The role of metalâ€“organic frameworks in a carbon-ne

Nature Energy

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DOI: 10.1038/nenergy.2016.34

Citation Report

#	Article	IF	Citations
1	Silver nanoparticles-sensitized cobalt complex for highly-efficient photocatalytic activity. Applied Catalysis B: Environmental, 2016, 199, 342-349.	10.8	19
2	Photocatalytic Cr(VI) reduction in metal-organic frameworks: A mini-review. Applied Catalysis B: Environmental, 2016, 193, 198-216.	10.8	516
3	Finely tuning MOFs towards high performance in C₂H₂ storage: synthesis and properties of a new MOF-505 analogue with an inserted amide functional group. Chemical Communications, 2016, 52, 7241-7244.	2.2	131
4	A Porous Zirconiumâ€Based Metalâ€Organic Framework with the Potential for the Separation of Butene Isomers. Chemistry - A European Journal, 2016, 22, 14988-14997.	1.7	57
5	The organic-moiety-dominated Li⁺ intercalation/deintercalation mechanism of a cobalt-based metalâ€“organic framework. Journal of Materials Chemistry A, 2016, 4, 16245-16251.	5.2	116
6	CNTs grown on nanoporous carbon from zeolitic imidazolate frameworks for supercapacitors. Chemical Communications, 2016, 52, 13016-13019.	2.2	109
7	An anionic metalâ€“organic framework based on angular tetracarboxylic acid and a mononuclear copper ion for selective gas adsorption. Inorganic Chemistry Frontiers, 2016, 3, 1411-1418.	3.0	29
8	Partitioning MOF-5 into Confined and Hydrophobic Compartments for Carbon Capture under Humid Conditions. Journal of the American Chemical Society, 2016, 138, 10100-10103.	6.6	214
9	EPR of Structural Phase Transition in Manganese- and Copper-Doped Formate Framework of [NH₃(CH₂)₄NH₃][Zn(HCOO)₃]₂. Journal of Physical Chemistry C, 2016, 120, 19751-19758.	1.5	19
10	The roles of imidazole ligands in coordination supramolecular systems. CrystEngComm, 2016, 18, 6543-6565.	1.3	88
11	A microporous europiumâ€“organic framework anchored with open â€“COOH groups for selective cation sensing. CrystEngComm, 2016, 18, 7955-7958.	1.3	10
12	Highly selective sorption of CO₂ and N₂O and strong gas-framework interactions in a nickel(<scp>ii</scp>) organic material. Journal of Materials Chemistry A, 2016, 4, 16198-16204.	5.2	42
13	Emerging Multifunctional Metalâ€“Organic Framework Materials. Advanced Materials, 2016, 28, 8819-8860.	11.1	1,227
14	Switching of Adsorption Properties in a Zwitterionic Metalâ€“Organic Framework Triggered by Photogenerated Radical Triplets. Chemistry of Materials, 2016, 28, 7825-7832.	3.2	65
15	Network diversity through two-step crystal engineering of a decorated 6-connected primary molecular building block. CrystEngComm, 2016, 18, 8578-8581.	1.3	14
16	Copper Nanocrystals Encapsulated in Zr-based Metalâ€“Organic Frameworks for Highly Selective CO₂ Hydrogenation to Methanol. Nano Letters, 2016, 16, 7645-7649.	4.5	370
17	Towards scalable and controlled synthesis of metalâ€“organic framework materials using continuous flow reactors. Reaction Chemistry and Engineering, 2016, 1, 352-360.	1.9	68
18	Statistical mechanical model of gas adsorption in porous crystals with dynamic moieties. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E287-E296.	3.3	34

#	Article	IF	Citations
19	Ag-NPs embedded in two novel Zn₃/Zn₅-cluster-based metalâ€“organic frameworks for catalytic reduction of 2/3/4-nitrophenol. Dalton Transactions, 2017, 46, 2430-2438.	1.6	49
20	Temperature dependent CO2 behavior in microporous 1-D channels of a metal-organic framework with multiple interaction sites. Scientific Reports, 2017, 7, 41447.	1.6	11
21	Metal-Organic Frameworks for Energy Applications. CheM, 2017, 2, 52-80.	5.8	941
22	Now we are one. Nature Energy, 2017, 2, .	19.8	0
23	An anionic metalâ€“organic framework with ternary building units for rapid and selective adsorption of dyes. Dalton Transactions, 2017, 46, 3332-3337.	1.6	88
24	Effect of an acetylene bond on hydrogen adsorption in diamond-like carbon allotropes: from first principles to atomic simulation. Physical Chemistry Chemical Physics, 2017, 19, 9261-9269.	1.3	9
25	Cation-Exchange Approach to Tuning the Flexibility of a Metalâ€“Organic Framework for Gated Adsorption. Inorganic Chemistry, 2017, 56, 5069-5075.	1.9	16
26	A highly stable metalâ€organic framework with optimum aperture size for CO₂ capture. AICHE Journal, 2017, 63, 4103-4114.	1.8	85
27	Efficient storage mechanisms and heterogeneous structures for building better next-generation lithium rechargeable batteries. Renewable and Sustainable Energy Reviews, 2017, 79, 1503-1512.	8.2	10
28	Three dimensional porous Hofmann clathrate [M^{II}Pt^{II}(CN)₄]_{â^ž} (M = Co, Ni) synthesized by using postsynthetic reductive elimination. Chemical Communications, 2017, 53, 6512-6515.	2.2	8
29	Heterogeneous catalysis with a coordination modulation synthesized MOF: morphology-dependent catalytic activity. New Journal of Chemistry, 2017, 41, 3957-3965.	1.4	56
30	Hydrogen adsorption and kinetics in MIL-101(Cr) and hybrid activated carbon-MIL-101(Cr) materials. International Journal of Hydrogen Energy, 2017, 42, 8021-8031.	3.8	49
31	Enhancement of Gas Sorption and Separation Performance via Ligand Functionalization within Highly Stable Zirconium-Based Metalâ€“Organic Frameworks. Crystal Growth and Design, 2017, 17, 2131-2139.	1.4	35
32	The Holy Grail: Chemistry Enabling an Economically Viable CO₂ Capture, Utilization, and Storage Strategy. Accounts of Chemical Research, 2017, 50, 472-475.	7.6	153
33	Constant Volume Gate-Opening by Freezing Rotational Dynamics in Microporous Organically Pillared Layered Silicates. Journal of the American Chemical Society, 2017, 139, 904-909.	6.6	25
34	Group 13th metal-organic frameworks and their role in heterogeneous catalysis. Coordination Chemistry Reviews, 2017, 335, 1-27.	9.5	88
35	Evolution of form in metalâ€“organic frameworks. Nature Communications, 2017, 8, 14070.	5.8	89
36	The chemistry of titanium-based metalâ€“organic frameworks. New Journal of Chemistry, 2017, 41, 14030-14043.	1.4	73

#	Article	IF	Citations
37	Tailoring CO₂ Reduction with Doped Silicon Nanocrystals. Advanced Sustainable Systems, 2017, 1, 1700118.	2.7	15
38	Review on the current practices and efforts towards pilot-scale production of metal-organic frameworks (MOFs). Coordination Chemistry Reviews, 2017, 352, 187-219.	9.5	190
39	A Triphasic Modulated Hydrothermal Approach for the Synthesis of Multivariate Metalâ€“Organic Frameworks with Hydrophobic Moieties for Highly Efficient Moistureâ€Resistant CO₂ Capture. Advanced Sustainable Systems, 2017, 1, 1700092.	2.7	43
40	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
41	Creation of â€œRose Petalâ€•and â€œLotus Leafâ€•Effects on Alumina by Surface Functionalization and Metalâ€Ion Coordination. Angewandte Chemie, 2017, 129, 16234-16238.	1.6	9
42	Creation of â€œRose Petalâ€•and â€œLotus Leafâ€•Effects on Alumina by Surface Functionalization and Metalâ€Ion Coordination. Angewandte Chemie - International Edition, 2017, 56, 16018-16022.	7.2	38
43	Engineering of Pore Geometry for Ultrahigh Capacity Methane Storage in Mesoporous Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2017, 139, 13300-13303.	6.6	140
44	Metal-Organic-Framework-Based Materials as Platforms for Renewable Energy and Environmental Applications. Joule, 2017, 1, 77-107.	11.7	673
45	The chemistry of metalâ€“organic frameworks for CO2 capture, regeneration and conversion. Nature Reviews Materials, 2017, 2, .	23.3	1,075
46	Fine Tuning of MOFâ€505 Analogues To Reduce Lowâ€Pressure Methane Uptake and Enhance Methane Working Capacity. Angewandte Chemie, 2017, 129, 11584-11588.	1.6	33
47	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
48	Solvent-modulated structures in anilato-based 2D coordination polymers. Polyhedron, 2017, 135, 17-25.	1.0	32
49	The Chemistry of CO₂ Capture in an Amine-Functionalized Metalâ€“Organic Framework under Dry and Humid Conditions. Journal of the American Chemical Society, 2017, 139, 12125-12128.	6.6	371
50	Selective adsorption behaviour of carbon dioxide in OH-functionalized metalâ€“organic framework materials. CrystEngComm, 2017, 19, 5346-5350.	1.3	9
51	A family of ssa-type copper-based MOFs constructed from unsymmetrical diisophthalates: synthesis, characterization and selective gas adsorption. Materials Chemistry Frontiers, 2017, 1, 2283-2291.	3.2	34
52	Highly Efficient Oxygen Reduction Reaction Electrocatalysts Synthesized under Nanospace Confinement of Metalâ€“Organic Framework. ACS Nano, 2017, 11, 8379-8386.	7.3	100
53	Postsynthetic ionization of an imidazole-containing metalâ€“organic framework for the cycloaddition of carbon dioxide and epoxides. Chemical Science, 2017, 8, 1570-1575.	3.7	346
54	A metalâ€“organic framework functionalized with piperazine exhibiting enhanced CH₄ storage. Journal of Materials Chemistry A, 2017, 5, 349-354.	5.2	41

#	Article	IF	Citations
55	New Eco-Friendly Phosphorus Organic Polymers as Gas Storage Media. Polymers, 2017, 9, 336.	2.0	30
56	Solvent exchange in a metalâ€“organic framework single crystal monitored by dynamicin situX-ray diffraction. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2017, 73, 669-674.	0.5	5
57	Porous Zr6L3 Metallocage with Synergetic Binding Centers for CO2. ACS Applied Materials & Interfaces, 2018, 10, 8685-8691.	4.0	38
58	Fabrication of mixedâ€matrix membranes with MOFâ€derived porous carbon for CO₂ separation. AICHE Journal, 2018, 64, 3400-3409.	1.8	27
59	Solvent-modulation of the structure and dimensionality in lanthanoidâ€“anilato coordination polymers. Dalton Transactions, 2018, 47, 6729-6741.	1.6	23
60	A Multifaceted Study of Methane Adsorption in Metalâ€“Organic Frameworks by Using Three Complementary Techniques. Chemistry - A European Journal, 2018, 24, 7866-7881.	1.7	29
61	Synthesis, structure, and photoluminescence properties of lanthanide based metal organic frameworks and a cadmium coordination polymer derived from 2,2â€²-diamino-trans 4,4â€²-stilbenedicarboxylate. Inorganica Chimica Acta, 2018, 478, 243-249.	1.2	1
62	Shedding Light on the Protonation States and Location of Protonated N Atoms of Adenine in Metalâ€“Organic Frameworks. Inorganic Chemistry, 2018, 57, 1888-1900.	1.9	21
63	Carbonâ€based adsorbents for postâ€combustion capture: a review. , 2018, 8, 11-36.		77
64	Effect of the lanthanoid-size on the structure of a series of lanthanoid-anilato 2-D lattices. Journal of Coordination Chemistry, 2018, 71, 845-863.	0.8	24
65	Shape engineering of metalâ€“organic frameworks. Polyhedron, 2018, 145, 1-15.	1.0	172
66	Photocatalytic hydrogen generation from a visible-light responsive metalâ€“organic framework system: the impact of nickel phosphide nanoparticles. Journal of Materials Chemistry A, 2018, 6, 2476-2481.	5.2	94
67	Solutionâ€reprocessable microporous polymeric adsorbents for carbon dioxide capture. AICHE Journal, 2018, 64, 3376-3389.	1.8	15
68	Two-dimensional porous cuprous oxide nanoplatelets derived from metalâ€“organic frameworks (MOFs) for efficient photocatalytic dye degradation under visible light. Dalton Transactions, 2018, 47, 7694-7700.	1.6	35
69	Fabrication of Metalâ€“Organic Frameworks inside Silica Nanopores with Significantly Enhanced Hydrostability and Catalytic Activity. ACS Applied Materials & Interfaces, 2018, 10, 12051-12059.	4.0	57
70	Providing evidence for the requirements to achieve supramolecular materials based on metalâ€“nucleobase entities. CrystEngComm, 2018, 20, 2528-2539.	1.3	6
71	Molecular Modelling of the H₂â€Adsorptive Properties of Tetrazolateâ€Based Metalâ€"Organic Frameworks: From the Cluster Approach to Periodic Simulations. ChemPhysChem, 2018, 19, 1349-1357.	1.0	6
72	Activated carbon (type Maxsorb-III) and MIL-101(Cr) metal organic framework based composite adsorbent for higher CH4 storage and CO2 capture. Chemical Engineering Journal, 2018, 334, 780-788.	6.6	113

#	Article	IF	Citations
73	Immobilizing Organicâ€Based Molecular Switches into Metalâ€“Organic Frameworks: A Promising Strategy for Switching in Solid State. Macromolecular Rapid Communications, 2018, 39, 1700388.	2.0	23
74	Gas adsorption properties of hybrid graphene-MOF materials. Journal of Colloid and Interface Science, 2018, 514, 801-813.	5.0	143
75	Recent advances in gas storage and separation using metalâ€“organic frameworks. Materials Today, 2018, 21, 108-121.	8.3	1,167
76	A solâ€“gel monolithic metalâ€“organic framework with enhanced methane uptake. Nature Materials, 2018, 17, 174-179.	13.3	386
77	Supercritical fluid processing for metalâ€“organic frameworks, porous coordination polymers, and covalent organic frameworks. Journal of Supercritical Fluids, 2018, 134, 197-203.	1.6	33
78	Mechanical Properties in Metalâ€“Organic Frameworks: Emerging Opportunities and Challenges for Device Functionality and Technological Applications. Advanced Materials, 2018, 30, e1704124.	11.1	165
79	Pristine Metalâ€“Organic Frameworks and their Composites for Energy Storage and Conversion. Advanced Materials, 2018, 30, e1702891.	11.1	525
80	Ultra-microporous N-doped carbon from polycondensed framework precursor for CO2 adsorption. Microporous and Mesoporous Materials, 2018, 257, 19-26.	2.2	53
81	Renaissance of the Methane Adsorbents. Israel Journal of Chemistry, 2018, 58, 985-994.	1.0	7
82	Synthesis and functionalization of phase-pure NU-901 for enhanced CO₂adsorption: the influence of a zirconium salt and modulator on the topology and phase purity. CrystEngComm, 2018, 20, 7066-7070.	1.3	43
83	Electrocatalytic CO2 Reduction: From Homogeneous Catalysts to Heterogeneous-Based Reticular Chemistry. Molecules, 2018, 23, 2835.	1.7	28
84	Phase Control of Ferromagnetic Copper(II) Carbonate Coordination Polymers through Reagent Concentration. European Journal of Inorganic Chemistry, 2018, 2018, 5223-5228.	1.0	9
85	Nanospace within metalâ€“organic frameworks for gas storage and separation. Materials Today Nano, 2018, 2, 21-49.	2.3	77
86	Two Dimensional Magnetic Coordination Polymers Formed by Lanthanoids and Chlorocyananilato. Magnetochemistry, 2018, 4, 58.	1.0	15
87	Electrochemical Reduction of CO₂ over Heterogeneous Catalysts in Aqueous Solution: Recent Progress and Perspectives. Small Methods, 2019, 3, 1800369.	4.6	168
88	Bioinspired Metalâ€“Organic Framework Catalysts for Selective Methane Oxidation to Methanol. Journal of the American Chemical Society, 2018, 140, 18208-18216.	6.6	301
89	Improved CO2 capture and separation performances of a Cr-based metalâ€“organic framework induced by post-synthesis modification of amine groups. Polyhedron, 2018, 156, 195-199.	1.0	6
90	Concurrent Photocatalytic Hydrogen Generation and Dye Degradation Using MILâ€125â€NH₂ under Visible Light Irradiation. Advanced Functional Materials, 2018, 28, 1806368.	7.8	110

#	Article	IF	Citations
91	Porous Hollow Fiber Nickel Electrodes for Effective Supply and Reduction of Carbon Dioxide to Methane through Microbial Electrosynthesis. Advanced Functional Materials, 2018, 28, 1804860.	7.8	122
92	Liquid, glass and amorphous solid states of coordination polymers and metalâ€“organic frameworks. Nature Reviews Materials, 2018, 3, 431-440.	23.3	314
93	Changing the Dress to a MOF through Fluorination and Transmetalation. Structural and Gas-Sorption Effects. Crystal Growth and Design, 2018, 18, 6824-6832.	1.4	17
94	Endowing Cu-BTC with Improved Hydrothermal Stability and Catalytic Activity: Hybridization with Natural Clay Attapulgite via Vapor-Induced Crystallization. ACS Sustainable Chemistry and Engineering, 2018, 6, 13217-13225.	3.2	35
95	Modeling Amorphous Microporous Polymers for CO₂Capture and Separations. Chemical Reviews, 2018, 118, 5488-5538.	23.0	208
96	Storage of CO₂ into Porous Coordination Polymer Controlled by Molecular Rotor Dynamics. Angewandte Chemie - International Edition, 2018, 57, 8687-8690.	7.2	64
97	From synthesis to applications: Metalâ€“organic frameworks for an environmentally sustainable future. Current Opinion in Green and Sustainable Chemistry, 2018, 12, 47-56.	3.2	33
98	Flexible porous molecular materials responsive to CO₂, CH₄ and Xe stimuli. Journal of Materials Chemistry A, 2018, 6, 14231-14239.	5.2	87
99	Hierarchical Cobaltâ€Based Metalâ€“Organic Framework for Highâ€Performance Lithiumâ€Ion Batteries. Chemistry - A European Journal, 2018, 24, 13362-13367.	1.7	60
100	Metalâ€“Organic Frameworks with Reduced Hydrophilicity for Postcombustion CO₂ Capture from Wet Flue Gas. ACS Sustainable Chemistry and Engineering, 2018, 6, 11904-11912.	3.2	43
101	Lewis Acid Enhancement of Proton Induced CO₂ Cleavage: Bond Weakening and Ligand Residence Time Effects. Journal of the American Chemical Society, 2018, 140, 10121-10125.	6.6	56
102	Expandable porous organic frameworks with built-in amino and hydroxyl functions for CO₂and CH₄capture. Chemical Communications, 2018, 54, 9321-9324.	2.2	26
103	Tuning the Structure and Properties of Lanthanoid Coordination Polymers with an Asymmetric Anilato Ligand. Magnetochemistry, 2018, 4, 6.	1.0	33
104	Morphology-control synthesis of a Cu-based metalâ€“organic framework directed by carboxyl-functionalized graphene. Polyhedron, 2018, 149, 104-108.	1.0	4
105	Plasticization behavior in polymers of intrinsic microporosity (PIM-1): A simulation study from combined Monte Carlo and molecular dynamics. Journal of Membrane Science, 2018, 565, 95-103.	4.1	62
106	Photocatalytic Hydrogen Generation from a Visible-Light-Responsive Metalâ€“Organic Framework System: Stability versus Activity of Molybdenum Sulfide Cocatalysts. ACS Applied Materials & Interfaces, 2018, 10, 30035-30039.	4.0	71
107	Recent Development and Application of Conductive MOFs. Israel Journal of Chemistry, 2018, 58, 1010-1018.	1.0	50
108	2.7 Porous Materials. , 2018, , 182-203.		7

#	Article	IF	Citations
109	Storage of CO₂ into Porous Coordination Polymer Controlled by Molecular Rotor Dynamics. Angewandte Chemie, 2018, 130, 8823-8826.	1.6	18
110	Single Tungsten Atoms Supported on MOFâ€Derived Nâ€Doped Carbon for Robust Electrochemical Hydrogen Evolution. Advanced Materials, 2018, 30, e1800396.	11.1	427
111	Metalâ€“Organicâ€Frameworkâ€Based Catalysts for Photoreduction of CO₂. Advanced Materials, 2018, 30, e1705512.	11.1	415
112	Metalâ€“Organic Frameworks for Energy. Advanced Energy Materials, 2019, 9, 1801307.	10.2	160
113	Rapid synthesis of mono/bimetallic (Zn/Co/Znâ€“Co) zeolitic imidazolate frameworks at room temperature and evolution of their CO2 uptake capacity. Environmental Chemistry Letters, 2019, 17, 447-454.	8.3	12
114	The role of molecular modelling and simulation in the discovery and deployment of metal-organic frameworks for gas storage and separation. Molecular Simulation, 2019, 45, 1082-1121.	0.9	74
115	In Situ Synthesis of Nano CuS-Embedded MOF Hierarchical Structures and Application in Dye Adsorption and Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 5698-5706.	2.5	28
116	Novel Isopropoxy Group-Functionalized UiO-66 with a High Hydrogen Chloride Adsorption Capacity. Journal of Chemical & Engineering Data, 2019, 64, 3576-3584.	1.0	2
117	Biopolymer@Metal-Organic Framework Hybrid Materials: A Critical Survey. Progress in Materials Science, 2019, 106, 100579.	16.0	63
118	Multishell Hollow Metal/Nitrogen/Carbon Dodecahedrons with Precisely Controlled Architectures and Synergistically Enhanced Catalytic Properties. ACS Nano, 2019, 13, 7800-7810.	7.3	143
119	Metal-Assisted Salphen Organic Frameworks (MaSOFs) with Trinuclear Metal Units for Synergic Gas Sorption. Chemistry of Materials, 2019, 31, 6210-6223.	3.2	15
120	Stepwise Evolution of Molecular Nanoaggregates Inside the Pores of a Highly Flexible Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2019, 58, 17342-17350.	7.2	16
121	Inserting Amide into NOTT-101 to Sharply Enhance Volumetric and Gravimetric Methane Storage Working Capacity. Inorganic Chemistry, 2019, 58, 13782-13787.	1.9	10
122	Thermal Engineering of Metalâ€“Organic Frameworks for Adsorption Applications: A Molecular Simulation Perspective. ACS Applied Materials & Interfaces, 2019, 11, 38697-38707.	4.0	56
123	Stepwise Evolution of Molecular Nanoaggregates Inside the Pores of a Highly Flexible Metalâ€“Organic Framework. Angewandte Chemie, 2019, 131, 17503-17511.	1.6	11
124	Hollow Znâ^'Co Based Zeolitic Imidazole Framework as a Robust Heterogeneous Catalyst for Enhanced CO₂ Chemical Fixation. Chemistry - an Asian Journal, 2019, 14, 4375-4382.	1.7	11
125	Metal-organic framework structures: adsorbents for natural gas storage. Russian Chemical Reviews, 2019, 88, 925-978.	2.5	57
126	2020 Roadmap on two-dimensional nanomaterials for environmental catalysis. Chinese Chemical Letters, 2019, 30, 2065-2088.	4.8	90

#	Article	IF	Citations
127	Atomicâ€•and Molecularâ€Level Design of Functional Metalâ€“Organic Frameworks (MOFs) and Derivatives for Energy and Environmental Applications. Advanced Science, 2019, 6, 1901129.	5.6	121
128	Implementing Metal-Organic Frameworks for Natural Gas Storage. Crystals, 2019, 9, 406.	1.0	37
129	Metal-organic frameworks as catalysts for sugar conversion into platform chemicals: State-of-the-art and prospects. Coordination Chemistry Reviews, 2019, 401, 213064.	9.5	45
130	Room Temperature Metallic Conductivity in a Metalâ€“Organic Framework Induced by Oxidation. Journal of the American Chemical Society, 2019, 141, 16323-16330.	6.6	93
131	Sonochemical synthesis of novel decorated graphene nanosheets with amine functional Cu-terephthalate MOF for hydrogen adsorption: Effect of ultrasound and graphene content. International Journal of Hydrogen Energy, 2019, 44, 26444-26458.	3.8	32
132	A double helix of opposite charges to form channels with unique CO₂ selectivity and dynamics. Chemical Science, 2019, 10, 730-736.	3.7	87
133	A dynamic microporous magnet exhibiting room-temperature thermal hysteresis, variable magnetic ordering temperatures and highly selective adsorption for CO₂. Journal of Materials Chemistry C, 2019, 7, 218-222.	2.7	5
134	An Integrated CO₂ Electrolyzer and Formate Fuel Cell Enabled by a Reversibly Restructuring Pbâ€“Pd Bimetallic Catalyst. Angewandte Chemie - International Edition, 2019, 58, 4031-4035.	7.2	64
135	A robust and water-stable two-fold interpenetrated metalâ€“organic framework containing both rigid tetrapodal carboxylate and rigid bifunctional nitrogen linkers exhibiting selective CO₂ capture. Dalton Transactions, 2019, 48, 415-425.	1.6	20
136	Interfacial assembled preparation of porous carbon composites for selective CO₂ capture at elevated temperatures. Journal of Materials Chemistry A, 2019, 7, 5402-5408.	5.2	38
137	Synthetic Factors Affecting the Scalable Production of Zeolitic Imidazolate Frameworks. ACS Sustainable Chemistry and Engineering, 2019, 7, 3632-3646.	3.2	52
138	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
139	Threshold catalytic onset of carbon formation on CeO₂during CO₂electrolysis: mechanism and inhibition. Journal of Materials Chemistry A, 2019, 7, 15233-15243.	5.2	19
140	Three Anionic Indiumâ€“Organic Frameworks for Highly Efficient and Selective Dye Adsorption, Lanthanide Adsorption, and Luminescence Regulation. Inorganic Chemistry, 2019, 58, 8396-8407.	1.9	34
141	Tuning porosity in macroscopic monolithic metal-organic frameworks for exceptional natural gas storage. Nature Communications, 2019, 10, 2345.	5.8	180
142	Computational design of multilayer frameworks to achieve DOE target for on-board methane delivery. Carbon, 2019, 152, 206-217.	5.4	5
143	Self-Assembly of Catalytically Active Supramolecular Coordination Compounds within Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 10350-10360.	6.6	50
144	Unlocking CO2 separation performance of ionic liquid/CuBTC composites: Combining experiments with molecular simulations. Chemical Engineering Journal, 2019, 373, 1179-1189.	6.6	44

#	Article	IF	Citations
145	Combined Nuclear Magnetic Resonance and Molecular Dynamics Study of Methane Adsorption in M₂(dobdc) Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2019, 123, 12286-12295.	1.5	18
146	Mesoporous Composite Nanomaterials for Dye Removal and Other Applications. , 2019, , 265-293.		17
147	A straightforward route to obtain zirconium based metal-organic gels. Microporous and Mesoporous Materials, 2019, 284, 128-132.	2.2	46
148	3D derived N-doped carbon matrix from 2D ZIF-L as an enhanced stable catalyst for chemical fixation. Microporous and Mesoporous Materials, 2019, 285, 80-88.	2.2	45
149	Carbon capture and conversion using metalâ€“organic frameworks and MOF-based materials. Chemical Society Reviews, 2019, 48, 2783-2828.	18.7	1,685
150	Understanding Quantitative Relationship between Methane Storage Capacities and Characteristic Properties of Metalâ€“Organic Frameworks Based on Machine Learning. Journal of Physical Chemistry C, 2019, 123, 8550-8559.	1.5	49
151	Co₉S₈ embedded into N/S doped carbon composites: in situ derivation from a sulfonate-based metalâ€“organic framework and its electrochemical properties. Journal of Materials Chemistry A, 2019, 7, 10331-10337.	5.2	75
152	An Allosteric Metalâ€“Organic Framework That Exhibits Multiple Pore Configurations for the Optimization of Hydrocarbon Separation. Chemistry - an Asian Journal, 2019, 14, 3552-3556.	1.7	11
153	Hollow Multiâ€Shelled Structure with Metalâ€“Organicâ€Frameworkâ€Derived Coatings for Enhanced Lithium Storage. Angewandte Chemie - International Edition, 2019, 58, 5266-5271.	7.2	102
154	Synergistic Effect of Coâ€“Ni Hybrid Phosphide Nanocages for Ultrahigh Capacity Fast Energy Storage. Advanced Science, 2019, 6, 1802005.	5.6	130
155	Hollow Multiâ€Shelled Structure with Metalâ€“Organicâ€Frameworkâ€Derived Coatings for Enhanced Lithium Storage. Angewandte Chemie, 2019, 131, 5320-5325.	1.6	15
156	An Integrated CO 2 Electrolyzer and Formate Fuel Cell Enabled by a Reversibly Restructuring Pbâ€“Pd Bimetallic Catalyst. Angewandte Chemie, 2019, 131, 4071-4075.	1.6	11
157	Large-Scale Structural Refinement and Screening of Zirconium Metalâ€“Organic Frameworks for H₂S/CH₄ Separation. ACS Applied Materials & Interfaces, 2019, 11, 46984-46992.	4.0	22
158	Microporous Organically Pillared Layered Silicates (MOPS): Aâ€‰Versatile Class of Functional Porous Materials. Chemistry - A European Journal, 2019, 25, 2103-2111.	1.7	4
159	Complex Phase Behaviour and Structural Transformations of Metalâ€Organic Frameworks with Mixed Rigid and Flexible Bridging Ligands. Chemistry - A European Journal, 2019, 25, 1353-1362.	1.7	2
160	DFT study of the two dimensional metalâ€“organic frameworks X3(HITP)2 as the cathode electrocatalysts for fuel cell. Applied Surface Science, 2019, 471, 256-262.	3.1	43
161	CO₂ Capture in Metalâ€“Organic Framework Adsorbents: An Engineering Perspective. Advanced Sustainable Systems, 2019, 3, 1800080.	2.7	217
162	Room-temperature electrochemical waterâ€“gas shift reaction for high purity hydrogen production. Nature Communications, 2019, 10, 86.	5.8	62

#	Article	IF	Citations
163	Metalâ€“organic frameworks and porous organic polymers for sustainable fixation of carbon dioxide into cyclic carbonates. Coordination Chemistry Reviews, 2019, 378, 32-65.	9.5	329
164	Expansion of effective pore size on hydrogen physisorption of porous carbons at low temperatures with high pressures. Carbon, 2020, 158, 364-371.	5.4	17
165	Time-dependent solid-state molecular motion and colour tuning of host-guest systems by organic solvents. Nature Communications, 2020, 11, 77.	5.8	51
166	Application of computational chemistry for adsorption studies on metalâ€“organic frameworks used for carbon capture. Physical Sciences Reviews, 2020, 5, .	0.8	0
167	Macrocyclic multinuclear metal complexes acting as catalysts for organic synthesis. Catalysis Science and Technology, 2020, 10, 12-34.	2.1	34
168	Screening for selectivity. Nature Energy, 2020, 5, 8-9.	19.8	8
169	A Highly Stable Triazoleâ€Functionalized Metalâ€“Organic Framework Integrated with Exposed Metal Sites for Selective CO₂ Capture and Conversion. Chemistry - A European Journal, 2020, 26, 2658-2665.	1.7	23
170	The synthesis strategies and photocatalytic performances of TiO2/MOFs composites: A state-of-the-art review. Chemical Engineering Journal, 2020, 391, 123601.	6.6	155
171	The highly selective detecting of antibiotics and support of noble metal catalysts by a multifunctional Eu-MOF. Dalton Transactions, 2020, 49, 14854-14862.	1.6	60
172	Diammonium-Pillared MOPS with Dynamic CO2 Selectivity. Cell Reports Physical Science, 2020, 1, 100210.	2.8	7
173	Facile synthesis of graphitic carbon nitride/chitosan/Au nanocomposite: A catalyst for electrochemical hydrogen evolution. International Journal of Biological Macromolecules, 2020, 164, 3012-3024.	3.6	62
174	A novel expanded metalâ€“organic framework for balancing volumetric and gravimetric methane storage working capacities. Chemical Communications, 2020, 56, 13117-13120.	2.2	9
175	Modulated Hydrothermal Synthesis of Highly Stable MOF-808(Hf) for Methane Storage. ACS Sustainable Chemistry and Engineering, 2020, 8, 17042-17053.	3.2	65
176	Next-Generation Accurate, Transferable, and Polarizable Potentials for Material Simulations. Journal of Chemical Theory and Computation, 2020, 16, 7632-7644.	2.3	5
177	Alkali-Induced Self-Transferring Byproduct Strategy for Strengthening Sustainable Synthesis of MOF-199 Without Waste Discharge. ACS Sustainable Chemistry and Engineering, 2020, 8, 17945-17955.	3.2	4
178	Hierarchical Metalâ€Organic Framework Films with Controllable Meso/Macroporosity. Advanced Science, 2020, 7, 2002368.	5.6	32
179	Design of Zeolite-Covalent Organic Frameworks for Methane Storage. Materials, 2020, 13, 3322.	1.3	6
180	A microporous, amino acid functionalized Zn(ii)-organic framework nanoflower for selective CO2 capture and solvent encapsulation. Materials Advances, 2020, 1, 1455-1463.	2.6	9

#	Article	IF	Citations
181	Tripodal carboxylate MOFs with Co(II): Transmetallation and gas sorption studies. Polyhedron, 2020, 189, 114724.	1.0	2
182	Dry and Wet CO 2 Capture from Milkâ€Derived Microporous Carbons with Tuned Hydrophobicity. Advanced Sustainable Systems, 2020, 4, 2000001.	2.7	3
183	Message Passing Neural Networks for Partial Charge Assignment to Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2020, 124, 19070-19082.	1.5	42
184	High-Performing Deep Learning Regression Models for Predicting Low-Pressure CO₂ Adsorption Properties of Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2020, 124, 27996-28005.	1.5	39
185	Mitigating Global Methane Emissions Using Metal-Organic Framework Adsorbents. Applied Sciences (Switzerland), 2020, 10, 7733.	1.3	4
186	Axial Cl/Br atom-mediated CO₂ electroreduction performance in a stable porphyrin-based metalâ€“organic framework. Chemical Communications, 2020, 56, 14817-14820.	2.2	10
187	Reticular chemistry in electrochemical carbon dioxide reduction. Science China Materials, 2020, 63, 1113-1141.	3.5	30
188	Opportunities and critical factors of porous metalâ€“organic frameworks for industrial light olefins separation. Materials Chemistry Frontiers, 2020, 4, 1954-1984.	3.2	48
189	Ordered Mesoporous Niâ€“P Amorphous Alloy Nanowire Arrays: High-Efficiency Catalyst for Production of Polyol from Sugar. ACS Applied Materials & Interfaces, 2020, 12, 26101-26112.	4.0	25
190	Tuning of electrocatalytic activity of Mnâ€“Oâ€“Co composite for alkaline hydrogen evolution reaction. International Journal of Hydrogen Energy, 2020, 45, 12360-12375.	3.8	6
191	Revealing enhancement mechanism of volumetric hydrogen storage capacity of nano-porous frameworks by molecular simulation. Chemical Engineering Science, 2020, 226, 115837.	1.9	13
192	Immobilization of carbonic anhydrase for facilitated CO2 capture and separation. Chinese Journal of Chemical Engineering, 2020, 28, 2817-2831.	1.7	17
193	Engineering Lithium Ions Embedded in NiFe Layered Double Hydroxide Lattices To Activate Laminated Ni²⁺ Sites as Highâ€Efficiency Oxygen Evolution Reaction Catalysts. Chemistry - A European Journal, 2020, 26, 7244-7249.	1.7	25
194	Photocatalytic CO2 reduction over metal-organic framework-based materials. Coordination Chemistry Reviews, 2020, 412, 213262.	9.5	401
195	Integration of Strong Electron Transporter Tetrathiafulvalene into Metalloporphyrin-Based Covalent Organic Framework for Highly Efficient Electroreduction of CO₂. ACS Energy Letters, 2020, 5, 1005-1012.	8.8	180
196	Coâ€“Ferrocene MOF/Glucose Oxidase as Cascade Nanozyme for Effective Tumor Therapy. Advanced Functional Materials, 2020, 30, 1910085.	7.8	283
197	Metal Organic Frameworks for Xenon Storage Applications. , 2020, 2, 233-238.		10
198	Advances in Metalâ€Organic Frameworks for Acetylene Storage. European Journal of Inorganic Chemistry, 2020, 2020, 2303-2311.	1.0	16

#	Article	IF	Citations
199	Advances in metalâ€“organic framework coatings: versatile synthesis and broad applications. Chemical Society Reviews, 2020, 49, 3142-3186.	18.7	327
200	Synthesis of an amorphous Geobacter-manganese oxide biohybrid as an efficient water oxidation catalyst. Green Chemistry, 2020, 22, 5610-5618.	4.6	11
201	Stabilizing conversion reaction electrodes by MOF derived N-doped carbon shell for highly reversible lithium storage. Nano Energy, 2020, 73, 104758.	8.2	31
202	Zeolitic Tetrazolateâ€“Imidazolate Frameworks with SOD Topology for Room Temperature Fixation of CO₂ to Cyclic Carbonates. Crystal Growth and Design, 2020, 20, 2866-2870.	1.4	22
203	Shaping the Future of Fuel: Monolithic Metalâ€“Organic Frameworks for High-Density Gas Storage. Journal of the American Chemical Society, 2020, 142, 8541-8549.	6.6	182
204	Balancing volumetric and gravimetric uptake in highly porous materials for clean energy. Science, 2020, 368, 297-303.	6.0	429
205	Atomistic insight in the flexibility and heat transport properties of the stimuli-responsive metalâ€“organic framework MIL-53(Al) for water-adsorption applications using molecular simulations. Faraday Discussions, 2021, 225, 301-323.	1.6	17
206	Metal phenanthroline-based porous polymeric hybrid catalysts for direct conversion of methane. Journal of Porous Materials, 2021, 28, 487-493.	1.3	0
207	Construction of MOF/TiO2 nanocomposites with efficient visible-light-driven photocathodic protection. Journal of Electroanalytical Chemistry, 2021, 880, 114915.	1.9	21
208	A Dy₆-cluster-basedfcu-MOF with efficient separation of C₂H₂/C₂H₄and selective adsorption of benzene. Inorganic Chemistry Frontiers, 2021, 8, 376-382.	3.0	28
209	New aspects of covalent triazine frameworks in heterogeneous catalysis. , 2021, , 1-32.		1
210	Electrochemical Hydrogen Storage in Amineâ€Activated Polydopamine. Advanced Sustainable Systems, 2021, 5, 2000176.	2.7	7
211	Atomic and Molecular Tunneling Processes in Chemistry. , 2021, , 231-282.		6
212	Tunable Metalâ€“Organic Frameworks Based on 8â€Connected Metal Trimers for High Ethane Uptake. Small, 2021, 17, e2003167.	5.2	19
213	Nano/Micro MOF-Based Materials. , 2021, , 1-40.		0
214	Adsorbed xenon propellant storage: are nanoporous materials worth the weight?. Materials Advances, 2021, 2, 4081-4092.	2.6	2
215	Role of Frameworkâ€“Carrier Interactions in Proton-Conducting Crystalline Porous Materials. Crystal Growth and Design, 2021, 21, 1378-1388.	1.4	20
216	N-Doped carbon encapsulating Bi nanoparticles derived from metalâ€“organic frameworks for high-performance sodium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 22048-22055.	5.2	33

#	Article	IF	Citations
217	Tuning the Optoelectronic Properties of Hybrid Functionalized MIL-125-NH₂ for Photocatalytic Hydrogen Evolution. ACS Applied Materials & Interfaces, 2021, 13, 5044-5051.	4.0	33
218	Recent developments in chemical energy storage. , 2021, , 447-494.		2
219	Control over interpenetration for boosting methane storage capacity in metalâ€“organic frameworks. Journal of Materials Chemistry A, 2021, 9, 24857-24862.	5.2	14
220	Adsorbed Natural Gas Storage for Onboard Applications. Advanced Sustainable Systems, 2021, 5, 2000200.	2.7	16
221	Post-synthetic metalation of porous framework materials for achieving high natural gas storage and working capacity: A GCMC simulation study. Microporous and Mesoporous Materials, 2021, 315, 110931.	2.2	3
222	Improved Electrochemical Performance of a Li_{1.2}Ni_{0.2}Mn_{0.6}O₂ Cathode by a Hydrothermal Method with a Metalâ€“Organic Framework as a Precursor. ACS Applied Energy Materials, 2021, 4, 2506-2513.	2.5	9
223	Deciphering the Supramolecular Organization of Multiple Guests Inside a Microporous MOF to Understand their Release Profile. Angewandte Chemie, 2021, 133, 10282-10290.	1.6	1
224	Deciphering the Supramolecular Organization of Multiple Guests Inside a Microporous MOF to Understand their Release Profile. Angewandte Chemie - International Edition, 2021, 60, 10194-10202.	7.2	18
225	Prediction of methane storage in covalent organic frameworks using big-data-mining approach. Chinese Journal of Chemical Engineering, 2021, 39, 286-296.	1.7	4
226	Ambient-Temperature Hydrogen Storage via Vanadium(II)-Dihydrogen Complexation in a Metalâ€“Organic Framework. Journal of the American Chemical Society, 2021, 143, 6248-6256.	6.6	81
227	Synthesis optimization of metal-organic frameworks MIL-125 and its adsorption separation on C8 aromatics measured by pulse test and simulation calculation. Journal of Solid State Chemistry, 2021, 296, 121956.	1.4	7
228	Metalâ€Organic Frameworks Nanocomposites with Different Dimensionalities for Energy Conversion and Storage. Advanced Energy Materials, 2022, 12, 2100346.	10.2	86
229	Trends and Prospects in UiOâ€66 Metalâ€Organic Framework for CO₂ Capture, Separation, and Conversion. Chemical Record, 2021, 21, 1771-1791.	2.9	48
230	Design of cobalt catalysed carbon nanotubes in bimetallic zeolitic imidazolate frameworks. Applied Surface Science, 2021, 547, 149134.	3.1	33
231	Influence of Phase Composition and Pretreatment on the Conversion of Iron Oxides into Iron Carbides in Syngas Atmospheres. Catalysts, 2021, 11, 773.	1.6	4
232	Factors Affecting Hydrogen Adsorption in Metalâ€“Organic Frameworks: A Short Review. Nanomaterials, 2021, 11, 1638.	1.9	31
233	Strong Foam-like Composites from Highly Mesoporous Wood and Metal-Organic Frameworks for Efficient CO₂ Capture. ACS Applied Materials & Interfaces, 2021, 13, 29949-29959.	4.0	37
234	Formation of porous ice frameworks at room temperature. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	7

#	Article	IF	Citations
235	An Overview of Metalâ€“Organic Frameworks for Green Chemical Engineering. Engineering, 2021, 7, 1115-1139.	3.2	94
236	Application of POMOF composites for CO₂ fixation into cyclic carbonates. IOP Conference Series: Earth and Environmental Science, 2021, 842, 012046.	0.2	4
237	Polyoxometalateâ€Based Metalâ€“Organic Framework as Molecular Sieve for Highly Selective Semiâ€Hydrogenation of Acetylene on Isolated Single Pd Atom Sites. Angewandte Chemie, 2021, 133, 22696-22702.	1.6	10
238	Boosting Catalytic Efficiency of Metalâ€Organic Frameworks with Electronâ€Withdrawing Effect for Lewisâ€Acid Catalysis. ChemistrySelect, 2021, 6, 7732-7735.	0.7	5
239	Electron-Conductive Metalâ€“Organic Framework, Fe(dhbq)(dhbq = 2,5-Dihydroxy-1,4-benzoquinone): Coexistence of Microporosity and Solid-State Redox Activity. ACS Applied Materials & Interfaces, 2021, 13, 38188-38193.	4.0	21
240	Recommendation System to Predict Missing Adsorption Properties of Nanoporous Materials. Chemistry of Materials, 2021, 33, 7203-7216.	3.2	11
241	Hierarchical and self-supporting honeycomb LaNi5 alloy on nickel foam for overall water splitting in alkaline media. Green Energy and Environment, 2022, 7, 799-806.	4.7	15
242	Polyoxometalateâ€Based Metalâ€“Organic Framework as Molecular Sieve for Highly Selective Semiâ€Hydrogenation of Acetylene on Isolated Single Pd Atom Sites. Angewandte Chemie - International Edition, 2021, 60, 22522-22528.	7.2	112
243	Tuning Open Metal Site-Free ncb Type of Metalâ€“Organic Frameworks for Simultaneously High Gravimetric and Volumetric Methane Storage Working Capacities. ACS Applied Materials & Interfaces, 2021, 13, 44956-44963.	4.0	13
244	In-process measurement of a keyhole using a low-coherence interferometer with a high repetition rate. Optics Express, 2021, 29, 32169.	1.7	5
245	Novel Lanthanide(III) Porphyrin-Based Metalâ€“Organic Frameworks: Structure, Gas Adsorption, and Magnetic Properties. ACS Omega, 2021, 6, 24637-24649.	1.6	7
246	Towards carbon neutrality by implementing carbon emissions trading scheme: Policy evaluation in China. Energy Policy, 2021, 157, 112510.	4.2	259
247	Design and construction of 2D/2D sheet-on-sheet transition metal sulfide/phosphide heterostructure for efficient oxygen evolution reaction. Applied Surface Science, 2021, 565, 150510.	3.1	30
248	A review for Metal-Organic Frameworks (MOFs) utilization in capture and conversion of carbon dioxide into valuable products. Journal of CO2 Utilization, 2021, 53, 101715.	3.3	58
249	Solventâ€Free Synthesis of Uniform MOF Shellâ€Derived Carbon Confined SnO₂/Co Nanocubes for Highly Reversible Lithium Storage. Small, 2017, 13, 1701504.	5.2	62
250	The Amazing Chemistry of Metal-Organic Frameworks. , 2017, , 339-369.		3
251	Why Design Matters: From Decorated Metal Oxide Clusters to Functional Metalâ€“Organic Frameworks. Topics in Current Chemistry, 2020, 378, 19.	3.0	11
252	Recent progress and remaining challenges in post-combustion CO2 capture using metal-organic frameworks (MOFs). Progress in Energy and Combustion Science, 2020, 80, 100849.	15.8	235

#	Article	IF	Citations
253	Bayesian optimization of nanoporous materials. Molecular Systems Design and Engineering, 2021, 6, 1066-1086.	1.7	47
254	Coordination tailoring of Cu single sites on C3N4 realizes selective CO2 hydrogenation at low temperature. Nature Communications, 2021, 12, 6022.	5.8	132
255	Reticular frameworks and their derived materials for CO2 conversion by thermoâ˜catalysis. EnergyChem, 2021, 3, 100064.	10.1	52
256	Photosensitizer-based metal-organic frameworks for highly effective photodynamic therapy. Materials Science and Engineering C, 2021, 131, 112514.	3.8	38
257	Methane and Hydrogen Storage in Metal Organic Frameworks: A Mini Review. Journal of Environmental & Earth Sciences, 2020, 2, .	0.4	1
258	Hollow MOF capsule encapsulated amino-functionalized ionic liquid for excellent CO2 catalytic conversion. Chinese Journal of Chemical Engineering, 2021, 40, 124-130.	1.7	6
259	Two mesoporous anionic metalâ€“organic frameworks for selective and efficient adsorption of a cationic organic dye. Dalton Transactions, 2021, 50, 17603-17610.	1.6	7
261	HKUST-1 Metalâ€“Organic Framework Nanoparticle/Graphene Oxide Nanocomposite Aerogels for CO₂ and CH₄ Adsorption and Separation. ACS Applied Nano Materials, 2021, 4, 12712-12725.	2.4	19
262	Alkali-Metal-Mediated Reversible Chemical Hydrogen Storage Using Seawater. Jacs Au, 2021, 1, 2339-2348.	3.6	6
263	Study on Selected Metal-Organic Framework-Based Catalysts for Cycloaddition Reaction of CO2 with Epoxides: A Highly Economic Solution for Carbon Capture and Utilization. Polymers, 2021, 13, 3905.	2.0	10
264	A novel Zn-based-MOF for efficient CO2 adsorption and conversion under mild conditions. Catalysis Today, 2022, 390-391, 230-236.	2.2	10
265	Exploring the Role of Cluster Formation in UiO Family Hf Metalâ€“Organic Frameworks with in Situ X-ray Pair Distribution Function Analysis. Journal of the American Chemical Society, 2021, 143, 19668-19683.	6.6	24
266	Fine-Tuning a Robust Metalâ€“Organic Framework toward Enhanced Clean Energy Gas Storage. Journal of the American Chemical Society, 2021, 143, 18838-18843.	6.6	79
267	Comprehensive assessment of CO₂ methanation: which H₂ production pathway is practicable for green methane production in terms of technical, economic, and environmental aspects?. Green Chemistry, 2021, 23, 9502-9514.	4.6	16
268	Recent progress on the design and development of diaminotriazine based molecular catalysts for light-driven hydrogen production. Coordination Chemistry Reviews, 2022, 456, 214375.	9.5	17
270	Optimizing the mobility of active species in ionic liquid/MIL-101 composites for boosting carbon dioxide conversion. New Journal of Chemistry, 2021, 46, 44-48.	1.4	5
271	Biomedical Applications of Metalâ˜Organic Frameworks for Disease Diagnosis and Drug Delivery: A Review. Nanomaterials, 2022, 12, 277.	1.9	61
272	Light-induced switchable adsorption in azobenzene- and stilbene-based porous materials. Trends in Chemistry, 2022, 4, 32-47.	4.4	11

#	Article	IF	Citations
273	On-line detecting the tuyere coke size and temperature distribution of raceway zone in a working blast furnace. Fuel, 2022, 316, 123349.	3.4	18
274	CO2-driven surface reconstruction in quaternary ammonium ionic liquid-propanol solutions. Journal of Ionic Liquids, 2022, 2, 100018.	1.0	2
275	Recent Progress Using Solid-State Materials for Hydrogen Storage: A Short Review. Processes, 2022, 10, 304.	1.3	58
276	Modified UiO-66 as photocatalysts for boosting the carbon-neutral energy cycle and solving environmental remediation issues. Coordination Chemistry Reviews, 2022, 458, 214428.	9.5	107
277	2D and 3D metalâ€“organic frameworks constructed with a mechanically rigidified [3]rotaxane ligand. Chemical Communications, 2022, 58, 5829-5832.	2.2	7
278	Towards singleâ€atom photocatalysts for future carbonâ€neutral application. SmartMat, 2022, 3, 417-446.	6.4	35
279	3D-mesoporous KIT-6 supported highly dispersed Pd nanocatalyst for dodecahydro-N-ethylcarbazole dehydrogenation. Microporous and Mesoporous Materials, 2022, 335, 111789.	2.2	9
280	High pressure-induced elimination of grain size softening in nanocrystalline metals: Grain boundary strengthening overwhelming reduction of intragranular dislocation storage ability. International Journal of Plasticity, 2022, 153, 103261.	4.1	15
281	Layer structured materials for ambient nitrogen fixation. Coordination Chemistry Reviews, 2022, 460, 214468.	9.5	28
282	Metal-organic frameworks as heterogeneous catalysts for the chemical conversion of carbon dioxide. Fuel, 2022, 320, 123904.	3.4	33
283	A Study on Electron Acceptor of Carbonaceous Materials for Highly Efficient Hydrogen Uptakes. Catalysts, 2021, 11, 1524.	1.6	3
284	Tuning Phase Structure of Nickelâ€“Ruthenium Alloys via MOFs In Situ Hydrolysis toward Enhanced Hydrogen Evolution Performance in Alkaline. Small Methods, 2022, 6, e2101188.	4.6	13
285	Genuine Pores in a Stable Zinc Phosphite for High H2 Adsorption and CO2 Capture. Chemistry - A European Journal, 2022, , .	1.7	2
286	Absorption based solid state hydrogen storage system: A review. Sustainable Energy Technologies and Assessments, 2022, 52, 102204.	1.7	12
287	Multicriteria decision making in organic-metal frameworks for fuel storage. , 2022, , 609-630.		0
288	Synergetic and Cooperative Effects in Multimetallic Macrocyclic Complexes for Biological, Catalytic and Magnetic Activity. Asian Journal of Chemistry, 2022, 34, 1333-1346.	0.1	0
289	Methane storage in flexible and dynamical metalâ€“organic frameworks. Chemical Physics Reviews, 2022, 3, .	2.6	7
290	Syntheses, Structures, and Properties of Coordination Polymers with 2,5-Dihydroxy-1,4-Benzoquinone and 4,4â€²-Bipyridyl Synthesized by In Situ Hydrolysis Method. ACS Omega, 0, , .	1.6	0

#	Article	IF	Citations
291	Modification of Metalâ˜Organic Frameworks for CO₂ Capture. ACS Symposium Series, 0, , 269-308.	0.5	2
292	Regeneration of single-atom catalysts deactivated under acid oxygen reduction reaction conditions. Journal of Energy Chemistry, 2022, 73, 478-484.	7.1	32
293	Design Rules of Hydrogen-Bonded Organic Frameworks with High Chemical and Thermal Stabilities. Journal of the American Chemical Society, 2022, 144, 10663-10687.	6.6	174
294	Ligand Tailoring Strategy of a Metalâ€“Organic Framework for Optimizing Methane Storage Working Capacities. Inorganic Chemistry, 2022, 61, 10417-10424.	1.9	5
295	Metal-organic framework (MOF) composites as promising materials for energy storage applications. Advances in Colloid and Interface Science, 2022, 307, 102732.	7.0	126
296	Rational design and synthesis of two-dimensional conjugated metal-organic polymers for electrocatalysis applications. CheM, 2022, 8, 1822-1854.	5.8	32
297	MOF-derived metal sulfides for electrochemical energy applications. Energy Storage Materials, 2022, 51, 840-872.	9.5	45
298	Recent Advances in Adsorption and Separation of Methane and Carbon Dioxide Greenhouse Gases Using Metalâ€“Organic Framework-Based Composites. Industrial & Engineering Chemistry Research, 2022, 61, 10555-10586.	1.8	11
299	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
300	Suppressing Methane Production to Boost High-Purity Hydrogen Production in Microbial Electrolysis Cells. Environmental Science & Technology, 2022, 56, 11931-11951.	4.6	23
301	Sol-gel processing of a covalent organic framework for the generation of hierarchically porous monolithic adsorbents. CheM, 2022, 8, 2961-2977.	5.8	18
302	Theoretical study on the mechanism of CO2 adsorption and reduction by single-atom M (MÂ=ÂCu, Co, Ni) doping C2N. Chemical Physics Letters, 2022, 804, 139902.	1.2	6
303	Finding the optimal CO2 adsorption material: Prediction of multi-properties of metal-organic frameworks (MOFs) based on DeepFM. Separation and Purification Technology, 2022, 302, 122111.	3.9	12
304	Nano-engineering induced Bi dots in situ anchored into modified porous carbon with superior sodium ion storage. Journal of Materials Chemistry A, 2022, 10, 20635-20645.	5.2	6
305	Construction of Acylamide-Functionalized Mofs for Efficient Catalysis on the Conversion of Co2. SSRN Electronic Journal, 0, , .	0.4	0
306	Metalâ€“organic framework: Application studies in hydrogen gas absorption/adsorption. , 2022, , 191-203.		0
307	Temperature Extrapolation of Henryâ€™s Law Constants and the Isosteric Heat of Adsorption. Journal of Physical Chemistry B, 2022, 126, 7999-8009.	1.2	1
308	Computational insights into the energy storage of ultraporous MOFs NU-1501-M (M = Al or Fe): Protonization revealing and performance improving by decoration of superalkali clusters. International Journal of Hydrogen Energy, 2022, 47, 41034-41045.	3.8	5

#	Article	IF	Citations
309	Relative Empirical Evaluation of the Aqueous Sequestration of Methylene Blue Using Benzene-1,4-dicarboxylic Acid-Linked Lanthanum and Zinc Metal Organic Frameworks. Water, Air, and Soil Pollution, 2022, 233, .	1.1	5
310	Evaluation and screening of porous materials containing fluorine for carbon dioxide capture and separation. Computational Materials Science, 2023, 216, 111872.	1.4	1
311	Facile synthesis behavior and CO2 adsorption capacities of Zn-based metal organic framework prepared via a microchannel reactor. Chemical Engineering Journal, 2023, 454, 140078.	6.6	2
312	Reversible Switching Cu^{II}/Cu^I Single Sites Catalyze Highâ€rate and Selective CO₂ Photoreduction. Angewandte Chemie - International Edition, 2023, 62, .	7.2	14
313	Reversible Switching Cu^{II}/Cu^I Single Sites Catalyze Highâ€rate and Selective CO₂ Photoreduction. Angewandte Chemie, 2023, 135, .	1.6	3
314	A Self-Evolutionary Methodology for Reverse Design of Novel MOFs. Journal of Physical Chemistry A, 2022, 126, 8476-8486.	1.1	1
315	Construction of Acylamide-functionalized MOFs for efficient catalysis on the conversion of CO2. Molecular Catalysis, 2022, 533, 112786.	1.0	2
316	A novel cryogenic fixed-bed adsorption apparatus for studying green hydrogen recovery from natural gas grids. Separation and Purification Technology, 2023, 307, 122824.	3.9	0
317	Electrocatalytic performance of CNTs/graphene composited rare earth phthalocyanines (M=La, Y, Yb,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.5	1
318	Porous framework materials for energy & environment relevant applications: A systematic review. Green Energy and Environment, 2024, 9, 217-310.	4.7	12
319	Engineering dynamic and interactive biomaterials using material nanoarchitectonics for modulation of cellular behaviors. Cell Reports Physical Science, 2023, 4, 101251.	2.8	15
320	ARCâ€“MOF: A Diverse Database of Metal-Organic Frameworks with DFT-Derived Partial Atomic Charges and Descriptors for Machine Learning. Chemistry of Materials, 2023, 35, 900-916.	3.2	20
321	Improving the hydrodeoxygenation activity of vanillin and its homologous compounds by employing MoO₃-incorporated Co-BTC MOF-derived MoCoO_x@C. Dalton Transactions, 2023, 52, 3111-3126.	1.6	4
322	Metal organic frameworks adsorbent for Iraq dry gas. AIP Conference Proceedings, 2023, , .	0.3	0
323	Metal-organic frameworks-based advanced catalysts for anthropogenic CO2 conversion toward sustainable future. Fuel Processing Technology, 2023, 244, 107705.	3.7	8
324	Chemical transformations of highly toxic H2S to promising clean energy in MOFs. Coordination Chemistry Reviews, 2023, 485, 215135.	9.5	11
325	The hydrogen storage capacity of carbon nano-onions fabricated by thermal chemical vapour deposition. International Journal of Hydrogen Energy, 2024, 52, 1371-1383.	3.8	2
326	Application of metal-organic frameworks, covalent organic frameworks and their derivates for the metal-air batteries. , 2023, 2, e9120052.		30

#	Article	IF	Citations
327	Direct air capture (DAC) and sequestration of CO ₂ : Dramatic effect of coordinated Cu(II) onto a chelating weak base ion exchanger. Science Advances, 2023, 9, .	4.7	17
328	Development of metal-organic framework materials as solid-state polymer electrolytes for lithium-metal batteries: A review. Functional Materials Letters, 0, , .	0.7	0
329	High-performance photothermal catalytic CO2 reduction to CH4 and CO by ABO3 (A = La, Ce; B = Ni, Co,) Tj ETQq0 0 0 rgBT /Overlock 1	2.3	6
330	Microporous carbon coated zeolite particles for efficient carbon capture from wet flue gas. Separation and Purification Technology, 2023, 317, 123762.	3.9	3
331	A Comprehensive Evaluation and Empirical Research on Dual Carbon Emission Reduction under Digital Empowerment. Sustainability, 2023, 15, 6598.	1.6	2
332	Fluorescence Enhancement of a Metalâ€Organic Framework for Ultraâ€Efficient Detection of Trace Benzene Vapor. Angewandte Chemie, 2023, 135, .	1.6	0
333	Fluorescence Enhancement of a Metalâ€Organic Framework for Ultraâ€Efficient Detection of Trace Benzene Vapor. Angewandte Chemie - International Edition, 2023, 62, .	7.2	15
341	Boosting Lean Electrolyte Lithiumâ€“Sulfur Battery Performance with Transition Metals: A Comprehensive Review. Nano-Micro Letters, 2023, 15, .	14.4	15
346	A SIFSIX-MOF constructed from a metalloligand yields enhanced stability for selective CO₂ adsorption. Chemical Communications, 0, , .	2.2	0
348	Porous organic cages for gas separations. Materials Chemistry Frontiers, 2023, 7, 5247-5262.	3.2	5
356	Methane monooxygenases; physiology, biochemistry and structure. Catalysis Science and Technology, 0, , .	2.1	1
373	Demonstration of the real-time feedback control with the MicroLiDAR. , 2023, , .		0
374	Materials based on organic radicals for gases capture. , 2024, , 309-320.		0