Wei Zhou

List of Publications by Year
in descending order

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251 papers	40,299 citations	2538 96 h-index	2558 195 g-index
269 all docs	269 docs citations	269 times ranked	27907 citing authors

#	Article	IF	Citations
1	Methane storage in metalâ€“organic frameworks. Chemical Society Reviews, 2014, 43, 5657-5678.	18.7	1,449
2	Metalâ€“Organic Frameworks as Platforms for Functional Materials. Accounts of Chemical Research, 2016, 49, 483-493.	7.6	1,403
3	Emerging Multifunctional Metalâ€“Organic Framework Materials. Advanced Materials, 2016, 28, 8819-8860.	11.1	1,227
4	Nanotube Networks in Polymer Nanocomposites:Â Rheology and Electrical Conductivity. Macromolecules, 2004, 37, 9048-9055.	2.2	1,196
5	Unusual and Highly Tunable Missing-Linker Defects in Zirconium Metalâ€“Organic Framework UiO-66 and Their Important Effects on Gas Adsorption. Journal of the American Chemical Society, 2013, 135, 10525-10532.	6.6	1,148
6	Pore chemistry and size control in hybrid porous materials for acetylene capture from ethylene. Science, 2016, 353, 141-144.	6.0	1,088
7	Nanostructured carbon for energy storage and conversion. Nano Energy, 2012, 1, 195-220.	8.2	895
8	Macroscopic, Neat, Single-Walled Carbon Nanotube Fibers. Science, 2004, 305, 1447-1450.	6.0	785
9	Ethane/ethylene separation in a metal-organic framework with iron-peroxo sites. Science, 2018, 362, 443-446.	6.0	763
10	Multifunctional porous hydrogen-bonded organic framework materials. Chemical Society Reviews, 2019, 48, 1362-1389.	18.7	751
11	Microporous metal-organic framework with potential for carbon dioxide capture at ambient conditions. Nature Communications, 2012, 3, 954.	5.8	716
12	Nanoporous carbide-derived carbon with tunable pore size. Nature Materials, 2003, 2, 591-594.	13.3	653
13	Recent Progress in Metalâ€Organic Frameworks for Applications in Electrocatalytic and Photocatalytic Water Splitting. Advanced Science, 2017, 4, 1600371.	5.6	594
14	A flexible metalâ€“organic framework with a high density of sulfonic acid sites for proton conduction. Nature Energy, 2017, 2, 877-883.	19.8	563
15	Exploration of porous metalâ€“organic frameworks for gas separation and purification. Coordination Chemistry Reviews, 2019, 378, 87-103.	9.5	538
16	High-Capacity Methane Storage in Metalâ^'Organic Frameworks M₂(dhtp): The Important Role of Open Metal Sites. Journal of the American Chemical Society, 2009, 131, 4995-5000.	6.6	534
17	Molecular sieving of ethylene from ethane using a rigid metalâ€“organic framework. Nature Materials, 2018, 17, 1128-1133.	13.3	532
18	Microporous Metal-Organic Framework Materials for Gas Separation. CheM, 2020, 6, 337-363.	5.8	528

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19	Enhanced H₂ Adsorption in Isostructural Metalâ"Organic Frameworks with Open Metal Sites: Strong Dependence of the Binding Strength on Metal Ions. Journal of the American Chemical Society, 2008, 130, 15268-15269.	6.6	517
20	Exceptionally High Acetylene Uptake in a Microporous Metalâ"Organic Framework with Open Metal Sites. Journal of the American Chemical Society, 2009, 131, 12415-12419.	6.6	510
21	Porous Metalâ€"Organic Frameworks for Gas Storage and Separation: What, How, and Why?. Journal of Physical Chemistry Letters, 2014, 5, 3468-3479.	2.1	505
22	UTSA-74: A MOF-74 Isomer with Two Accessible Binding Sites per Metal Center for Highly Selective Gas Separation. Journal of the American Chemical Society, 2016, 138, 5678-5684.	6.6	489
23	True solutions of single-walled carbon nanotubes for assembly into macroscopic materials. Nature Nanotechnology, 2009, 4, 830-834.	15.6	486
24	Dynamic traction of lattice-confined platinum atoms into mesoporous carbon matrix for hydrogen evolution reaction. Science Advances, 2018, 4, eaao6657.	4.7	460
25	Hydrogen and Methane Adsorption in Metalâ"Organic Frameworks:â€‰ A High-Pressure Volumetric Study. Journal of Physical Chemistry C, 2007, 111, 16131-16137.	1.5	449
26	Porous metal-organic frameworks for gas storage and separation: Status and challenges. EnergyChem, 2019, 1, 100006.	10.1	434
27	Stable Hierarchical Bimetalâ€"Organic Nanostructures as HighPerformance Electrocatalysts for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 4227-4231.	7.2	430
28	Optimized Separation of Acetylene from Carbon Dioxide and Ethylene in a Microporous Material. Journal of the American Chemical Society, 2017, 139, 8022-8028.	6.6	417
29	Microporous metalâ€"organic framework with dual functionalities for highly efficient removal of acetylene from ethylene/acetylene mixtures. Nature Communications, 2015, 6, 7328.	5.8	404
30	Hydrogen Storage in a Prototypical Zeolitic Imidazolate Framework-8. Journal of the American Chemical Society, 2007, 129, 5314-5315.	6.6	393
31	Graphene Oxide Framework Materials: Theoretical Predictions and Experimental Results. Angewandte Chemie - International Edition, 2010, 49, 8902-8904.	7.2	372
32	Exceptional Mechanical Stability of Highly Porous Zirconium Metalâ€"Organic Framework UiO-66 and Its Important Implications. Journal of Physical Chemistry Letters, 2013, 4, 925-930.	2.1	361
33	A Flexible Microporous Hydrogen-Bonded Organic Framework for Gas Sorption and Separation. Journal of the American Chemical Society, 2015, 137, 9963-9970.	6.6	360
34	Carbon capture in metalâ€"organic frameworksâ€"a comparative study. Energy and Environmental Science, 2011, 4, 2177.	15.6	354
35	Open Metal Sites within Isostructural Metalâ€"Organic Frameworks for Differential Recognition of Acetylene and Extraordinarily High Acetylene Storage Capacity at Room Temperature. Angewandte Chemie - International Edition, 2010, 49, 4615-4618.	7.2	344
36	A Metalâ€"Organic Framework with Optimized Open Metal Sites and Pore Spaces for High Methane Storage at Room Temperature. Angewandte Chemie - International Edition, 2011, 50, 3178-3181.	7.2	340

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37	Pore Space Partition within a Metalâ€“Organic Framework for Highly Efficient C₂H₂/CO₂ Separation. Journal of the American Chemical Society, 2019, 141, 4130-4136.	6.6	338
38	A Zn4O-containing doubly interpenetrated porous metalâ€“organic framework for photocatalytic decomposition of methyl orange. Chemical Communications, 2011, 47, 11715.	2.2	319
39	Mixed Metalâ€“Organic Framework with Multiple Binding Sites for Efficient C₂H₂/CO₂Separation. Angewandte Chemie - International Edition, 2020, 59, 4396-4400.	7.2	313
40	A Porous Metalâ€“Organic Framework with Dynamic Pyrimidine Groups Exhibiting Record High Methane Storage Working Capacity. Journal of the American Chemical Society, 2014, 136, 6207-6210.	6.6	311
41	An Ideal Molecular Sieve for Acetylene Removal from Ethylene with Record Selectivity and Productivity. Advanced Materials, 2017, 29, 1704210.	11.1	310
42	Boosting Ethane/Ethylene Separation within Isoreticular Ultramicroporous Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2018, 140, 12940-12946.	6.6	309
43	Transition-Metal-Ethylene Complexes as High-Capacity Hydrogen-Storage Media. Physical Review Letters, 2006, 97, 226102.	2.9	304
44	An Iodide-Based Li₇P₂S₈I Superionic Conductor. Journal of the American Chemical Society, 2015, 137, 1384-1387.	6.6	298
45	Microporous metalâ€“organic frameworks for storage and separation of small hydrocarbons. Chemical Communications, 2012, 48, 11813.	2.2	297
46	Porous Metal-Organic Frameworks: Promising Materials for Methane Storage. CheM, 2016, 1, 557-580.	5.8	297
47	Magnetically aligned single wall carbon nanotube films: Preferred orientation and anisotropic transport properties. Journal of Applied Physics, 2003, 93, 2157-2163.	1.1	292
48	A Rodâ€Packing Microporous Hydrogenâ€Bonded Organic Framework for Highly Selective Separation of C₂H₂/CO₂ at Room Temperature. Angewandte Chemie - International Edition, 2015, 54, 574-577.	7.2	289
49	Dispersing Single-Walled Carbon Nanotubes with Surfactants:â€‰ A Small Angle Neutron Scattering Study. Nano Letters, 2004, 4, 1789-1793.	4.5	288
50	Adsorption Sites and Binding Nature of CO₂ in Prototypical Metalâ€'Organic Frameworks: A Combined Neutron Diffraction and First-Principles Study. Journal of Physical Chemistry Letters, 2010, 1, 1946-1951.	2.1	260
51	Alkali and Alkaline-Earth Metal Amidoboranes: Structure, Crystal Chemistry, and Hydrogen Storage Properties. Journal of the American Chemical Society, 2008, 130, 14834-14839.	6.6	246
52	Flexibleâ€“Robust Metalâ€“Organic Framework for Efficient Removal of Propyne from Propylene. Journal of the American Chemical Society, 2017, 139, 7733-7736.	6.6	242
53	Structural characterization and diameter-dependent oxidative stability of single wall carbon nanotubes synthesized by the catalytic decomposition of CO. Chemical Physics Letters, 2001, 350, 6-14.	1.2	241
54	Unparalleled lithium and sodium superionic conduction in solid electrolytes with large monovalent cage-like anions. Energy and Environmental Science, 2015, 8, 3637-3645.	15.6	235

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55	Metalâ€“Organic Frameworks with Exceptionally High Methane Uptake: Where and How is Methane Stored?. Chemistry - A European Journal, 2010, 16, 5205-5214.	1.7	227
56	A thermally derived and optimized structure from ZIF-8 with giant enhancement in CO₂ uptake. Energy and Environmental Science, 2014, 7, 2232-2238.	15.6	222
57	Porous metalâ€“organic frameworks for fuel storage. Coordination Chemistry Reviews, 2018, 373, 167-198.	9.5	211
58	Charge transfer and Fermi level shift inp-doped single-walled carbon nanotubes. Physical Review B, 2005, 71, .	1.1	205
59	Molecular Sieving of Ethane from Ethylene through the Molecular Crossâ€Section Size Differentiation in Gallateâ€based Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2018, 57, 16020-16025.	7.2	202
60	Two-Dimensional Covalent Organic Frameworks with Cobalt(II)-Phthalocyanine Sites for Efficient Electrocatalytic Carbon Dioxide Reduction. Journal of the American Chemical Society, 2021, 143, 7104-7113.	6.6	198
61	A series of metalâ€“organic frameworks with high methane uptake and an empirical equation for predicting methane storage capacity. Energy and Environmental Science, 2013, 6, 2735.	15.6	193
62	Tunable titanium metalâ€“organic frameworks with infinite 1D Tiâ€“O rods for efficient visible-light-driven photocatalytic H₂ evolution. Journal of Materials Chemistry A, 2019, 7, 11928-11933.	5.2	192
63	Liquidâ€Like Ionic Conduction in Solid Lithium and Sodium Monocarbaâ€closoâ€Decaborates Near or at Room Temperature. Advanced Energy Materials, 2016, 6, 1502237.	10.2	190
64	An Ultramicroporous Metalâ€“Organic Framework for High Sieving Separation of Propylene from Propane. Journal of the American Chemical Society, 2020, 142, 17795-17801.	6.6	186
65	Ultrahigh and Selective SO₂ Uptake in Inorganic Anionâ€Pillared Hybrid Porous Materials. Advanced Materials, 2017, 29, 1606929.	11.1	183
66	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
67	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
68	Postsynthetic Metalation of a Robust Hydrogen-Bonded Organic Framework for Heterogeneous Catalysis. Journal of the American Chemical Society, 2019, 141, 8737-8740.	6.6	178
69	Single wall carbon nanotube fibers extruded from super-acid suspensions: Preferred orientation, electrical, and thermal transport. Journal of Applied Physics, 2004, 95, 649-655.	1.1	174
70	A microporous metalâ€“organic framework with both open metal and Lewis basic pyridyl sites for high C2H2 and CH4 storage at room temperature. Chemical Communications, 2013, 49, 6719.	2.2	158
71	CH₃NH₃PbBr₃ Perovskite Nanocrystals Encapsulated in Lanthanide Metalâ€“Organic Frameworks as a Photoluminescence Converter for Anti-Counterfeiting. ACS Applied Materials & Interfaces, 2018, 10, 27875-27884.	4.0	155
72	Enhanced Gas Uptake in a Microporous Metalâ€“Organic Framework via a Sorbate Induced-Fit Mechanism. Journal of the American Chemical Society, 2019, 141, 17703-17712.	6.6	152

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73	Crystal Structure of Li₂B₁₂H₁₂: a Possible Intermediate Species in the Decomposition of LiBH₄. Inorganic Chemistry, 2008, 47, 9757-9759.	1.9	147
74	High Separation Capacity and Selectivity of C₂ Hydrocarbons over Methane within a Microporous Metalâ€“Organic Framework at Room Temperature. Chemistry - A European Journal, 2012, 18, 1901-1904.	1.7	142
75	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
76	A Microporous Hydrogenâ€Bonded Organic Framework for the Efficient Capture and Purification of Propylene. Angewandte Chemie - International Edition, 2021, 60, 20400-20406.	7.2	132
77	Origin of the exceptional negative thermal expansion in metal-organic framework-5<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Zn</mml:mtext></mml:mrow><mml:mn>4</mml:mn></mml:m Physical Review B, 2008, 78, .	1.1	128
78	Small angle neutron scattering from single-wall carbon nanotube suspensions: evidence for isolated rigid rods and rod networks. Chemical Physics Letters, 2004, 384, 185-189.	1.2	127
79	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
80	Porous metalâ€“organic frameworks with Lewis basic nitrogen sites for high-capacity methane storage. Energy and Environmental Science, 2015, 8, 2504-2511.	15.6	126
81	Our journey of developing multifunctional metal-organic frameworks. Coordination Chemistry Reviews, 2019, 384, 21-36.	9.5	126
82	A Metalâ€“Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. Angewandte Chemie - International Edition, 2018, 57, 15183-15188.	7.2	124
83	A metalâ€“organic framework with suitable pore size and dual functionalities for highly efficient post-combustion CO₂ capture. Journal of Materials Chemistry A, 2019, 7, 3128-3134.	5.2	124
84	Microporous Diaminotriazine-Decorated Porphyrin-Based Hydrogen-Bonded Organic Framework: Permanent Porosity and Proton Conduction. Crystal Growth and Design, 2016, 16, 5831-5835.	1.4	120
85	Engineering microporous ethane-trapping metalâ€“organic frameworks for boosting ethane/ethylene separation. Journal of Materials Chemistry A, 2020, 8, 3613-3620.	5.2	120
86	Methane Sorption in Nanoporous Metalâˆ'Organic Frameworks and First-Order Phase Transition of Confined Methane. Journal of Physical Chemistry C, 2009, 113, 3029-3035.	1.5	119
87	Fine Tuning of MOFâ€505 Analogues To Reduce Lowâ€Pressure Methane Uptake and Enhance Methane Working Capacity. Angewandte Chemie - International Edition, 2017, 56, 11426-11430.	7.2	119
88	Electronic, dynamical, and thermal properties of ultra-incompressible superhard rhenium diboride: A combined first-principles and neutron scattering study. Physical Review B, 2007, 76, .	1.1	118
89	Optimization of the Pore Structures of MOFs for Record High Hydrogen Volumetric Working Capacity. Advanced Materials, 2020, 32, e1907995.	11.1	118
90	Extraordinary Separation of Acetyleneâ€Containing Mixtures with Microporous Metalâ€“Organic Frameworks with Open O Donor Sites and Tunable Robustness through Control of the Helical Chain Secondary Building Units. Chemistry - A European Journal, 2016, 22, 5676-5683.	1.7	113

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91	A Metalâ€“Organic Framework with Optimized Porosity and Functional Sites for High Gravimetric and Volumetric Methane Storage Working Capacities. Advanced Materials, 2018, 30, e1704792.	11.1	109
92	Kinetic separation of propylene over propane in a microporous metal-organic framework. Chemical Engineering Journal, 2018, 354, 977-982.	6.6	108
93	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
94	Dehydrogenation Tuning of Ammine Borohydrides Using Double-Metal Cations. Journal of the American Chemical Society, 2011, 133, 4690-4693.	6.6	103
95	Production and Characterization of Polymer Nanocomposites with Highly Aligned Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2003, 3, 105-110.	0.9	101
96	Synthesis of Defect-Rich Titanium Terephthalate with the Assistance of Acetic Acid for Room-Temperature Oxidative Desulfurization of Fuel Oil. ACS Catalysis, 2020, 10, 2384-2394.	5.5	100
97	Methane storage in porous metalâ˜organic frameworks: current records and future perspectives. Chemical Record, 2010, 10, 200-204.	2.9	99
98	A Metalâ€“Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. Angewandte Chemie, 2018, 130, 15403-15408.	1.6	98
99	Porous Polyethersulfone-Supported Zeolitic Imidazolate Framework Membranes for Hydrogen Separation. Journal of Physical Chemistry C, 2012, 116, 13264-13270.	1.5	96
100	Two solvent-induced porous hydrogen-bonded organic frameworks: solvent effects on structures and functionalities. Chemical Communications, 2017, 53, 11150-11153.	2.2	93
101	Versatile Assembly of Metal-Coordinated Calix[4]resorcinarene Cavitands and Cages through Ancillary Linker Tuning. Journal of the American Chemical Society, 2017, 139, 7648-7656.	6.6	92
102	Nanoconfinement and Catalytic Dehydrogenation of Ammonia Borane by Magnesiumâ€Metalâ€“Organicâ€Frameworkâ€74. Chemistry - A European Journal, 2011, 17, 6043-6047.	1.7	90
103	Efficient separation of ethylene from acetylene/ethylene mixtures by a flexible-robust metalâ€“organic framework. Journal of Materials Chemistry A, 2017, 5, 18984-18988.	5.2	88
104	Hydrogen absorption properties of metal-ethylene complexes. Physical Review B, 2007, 76, .	1.1	85
105	Robust Biological Hydrogenâ€Bonded Organic Framework with Postâ€Functionalized Rhenium(I) Sites for Efficient Heterogeneous Visibleâ€Lightâ€Driven CO₂ Reduction. Angewandte Chemie - International Edition, 2021, 60, 8983-8989.	7.2	83
106	Maximizing Electroactive Sites in a Threeâ€Dimensional Covalent Organic Framework for Significantly Improved Carbon Dioxide Reduction Electrocatalysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	83
107	A NbO-type metalâ€“organic framework exhibiting high deliverable capacity for methane storage. Chemical Communications, 2015, 51, 8508-8511.	2.2	81
108	Modulating the electrical conductivity of metalâ€“organic framework films with intercalated guest Ï€-systems. Journal of Materials Chemistry C, 2016, 4, 894-899.	2.7	80

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109	A microporous hydrogen-bonded organic framework with amine sites for selective recognition of small molecules. Journal of Materials Chemistry A, 2017, 5, 8292-8296.	5.2	78
110	Controlling Pore Shape and Size of Interpenetrated Anion-Pillared Ultramicroporous Materials Enables Molecular Sieving of CO₂ Combined with Ultrahigh Uptake Capacity. ACS Applied Materials & Interfaces, 2018, 10, 16628-16635.	4.0	78
111	Quasi-Free Methyl Rotation in Zeolitic Imidazolate Framework-8. Journal of Physical Chemistry A, 2008, 112, 12602-12606.	1.1	77
112	Nanospace within metalâ€“organic frameworks for gas storage and separation. Materials Today Nano, 2018, 2, 21-49.	2.3	77
113	Lowering Band Gap of an Electroactive Metalâ€“Organic Framework via Complementary Guest Intercalation. ACS Applied Materials & Interfaces, 2017, 9, 32413-32417.	4.0	75
114	Fine-tuning of nano-traps in a stable metalâ€“organic framework for highly efficient removal of propyne from propylene. Journal of Materials Chemistry A, 2018, 6, 6931-6937.	5.2	74
115	Electrostatically Driven Selective Adsorption of Carbon Dioxide over Acetylene in an Ultramicroporous Material. Angewandte Chemie - International Edition, 2021, 60, 9604-9609.	7.2	73
116	Lattice dynamics of metal-organic frameworks: Neutron inelastic scattering and first-principles calculations. Physical Review B, 2006, 74, .	1.1	72
117	Molecular Sieving of Ethane from Ethylene through the Molecular Crossâ€Section Size Differentiation in Gallateâ€based Metalâ€“Organic Frameworks. Angewandte Chemie, 2018, 130, 16252-16257.	1.6	72
118	Sodium magnesium amidoborane: the first mixed-metal amidoborane. Chemical Communications, 2011, 47, 4102.	2.2	71
119	Nature and Tunability of Enhanced Hydrogen Binding in Metalâ^'Organic Frameworks with Exposed Transition Metal Sites. Journal of Physical Chemistry C, 2008, 112, 8132-8135.	1.5	70
120	Structures and Crystal Chemistry of Li₂BNH₆ and Li₄BN₃H₁₀. Chemistry of Materials, 2008, 20, 1245-1247.	3.2	70
121	Borohydride hydrazinates: high hydrogen content materials for hydrogenstorage. Energy and Environmental Science, 2012, 5, 5686-5689.	15.6	68
122	A Solid Transformation into Carboxyl Dimers Based on a Robust Hydrogenâ€Bonded Organic Framework for Propyne/Propylene Separation. Angewandte Chemie - International Edition, 2021, 60, 25942-25948.	7.2	68
123	Expanded Organic Building Units for the Construction of Highly Porous Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2013, 19, 14886-14894.	1.7	66
124	Highly Selective Adsorption of Carbon Dioxide over Acetylene in an Ultramicroporous Metalâ€“Organic Framework. Advanced Materials, 2021, 33, e2105880.	11.1	66
125	A new family of metal borohydride ammonia borane complexes: Synthesis, structures, and hydrogen storage properties. Journal of Materials Chemistry, 2010, 20, 6550.	6.7	65
126	Microporous Metalâ€“Organic Framework with Dual Functionalities for Efficient Separation of Acetylene from Light Hydrocarbon Mixtures. ACS Sustainable Chemistry and Engineering, 2019, 7, 4897-4902.	3.2	65

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127	Structural stability and elastic properties of prototypical covalent organic frameworks. Chemical Physics Letters, 2010, 499, 103-107.	1.2	62
128	A microporous metalâ€“organic framework assembled from an aromatic tetracarboxylate for H2 purification. Journal of Materials Chemistry A, 2013, 1, 2543.	5.2	62
129	A microporous metalâ€“organic framework of a rare sty topology for high CH4 storage at room temperature. Chemical Communications, 2013, 49, 2043.	2.2	61
130	Probing the structure, stability and hydrogen storage properties of calcium dodecahydro-closo-dodecaborate. Journal of Solid State Chemistry, 2010, 183, 1133-1140.	1.4	60
131	Zn-MOF assisted dehydrogenation of ammonia borane: Enhanced kinetics and clean hydrogen generation. International Journal of Hydrogen Energy, 2012, 37, 3633-3638.	3.8	60
132	Metastable Interwoven Mesoporous Metalâ€“Organic Frameworks. Inorganic Chemistry, 2013, 52, 11580-11584.	1.9	60
133	Crystal Chemistry of Perovskite-Type Hydride NaMgH₃: Implications for Hydrogen Storage. Chemistry of Materials, 2008, 20, 2335-2342.	3.2	57
134	A microporous aluminum-based metal-organic framework for high methane, hydrogen, and carbon dioxide storage. Nano Research, 2021, 14, 507-511.	5.8	57
135	Metal hydrazinoborane LiN2H3BH3 and LiN2H3BH3Â·2N2H4BH3: crystal structures and high-extent dehydrogenation. Energy and Environmental Science, 2012, 5, 7531.	15.6	56
136	Role of Cation Size on the Structural Behavior of the Alkali-Metal Dodecahydro-closo-Dodecaborates. Journal of Physical Chemistry C, 2009, 113, 11187-11189.	1.5	55
137	A novel anion-pillared metalâ€“organic framework for highly efficient separation of acetylene from ethylene and carbon dioxide. Journal of Materials Chemistry A, 2021, 9, 9248-9255.	5.2	55
138	Single-Walled Carbon Nanotube-Templated Crystallization of H2SO4:Â Direct Evidence for Protonation. Journal of the American Chemical Society, 2005, 127, 1640-1641.	6.6	53
139	Orderâ€“Disorder Transitions and Superionic Conductivity in the Sodium nido-Undeca(carba)borates. Chemistry of Materials, 2017, 29, 10496-10509.	3.2	53
140	Reversible Switching between Nonporous and Porous Phases of a New SIFSIX Coordination Network Induced by a Flexible Linker Ligand. Journal of the American Chemical Society, 2020, 142, 6896-6901.	6.6	51
141	Maximizing acetylene packing density for highly efficient C2H2/CO2 separation through immobilization of amine sites within a prototype MOF. Chemical Engineering Journal, 2022, 431, 134184.	6.6	49
142	Visualizing Structural Transformation and Guest Binding in a Flexible Metalâ€“Organic Framework under High Pressure and Room Temperature. ACS Central Science, 2018, 4, 1194-1200.	5.3	46
143	Mixed Metalâ€“Organic Framework with Multiple Binding Sites for Efficient C 2 H 2 /CO 2 Separation. Angewandte Chemie, 2020, 132, 4426-4430.	1.6	46
144	A highly porous NbO type metalâ€“organic framework constructed from an expanded tetracarboxylate. Chemical Communications, 2014, 50, 1552.	2.2	44

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145	A Flexible Microporous Hydrogen-Bonded Organic Framework. Crystal Growth and Design, 2019, 19, 5184-5188.	1.4	43
146	Porous organic cages as synthetic water channels. Nature Communications, 2020, 11, 4927.	5.8	43
147	A metalâ€“organic framework functionalized with piperazine exhibiting enhanced CH₄ storage. Journal of Materials Chemistry A, 2017, 5, 349-354.	5.2	41
148	A porous metalâ€“organic framework with an elongated anthracene derivative exhibiting a high working capacity for the storage of methane. Journal of Materials Chemistry A, 2014, 2, 11516.	5.2	40
149	Structural Behavior of Li₂B₁₀H₁₀. Journal of Physical Chemistry C, 2015, 119, 6481-6487.	1.5	40
150	A microporous metalâ€“organic framework with polarized trifluoromethyl groups for high methane storage. Chemical Communications, 2015, 51, 14789-14792.	2.2	40
151	MIL-100Cr with open Cr sites for a record N₂O capture. Chemical Communications, 2018, 54, 14061-14064.	2.2	39
152	Size effects on the hydrogen storage properties of nanoscaffolded Li3BN2H8. Nanotechnology, 2009, 20, 204002.	1.3	36
153	Novel Microporous Metalâ€“Organic Framework Exhibiting High Acetylene and Methane Storage Capacities. Inorganic Chemistry, 2015, 54, 4377-4381.	1.9	36
154	A Fluorinated Metalâ€“Organic Framework for High Methane Storage at Room Temperature. Crystal Growth and Design, 2016, 16, 3395-3399.	1.4	36
155	Stable Hierarchical Bimetalâ€“Organic Nanostructures as HighPerformance Electrocatalysts for the Oxygen Evolution Reaction. Angewandte Chemie, 2019, 131, 4271-4275.	1.6	36
156	Hydrogenâ€Bonded Metalâ€“Nucleobase Frameworks for Efficient Separation of Xenon and Krypton. Angewandte Chemie - International Edition, 2022, 61, .	7.2	36
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