Frontiers, 2021, 5, 979-994.	3.2	50
204	Modification of the pore environment in UiO-type metal-organic framework toward boosting the separation of propane/propylene. Chemical Engineering Journal, 2021, 403, 126428.	6.6	31
205	Separation of propylene and propane with a microporous metal–organic framework via equilibriumâ€kinetic synergetic effect. AICHE Journal, 2021, 67, .	1.8	35
206	Tuning of Delicate Host–Guest Interactions in Hydrated MILâ€53 and Functional Variants for Furfural Capture from Aqueous Solution. Angewandte Chemie - International Edition, 2021, 60, 1629-1634.	7.2	17
207	Metal-organic materials with triazine-based ligands: From structures to properties and applications. Coordination Chemistry Reviews, 2021, 427, 213518.	9.5	29
208	Selective capture of carbon dioxide from humid gases over a wide temperature range using a robust metal–organic framework. Chemical Engineering Journal, 2021, 405, 126937.	6.6	32
209	é~´ç¦»å功能化超微å"MOFé«~æ•^选择性æ•获低浓尦 CO2. Science China Materials, 2021	l, 6 4, 5691-	69 2 8
210	Tuning of Delicate Host–Guest Interactions in Hydrated MILâ€53 and Functional Variants for Furfural Capture from Aqueous Solution. Angewandte Chemie, 2021, 133, 1653-1658.	1.6	4
211	The state of the field: from inception to commercialization of metal–organic frameworks. Faraday Discussions, 2021, 225, 9-69.	1.6	70
212	Specific Li+ sites in a nanoporous carbon for enhanced light hydrocarbons storage and separation: GCMC and DFT simulations. Fuel, 2021, 288, 119647.	3.4	9
213	An aromatic-rich cage-based MOF with inorganic chloride ions decorating the pore surface displaying the preferential adsorption of C ₂ H ₂ and C ₂ H ₆ over C ₂ H ₄ . Inorganic Chemistry Frontiers, 2021, 8, 1243-1252.	3.0	43
214	A robust heterometallic ultramicroporous MOF with ultrahigh selectivity for propyne/propylene separation. Journal of Materials Chemistry A, 2021, 9, 2850-2856.	5.2	22
215	Chemistry and applications of s-block metal–organic frameworks. Journal of Materials Chemistry A, 2021, 9, 3828-3854.	5.2	31
216	High Adsorption Capacity and Selectivity of SO ₂ over CO ₂ in a Metal–Organic Framework. Inorganic Chemistry, 2021, 60, 4-8.	1.9	22
217	In silico screening and design strategies of ethaneâ€selective metal–organic frameworks for ethane/ethylene separation. AICHE Journal, 2021, 67, e17025.	1.8	44

#	Article	IF	CITATIONS
218	Tunable Metal–Organic Frameworks Based on 8 onnected Metal Trimers for High Ethane Uptake. Small, 2021, 17, e2003167.	5.2	19
219	Pore control of Al-based MIL-53 isomorphs for the preferential capture of ethane in an ethane/ethylene mixture. Journal of Materials Chemistry A, 2021, 9, 14593-14600.	5.2	29
220	Separation of alkane and alkene mixtures by metal–organic frameworks. Journal of Materials Chemistry A, 2021, 9, 20874-20896.	5.2	54
221	MOF-based electrocatalysts for high-efficiency CO ₂ conversion: structure, performance, and perspectives. Journal of Materials Chemistry A, 2021, 9, 22710-22728.	5.2	20
222	A Fluorinated <scp>Metal</scp> â€ <scp>Organic</scp> Framework, <scp>FMOF</scp> â€2, for Preferential Adsorption of Ethane over Ethylene. Bulletin of the Korean Chemical Society, 2021, 42, 286-289.	1.0	13
223	Wettability control of metal-organic frameworks. , 2021, , 131-166.		2
224	Preferential adsorption of ethane over ethylene on a Zr-based metal–organic framework: impacts of C–Hâ <n 2021,="" 45,="" 8045-8053.<="" bonding.="" chemistry,="" hydrogen="" journal="" new="" of="" td=""><td>1.4</td><td>16</td></n>	1.4	16
225	Alkyl decorated metal–organic frameworks for selective trapping of ethane from ethylene above ambient pressures. Dalton Transactions, 2021, 50, 10423-10435.	1.6	15
226	Beyond structural motifs: the frontier of actinide-containing metal–organic frameworks. Chemical Science, 2021, 12, 7214-7230.	3.7	43
227	Molecular Simulations on Tuning the Interlayer Spacing of Graphene Nanoslits for C4H6/C4H10 Separation. ACS Applied Nano Materials, 2021, 4, 1994-2001.	2.4	5
228	Oneâ€step Ethylene Purification from an Acetylene/Ethylene/Ethane Ternary Mixture by Cyclopentadiene Cobaltâ€Functionalized Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2021, 60, 11350-11358.	7.2	118
229	A robust ethane-trapping metal-organic framework for efficient purification of ethylene. Science China Chemistry, 2021, 64, 666-672.	4.2	16
230	Highâ€Efficiency Separation of <i>n</i> â€Hexane by a Dynamic Metalâ€Organic Framework with Reduced Energy Consumption. Angewandte Chemie - International Edition, 2021, 60, 10593-10597.	7.2	42
231	Highâ€Efficiency Separation of <i>n</i> â€Hexane by a Dynamic Metalâ€Organic Framework with Reduced Energy Consumption. Angewandte Chemie, 2021, 133, 10687-10691.	1.6	10
232	A Rodâ€Packing Hydrogenâ€Bonded Organic Framework with Suitable Pore Confinement for Benchmark Ethane/Ethylene Separation. Angewandte Chemie - International Edition, 2021, 60, 10304-10310.	7.2	104
233	A Novel Hydrogen-Bonded Organic Framework with Highly Permanent Porosity for Boosting Ethane/Ethylene Separation. , 2021, 3, 497-503.		46
234	Nanospace Engineering of Metal–Organic Frameworks through Dynamic Spacer Installation of Multifunctionalities for Efficient Separation of Ethane from Ethane/Ethylene Mixtures. Angewandte Chemie, 2021, 133, 9766-9771.	1.6	9
235	Oneâ€step Ethylene Purification from an Acetylene/Ethylene/Ethane Ternary Mixture by Cyclopentadiene Cobaltâ€Functionalized Metal–Organic Frameworks. Angewandte Chemie, 2021, 133, 11451-11459.	1.6	21

#	Article	IF	CITATIONS
236	Nanospace Engineering of Metal–Organic Frameworks through Dynamic Spacer Installation of Multifunctionalities for Efficient Separation of Ethane from Ethane/Ethylene Mixtures. Angewandte Chemie - International Edition, 2021, 60, 9680-9685.	7.2	89
237	A Rodâ€Packing Hydrogenâ€Bonded Organic Framework with Suitable Pore Confinement for Benchmark Ethane/Ethylene Separation. Angewandte Chemie, 2021, 133, 10392-10398.	1.6	29
239	Exploring periodic mesoporous organosilicas for ethane–ethylene adsorption–separation. Microporous and Mesoporous Materials, 2021, 317, 110975.	2.2	5
241	Chemically Stable Hafnium-Based Metal–Organic Framework for Highly Efficient C ₂ H ₆ /C ₂ H ₄ Separation under Humid Conditions. ACS Applied Materials & Interfaces, 2021, 13, 18792-18799.	4.0	34
242	Highâ€Throughput Discovery of Ni(IN) ₂ for Ethane/Ethylene Separation. Advanced Science, 2021, 8, e2004940.	5.6	50
243	Ultrahighâ€Uptake Capacityâ€Enabled Gas Separation and Fruit Preservation by a New Singleâ€Walled Nickel–Organic Framework. Advanced Science, 2021, 8, 2003141.	5.6	38
244	Supramolecular control of MOF pore properties for the tailored guest adsorption/separation applications. Coordination Chemistry Reviews, 2021, 434, 213709.	9.5	141
245	Classified Encapsulation of an Organic Dye and Metal–Organic Complex in Different Molecular Compartments for White-Light Emission and Selective Adsorption of C2H2 over CO2. Inorganic Chemistry, 2021, 60, 8211-8217.	1.9	7
246	Separation and Purification of Hydrocarbons with Porous Materials. Angewandte Chemie - International Edition, 2021, 60, 18930-18949.	7.2	118
247	Separation and Purification of Hydrocarbons with Porous Materials. Angewandte Chemie, 2021, 133, 19078-19097.	1.6	2
248	Modulation of Topological Structures and Adsorption Properties of Copper-Tricarboxylate Frameworks Enabled by the Effect of the Functional Group and Its Position. Inorganic Chemistry, 2021, 60, 8111-8122.	1.9	6
249	Realization of Ethylene Production from Its Quaternary Mixture through Metal–Organic Framework Materials. ACS Applied Materials & Interfaces, 2021, 13, 22514-22520.	4.0	13
250	ZIF-8 derived carbon materials with multifunctional selective adsorption abilities. Carbon, 2021, 176, 421-430.	5.4	30
251	Post-Synthetic Coordination Modification of Robust Pillared-Rod Metal-Azolate Frameworks for Diversified Applications. Bulletin of Japan Society of Coordination Chemistry, 2021, 77, 3-10.	0.1	2
252	Humid Ethylene/Ethane Separation on Ethylene-Selective Materials. Industrial & Engineering Chemistry Research, 2021, 60, 9940-9947.	1.8	16
253	An ethane-favored metal-organic framework with tailored pore environment used for efficient ethylene separation. Microporous and Mesoporous Materials, 2021, 320, 111096.	2.2	16
254	Scalable Room-Temperature Synthesis of Highly Robust Ethane-Selective Metal–Organic Frameworks for Efficient Ethylene Purification. Journal of the American Chemical Society, 2021, 143, 8654-8660.	6.6	124
255	Hostâ€Guest Interaction in Ethylene and Ethane Separation on Zeolitic Imidazolate Frameworks as Revealed by Solid tate NMR Spectroscopy. Chemistry - A European Journal, 2021, 27, 11303-11308.	1.7	7

#	Article	IF	CITATIONS
256	Octanuclear Cobalt(II) Cluster-Based Metal–Organic Framework with Caged Structure Exhibiting the Selective Adsorption of Ethane over Ethylene. Inorganic Chemistry, 2021, 60, 10596-10602.	1.9	11
257	Advances in adsorptive separation of benzene and cyclohexane by metal-organic framework adsorbents. Coordination Chemistry Reviews, 2021, 437, 213852.	9.5	74
258	Efficient ethylene purification by a robust ethane-trapping porous organic cage. Nature Communications, 2021, 12, 3703.	5.8	70
259	Metal-organic frameworks for C6–C8 hydrocarbon separations. EnergyChem, 2021, 3, 100057.	10.1	58
260	Rational Construction and Performance Regulation of an In(III)–Tetraisophthalate Framework for One-Step Adsorption-Phase Purification of C ₂ H ₄ from C ₂ Hydrocarbons. Inorganic Chemistry, 2021, 60, 10819-10829.	1.9	40
261	Ethylene/ethane separation in a stable hydrogen-bonded organic framework through a gating mechanism. Nature Chemistry, 2021, 13, 933-939.	6.6	235
262	A Robust Hydrogen-Bonded Metal–Organic Framework with Enhanced Ethane Uptake and Selectivity. Chemistry of Materials, 2021, 33, 6193-6199.	3.2	39
263	Lowâ€Concentration C ₂ H ₆ Capture Enabled by Size Matching in the Ultramicropore. Chemistry - A European Journal, 2021, 27, 12753-12757.	1.7	4
264	Efficient Capture of Trace Acetylene by an Ultramicroporous Metal–Organic Framework with Purine Binding Sites. Chemistry of Materials, 2021, 33, 5800-5808.	3.2	22
265	Zeolitic Octahedral Metal Oxides with Ultra‣mall Micropores for C 2 Hydrocarbon Separation. Angewandte Chemie, 2021, 133, 18476-18482.	1.6	5
266	Zeolitic Octahedral Metal Oxides with Ultra‣mall Micropores for C ₂ Hydrocarbon Separation. Angewandte Chemie - International Edition, 2021, 60, 18328-18334.	7.2	20
267	The modulation of <scp>ethaneâ€selective</scp> adsorption performance in series of bimetal <scp>PCN</scp> â€250 metal–organic frameworks: Impact of metal composition. AICHE Journal, 2022, 68, e17385.	1.8	11
268	Stable titanium metal-organic framework with strong binding affinity for ethane removal. Chinese Journal of Chemical Engineering, 2022, 42, 35-41.	1.7	3
269	C2s/C1 hydrocarbon separation: The major step towards natural gas purification by metal-organic frameworks (MOFs). Coordination Chemistry Reviews, 2021, 442, 213998.	9.5	64
270	A Microporous MOF Constructed by Cross-Linking Helical Chains for Efficient Purification of Natural Gas and Ethylene. Inorganic Chemistry, 2021, 60, 14969-14977.	1.9	11
271	Highly Microporous Activated Carbons with Industrial Potential for Selective Adsorption of Ethane over Ethylene. Industrial & amp; Engineering Chemistry Research, 2021, 60, 13301-13308.	1.8	6
272	Recent advances of nanoporous adsorbents for light hydrocarbon (C1 – C3) separation. Chemical Engineering Journal, 2022, 430, 132654.	6.6	25
273	Elucidating the mechanisms of Paraffin-Olefin separations using nanoporous adsorbents: An overview. IScience, 2021, 24, 103042.	1.9	11

#	Article	IF	CITATIONS
274	Two Isostructural Titanium Metal–Organic Frameworks for Light Hydrocarbon Separation. Inorganic Chemistry, 2021, 60, 13955-13959.	1.9	12
275	Efficient propyne/propadiene separation by microporous crystalline physiadsorbents. Nature Communications, 2021, 12, 5768.	5.8	26
276	Construction of saturated coordination titanium-based metal–organic framework for one-step C2H2/C2H6/C2H4 separation. Separation and Purification Technology, 2021, 276, 119284.	3.9	28
277	Reversed C2H6/C2H4 separation in interpenetrated diamondoid coordination networks with enhanced host–guest interaction. Separation and Purification Technology, 2021, 276, 119385.	3.9	13
278	A microporous metal–organic framework with triangular channels for C2H6/C2H4 adsorption separation. Separation and Purification Technology, 2021, 276, 119424.	3.9	13
279	Urea-assisted synthesis of biomass-based hierarchical porous carbons for the light hydrocarbons adsorption and separation. Chemical Engineering Journal, 2022, 428, 130985.	6.6	16
280	pH-responsive aminotriazole doped metal organic frameworks nanoplatform enables selfâ€boosting reactive oxygen species generation through regulating the activity of catalase for targeted chemo/chemodynamic combination therapy. Journal of Colloid and Interface Science, 2022, 607, 1651-1660.	5.0	32
281	Robust carbazole-based covalent triazine frameworks with defective ultramicropore structure for efficient ethane-selective ethane-ethylene separation. Chemical Engineering Journal, 2022, 427, 131726.	6.6	15
282	Micro- and mesoporous metal-organic frameworks for hydrocarbon separation. Russian Chemical Reviews, 2022, 91, RCR5026.	2.5	39
283	Pore Engineering for One-Step Ethylene Purification from a Three-Component Hydrocarbon Mixture. Journal of the American Chemical Society, 2021, 143, 1485-1492.	6.6	143
284	An upper bound visualization of design trade-offs in adsorbent materials for gas separations: alkene/alkane adsorbents. Chemical Communications, 2021, 57, 6950-6959.	2.2	8
285	Research Progress in Metal-Organic Framework and Its Composites for Separation of C ₂ Based on Sieving Multiple Effects. Acta Chimica Sinica, 2021, 79, 459.	0.5	13
286	Efficient Purification of Ethylene from C ₂ Hydrocarbons with an C ₂ H ₆ /C ₂ H ₂ -Selective Metal–Organic Framework. ACS Applied Materials & Interfaces, 2021, 13, 962-969.	4.0	69
287	An Ultramicroporous Metal–Organic Framework for High Sieving Separation of Propylene from Propane. Journal of the American Chemical Society, 2020, 142, 17795-17801.	6.6	186
288	Recent advances in adsorptive separation of ethane and ethylene by C2H6-selective MOFs and other adsorbents. Chemical Engineering Journal, 2022, 431, 133208.	6.6	58
289	Lanthanide–Organic Frameworks Featuring Three-Dimensional Inorganic Connectivity for Multipurpose Hydrocarbon Separation. Inorganic Chemistry, 2021, 60, 17249-17257.	1.9	17
290	Rapid Screening of Metal–Organic Frameworks for Propane/Propylene Separation by Synergizing Molecular Simulation and Machine Learning. ACS Applied Materials & Interfaces, 2021, 13, 53454-53467.	4.0	48
291	Improving Ethane/Ethylene Separation Performance of Isoreticular Metal–Organic Frameworks <i>via</i> Substituent Engineering. ACS Applied Materials & Interfaces, 2021, 13, 54059-54068.	4.0	24

#	Article	IF	CITATIONS
292	Separation of ethane/ethylene gas mixture by ethane-selective CAU-3-NDCA adsorbent. Microporous and Mesoporous Materials, 2022, 330, 111572.	2.2	9
293	One-step ethylene production from a four-component gas mixture by a single physisorbent. Nature Communications, 2021, 12, 6507.	5.8	64
294	Energy efficient ethylene purification in a commercially viable ethane-selective MOF. Separation and Purification Technology, 2022, 282, 120126.	3.9	8
295	Threeâ€inâ€One C ₂ H ₂ â€Selectivityâ€Guided Adsorptive Separation across an Isoreticular Family of Cationic Squareâ€Lattice MOFs. Angewandte Chemie, 2022, 134, e202114132.	1.6	2
296	Enhanced Sieving of C2â€Hydrocarbon from Methane by Fluoroâ€Functionalization of Inâ€MOF with Robust Stability. Chemistry - an Asian Journal, 2022, 17, .	1.7	2
297	Threeâ€inâ€One C ₂ H ₂ â€Selectivityâ€Guided Adsorptive Separation across an Isoreticular Family of Cationic Squareâ€Lattice MOFs. Angewandte Chemie - International Edition, 2022, 61, .	7.2	33
298	A robust ethane-selective metal-organic framework with nonpolar pore surface for efficient C2H6/C2H4 separation. Chemical Engineering Journal, 2022, 433, 133786.	6.6	19
299	Boosting selective C2H2/CH4, C2H4/CH4 and CO2/CH4 adsorption performance via 1,2,3-triazole functionalized triazine-based porous organic polymers. Chinese Journal of Chemical Engineering, 2022, 42, 64-72.	1.7	6
300	A robust ethane-selective hypercrosslinked porous organic adsorbent with high ethane capacity. Journal of Materials Chemistry A, 2022, 10, 3579-3584.	5.2	13
301	A Microporous Metalâ€Organic Framework with Channels Constructed from Nonpolar Aromatic Rings for the Selective Separation of Ethane/Ethylene Mixtures. ChemPlusChem, 2022, 87, e202100482.	1.3	1
302	Recent progress on porous MOFs for process-efficient hydrocarbon separation, luminescent sensing, and information encryption. Chemical Communications, 2022, 58, 747-770.	2.2	81
303	Immobilization of Lewis Basic Sites into a Stable Ethane-Selective MOF Enabling One-Step Separation of Ethylene from a Ternary Mixture. Journal of the American Chemical Society, 2022, 144, 2614-2623.	6.6	127
304	An anion-functionalized zinc-organic framework for efficient C2H2/C2H4 separation. Inorganic Chemistry Communication, 2022, 137, 109198.	1.8	2
305	General pore features for one-step C ₂ H ₄ production from a C2 hydrocarbon mixture. Chemical Communications, 2022, 58, 4954-4957.	2.2	8
306	Preferential adsorption sites for propane/propylene separation on ZIF-8 as revealed by solid-state NMR spectroscopy. Physical Chemistry Chemical Physics, 2022, 24, 6535-6543.	1.3	4
307	Three novel MOFs constructed from 1,3,5-tris(1-imidazolyl)benzene and dicarboxylate ligands with selective adsorption for C ₂ H ₂ /C ₂ H ₄ and C ₂ H ₄ /C+sub>2. Dalton Transactions, 2022, 51, 4862-4868.	1.6	2
308	Preferential Adsorption Performance of Ethane in a Robust Nickel-Based Metal–Organic Framework for Separating Ethane from Ethylene. ACS Omega, 2022, 7, 7648-7654.	1.6	7
309	Improving Ethane/Ethylene Separation Performance under Humid Conditions by Spatially Modified Zeolitic Imidazolate Frameworks. ACS Applied Materials & Interfaces, 2022, 14, 11547-11558.	4.0	13

#	Article	IF	CITATIONS
310	Uncoordinated Hexafluorosilicates in a Microporous Metal–Organic Framework Enabled C ₂ H ₂ /CO ₂ Separation. Inorganic Chemistry, 2022, 61, 4251-4256.	1.9	15
311	Computational Screening of Metal-Organic Frameworks for Ethylene Purification from Ethane/Ethylene/Acetylene Mixture. Nanomaterials, 2022, 12, 869.	1.9	3
312	One-Step Ethylene Purification by an Ethane-Screening Metal–Organic Framework. ACS Applied Materials & Interfaces, 2022, 14, 15195-15204.	4.0	15
313	Efficient organic iodide capture by a mesoporous bimetallic-organic framework. Cell Reports Physical Science, 2022, 3, 100830.	2.8	15
314	Identification of optimal metal-organic frameworks by machine learning: Structure decomposition, feature integration, and predictive modeling. Computers and Chemical Engineering, 2022, 160, 107739.	2.0	13
315	Control of pore environment in highly porous carbon materials for C2H6/C2H4 separation with exceptional ethane uptake. Materials Today Chemistry, 2022, 24, 100856.	1.7	2
316	A metal-organic framework based on Co(II) and 3-aminoisonicotinate showing specific and reversible colourimetric response to solvent exchange with variable magnet behaviour. Materials Today Chemistry, 2022, 24, 100794.	1.7	6
317	Host–Guest Pore Space Partition in a Boron Imidazolate Framework for Ethylene Separation. Chemistry of Materials, 2022, 34, 307-313.	3.2	23
318	Adsorption in Reversed Order of C ₂ Hydrocarbons on an Ultramicroporous Fluorinated Metalâ€Organic Framework. Angewandte Chemie - International Edition, 2022, 61, .	7.2	34
319	Ethylene purification in a metal–organic framework over a wide temperature range via pore confinement. Green Energy and Environment, 2023, 8, 1703-1710.	4.7	6
320	Adsorption in Reversed Order of C ₂ Hydrocarbons on an Ultramicroporous Fluorinated Metalâ€Organic Framework. Angewandte Chemie, 2022, 134, .	1.6	7
321	Two isostructural metal–organic frameworks with unique nickel clusters for C ₂ H ₂ /C ₂ /C ₂ /C ₂ H ₄ mixture separation. Journal of Materials Chemistry A, 2022, 10, 12497-12502.	5.2	12
322	Oneâ€5tep C ₂ H ₄ Purification from Ternary C ₂ H ₆ /C ₂ H ₄ /C ₂ H ₂ 222	7.2	57
323	Oneâ€Step C ₂ H ₄ Purification from Ternary C ₂ H ₆ /C ₂ H ₄ /C ₂ H ₂ H ₂ /C ₂ H ₂ H ₂ /C ₂ H ₂ H ₂ /C ₂ H ₂ /C ₂ H ₂ /C <sub>/C₂/C<sub>/C₂/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub>/C<sub c<sub="" c<sub<="" td=""><td>1.6</td><td>15</td></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub>	1.6	15
324	Boosting <scp>C₂H₆</scp> / <scp>C₂H₄</scp> separation in scalable metalâ€organic frameworks through pore engineering. AICHE Journal, 2022, 68, .	1.8	10
325	Tailoring a robust Al-MOF for trapping C ₂ H ₆ and C ₂ H ₂ towards efficient C ₂ H ₄ purification from quaternary mixtures. Chemical Science, 2022, 13, 7172-7180.	3.7	30
326	A Water-Resistant Hydrogen-Bonded Organic Framework for Ethane/Ethylene Separation in Humid Environments. , 2022, 4, 1227-1232.		33
327	Cascade adsorptive separation of light hydrocarbons by commercial zeolites. Journal of Energy Chemistry, 2022, 72, 299-305.	7.1	5

#	Article	IF	CITATIONS
328	A Scandiumâ€based Microporous Metalâ€Organic Framework for Ethaneâ€&elective Separation. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 0, , .	0.6	1
329	Luminescence modulation by twisting the branches of organic building blocks in uranyl-organic frameworks. Cell Reports Physical Science, 2022, , 100913.	2.8	4
331	Selective adsorption of ethane over ethylene through a metal–organic framework bearing dense alkyl groups. Separation and Purification Technology, 2022, 295, 121330.	3.9	9
332	Reverse-selective metal–organic framework materials for the efficient separation and purification of light hydrocarbons. Coordination Chemistry Reviews, 2022, 468, 214628.	9.5	48
333	Evaluation of Iron-Based Metal–Organic Framework Activation Temperatures in Acetylene Adsorption. Inorganic Chemistry, 2022, 61, 9242-9250.	1.9	3
334	Direct Visualization of Supramolecular Binding and Separation of Light Hydrocarbons in MFM-300(In). Chemistry of Materials, 2022, 34, 5698-5705.	3.2	11
335	Optimizing Photodetectors in Two-Dimensional Metal-Metalloporphyrinic Framework Thin Films. ACS Applied Materials & Interfaces, 2022, 14, 33548-33554.	4.0	13
336	Pore-Window Partitions in Metal–Organic Frameworks for Highly Efficient Reversed Ethylene/Ethane Separations. Inorganic Chemistry, 2022, 61, 10493-10501.	1.9	5
337	Effect of Orbital-Symmetry Matching in a Metal–Organic Framework for Highly Efficient C ₂ H ₂ /C ₂ H ₄ and C ₂ H _{H₂/CO₂ Separations. Inorganic Chemistry, 2022, 61, 10263-10266.}	1.9	3
338	Synergistic binding sites in a hybrid ultramicroporous material for one-step ethylene purification from ternary C ₂ hydrocarbon mixtures. Science Advances, 2022, 8, .	4.7	53
339	One‣tep Ethylene Purification from Ternary Mixtures in a Metal–Organic Framework with Customized Pore Chemistry and Shape. Angewandte Chemie - International Edition, 2022, 61, .	7.2	39
340	An Ultramicroporous Hydrogenâ€Bonded Organic Framework Exhibiting High C2H2/CO2 Separation. Angewandte Chemie, 0, , .	1.6	5
341	Oneâ€ s tep Ethylene Purification from Ternary Mixtures in a Metal–Organic Framework with Customized Pore Chemistry and Shape. Angewandte Chemie, 2022, 134, .	1.6	4
342	An Ultramicroporous Hydrogenâ€Bonded Organic Framework Exhibiting High C ₂ H ₂ /CO ₂ Separation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	48
343	Pore space partition of metal-organic frameworks for gas storage and separation. EnergyChem, 2022, 4, 100080.	10.1	35
344	Progress and potential of metal-organic frameworks (MOFs) for gas storage and separation: A review. Journal of Environmental Chemical Engineering, 2022, 10, 108300.	3.3	86
345	A review on anion-pillared metal–organic frameworks (APMOFs) and their composites with the balance of adsorption capacity and separation selectivity for efficient gas separation. Coordination Chemistry Reviews, 2022, 470, 214714.	9.5	32
346	Recent advances in microporous metal–organic frameworks as promising adsorbents for gas separation. Journal of Materials Chemistry A, 2022, 10, 17878-17916.	5.2	29

#	Article	IF	CITATIONS
347	A Metalâ€Organic Framework with Nonpolar Pore Surfaces for the One‣tep Acquisition of C ₂ H ₄ from a C ₂ H ₄ and C ₂ H ₆ Mixture. Angewandte Chemie - International Edition, 2022, 61, .	7.2	41
348	Ultramicroporous material based parallel and extended paraffin nano-trap for benchmark olefin purification. Nature Communications, 2022, 13, .	5.8	37
349	Metalâ€Organic Framework with High Densities of Open Metal Sites for Efficient Separation of Propylene from Propane. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2022, 648, .	0.6	7
350	A Metalâ€Organic Framework with Nonpolar Pore Surfaces for the One‣tep Acquisition of C ₂ H ₄ from a C ₂ H ₄ and C ₂ H ₆ Mixture. Angewandte Chemie, 2022, 134, .	1.6	5
351	Enhanced ethylene transport of mixed-matrix membranes by incorporating anion-pillared hybrid ultramicroporous materials via in situ growth. Separation and Purification Technology, 2022, 300, 121804.	3.9	5
352	One-step ethylene purification from ternary mixture by synergetic molecular shape and size matching in a honeycomb-like ultramicroporous material. Chemical Engineering Journal, 2022, 450, 138272.	6.6	10
353	An ethane-trapping Zn (II) cluster-based metal-organic framework with suitable pockets for efficient ethane/ethylene separation. Separation and Purification Technology, 2022, 301, 122011.	3.9	4
354	Development and assessment of magnetic Fe2O3@MOF-74 composite sorbents for ethylene/ethane separation. Chemical Engineering Journal, 2023, 451, 139006.	6.6	12
355	Screening Hoffman-type metal organic frameworks for efficient C2H2/CO2 separation. Chemical Engineering Journal, 2023, 452, 139296.	6.6	37
356	Selectivity Tuning of Adsorbents for Ethane/Ethylene Separation: A Review. Industrial & Engineering Chemistry Research, 2022, 61, 12269-12293.	1.8	17
357	High-Performance Adsorbent for Ethane/Ethylene Separation Selected through the Computational Screening of Aluminum-Based Metal–Organic Frameworks. ACS Applied Materials & Interfaces, 2022, 14, 43637-43645.	4.0	5
358	Guest-molecule-induced self-adaptive pore engineering facilitates purification of ethylene from ternary mixture. CheM, 2022, 8, 3263-3274.	5.8	42
359	Simulation study on the effect of pore structure and surface curvature of activated carbon on the adsorption and separation performance of CO2/N2. Journal of Nanoparticle Research, 2022, 24, .	0.8	1
360	Desolvation-Degree-Induced Structural Dynamics in a Rigid Cerium–Organic Framework Exhibiting Tandem Purification of Ethylene from Acetylene and Ethane. ACS Applied Materials & Interfaces, 2022, 14, 44460-44469.	4.0	11
361	Boosting Ethane/Ethylene Separation by MOFs through the Aminoâ€Functionalization of Pores. Angewandte Chemie - International Edition, 2022, 61, .	7.2	79
362	Boosting Ethane/Ethylene Separation by MOFs through the Aminoâ€Functionalization of Pores. Angewandte Chemie, 0, , .	1.6	5
363	Hydrophobic paraffin-selective pillared-layer MOFs for olefin purification. Journal of Materials Chemistry A, 2022, 10, 24127-24136.	5.2	14
364	Status and Outlook of Oil Field Chemistry-Assisted Analysis during the Energy Transition Period. Energy & Fuels, 2022, 36, 12917-12945.	2.5	17

#	Article	IF	CITATIONS
365	A Flexible Hydrogenâ€Bonded Organic Framework Constructed from a Tetrabenzaldehyde with a Carbazole Nâ''H Binding Site for the Highly Selective Recognition and Separation of Acetone. Angewandte Chemie, 2022, 134, .	1.6	2
366	A Flexible Hydrogenâ€Bonded Organic Framework Constructed from a Tetrabenzaldehyde with a Carbazole Nâ''H Binding Site for the Highly Selective Recognition and Separation of Acetone. Angewandte Chemie - International Edition, 2022, 61, .	7.2	35
367	Fine Tuning the Pore Surface in Zirconium Metal–Organic Frameworks for Selective Ethane/Ethylene Separation. , 2023, 1, 334-340.		0
368	Efficient C ₂ H ₂ Separation from CO ₂ and CH ₄ within a Microporous Metal–Organic Framework of Multiple Functionalities. Industrial & Engineering Chemistry Research, 0, , .	1.8	1
369	Tuning Metal–Organic Framework (MOF) Topology by Regulating Ligand and Secondary Building Unit (SBU) Geometry: Structures Built on 8-Connected M ₆ (M = Zr, Y) Clusters and a Flexible Tetracarboxylate for Propane-Selective Propane/Propylene Separation. Journal of the American Chemical Society, 2022, 144, 21702-21709.	6.6	31
370	Molecular insights into the role of O2 in reversed C2H6/C2H4 separation on metal–organic frameworks. Separation and Purification Technology, 2023, 304, 122332.	3.9	3
371	Thermodynamic and kinetic synergetic separation of CO2/C2H2 in an ultramicroporous metal-organic framework. Separation and Purification Technology, 2023, 304, 122318.	3.9	12
372	Control of pore structure by the solvent effect for efficient ethane/ethylene separation. Separation and Purification Technology, 2023, 304, 122378.	3.9	5
373	Efficient separation of methane, ethane and propane on mesoporous metal-organic frameworks. Chemical Engineering Journal, 2023, 453, 139642.	6.6	20
374	Constructing C2H2 anchoring traps within MOF interpenetration nets as C2H2/CO2 and C2H2/C2H4 bifunctional separator. Chemical Engineering Journal, 2023, 453, 139713.	6.6	19
375	Responsive shape recognition of styrene over ethylbenzene with excellent selectivity and capacity in a hybrid porous material. Chemical Engineering Journal, 2023, 453, 139756.	6.6	5
376	Rational regulation of acetylene adsorption and separation for ultra-microporous copper-1,2,4-triazolate frameworks by halogen hydrogen bonds. Nanoscale, 2022, 14, 18200-18208.	2.8	6
377	Dense packing of xenon in an ultra-microporous metal–organic framework for benchmark xenon capture and separation. Chemical Engineering Journal, 2023, 453, 139849.	6.6	9
378	Insights into the thermodynamic–kinetic synergistic separation of propyne/propylene in anion pillared cage MOFs with entropy–enthalpy balanced adsorption sites. Chemical Science, 2023, 14, 298-309.	3.7	15
379	Efficient Propylene/Ethylene Separation in Highly Porous Metal–Organic Frameworks. Materials, 2023, 16, 154.	1.3	4
380	Enhanced Adsorption Selectivity of Carbon Dioxide and Ethane on Porous Metal–Organic Framework Functionalized by a Sulfur-Rich Heterocycle. Nanomaterials, 2022, 12, 4281.	1.9	4
381	Enhancing Ethane/Ethylene Separation Performance in Two Dynamic MOFs by Regulating Temperature-Controlled Structural Interpenetration. Inorganic Chemistry, 2023, 62, 4762-4769.	1.9	2
382	Postsynthetic modification strategies to improve polycrystalline metal-organic framework membranes. Materials Today Sustainability, 2023, 21, 100296.	1.9	2

#	Article	IF	CITATIONS
383	Adenine-mediated amide-containing metal-organic framework toward one-step ethylene purification from a ternary mixture. , 2023, 42, 100012.		2
384	Enhanced oneâ€step purification of <scp>C₂H₄</scp> from <scp>C₂H₂/<scp>C₂H₄</scp>/<scp>C_{2mixtures by fluorinated <scp>Zrâ€MOF</scp>. AICHE Journal, 2023, 69, .}</scp></scp>	≻H tas ub>6	
385	Combination of Low-Polar and Polar Binding Sites in Aliphatic MOFs for the Efficient C ₂ H ₆ /C ₂ H ₄ Separation. ACS Applied Materials & Interfaces, 2023, 15, 3387-3394.	4.0	11
386	One-step ethylene separation from ternary C2 hydrocarbon mixture with a robust zirconium metal–organic framework. Chinese Journal of Chemical Engineering, 2023, 59, 9-15.	1.7	1
387	Construction of Fluorinated Propaneâ€Trap in Metal–Organic Frameworks for Record Polymerâ€Grade Propylene Production under High Humidity Conditions. Advanced Materials, 2023, 35, .	11.1	22
388	Strategies, Synthesis, and Applications of Metal-Organic Framework Materials. , 2023, , 1-82.		0
389	Highly Robust Microporous Metalâ€Organic Frameworks for Efficient Ethylene Purification under Dry and Humid Conditions. Angewandte Chemie, 2023, 135, .	1.6	0
390	Highly Robust Microporous Metalâ€Organic Frameworks for Efficient Ethylene Purification under Dry and Humid Conditions. Angewandte Chemie - International Edition, 2023, 62, .	7.2	13
391	Design and Screening of Metal–Organic Frameworks for Ethane/Ethylene Separation. ACS Omega, 2023, 8, 4278-4284.	1.6	6
392	Expanding nonpolar pore surfaces in stable ethane-selective MOF to boost ethane/ethylene separation performance. Separation and Purification Technology, 2023, 315, 123642.	3.9	5
393	Designed metal-organic frameworks with potential for multi-component hydrocarbon separation. Coordination Chemistry Reviews, 2023, 484, 215111.	9.5	20
394	Bioinspired inhibition of aggregation in metal-organic frameworks (MOFs). IScience, 2023, 26, 106239.	1.9	1
395	Fe-MOF with U-Shaped Channels for C ₂ H ₂ /CO ₂ and C ₂ H ₂ /C _{/C₂H₄ Separation. Inorganic Chemistry, 2023, 62, 3722-3726.}	1.9	6
396	Customizing Metalâ€Organic Frameworks by Legoâ€Brick Strategy for Oneâ€Step Purification of Ethylene from a Quaternary Gas Mixture. Small, 2023, 19, .	5.2	19
397	Design of Olefin-Phobic Zeolites for Efficient Ethane and Ethylene Separation. Chemistry of Materials, 2023, 35, 2078-2087.	3.2	2
398	The Adsorptive Separation of Ethylene from C ₂ Hydrocarbons by Metalâ€Organic Frameworks. Chemistry - A European Journal, 2023, 29, .	1.7	3
399	An ultramicroporous pillar-layer metal-organic framework for high sieving separation of ethylene from ethane. Microporous and Mesoporous Materials, 2023, 354, 112532.	2.2	2
400	Application of Hydrogen-Bonded Organic Frameworks in Environmental Remediation: Recent Advances and Future Trends. Separations, 2023, 10, 196.	1.1	4

#	Article	IF	CITATIONS
401	A Microporous Metalâ€Organic Framework with Unique Aromatic Pore Surfaces for High Performance C ₂ H ₆ /C ₂ H ₄ Separation. Angewandte Chemie - International Edition, 2023, 62, .	7.2	31
402	A Microporous Metalâ€Organic Framework with Unique Aromatic Pore Surfaces for High Performance C ₂ H ₆ /C ₂ H ₄ Separation. Angewandte Chemie, 2023, 135,	1.6	0
403	Water-stable MOFs and hydrophobically encapsulated MOFs for CO2 capture from ambient air and wet flue gas. Materials Today, 2023, 65, 207-226.	8.3	18
404	The Design of MOF-Based Nano-Trap for the Efficient Separation of Propane and Propylene. Chemical Communications, 0, , .	2.2	2
405	A separation MOF with O/N active sites in nonpolar pore for One-step C2H4 purification from C2H6 or C3H6 mixtures. Chemical Engineering Journal, 2023, 466, 143056.	6.6	9
407	Nanomaterials and catalysis. , 2023, , 39-54.		0
424	One-step ethylene purification from ternary mixtures by an ultramicroporous material with synergistic binding centers. Materials Horizons, 2023, 10, 4463-4469.	6.4	3
427	Recent progress in metal–organic frameworks for the separation of gaseous hydrocarbons. Materials Chemistry Frontiers, 2023, 7, 5693-5730.	3.2	0
428	Metal–organic frameworks for hydrocarbon separation: design, progress, and challenges. Journal of Materials Chemistry A, 2023, 11, 20459-20469.	5.2	5
462	Future prospects and grand challenges for porous coordination polymers. , 2024, , 393-408.		0