When defects turn into virtues: The curious case of zirc frameworks

Coordination Chemistry Reviews 343, 1-24 DOI: 10.1016/j.ccr.2017.04.010

Citation Report

#	Article	IF	CITATIONS
1	Defect porous organic frameworks (dPOFs) as a platform for chiral organocatalysis. Journal of Catalysis, 2017, 355, 131-138.	3.1	26
2	Structural defects in metal–organic frameworks (MOFs): Formation, detection and control towards practices of interests. Coordination Chemistry Reviews, 2017, 349, 169-197.	9.5	200
3	Tackling the Defect Conundrum in UiO-66: A Mixed-Linker Approach to Engineering Missing Linker Defects. Chemistry of Materials, 2017, 29, 10478-10486.	3.2	102
4	Structure and Dynamics of Zr ₆ O ₈ Metal–Organic Framework Node Surfaces Probed with Ethanol Dehydration as a Catalytic Test Reaction. Journal of the American Chemical Society, 2018, 140, 3751-3759.	6.6	150
5	Chemical diversity in a metal–organic framework revealed by fluorescence lifetime imaging. Nature Communications, 2018, 9, 1647.	5.8	112
6	Simultaneous neutron powder diffraction and microwave dielectric studies of ammonia absorption in metal–organic framework systems. Physical Chemistry Chemical Physics, 2018, 20, 10460-10469.	1.3	7
7	Zirconium Metal–Organic Frameworks Assembled from Pd and Pt P ^N N ^N P Pincer Complexes: Synthesis, Postsynthetic Modification, and Lewis Acid Catalysis. Inorganic Chemistry, 2018, 57, 2663-2672.	1.9	29
8	<i>Operando</i> study of palladium nanoparticles inside UiO-67 MOF for catalytic hydrogenation of hydrocarbons. Faraday Discussions, 2018, 208, 287-306.	1.6	46
9	Computational Design of Functionalized Metal–Organic Framework Nodes for Catalysis. ACS Central Science, 2018, 4, 5-19.	5.3	148
10	Aqueous production of spherical Zr-MOF beads <i>via</i> continuous-flow spray-drying. Green Chemistry, 2018, 20, 873-878.	4.6	59
11	Stable Metal–Organic Frameworks with Group 4 Metals: Current Status and Trends. ACS Central Science, 2018, 4, 440-450.	5.3	382
12	Synthesis and functionalization of phase-pure NU-901 for enhanced CO ₂ adsorption: the influence of a zirconium salt and modulator on the topology and phase purity. CrystEngComm, 2018, 20, 7066-7070.	1.3	43
13	Scandium-organic frameworks: progress and prospects. Russian Chemical Reviews, 2018, 87, 1139-1167.	2.5	46
14	Metal–Organic Frameworks for Water Harvesting from Air. Advanced Materials, 2018, 30, e1704304.	11.1	500
15	Feasibility Study on the Design and Synthesis of Functional Porous Organic Polymers with Tunable Pore Structure as Metallocene Catalyst Supports. Polymers, 2018, 10, 944.	2.0	9
16	Twoâ€dimensional Cobaltâ€Carboxylate Framework with Hourglass Trinuclear Co ₃ (COO) ₆ (DMA) ₃ Secondary Building Unit. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2018, 644, 1387-1392.	0.6	2
17	Zirconium Metal–Organic Framework UiO-66: Stability in an Aqueous Environment and Its Relevance for Organophosphate Degradation. Inorganic Chemistry, 2018, 57, 14290-14297.	1.9	100
18	Photodynamic Therapy Based on Nanoscale Metal–Organic Frameworks: From Material Design to Cancer Nanotherapeutics. Chemistry - an Asian Journal, 2018, 13, 3122-3149.	1.7	71

#	Article	IF	CITATIONS
19	Two-dimensional metal-organic frameworks nanosheets: Synthesis strategies and applications. Inorganica Chimica Acta, 2018, 483, 550-564.	1.2	48
20	Smoothing the single-crystal to single-crystal conversions of a two-dimensional metal–organic framework <i>via</i> the hetero-metal doping of the linear trimetallic secondary building unit. Dalton Transactions, 2018, 47, 13722-13729.	1.6	16
21	Characterization of Undercoordinated Zr Defect Sites in UiO-66 with Vibrational Spectroscopy of Adsorbed CO. Journal of Physical Chemistry C, 2018, 122, 14582-14589.	1.5	52
22	Synthesis and Shaping Scale-up Study of Functionalized UiO-66 MOF for Ammonia Air Purification Filters. Industrial & Engineering Chemistry Research, 2018, 57, 8200-8208.	1.8	86
23	Post‧ynthetic Ligand Exchange in Zirconiumâ€Based Metal–Organic Frameworks: Beware of The Defects!. Angewandte Chemie - International Edition, 2018, 57, 11706-11710.	7.2	107
24	Activation of Methyltrioxorhenium for Olefin Metathesis in a Zirconium-Based Metal–Organic Framework. Journal of the American Chemical Society, 2018, 140, 6956-6960.	6.6	36
25	Postâ€5ynthetic Ligand Exchange in Zirconiumâ€Based Metal–Organic Frameworks: Beware of The Defects!. Angewandte Chemie, 2018, 130, 11880-11884.	1.6	3
26	Band gap modulation in zirconium-based metal–organic frameworks by defect engineering. Journal of Materials Chemistry A, 2019, 7, 23781-23786.	5.2	79
27	Defect-Tailoring and Titanium Substitution in Metal–Organic Framework UiO-66-NH ₂ for the Photocatalytic Degradation of Cr(VI) to Cr(III). ACS Applied Nano Materials, 2019, 2, 5973-5980.	2.4	59
28	Controlling the Synthesis of Metal–Organic Framework UiO-67 by Tuning Its Kinetic Driving Force. Crystal Growth and Design, 2019, 19, 4246-4251.	1.4	28
29	Acetylenedicarboxylate and In Situ Generated Chlorofumarate-Based Hafnium(IV)–Metal–Organic Frameworks: Synthesis, Structure, and Sorption Properties. Inorganic Chemistry, 2019, 58, 10965-10973.	1.9	21
30	Lithium Thiophosphate Functionalized Zirconium MOFs for Li–S Batteries with Enhanced Rate Capabilities. Journal of the American Chemical Society, 2019, 141, 17891-17899.	6.6	117
31	Facile in Situ Halogen Functionalization via Triple-Bond Hydrohalogenation: Enhancing Sorption Capacities through Halogenation to Halofumarate-Based Zr(IV)-Metal-Organic Frameworks. Chemistry of Materials, 2019, 31, 8629-8638.	3.2	28
32	Post Synthetic Defect Engineering of UiO-66 Metal–Organic Framework with An Iridium(III)-HEDTA Complex and Application in Water Oxidation Catalysis. Inorganics, 2019, 7, 123.	1.2	9
33	Atomic―and Molecular‣evel Design of Functional Metal–Organic Frameworks (MOFs) and Derivatives for Energy and Environmental Applications. Advanced Science, 2019, 6, 1901129.	5.6	121
34	Tailoring the Properties of UiO-66 through Defect Engineering: A Review. Industrial & Engineering Chemistry Research, 2019, 58, 17646-17659.	1.8	152
35	Stabilizing defects in metal–organic frameworks: pendant Lewis basic sites as capping agents in UiO-66-type MOFs toward highly stable and defective porous materials. Dalton Transactions, 2019, 48, 14696-14704.	1.6	22
36	Ligand Excess "Inverse-Defected―Zr ₆ Tetrahedral Tetracarboxylate Framework and Its Thermal Transformation. Inorganic Chemistry, 2019, 58, 12786-12797.	1.9	3

#	Article	IF	CITATIONS
37	Protons Make Possible Heterolytic Activation of Hydrogen Peroxide over Zr-Based Metal–Organic Frameworks. ACS Catalysis, 2019, 9, 9699-9704.	5.5	41
38	Duet of Acetate and Water at the Defects of Metal–Organic Frameworks. Nano Letters, 2019, 19, 1618-1624.	4.5	49
39	Elucidating the mechanism of the UiO-66-catalyzed sulfide oxidation: activity and selectivity end selectivity enhancements through changes in the node coordination environment and solvent. Catalysis Science and Technology, 2019, 9, 327-335.	2.1	40
40	Homochiral BINAPDA-Zr-MOF for Heterogeneous Asymmetric Cyanosilylation of Aldehydes. Inorganic Chemistry, 2019, 58, 9253-9259.	1.9	29
41	Expanding the Variety of Zirconiumâ€based Inorganic Building Units for Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2019, 58, 10995-11000.	7.2	31
42	Expanding the Variety of Zirconiumâ€based Inorganic Building Units for Metal–Organic Frameworks. Angewandte Chemie, 2019, 131, 11111-11116.	1.6	13
43	Powerful uranium extraction strategy with combined ligand complexation and photocatalytic reduction by postsynthetically modified photoactive metal-organic frameworks. Applied Catalysis B: Environmental, 2019, 254, 47-54.	10.8	222
44	Synthesis, characterization, and post-synthetic modification of a micro/mesoporous zirconium–tricarboxylate metal–organic framework: towards the addition of acid active sites. CrystEngComm, 2019, 21, 3014-3030.	1.3	38
45	Molecular Level Understanding of the Free Energy Landscape in Early Stages of Metal–Organic Framework Nucleation. Journal of the American Chemical Society, 2019, 141, 6073-6081.	6.6	23
46	Continuous Flow Desulfurization of a Model Fuel Catalysed by Titanium Functionalized UiOâ€66. ChemistrySelect, 2019, 4, 2806-2809.	0.7	19
47	Functional metal–organic frameworks for catalytic applications. Coordination Chemistry Reviews, 2019, 388, 268-292.	9.5	242
48	Elucidation of adsorption cooling characteristics of Zr-MOFs: Effects of structure property and working fluids. Chemical Engineering Science, 2019, 204, 48-58.	1.9	26
49	Effective loading of cisplatin into a nanoscale UiO-66 metal–organic framework with preformed defects. Dalton Transactions, 2019, 48, 5308-5314.	1.6	45
50	Geometry and energetics of CO adsorption on hydroxylated UiO-66. Physical Chemistry Chemical Physics, 2019, 21, 5078-5085.	1.3	17
51	Tuning the Properties of Zr ₆ O ₈ Nodes in the Metal Organic Framework UiO-66 by Selection of Node-Bound Ligands and Linkers. Chemistry of Materials, 2019, 31, 1655-1663.	3.2	97
52	A new approach to enhancing the CO ₂ capture performance of defective UiO-66 <i>via</i> post-synthetic defect exchange. Dalton Transactions, 2019, 48, 3349-3359.	1.6	57
53	Tuning acidity in zirconium-based metal organic frameworks catalysts for enhanced production of butyl butyrate. Applied Catalysis A: General, 2019, 570, 31-41.	2.2	36
54	Engineering UiOâ€66 Metal Organic Framework for Heterogeneous Catalysis. ChemCatChem, 2019, 11, 899-923.	1.8	182

#	Article	IF	CITATIONS
55	Application of zirconium MOFs in drug delivery and biomedicine. Coordination Chemistry Reviews, 2019, 380, 230-259.	9.5	470
56	Scalable synthesis of multi-substituted aryl-phosphonates: Exploring the limits of isoretical expansion and the synthesis of new triazene-based phosphonates. Phosphorus, Sulfur and Silicon and the Related Elements, 2020, 195, 231-244.	0.8	1
57	Structural engineering of Zr-based metal-organic framework catalysts for optimized biofuel additives production. Chemical Engineering Journal, 2020, 382, 122793.	6.6	27
58	Metal organic frameworks as solid catalysts for liquid-phase continuous flow reactions. Chemical Communications, 2020, 56, 26-45.	2.2	47
59	Multi-emission metal–organic framework composites for multicomponent ratiometric fluorescence sensing: recent developments and future challenges. Journal of Materials Chemistry B, 2020, 8, 3292-3315.	2.9	101
60	Defectous UiO-66 MOF Nanocomposites as Reactive Media of Superior Protection against Toxic Vapors. ACS Applied Materials & Interfaces, 2020, 12, 14678-14689.	4.0	44
61	Applications of multifunctional zirconium-based metal-organic frameworks in analytical chemistry: Overview and perspectives. TrAC - Trends in Analytical Chemistry, 2020, 131, 116015.	5.8	35
62	Design and Precursor-based Solid-State Synthesis of Mixed-Linker Zr-MIL-140A. Inorganic Chemistry, 2020, 59, 15250-15261.	1.9	4
63	Nucleophilic versus Electrophilic Activation of Hydrogen Peroxide over Zr-Based Metal–Organic Frameworks. Inorganic Chemistry, 2020, 59, 10634-10649.	1.9	30
64	On the Role of Enthalpic and Entropic Contributions to the Conformational Free Energy Landscape of MILâ€101(Cr) Secondary Building Units. Advanced Theory and Simulations, 2020, 3, 2000092.	1.3	7
65	Design and applications of water-stable metal-organic frameworks: status and challenges. Coordination Chemistry Reviews, 2020, 423, 213507.	9.5	138
66	The metal–organic framework UiO-66 with missing-linker defects: A highly active catalyst for carbon dioxide cycloaddition. Applied Energy, 2020, 277, 115560.	5.1	68
67	Defect Control in Zr-Based Metal–Organic Framework Nanoparticles for Arsenic Removal from Water. ACS Applied Nano Materials, 2020, 3, 8997-9008.	2.4	96
68	Thermal Defect Engineering of Precious Group Metal–Organic Frameworks: A Case Study on Ru/Rh-HKUST-1 Analogues. ACS Applied Materials & Interfaces, 2020, 12, 40635-40647.	4.0	24
69	Synthesis, characterization and application of defective metal–organic frameworks: current status and perspectives. Journal of Materials Chemistry A, 2020, 8, 21526-21546.	5.2	155
70	Modulator-free approach towards missing-cluster defect formation in Zr-based UiO-66. RSC Advances, 2020, 10, 28180-28185.	1.7	15
71	Spectroscopy, microscopy, diffraction and scattering of archetypal MOFs: formation, metal sites in catalysis and thin films. Chemical Society Reviews, 2020, 49, 6694-6732.	18.7	71
72	Controlling Polymorphism and Orientation of NU-901/NU-1000 Metal–Organic Framework Thin Films. Chemistry of Materials, 2020, 32, 10556-10565.	3.2	23

#	Article	IF	CITATIONS
73	Preparation of MOF catalysts and simultaneously modulated metal nodes and ligands via a one-pot method for optimizing cycloaddition reactions. New Journal of Chemistry, 2020, 44, 9611-9615.	1.4	2
74	Exploring Structural Disorders in Aluminum-Containing Metal–Organic Frameworks: Comparison of Solid-State ²⁷ Al NMR Powder Spectra to DFT Calculations on Bulk Periodic Structures. Journal of Physical Chemistry C, 2020, 124, 12569-12579.	1.5	1
75	Synthesis of ordered microporous/macroporous MOF-808 through modulator-induced defect-formation, and surfactant self-assembly strategies. Physical Chemistry Chemical Physics, 2020, 22, 12591-12604.	1.3	22
76	Enhancing catalytic alkane hydroxylation by tuning the outer coordination sphere in a heme-containing metal–organic framework. Chemical Science, 2020, 11, 5447-5452.	3.7	4
77	Metal removal from the secondary building unit of bio-MOF-1 by adenine N6-alkylation while retaining the overall 3D porous topology. CrystEngComm, 2020, 22, 4201-4205.	1.3	2
78	Effect of the Incorporation of Functionalized Cellulose Nanocrystals into UiOâ€66 on Composite Porosity and Surface Heterogeneity Alterations. Advanced Materials Interfaces, 2020, 7, 1902098.	1.9	15
79	Tunable LiCl@UiO-66 composites for water sorption-based heat transformation applications. Journal of Materials Chemistry A, 2020, 8, 13364-13375.	5.2	59
80	Metal–Organic Frameworks in Heterogeneous Catalysis: Recent Progress, New Trends, and Future Perspectives. Chemical Reviews, 2020, 120, 8468-8535.	23.0	1,001
81	Lewis acid sites in MOFs supports promoting the catalytic activity and selectivity for CO esterification to dimethyl carbonate. Catalysis Science and Technology, 2020, 10, 1699-1707.	2.1	53
82	Multivariate Modulation of the Zr MOF UiOâ€66 for Defectâ€Controlled Combination Anticancer Drug Delivery. Angewandte Chemie, 2020, 132, 5249-5255.	1.6	52
83	Multivariate Modulation of the Zr MOF UiOâ€66 for Defect ontrolled Combination Anticancer Drug Delivery. Angewandte Chemie - International Edition, 2020, 59, 5211-5217.	7.2	205
84	UiOâ€66 microcrystals catalyzed direct arylation of enol acetates and heteroarenes with aryl diazonium salts in water. Applied Organometallic Chemistry, 2020, 34, e5482.	1.7	7
85	Modulated self-assembly of metal–organic frameworks. Chemical Science, 2020, 11, 4546-4562.	3.7	155
86	Metal–organic frameworks <i>vs.</i> buffers: case study of UiO-66 stability. Inorganic Chemistry Frontiers, 2021, 8, 720-734.	3.0	65
87	Applications of reticular diversity in metal–organic frameworks: An ever-evolving state of the art. Coordination Chemistry Reviews, 2021, 430, 213655.	9.5	56
88	Cyclodextrins: a new and effective class of co-modulators for aqueous zirconium-MOF syntheses. CrystEngComm, 2021, 23, 2764-2772.	1.3	11
89	Metal-organic framework photocatalysts for carbon dioxide reduction. , 2021, , 389-420.		0
90	Water adsorption fingerprinting of structural defects/capping functions in Zr–fumarate MOFs: a hybrid computational-experimental approach. Dalton Transactions, 2021, 50, 1324-1333.	1.6	10

#	Article	IF	CITATIONS
91	Linker depletion for missing cluster defects in non-UiO metal–organic frameworks. Chemical Science, 2021, 12, 11839-11844.	3.7	8
92	Metal–organic frameworks of linear trinuclear cluster secondary building units: structures and applications. Dalton Transactions, 2021, 50, 12692-12707.	1.6	12
93	Effect of modulator connectivity on promoting defectivity in titanium–organic frameworks. Chemical Science, 2021, 12, 2586-2593.	3.7	13
94	Controlling the molecular diffusion in MOFs with the acidity of monocarboxylate modulators. Dalton Transactions, 2021, 50, 11291-11299.	1.6	8
95	Engineering metal–organic frameworks for adsorption-based gas separations: from process to atomic scale. Molecular Systems Design and Engineering, 2021, 6, 841-875.	1.7	36
96	Synthesis of macroscopic monolithic metal–organic gels for ultra-fast destruction of chemical warfare agents. RSC Advances, 2021, 11, 22125-22130.	1.7	11
97	Immobilization of Heterocycle-Appended Porphyrins on UiO-66 and UiO-67 MOFs. Russian Journal of Inorganic Chemistry, 2021, 66, 193-201.	0.3	8
98	Defectâ€Assisted Loading and Docking Conformations of Pharmaceuticals in Metal–Organic Frameworks. Angewandte Chemie, 2021, 133, 7798-7806.	1.6	6
99	The Role of Defects in Metal–Organic Frameworks for Nitrogen Reduction Reaction: When Defects Switch to Features. Advanced Functional Materials, 2021, 31, 2010052.	7.8	92
100	Probing the Influence of Defects, Hydration, and Composition on Prussian Blue Analogues with Pressure. Journal of the American Chemical Society, 2021, 143, 3544-3554.	6.6	23
101	Defectâ€Assisted Loading and Docking Conformations of Pharmaceuticals in Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2021, 60, 7719-7727.	7.2	25
102	Catalytic Performance of Zrâ€Based Metal–Organic Frameworks Zrâ€∎btc and MIPâ€200 in Selective Oxidations with H ₂ O ₂ . Chemistry - A European Journal, 2021, 27, 6985-6992.	1.7	20
103	A mixedâ€valence copper(I/II) coordination polymer directed with a bifunctional softâ€hard pyrazolateâ^'carboxylate ligand. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 803-808.	0.6	4
105	Defect Engineering in Metal–Organic Frameworks Towards Advanced Mixed Matrix Membranes for Efficient Propylene/Propane Separation. Angewandte Chemie - International Edition, 2021, 60, 13081-13088.	7.2	70
106	Efficient biofuel production by MTV-UiO-66 based catalysts. Chemical Engineering Journal, 2021, 410, 128237.	6.6	13
107	Defect Engineering in Metal–Organic Frameworks Towards Advanced Mixed Matrix Membranes for Efficient Propylene/Propane Separation. Angewandte Chemie, 2021, 133, 13191-13198.	1.6	20
108	Defect Termination in the UiO-66 Family of Metal–Organic Frameworks: The Role of Water and Modulator. Journal of the American Chemical Society, 2021, 143, 6328-6332.	6.6	74
109	Dimensional Reduction of Lewis Acidic Metal–Organic Frameworks for Multicomponent Reactions. Journal of the American Chemical Society, 2021, 143, 8184-8192.	6.6	59

#	Article	IF	CITATIONS
110	Directional Exciton Migration in Benzoimidazole-Based Metal–Organic Frameworks. Journal of Physical Chemistry Letters, 2021, 12, 4917-4927.	2.1	10
111	Trends and Prospects in UiOâ€66 Metalâ€Organic Framework for CO ₂ Capture, Separation, and Conversion. Chemical Record, 2021, 21, 1771-1791.	2.9	48
112	A Showcase of Green Chemistry: Sustainable Synthetic Approach of Zirconiumâ€Based MOF Materials. Chemistry - A European Journal, 2021, 27, 9967-9987.	1.7	33
113	Metal–Organic Framework-Based Solid Acid Materials for Biomass Upgrade. Transactions of Tianjin University, 2021, 27, 434-449.	3.3	18
114	Disclosing the Role of Defectâ€Engineered Metal–Organic Frameworks in Mixed Matrix Membranes for Efficient CO ₂ Separation: A Joint Experimentalâ€Computational Exploration. Advanced Functional Materials, 2021, 31, 2103973.	7.8	47
115	Controlling the Structural Robustness of Zirconium-Based Metal Organic Frameworks for Efficient Adsorption on Tetracycline Antibiotics. Water (Switzerland), 2021, 13, 1869.	1.2	13
116	Metal–Organic Framework UiO-68 and Its Derivatives with Sufficiently Good Properties and Performance Show Promising Prospects in Potential Industrial Applications. Crystal Growth and Design, 2021, 21, 4780-4804.	1.4	19
117	Facile microwave synthesis of zirconium metal-organic framework thin films on gold and silicon and application to sensor functionalization. Microporous and Mesoporous Materials, 2021, 323, 111133.	2.2	19
118	The Surge of Metal–Organic-Framework (MOFs)-Based Electrodes as Key Elements in Electrochemically Driven Processes for the Environment. Molecules, 2021, 26, 5713.	1.7	12
119	Highâ€Throughput Discovery of a Rhombohedral Twelveâ€Connected Zirconiumâ€Based Metalâ€Organic Framework with Ordered Terephthalate and Fumarate Linkers. Angewandte Chemie - International Edition, 2021, 60, 26939-26946.	7.2	10
120	Highâ€throughput discovery of a rhombohedral twelveâ€connected zirconiumâ€based metalâ€organic framework with ordered terephthalate and fumarate linkers. Angewandte Chemie, 0, , .	1.6	2
121	Hydrophobic polymer tethered magnetic zirconium-based metal-organic framework as advance and recyclable adsorbent for microwave-assisted extraction of polycyclic aromatic hydrocarbons from environmental water samples. Microchemical Journal, 2021, 168, 106361.	2.3	4
122	"Shake â€~n Bake―Route to Functionalized Zr-UiO-66 Metal–Organic Frameworks. Inorganic Chemistry, 2021, 60, 14294-14301.	1.9	20
123	Sorptive extraction of pesticides from food and environmental samples using metal organic framework-based adsorbents. Trends in Environmental Analytical Chemistry, 2021, 32, e00141.	5.3	6
124	Defect-engineering of Zr(IV)-based metal-organic frameworks for regulating CO2 photoreduction. Chemical Engineering Journal, 2022, 429, 132157.	6.6	22
125	Atomic resolution tracking of nerve-agent simulant decomposition and host metal–organic framework response in real space. Communications Chemistry, 2021, 4, .	2.0	8
126	Defect engineering: an effective tool for enhancing the catalytic performance of copper-MOFs for the click reaction and the A ³ coupling. Catalysis Science and Technology, 2021, 11, 2396-2402.	2.1	20
127	Stepwise collapse of a giant pore metalâ \in organic framework. Dalton Transactions, 2021, 50, 5011-5022.	1.6	23

#	Article	IF	CITATIONS
128	A Comprehensive Thermogravimetric Analysis Multifaceted Method for the Exact Determination of the Composition of Multifunctional Metalâ€Organic Framework Materials. European Journal of Inorganic Chemistry, 2020, 2020, 4284-4294.	1.0	29
129	UiO-66 type MOFs with mixed-linkers - 1,4-Benzenedicarboxylate and 1,4-naphthalenedicarboxylate: Effect of the modulator and post-synthetic exchange. Microporous and Mesoporous Materials, 2020, 305, 110324.	2.2	33
130	Hybrid Nanocomposites Formed by Lanthanide Nanoparticles in Zr-MOF for Local Temperature Measurements during Catalytic Reactions. Chemistry of Materials, 2021, 33, 8007-8017.	3.2	22
131	Fabrication of MOF-808(Zr) with abundant defects by cleaving Zr O bond for oxidative desulfurization of fuel oil. Journal of Industrial and Engineering Chemistry, 2022, 105, 435-445.	2.9	25
132	Defect Level and Particle Size Effects on the Hydrolysis of a Chemical Warfare Agent Simulant by UiO-66. Inorganic Chemistry, 2021, 60, 16378-16387.	1.9	16
133	Hybrid NaYF4:Er,Yb@NaYF4@nano-MOF@AuNPs@LB composites for Yb3+-Er3+ physiological thermometry. Physica B: Condensed Matter, 2021, 626, 413453.	1.3	9
134	UiOâ€66 and hcp UiOâ€66 Catalysts Synthesized from Ionic Liquids as Linker Precursors. ChemistryOpen, 2021, 10, 233-242.	0.9	7
135	Solvent-dependent textural properties of defective UiO-66 after acidic and basic treatment. Inorganic Chemistry Frontiers, 2021, 9, 70-77.	3.0	3
136	Synthesis of Al-Based Metal-Organic Framework in Water With Caffeic Acid Ligand and NaOH as Linker Sources With Highly Efficient Anticancer Treatment. Frontiers in Chemistry, 2021, 9, 784461.	1.8	4
137	Theoretical investigation on the structure of mixed-metal zeolitic imidazolate framework and its interaction with CO2. Computational Materials Science, 2022, 210, 111033.	1.4	3
138	Epoxidation catalysts prepared by encapsulation of molybdenum hexacarbonyl in UiO-66(Zr/Hf)-type metal-organic frameworks. Microporous and Mesoporous Materials, 2022, 330, 111603.	2.2	6
139	One-pot synthesis of oxygen-vacancy-rich Cu-doped UiO-66 for collaborative adsorption and photocatalytic degradation of ciprofloxacin. Science of the Total Environment, 2022, 815, 151962.	3.9	31
140	Coordinationâ€Induced Band Gap Reduction in a Metal–Organic Framework. Chemistry - A European Journal, 2022, 28, e202104041.	1.7	4
141	Phosphor nitrile functionalized UiO-66-NH2/graphene hybrid flame retardants for fire safety of epoxy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 635, 128093.	2.3	26
142	Fabrication of zirconium based coordination polymers for fluorine/silane free superhydrophobic coatings. Chemical Engineering Journal, 2022, 431, 134262.	6.6	5
143	Growth of MOF@COF on corncob as effective adsorbent for enhancing adsorption of sulfonamides and its mechanism. Applied Surface Science, 2022, 580, 152285.	3.1	23
144	MOF@chitosan Composites with Potential Antifouling Properties for Open-Environment Applications of Metal-Organic Frameworks. Solids, 2022, 3, 35-54.	1.1	5
145	Vacancies in Metalâ^'Organic Frameworks: Formation, Arrangement, and Functions. Small Structures, 2022, 3, .	6.9	9

~			-			
CIT/	VT1	ΟN	R	FΡ	O.	RΤ

#	Article	IF	CITATIONS
146	ZrBDC-Based Functional Adsorbents for Small-Scale Methane Storage Systems. Adsorption Science and Technology, 2022, 2022, .	1.5	2
147	A caveat on the effect of modulators in the synthesis of the aluminum furandicarboxylate metalâ€organic framework MILâ€160. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 0, , .	0.6	2
148	Surface thermodynamics and Lewis acid-base properties of metal-organic framework Crystals by Inverse gas chromatography at infinite dilution. Journal of Chromatography A, 2022, 1666, 462849.	1.8	10
149	Switching on photocatalytic NO oxidation and proton reduction of NH2-MIL-125(Ti) by convenient linker defect engineering. Journal of Hazardous Materials, 2022, 430, 128468.	6.5	26
150	Effect of organic linker substituent on catalytic activity of UiO-66 metal-organic framework in selective oxidation of propylene glycol: homolytic versus heterolytic activation of hydrogen peroxide. Materials Today Chemistry, 2022, 24, 100776.	1.7	2
151	Surface Thermodynamics and Lewis Acid-Base Properties of UiO-66 Crystals by Inverse Gas Chromatography at Infinite Dilution. SSRN Electronic Journal, 0, , .	0.4	1
153	Computational Approach Toward Identification and Catalytic Degradation of Chemical Warfare Agents Using MOFs. , 2022, , 431-451.		3
154	Defect-engineered MOF-801 for cycloaddition of CO ₂ with epoxides. Journal of Materials Chemistry A, 2022, 10, 10051-10061.	5.2	42
155	A Rare Flexible Metal–Organic Framework Based on a Tailorable Mn ₈ â€Cluster Showing Smart Responsiveness to Aromatic Guests and Capacity for Gas Separation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	20
156	Seignette salt induced defects in Zr-MOFs for boosted Pb(â¡) adsorption: universal strategy and mechanism insight. Chemical Engineering Journal, 2022, 442, 136276.	6.6	82
157	A Rare Flexible Metal–Organic Framework Based on a Tailorable Mn ₈ â€Cluster Showing Smart Responsiveness to Aromatic Guests and Capacity for Gas Separation. Angewandte Chemie, 2022, 134, .	1.6	2
158	Generating Catalytic Sites in UiO-66 through Defect Engineering. ACS Applied Materials & Interfaces, 2021, 13, 60715-60735.	4.0	86
159	Synthesis, characterization and application of a zirconium-based MOF-808 functionalized with isonicotinic acid for fast and efficient solid phase extraction of uranium(VI) from wastewater prior to its spectrophotometric determination. BMC Chemistry, 2022, 16, 27.	1.6	6
160	Molybdenum active sites implanted defective UiO-66(Zr) for cyclohexene epoxidation: Activity and kinetics investigation. Molecular Catalysis, 2022, 524, 112312.	1.0	1
161	Strategies for induced defects in metal–organic frameworks for enhancing adsorption and catalytic performance. Dalton Transactions, 2022, 51, 8133-8159.	1.6	22
162	Metal–organic framework structures of fused hexagonal motifs with cuprophilic interactions of a triangular Cu(<scp>i</scp>) ₃ (pyrazolate-benzoate) metallo-linker. CrystEngComm, 2022, 24, 3675-3691.	1.3	5
163	Direct Observation of Ammonia Storage in UiO-66 Incorporating Cu(II) Binding Sites. Journal of the American Chemical Society, 2022, 144, 8624-8632.	6.6	24
164	Computational study of BrÃ,nsted acidity in the metal–organic framework UiO-66. Chemical Physics Letters, 2022, 800, 139658.	1.2	2

#	Article	IF	CITATIONS
165	Influence of the defects on selective hydrogenation of cinnamaldehyde to cinnamyl alcohol over UiO-66 supported Pt catalysts. Microporous and Mesoporous Materials, 2022, 338, 111968.	2.2	8
166	ZIF-8 with cationic defects toward efficient ¹²⁵ 1 ₂ uptake for <i>in vitro</i> radiotherapy of colon cancer. Chemical Communications, 2022, 58, 6942-6945.	2.2	4
167	Quasi-metal organic frameworks: Preparation, applications and future perspectives. Coordination Chemistry Reviews, 2022, 468, 214643.	9.5	24
168	Mixed-linker strategy toward enhanced photoreduction-assisted uranium recovery from wastewater and seawater. Chemical Engineering Journal, 2022, 446, 137264.	6.6	28
169	Understanding Metal–Organic Framework Nucleation from a Solution with Evolving Graphs. Journal of the American Chemical Society, 2022, 144, 11099-11109.	6.6	19
170	Probing adsorption of water and DMF in UiO-66(Zr) using solid-state NMR. Solid State Nuclear Magnetic Resonance, 2022, 120, 101797.	1.5	3
171	The chemistry of metal–organic frameworks with face-centered cubic topology. Coordination Chemistry Reviews, 2022, 468, 214644.	9.5	14
172	Tailoring defect-type and ligand-vacancies in Zr(<scp>iv</scp>) frameworks for CO ₂ photoreduction. Journal of Materials Chemistry A, 2022, 10, 16396-16402.	5.2	25
173	Guest-responsive thermal expansion in the Zr–porphyrin metal–organic framework PCN-222. APL Materials, 2022, 10, .	2.2	5
174	Metal–organic framework (MOF)-, covalent-organic framework (COF)-, and porous-organic polymers (POP)-catalyzed selective C–H bond activation and functionalization reactions. Chemical Society Reviews, 2022, 51, 7810-7882.	18.7	80
175	Fabrication of a Reusable Carbon Dot/Gold Nanoparticle/Metal–Organic Framework Film for Fluorescence Detection of Lead Ions in Water. ACS Applied Materials & Interfaces, 2022, 14, 35755-35768.	4.0	27
176	Single-Atom Nanozymes: Fabrication, Characterization, Surface Modification and Applications of ROS Scavenging and Antibacterial. Molecules, 2022, 27, 5426.	1.7	15
177	Adsorptive removal of carbamazepine and ibuprofen from aqueous solution using a defective Zr-based metal-organic framework. Journal of Environmental Chemical Engineering, 2022, 10, 108560.	3.3	7
178	Vibrational spectroscopy investigation of defects in Zr- and Hf-UiO-66. RSC Advances, 2022, 12, 22440-22447.	1.7	5
179	Defect controlled MOF-808 for seawater uranium capture with high capacity and selectivity. Journal of Molecular Liquids, 2022, 367, 120514.	2.3	11
180	System of sequences in multivariate reticular structures. Nature Reviews Materials, 2023, 8, 331-340.	23.3	28
181	Computer simulation of the early stages of self-assembly and thermal decomposition of ZIF-8. Journal of Chemical Physics, 2022, 157, .	1.2	7
182	Construction of coreâ^'shell MOF@hydroxide hybrids with strong hetero-interface interaction for photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2023, 48, 2583-2592.	3.8	6

	Сітатіо	n Report	
#	Article	IF	CITATIONS
183	Zeolitic imidazolate framework-8 as an efficient and facile heterogeneous catalyst for the acceptorless alcohol dehydrogenation to carboxylates. Journal of Catalysis, 2023, 417, 202-212.	3.1	7
184	Adsorption and photocatalytic desorption toward Cr(<scp>vi</scp>) over defect-induced hierarchically porous UiO-66-(OH) ₂ : a sustainable approach. Environmental Science: Nano, 2023, 10, 672-682.	2.2	21
185	Uncertainty in Composite Membranes: From Defect Engineering to Film Processing. Journal of the American Chemical Society, 2023, 145, 830-840.	6.6	12
186	Metal-organic layers: Preparation and applications. Science China Materials, 2023, 66, 839-858.	3.5	3
187	Fabrication of Hierarchical, Porous, Bimetallic, Zeolitic Imidazolate Frameworks with the Incorporation of Square Planar Pd and Its Catalytic Application. ACS Applied Materials & Interfaces, 2023, 15, 9296-9306.	4.0	7
188	From crystal phase mixture to pure metal-organic frameworks – Tuning pore and structure properties. Ultrasonics Sonochemistry, 2023, 95, 106377.	3.8	5
189	A novel strategy of post defect modification (PDM) for synthesizing hydrophobic FA-UiO-66-CF3 with enhanced n-hexane vapor adsorption capacity under humidity. Microporous and Mesoporous Materials, 2023, 356, 112595.	2.2	3
190	State and future implementation perspectives of porous carbon-based hybridized matrices for lithium sulfur battery. Coordination Chemistry Reviews, 2023, 481, 215055.	9.5	9
191	Advances in Antiviral Delivery Systems and Chitosan-Based Polymeric and Nanoparticulate Antivirals and Antiviral Carriers. Viruses, 2023, 15, 647.	1.5	11
192	MOF Scaffolds Defects and Disorders. Engineering Materials, 2023, , 113-138.	0.3	0
193	A Dynamic Defect Generation Strategy for Efficient Enzyme Immobilization in Robust Metalâ€Organic Frameworks for Catalytic Hydrolysis and Chiral Resolution. Angewandte Chemie, 2023, 135, .	1.6	4
194	A Dynamic Defect Generation Strategy for Efficient Enzyme Immobilization in Robust Metalâ€Organic Frameworks for Catalytic Hydrolysis and Chiral Resolution. Angewandte Chemie - International Edition, 2023, 62, .	7.2	8
198	Optimization Strategies of the Design and Preparation of Metal–Organic Framework Nanostructures for Water Sorption: A Review. ACS Applied Nano Materials, 2023, 6, 10903-10924.	2.4	4
204	Coordination modulation: a way to improve the properties of metal–organic frameworks. Journal of Materials Chemistry A, 2023, 11, 22105-22131.	5.2	2
207	Metal–Organic Frameworks in Green Analytical Chemistry. , 2023, , 1-44.		0