

The chemistry of metal–organic frameworks for CO₂ conversion

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Citation Report

#	ARTICLE	IF	CITATIONS
1	High Hole-Mobility Molecular Layer Made from Strong Electron Acceptor Molecules with Metal Adatoms. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5366-5371.	2.1	15
2	Revisiting the Aluminum Trimesate-Based MOF (MIL-96): From Structure Determination to the Processing of Mixed Matrix Membranes for CO ₂ Capture. <i>Chemistry of Materials</i> , 2017, 29, 10326-10338.	3.2	78
3	Direct Carboxylation of C(sp ³)-H and C(sp ²)-H Bonds with CO ₂ by Transition-Metal-Catalyzed and Base-Mediated Reactions. <i>Catalysts</i> , 2017, 7, 380.	1.6	33
4	Atomically Dispersed Metal Sites in MOF-Based Materials for Electrocatalytic and Photocatalytic Energy Conversion. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9604-9633.	7.2	452
5	Vacuum-Mediated Single-Crystal-to-Single-Crystal (SCSC) Transformation in Na-MOFs: Rare to Novel Topology and Activation of Nitrogen in Triazole Moieties. <i>Crystal Growth and Design</i> , 2018, 18, 1287-1292.	1.4	11
6	A fluorine-containing hydrophobic covalent triazine framework with excellent selective CO ₂ capture performance. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6370-6375.	5.2	105
7	Incorporation of Imidazolium-Based Poly(ionic liquid)s into a Metal-Organic Framework for CO ₂ Capture and Conversion. <i>ACS Catalysis</i> , 2018, 8, 3194-3201.	5.5	379
8	Atomar dispergierte Metallzentren in Metall-Organischen Gerüststrukturen für die elektrokatalytische und photokatalytische Energieumwandlung. <i>Angewandte Chemie</i> , 2018, 130, 9750-9780.	1.6	58
9	The role of reticular chemistry in the design of CO ₂ reduction catalysts. <i>Nature Materials</i> , 2018, 17, 301-307.	13.3	552
10	Synthesis and electrochemical properties of Mg-doped chromium-based metal organic framework/reduced graphene oxide composite for supercapacitor application. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 8421-8430.	1.1	14
11	Fluorocarbon Separation in a Thermally Robust Zirconium Carboxylate Metal-Organic Framework. <i>Chemistry - an Asian Journal</i> , 2018, 13, 977-981.	1.7	16
12	An experimental and computational study of CO ₂ adsorption in the sodalite-type M-BTT (M = Cr, Mn, Fe.) <i>Tj ETQq1 1 0.784314 rgBT / Ov</i>	3.7	43
13	Tin(IV) Sulfide Greatly Improves the Catalytic Performance of LiO ₂ for Carbon Dioxide Cycloaddition. <i>ChemCatChem</i> , 2018, 10, 2945-2948.	1.8	11
14	Pd@zeolitic imidazolate framework-8 derived PdZn alloy catalysts for efficient hydrogenation of CO ₂ to methanol. <i>Applied Catalysis B: Environmental</i> , 2018, 234, 143-152.	10.8	122
15	A Chemical Role for Trichloromethane: Room-Temperature Removal of Coordinated Solvents from Open Metal Sites in the Copper-Based Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2018, 57, 5225-5231.	1.9	33
16	Dynamic Adsorption of CO ₂ /N ₂ on Cation-Exchanged Chabazite SSZ-13: A Breakthrough Analysis. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14287-14291.	4.0	27
17	An alkaline-resistant Ag(scp)-anchored pyrazolate-based metal-organic framework for chemical fixation of CO ₂ . <i>Chemical Communications</i> , 2018, 54, 4469-4472.	2.2	48
18	Design and synthesis of a multifunctional porous N-rich polymer containing <i>i</i> -triazine and TrÄger's base for CO ₂ adsorption, catalysis and sensing. <i>Polymer Chemistry</i> , 2018, 9, 2643-2649.	1.9	57

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19	Assembly of one novel coordination polymer built from rigid tricarboxylate ligand and bis(imidazole) linker: Synthesis, structure, and fluorescence sensing property. <i>Inorganic Chemistry Communication</i> , 2018, 96, 139-144.	1.8	6
20	Synthesis and Characterization of a Cu ₂ (pzdc) ₂ (bix) [pzdc: 2,3-pyrazinedicarboxylate;bix: 1,3-bis(imidazol-1-yl)benzene] Porous Coordination Pillared-Layer Network. <i>Crystal Growth and Design</i> , 2018, 18, 1676-1685.	1.4	10
21	Unusual Missing Linkers in an Organosulfonate-Based Primitiveâ€“Cubic (pcu)-Type Metalâ€“Organic Framework for CO ₂ Capture and Conversion under Ambient Conditions. <i>ACS Catalysis</i> , 2018, 8, 2519-2525.	5.5	125
22	CO ₂ abatement using two-dimensional MXene carbides. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3381-3385.	5.2	152
23	Morphogenesis of Metalâ€“Organic Mesocrystals Mediated by Double Hydrophilic Block Copolymers. <i>Journal of the American Chemical Society</i> , 2018, 140, 2947-2956.	6.6	69
24	Tailoring the gas separation efficiency of metal organic framework ZIF-8 through metal substitution: a computational study. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 4879-4892.	1.3	47
25	Highly Dispersed Metal Carbide on ZIFâ€“Derived Pyridinicâ€“Doped Carbon for CO ₂ Enrichment and Selective Hydrogenation. <i>ChemSusChem</i> , 2018, 11, 1040-1047.	3.6	59
26	Zinc Porphyrin/Imidazolium Integrated Multivariate Zirconium Metalâ€“Organic Frameworks for Transformation of CO ₂ into Cyclic Carbonates. <i>Inorganic Chemistry</i> , 2018, 57, 2584-2593.	1.9	153
27	Construction of unprecedented pillar-layered metal organic frameworks via a dual-ligand strategy for dye degradation. <i>Dalton Transactions</i> , 2018, 47, 4032-4035.	1.6	23
28	Theoretical study on the interaction of CO ₂ and H ₂ O molecules with metal doped-fluorinated phthalocyanines. <i>New Journal of Chemistry</i> , 2018, 42, 3465-3472.	1.4	15
29	New Metalâ€“Organic Frameworks for Chemical Fixation of CO ₂ . <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 733-744.	4.0	192
30	Hydroxide Ligands Cooperate with Catalytic Centers in Metalâ€“Organic Frameworks for Efficient Photocatalytic CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2018, 140, 38-41.	6.6	322
31	Hierarchically Porous Carbon Materials for CO ₂ Capture: The Role of Pore Structure. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 1262-1268.	1.8	83
32	Comparative Study on Temperature-Dependent CO ₂ Sorption Behaviors of Two Isostructural <i>N</i> -Oxide-Functionalized 3D Dynamic Microporous MOFs. <i>Inorganic Chemistry</i> , 2018, 57, 1455-1463.	1.9	19
33	Synthesis of zeolitic tetrazolate-imidazolate frameworks (ZTIFs) in ethylene glycol. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 675-678.	3.0	9
34	Solutionâ€“reprocessable microporous polymeric adsorbents for carbon dioxide capture. <i>AIChE Journal</i> , 2018, 64, 3376-3389.	1.8	15
35	A [COF-300]-[UiO-66] composite membrane with remarkably high permeability and H ₂ /CO ₂ separation selectivity. <i>Dalton Transactions</i> , 2018, 47, 7206-7212.	1.6	52
36	Potential of metalâ€“organic frameworks for adsorptive separation of industrially and environmentally relevant liquid mixtures. <i>Coordination Chemistry Reviews</i> , 2018, 367, 82-126.	9.5	105

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37	Metal coordination and metal activation abilities of commonly unreactive chloromethanes toward metal-organic frameworks. <i>Chemical Communications</i> , 2018, 54, 6458-6471.	2.2	42
38	Exceptionally Stable and 20-Connected Lanthanide Metal-Organic Frameworks for Selective CO ₂ Capture and Conversion at Atmospheric Pressure. <i>Crystal Growth and Design</i> , 2018, 18, 2432-2440.	1.4	95
39	Carbon dioxide capture in the presence of water by an amine-based crosslinked porous polymer. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6455-6462.	5.2	39
40	Synthetic approaches for the incorporation of free amine functionalities in porous coordination polymers for enhanced CO ₂ sorption. <i>Coordination Chemistry Reviews</i> , 2018, 365, 1-22.	9.5	55
41	Triptycene-Based Porous Metal-Assisted Salphen Organic Frameworks: Influence of the Metal Ions on Formation and Gas Sorption. <i>Chemistry of Materials</i> , 2018, 30, 2781-2790.	3.2	27
42	Hypercrosslinked mesoporous poly(ionic liquid)s with high ionic density for efficient CO ₂ capture and conversion into cyclic carbonates. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6660-6666.	5.2	116
43	Emerging Two-Dimensional Nanomaterials for Electrocatalysis. <i>Chemical Reviews</i> , 2018, 118, 6337-6408.	23.0	1,552
44	Design of iron atom modified thiophene-linked metalloporphyrin 2D conjugated microporous polymer as CO ₂ reduction photocatalyst. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 9536-9542.	1.3	28
45	MOFs based on ZIF-8 deposited on TiO ₂ nanotubes increase the surface adsorption of CO ₂ and its photoelectrocatalytic reduction to alcohols in aqueous media. <i>Applied Catalysis B: Environmental</i> , 2018, 225, 563-573.	10.8	157
46	Newly Designed Covalent Triazine Framework Based on Novel N-Heteroaromatic Building Blocks for Efficient CO ₂ and H ₂ Capture and Storage. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1244-1249.	4.0	68
47	An imidazolium-functionalized mesoporous cationic metal-organic framework for cooperative CO ₂ fixation into cyclic carbonate. <i>Chemical Communications</i> , 2018, 54, 342-345.	2.2	142
48	Heterobimetallic metal-organic framework nanocages as highly efficient catalysts for CO ₂ conversion under mild conditions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2964-2973.	5.2	73
49	Advances in Porous Adsorbents for CO ₂ Capture and Storage. , 2018, , .		7
50	Layer-by-Layer Assembly of Metal-Organic Frameworks Based on Carboxylated Perylene on Template Monolayers of Graphene Oxide. <i>Colloid Journal</i> , 2018, 80, 684-690.	0.5	6
51	Electronic Tuning of Co, Ni-Based Nanostructured (Hydr)oxides for Aqueous Electrocatalysis. <i>Advanced Functional Materials</i> , 2018, 28, 1804886.	7.8	87
52	Impact of the functionalization onto structure transformation and gas adsorption of MIL-68(In). <i>Royal Society Open Science</i> , 2018, 5, 181378.	1.1	8
53	Four new MOFs based on an imidazole-containing ligand and multicarboxylates: syntheses, structures and sorption properties. <i>CrystEngComm</i> , 2018, 20, 7719-7728.	1.3	5
54	Enhancing porphyrin photostability when locked in metal-organic frameworks. <i>Dalton Transactions</i> , 2018, 47, 15765-15771.	1.6	24

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55	Potential of ultramicroporous metal-organic frameworks in CO ₂ clean-up. <i>Chemical Communications</i> , 2018, 54, 13472-13490.	2.2	49
56	Exceptional Adsorption and Binding of Sulfur Dioxide in a Robust Zirconium-Based Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2018, 140, 15564-15567.	6.6	149
57	Highly efficient conversion of CO ₂ to cyclic carbonates with a binary catalyst system in a microreactor: intensification of electrophile-nucleophile synergistic effect. <i>RSC Advances</i> , 2018, 8, 39182-39186.	1.7	15
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59	Phase Control of Ferromagnetic Copper(II) Carbonate Coordination Polymers through Reagent Concentration. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 5223-5228.	1.0	9
60	Paddlewheel SBU based Zn MOFs: Syntheses, Structural Diversity, and CO ₂ Adsorption Properties. <i>Polymers</i> , 2018, 10, 1398.	2.0	6
61	Preparation of Well-Dispersed Nanosilver in MIL-101(Cr) Using Double-Solvent Radiation Method for Catalysis. <i>Nano</i> , 2018, 13, 1850145.	0.5	4
62	Solvent mediated morphology control of zinc MOFs as carbon templates for application in supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23521-23530.	5.2	61
63	Rationally Armoring PtCu Alloy with Metal-Organic Frameworks as Highly Selective Nonenzyme Electrochemical Sensor. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801168.	1.9	19
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67	A Series of Metal-Organic Frameworks for Selective CO ₂ Capture and Catalytic Oxidative Carboxylation of Olefins. <i>Inorganic Chemistry</i> , 2018, 57, 13772-13782.	1.9	68
68	Metal-Organic Framework as a Microreactor for in Situ Fabrication of Multifunctional Nanocomposites for Photothermal Chemotherapy of Tumors in Vivo. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 38729-38738.	4.0	42
69	Mixed Matrix Membranes for CO ₂ Separations. , 2018, , 103-153.		3
70	Molecularly Defined Interface Created by Porous Polymeric Networks on Gold Surface for Concerted and Selective CO ₂ Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 17277-17283.	3.2	26
71	Adsorption and Biomass: Current Interconnections and Future Challenges. <i>Current Sustainable/Renewable Energy Reports</i> , 2018, 5, 247-256.	1.2	7
72	Adsorption breakthrough and cycling stability of carbon dioxide separation from CO ₂ /N ₂ /H ₂ O mixture under ambient conditions using 13X and Mg-MOF-74. <i>Applied Energy</i> , 2018, 230, 1093-1107.	5.1	60

#	ARTICLE	IF	CITATIONS
73	ROMP for Metal-Organic Frameworks: An Efficient Technique toward Robust and High-Separation Performance Membranes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34640-34645.	4.0	42
74	Higher Symmetry Multinuclear Clusters of Metal-Organic Frameworks for Highly Selective CO ₂ Capture. <i>Journal of the American Chemical Society</i> , 2018, 140, 17825-17829.	6.6	98
75	Heteroatom-doped carbon materials and their composites as electrocatalysts for CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18782-18793.	5.2	136
76	Photodynamic Therapy Based on Nanoscale Metal-Organic Frameworks: From Material Design to Cancer Nanotherapeutics. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3122-3149.	1.7	71
77	Amine-Functionalized Mesoporous Silica @ Reduced Graphene Sandwichlike Structure Composites for CO ₂ Adsorption. <i>ACS Applied Nano Materials</i> , 2018, 1, 4695-4702.	2.4	21
78	A Review on Recent Developments and Progress in Natural Gas Processing and Separating Using Nanoparticles Incorporated Membranes. , 2018, , .		2
79	Counteranion Modulated Crystal Growth and Function of One-Dimensional Homochiral Coordination Polymers: Morphology, Structures, and Magnetic Properties. <i>Inorganic Chemistry</i> , 2018, 57, 12143-12154.	1.9	17
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83	Reticular control of interpenetration in a complex metal-organic framework. <i>Materials Chemistry Frontiers</i> , 2018, 2, 2063-2069.	3.2	15
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90	Modeling Amorphous Microporous Polymers for CO ₂ Capture and Separations. <i>Chemical Reviews</i> , 2018, 118, 5488-5538.	23.0	208

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98	Lower Activation Energy for Catalytic Reactions through Host-Guest Cooperation within Metal-Organic Frameworks. Angewandte Chemie, 2018, 130, 10264-10268.	1.6	33
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100	High Propylene Selective Metal-Organic Framework Membranes Prepared in Confined Spaces via Convective Circulation Synthesis. Advanced Materials Interfaces, 2018, 5, 1800287.	1.9	19
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108	Recent developments and consideration issues in solid adsorbents for CO ₂ capture from flue gas. Chinese Journal of Chemical Engineering, 2018, 26, 2303-2317.	1.7	70

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110	Azine-based covalent organic frameworks as metal-free visible light photocatalysts for CO ₂ reduction with H ₂ O. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 46-51.	10.8	203
111	Microporosity and CO ₂ Capture Properties of Amorphous Silicon Oxynitride Derived from Novel Polyalkoxysilsesquiazanes. <i>Materials</i> , 2018, 11, 422.	1.3	4
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118	Tuning Expanded Pores in Metal-Organic Frameworks for Selective Capture and Catalytic Conversion of Carbon Dioxide. <i>ChemSusChem</i> , 2018, 11, 3751-3757.	3.6	47
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128	Recent Approaches to Design Electrocatalysts Based on Metal-Organic Frameworks and Their Derivatives. <i>Chemistry - an Asian Journal</i> , 2019, 14, 3474-3501.	1.7	34
129	Magnetic Metal-Organic Framework Composites: Solvent-Free Synthesis and Regeneration Driven by Localized Magnetic Induction Heat. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13627-13632.	3.2	29
130	Renal-Clearable Porphyrinic Metal-Organic Framework Nanodots for Enhanced Photodynamic Therapy. <i>ACS Nano</i> , 2019, 13, 9206-9217.	7.3	110
131	Spectroscopy and dynamics of a HOF and its molecular units: remarkable vapor acid sensing. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10818-10832.	2.7	29
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#	ARTICLE	IF	CITATIONS
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