

Metal-Organic Frameworks against Toxic Chemicals

Chemical Reviews

120, 8130-8160

DOI: [10.1021/acs.chemrev.9b00828](https://doi.org/10.1021/acs.chemrev.9b00828)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Porous materials applied to biomarker sensing in exhaled breath for monitoring and detecting non-invasive pathologies. Dalton Transactions, 2020, 49, 15161-15170.	1.6	11
2	Capture of Sulfur Mustard by Pillar[5]arene: From Host-Guest Complexation to Efficient Adsorption Using Nonporous Adaptive Crystals. IScience, 2020, 23, 101443.	1.9	20
3	Benign Integration of a Zn-Azolate Metal-Organic Framework onto Textile Fiber for Ammonia Capture. ACS Applied Materials & Interfaces, 2020, 12, 47747-47753.	4.0	37
4	Doubly Interpenetrated Metal-Organic Framework of pcu Topology for Selective Separation of Propylene from Propane. ACS Applied Materials & Interfaces, 2020, 12, 48712-48717.	4.0	23
5	Selective CO ₂ adsorption over functionalized Zr-based metal organic framework under atmospheric or lower pressure: Contribution of functional groups to adsorption. Chemical Engineering Journal, 2020, 402, 126254.	6.6	58
6	Highly Robust 3D {CaZn}-Organic Framework for Excellent Catalytic Performance on Chemical Fixation of CO ₂ and Knoevenagel Condensation Reaction. ACS Applied Materials & Interfaces, 2020, 12, 54884-54892.	4.0	85
7	Modulation of crystal growth and structure within cerium-based metal-organic frameworks. CrystEngComm, 2020, 22, 8182-8188.	1.3	17
8	Function-Topology Relationship in the Catalytic Hydrolysis of a Chemical Warfare Simulant in Two Zr-MOFs. Chemistry - A European Journal, 2020, 26, 17437-17444.	1.7	8
9	Catalytic Degradation of an Organophosphorus Agent at Zn-OH Sites in a Metal-Organic Framework. Chemistry of Materials, 2020, 32, 6998-7004.	3.2	32
10	Mechanistic Insight into the Catalytic NO Oxidation by the MIL-100 MOF Platform: Toward the Prediction of More Efficient Catalysts. ACS Catalysis, 2020, 10, 9445-9450.	5.5	22
11	Polymerization in MOF-Confined Nanospaces: Tailored Architectures, Functions, and Applications. Langmuir, 2020, 36, 10657-10673.	1.6	35
12	Catalytic Degradation of Nerve Agents. Catalysts, 2020, 10, 881.	1.6	22
13	Water-Based Synthesis of a Stable Iron-Based Metal-Organic Framework for Capturing Toxic Gases. , 2020, 2, 1129-1134.		33
14	Emerging Porous Materials and Their Composites for NH ₃ Gas Removal. Advanced Science, 2020, 7, 2002142.	5.6	58
15	CO ₂ adsorption at low pressure over polymers-loaded mesoporous metal organic framework PCN-777: effect of basic site and porosity on adsorption. Journal of CO ₂ Utilization, 2020, 42, 101332.	3.3	14
16	Reactive Porous Polymers for Detoxification of a Chemical Warfare Agent Simulant. Chemistry of Materials, 2020, 32, 9299-9306.	3.2	38
17	NO ₂ Removal under Ambient Conditions by Nanoporous Multivariate Zirconium-Based Metal-Organic Framework. ACS Applied Nano Materials, 2020, 3, 11442-11454.	2.4	20
18	Robust Anionic Ln ^{III} -Organic Frameworks: Chemical Fixation of CO ₂ , Tunable Light Emission, and Fluorescence Recognition of Fe ³⁺ . Inorganic Chemistry, 2020, 59, 13407-13415.	1.9	25

#	ARTICLE	IF	CITATIONS
19	Fiber Composites of Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2020, 32, 7120-7140.	3.2	82
20	Tuning the Atrazine Binding Sites in an Indium-Based Flexible Metal-Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 44762-44768.	4.0	11
21	Capture and Decomposition of the Nerve Agent Simulant, DMCP, Using the Zeolitic Imidazolate Framework (ZIF-8). <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 58326-58338.	4.0	22
22	Modeling of Diffusion of Acetone in UiO-66. <i>Journal of Physical Chemistry C</i> , 2020, 124, 28469-28478.	1.5	23
23	Structural Diversity of Zirconium Metal-Organic Frameworks and Effect on Adsorption of Toxic Chemicals. <i>Journal of the American Chemical Society</i> , 2020, 142, 21428-21438.	6.6	95
24	Advances and challenges in metal-organic framework derived porous materials for batteries and electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24895-24919.	5.2	86
25	A historical perspective on porphyrin-based metal-organic frameworks and their applications. <i>Coordination Chemistry Reviews</i> , 2021, 429, 213615.	9.5	140
26	The state of the field: from inception to commercialization of metal-organic frameworks. <i>Faraday Discussions</i> , 2021, 225, 9-69.	1.6	70
27	Efficient hydrolytic cleavage of phosphodiester with a lanthanide-based metal-organic framework. <i>Journal of Solid State Chemistry</i> , 2021, 293, 121820.	1.4	5
28	Straightforward synthesis of a porous chromium-based porphyrinic metal-organic framework for visible-light triggered selective aerobic oxidation of benzyl alcohol to benzaldehyde. <i>Applied Catalysis A: General</i> , 2021, 611, 117965.	2.2	27
29	Application of Metal-Organic Frameworks in Adsorptive Removal of Organic Contaminants from Water, Fuel and Air. <i>Chemistry - an Asian Journal</i> , 2021, 16, 185-196.	1.7	31
30	Probing adsorbent heterogeneity using Toth isotherms. <i>Journal of Materials Chemistry A</i> , 2021, 9, 944-962.	5.2	12
31	Catalytic Processes for the Neutralization of Sulfur Mustard. <i>Chemistry - A European Journal</i> , 2021, 27, 54-68.	1.7	31
32	Recent advances in process engineering and upcoming applications of metal-organic frameworks. <i>Coordination Chemistry Reviews</i> , 2021, 426, 213544.	9.5	243
33	Syntheses and structures of three macrocyclic supramolecular complexes and one Zn ^{II} -containing coordination polymer generated from a semi-rigid multidentate N-containing ligand. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2021, 77, 29-39.	0.2	0
34	Water-sensitive multicolor luminescence in lanthanide-organic framework for anti-counterfeiting. <i>Opto-Electronic Advances</i> , 2021, 4, 200063-200063.	6.4	20
35	Cucurbit[6]uril@MIL-101-Cl: loading polar porous cages in mesoporous stable host for enhanced SO ₂ adsorption at low pressures. <i>Nanoscale</i> , 2021, 13, 15952-15962.	2.8	8
36	Transient Catenation in a Zirconium-Based Metal-Organic Framework and Its Effect on Mechanical Stability and Sorption Properties. <i>Journal of the American Chemical Society</i> , 2021, 143, 1503-1512.	6.6	28

#	ARTICLE	IF	CITATIONS
37	Sulfur-containing nitrogen-rich robust hierarchically porous organic polymer for adsorptive removal of mercury: experimental and theoretical insights. <i>Environmental Science: Nano</i> , 2021, 8, 2641-2649.	2.2	15
38	Polyoxometalate-based metal-organic frameworks for heterogeneous catalysis. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 1865-1899.	3.0	90
39	Flow neutralisation of sulfur-containing chemical warfare agents with Oxone: packed bed vs. aqueous solution. <i>Green Chemistry</i> , 2021, 23, 2925-2930.	4.6	15
40	Metal-Organic Frameworks (MOFs) Based Analytical Techniques for Food Safety Evaluation. <i>EFood</i> , 2021, 2, 1-12.	1.7	17
41	Guest size limitation in metal-organic framework crystal-glass composites. <i>Journal of Materials Chemistry A</i> , 2021, 9, 8386-8393.	5.2	15
42	Incorporation of homogeneous organometallic catalysts into metal-organic frameworks for advanced heterogenization: a review. <i>Catalysis Science and Technology</i> , 2021, 11, 5734-5771.	2.1	35
43	Review of Advances in Engineering Nanomaterial Adsorbents for Metal Removal and Recovery from Water: Synthesis and Microstructure Impacts. <i>ACS ES&T Engineering</i> , 2021, 1, 623-661.	3.7	61
44	Capture of toxic gases in MOFs: SO ₂ , H ₂ S, NH ₃ and NO _x . <i>Chemical Science</i> , 2021, 12, 6772-6799.	3.7	79
45	MIL-101(Cr) with incorporated polypyridine zinc complexes for efficient degradation of a nerve agent simulant: spatial isolation of active sites promoting catalysis. <i>Dalton Transactions</i> , 2021, 50, 1995-2000.	1.6	6
46	Turn-On Circularly Polarized Luminescence in Metal-Organic Frameworks. <i>Advanced Optical Materials</i> , 2021, 9, 2002096.	3.6	36
47	Solvent-mediated framework flexibility of interdigitated 2D layered metal-organic frameworks. <i>Materials Chemistry Frontiers</i> , 2021, 5, 3621-3627.	3.2	8
48	H ₂ S Stability of Metal-Organic Frameworks: A Computational Assessment. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 4813-4822.	4.0	6
49	An NH ₂ -modified {Eu(II)}-organic framework for the efficient chemical fixation of CO ₂ and highly selective sensing of 2,4,6-trinitrophenol. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 4376-4385.	3.0	20
50	Efficient detection of Fe(III) and chromate ions in water using two robust lanthanide metal-organic frameworks. <i>CrystEngComm</i> , 2021, 23, 1677-1683.	1.3	24
51	Metal-organic frameworks constructed from an [MS ₄ Cux] ₂ (M = W, Mo) unit: isomerization of the cluster unit induced by temperature. <i>CrystEngComm</i> , 0, .	1.3	0
52	Soft and effective detoxification of a VX simulant in a nylon 3D printed basic flow reactor. <i>Green Chemistry</i> , 2021, 23, 7522-7527.	4.6	5
53	Beyond structural motifs: the frontier of actinide-containing metal-organic frameworks. <i>Chemical Science</i> , 2021, 12, 7214-7230.	3.7	43
54	Synthesis of macroscopic monolithic metal-organic gels for ultra-fast destruction of chemical warfare agents. <i>RSC Advances</i> , 2021, 11, 22125-22130.	1.7	11

#	ARTICLE	IF	CITATIONS
55	Metal-Organic Frameworks in Oxidation Catalysis with Hydrogen Peroxide. <i>Catalysts</i> , 2021, 11, 283.	1.6	34
56	Mechanistic Insight into Charge and Energy Transfers of Luminescent Metal-Organic Frameworks Based Sensors for Toxic Chemicals. <i>Advanced Sustainable Systems</i> , 2021, 5, 2000293.	2.7	27
57	An Amidoxime-Functionalized Porous Reactive Fiber against Toxic Chemicals. , 2021, 3, 320-326.		13
58	Two-Dimensional Metal-Organic Framework Materials: Synthesis, Structures, Properties and Applications. <i>Chemical Reviews</i> , 2021, 121, 3751-3891.	23.0	442
59	Postsynthetically Modified Polymers of Intrinsic Microporosity (PIMs) for Capturing Toxic Gases. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 10409-10415.	4.0	30
60	Small Molecules, Big Effects: Tuning Adsorption and Catalytic Properties of Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2021, 33, 1444-1454.	3.2	56
61	Quantitative Structure-Activity Relationship of Nanowire Adsorption to SO ₂ Revealed by <i>In Situ</i> TEM Technique. <i>Nano Letters</i> , 2021, 21, 1679-1687.	4.5	26
62	Comparative Evaluation of Different MOF and Non-MOF Porous Materials for SO ₂ Adsorption and Separation Showing the Importance of Small Pore Diameters for Low-Pressure Uptake. <i>Advanced Sustainable Systems</i> , 2021, 5, 2000285.	2.7	43
63	Successive degradation of organophosphate nerve agent by integrating the merits of artificial enzyme and metal nanoparticle catalyst. <i>Colloids and Interface Science Communications</i> , 2021, 41, 100382.	2.0	5
64	Decavanadate-based clusters as bifunctional catalysts for efficient treatment of carbon dioxide and simulant sulfur mustard. <i>Journal of CO2 Utilization</i> , 2021, 45, 101419.	3.3	18
65	Experimental strategies on enhancing toxic gases uptake of metal-organic frameworks. <i>Coordination Chemistry Reviews</i> , 2021, 430, 213738.	9.5	61
66	Metal Organic Framework Functionalized Textiles as Protective Clothing for the Detection and Detoxification of Chemical Warfare Agents—A Review. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 4218-4239.	1.8	36
67	Choline chloride-coated UiO-66-Urea MOF: A novel multifunctional heterogeneous catalyst for efficient one-pot three-component synthesis of 2-amino-4H-chromenes. <i>Journal of Molecular Liquids</i> , 2021, 325, 115228.	2.3	21
68	V ₅ O ₇ Functionalized {Tm ₂ }-Organic Framework Designed by Postsynthesis Modification for Catalytic Chemical Fixation of CO ₂ and Oxidation of Mustard Gas. <i>Inorganic Chemistry</i> , 2021, 60, 5005-5013.	1.9	11
69	MOF-on-MOF hybrids: Synthesis and applications. <i>Coordination Chemistry Reviews</i> , 2021, 432, 213743.	9.5	231
71	Tuning the Structural Flexibility for Multi-Responsive Gas Sorption in Isonicotinate-Based Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 16820-16827.	4.0	31
72	Emergent behavior in nanoconfined molecular containers. <i>CheM</i> , 2021, 7, 919-947.	5.8	93
73	A 3D Cd(II) MOF of tetracarboxylate and tris(benzimidazole) ligands: Luminescence sensing properties. <i>Inorganica Chimica Acta</i> , 2021, 518, 120242.	1.2	7

#	ARTICLE	IF	CITATIONS
74	Strong, Ductile MOFâ€“Poly(urethane urea) Composites. <i>Chemistry of Materials</i> , 2021, 33, 3164-3171.	3.2	25
75	SO ₂ Capture and Oxidation in a Pd ₆ L ₈ Metalâ€“Organic Cage. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 18658-18665.	4.0	17
76	Adsorptive and responsive hybrid sponge of melamine foam and metal organic frameworks for rapid collection/removal and detection of mycotoxins. <i>Chemical Engineering Journal</i> , 2021, 410, 128268.	6.6	40
77	Chemical targets to deactivate biological and chemical toxins using surfaces and fabrics. <i>Nature Reviews Chemistry</i> , 2021, 5, 370-387.	13.8	47
78	Detection and Removal of Arsenite from Water Using Bisâ€“Urea Supramolecular Polymer and Dipeptide Adsorbent. <i>ChemistrySelect</i> , 2021, 6, 4448-4455.	0.7	3
79	Molecular Surgery at Microporous MOF for Mesopore Generation and Renovation. <i>Angewandte Chemie</i> , 2021, 133, 14722-14729.	1.6	3
80	Simulation Meets Experiment: Unraveling the Properties of Water in Metalâ€“Organic Frameworks through Vibrational Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2021, 125, 12451-12460.	1.5	16
81	Template-Induced {Mn ₂ }â€“Organic Framework with Lewis Acidâ€“Base Canals as a Highly Efficient Heterogeneous Catalyst for Chemical Fixation of CO ₂ and Knoevenagel Condensation. <i>Inorganic Chemistry</i> , 2021, 60, 7276-7283.	1.9	16
82	Designing Oxide Aerogels With Enhanced Sorptive and Degradative Activity for Acute Chemical Threats. <i>Frontiers in Materials</i> , 2021, 8, .	1.2	7
83	TWO Zn(II) AND Co(II) COORDINATION POLYMERS WITH 3-FOLD RIGHT-HANDED HELICAL CHAINS: SYNTHESSES, STRUCTURAL CHARACTERIZATION, AND PHOTOLUMINESCENT PROPERTY. <i>Journal of Structural Chemistry</i> , 2021, 62, 740-747.	0.3	4
84	Molecular Surgery at Microporous MOF for Mesopore Generation and Renovation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14601-14608.	7.2	48
85	Band gap engineering of metal-organic frameworks for solar fuel productions. <i>Coordination Chemistry Reviews</i> , 2021, 435, 213785.	9.5	57
86	Insights into Catalytic Hydrolysis of Organophosphonates at Mâ€“OH Sites of Azolate-Based Metal Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021, 143, 9893-9900.	6.6	45
88	SERS Approach to Probe the Adsorption Process of Trace Volatile Benzaldehyde on Layered Double Hydroxide Material. <i>Analytical Chemistry</i> , 2021, 93, 8228-8237.	3.2	26
89	Asymmetric catalysis using metal-organic frameworks. <i>Coordination Chemistry Reviews</i> , 2021, 437, 213845.	9.5	80
90	Optimal Pore Chemistry in an Ultramicroporous Metalâ€“Organic Framework for Benchmark Inverse CO ₂ /C ₂ H ₂ Separation. <i>Angewandte Chemie</i> , 2021, 133, 17335-17341.	1.6	16
91	Computational catalysis for metal-organic frameworks: An overview. <i>Coordination Chemistry Reviews</i> , 2021, 436, 213777.	9.5	34
92	Zirconium and Aluminum MOFs for Low-Pressure SO ₂ Adsorption and Potential Separation: Elucidating the Effect of Small Pores and NH ₂ Groups. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29137-29149.	4.0	59

#	ARTICLE	IF	CITATIONS
93	Optimal Pore Chemistry in an Ultramicroporous Metal-Organic Framework for Benchmark Inverse CO ₂ /CH ₄ Separation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17198-17204.	7.2	93
94	Integration of metal-organic frameworks and covalent organic frameworks: Design, synthesis, and applications. <i>Matter</i> , 2021, 4, 2230-2265.	5.0	158
95	Efficiently Selective Oxidation of H ₂ S to Elemental Sulfur over Covalent Triazine Framework Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 34124-34133.	4.0	21
96	Ultrathin Zirconium Hydroxide Nanosheet-Assembled Nanofibrous Membranes for Rapid Degradation of Chemical Warfare Agents. <i>Small</i> , 2021, 17, e2101639.	5.2	20
97	Einlagerung und Abtrennung von SO ₂ -Spuren in Metall-organischen Gerüstverbindungen durch präsynthetische Anpassung der Porenenumgebung mit Methylgruppen. <i>Angewandte Chemie</i> , 2021, 133, 18145-18153.	1.6	6
98	Rapid Fabrication of Biocomposites by Encapsulating Enzymes into Zn-MOF-74 via a Mild Water-Based Approach. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52014-52022.	4.0	36
99	Efficient Capture of Trace Acetylene by an Ultramicroporous Metal-Organic Framework with Purine Binding Sites. <i>Chemistry of Materials</i> , 2021, 33, 5800-5808.	3.2	22
100	Capture and Separation of SO ₂ Traces in Metal-Organic Frameworks via Pre-synthetic Pore Environment Tailoring by Methyl Groups. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17998-18005.	7.2	92
101	Recent Progress in Metal-Organic Frameworks@Cellulose Hybrids and Their Applications. <i>Chinese Journal of Chemistry</i> , 2021, 39, 3462-3480.	2.6	34
102	Near-instantaneous catalytic hydrolysis of organophosphorus nerve agents with zirconium-based MOF/hydrogel composites. <i>Chem Catalysis</i> , 2021, 1, 721-733.	2.9	49
103	Fine-Tuning Window Apertures in ZIF-8/67 Frameworks by Metal Ions and Temperature for High-Efficiency Molecular Sieving of Xylenes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 40830-40836.	4.0	28
104	Synthesis, crystal structure and magnetic properties of poly[[diaqua{1/4}Co ₆ -2-[bis(carboxylatomethyl)amino]terephthalato}dicobalt(II)] 1.6-hydrate]. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2021, 77, 939-943.	0.2	1
105	Neutral Nitrogen Donor Ligand-based MOFs for Sensing Applications. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2569-2587.	1.7	9
106	Enhancing toxic gas uptake performance of Zr-based MOF through uncoordinated carboxylate and copper insertion; ammonia adsorption. <i>Journal of Hazardous Materials</i> , 2021, 416, 125933.	6.5	31
107	Pyrazolate-based porphyrinic metal-organic frameworks as catechol oxidase mimic enzyme for fluorescent and colorimetric dual-mode detection of dopamine with high sensitivity and specificity. <i>Sensors and Actuators B: Chemical</i> , 2021, 341, 130000.	4.0	29
108	Recent development on the alkaline earth MOFs (AEMOFs). <i>Coordination Chemistry Reviews</i> , 2021, 440, 213955.	9.5	24
109	Benign Synthesis and Modification of a Zn-Azolate Metal-Organic Framework for Enhanced Ammonia Uptake and Catalytic Hydrolysis of an Organophosphorus Chemical. , 2021, 3, 1363-1368.		13
110			

#	ARTICLE	IF	CITATIONS
111	SO ₂ Capture by Two Aluminum-Based MOFs: Rigid-like MIL-53(Al)-TDC versus Breathing MIL-53(Al)-BDC. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 39363-39370.	4.0	39
112	C2s/C1 hydrocarbon separation: The major step towards natural gas purification by metal-organic frameworks (MOFs). <i>Coordination Chemistry Reviews</i> , 2021, 442, 213998.	9.5	64
113	Smart Metal-Organic Frameworks with Reversible Luminescence/Magnetic Switch Behavior for HCl Vapor Detection. <i>Advanced Functional Materials</i> , 2021, 31, 2106925.	7.8	42
114	Round-the-clock water harvesting from dry air using a metal-organic framework. <i>Chinese Journal of Chemical Engineering</i> , 2022, 49, 170-177.	1.7	5
115	Smart light-responsive hierarchical metal organic frameworks constructed mixed matrix membranes for efficient gas separation. <i>Green Chemical Engineering</i> , 2022, 3, 71-82.	3.3	12
116	Contribution of hydrogen bonding to liquid-phase adsorptive removal of hazardous organics with metal-organic framework-based materials. <i>Chemical Engineering Journal</i> , 2022, 430, 132596.	6.6	79
117	Capture of Toxic Oxoanions from Water Using Metal-Organic Frameworks. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 9175-9181.	2.1	7
118	Utilizing Zirconium MOF-functionalized Fiber Substrates Prepared by Molecular Layer Deposition for Toxic Gas Capture and Chemical Warfare Agent Degradation. <i>Global Challenges</i> , 2021, 5, 2100001.	1.8	10
119	Non-injective gas sensor arrays: identifying undetectable composition changes. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 464003.	0.7	2
120	Immobilized Regenerable Active Chlorine within a Zirconium-Based MOF Textile Composite to Eliminate Biological and Chemical Threats. <i>Journal of the American Chemical Society</i> , 2021, 143, 16777-16785.	6.6	64
121	Shining Light on Porous Liquids: From Fundamentals to Syntheses, Applications and Future Challenges. <i>Advanced Functional Materials</i> , 2022, 32, 2104162.	7.8	40
122	Photo-assisted enhancement performance for rapid detoxification of chemical warfare agent simulants over versatile ZnIn ₂ S ₄ /UiO-66-NH ₂ nanocomposite catalysts. <i>Journal of Hazardous Materials</i> , 2021, 417, 126056.	6.5	18
123	Adsorptive removal of pesticides from water with metal-organic framework-based materials. <i>Chemical Engineering Journal</i> , 2021, 421, 129688.	6.6	92
124	Electrochemically-assisted removal of cadmium ions by redox active Cu-based metal-organic framework. <i>Chemical Engineering Journal</i> , 2021, 421, 129765.	6.6	18
125	Efficient elimination of organic contaminants with novel and stable zeolite@MOF layer adsorbents. <i>Particuology</i> , 2021, 58, 74-84.	2.0	11
126	Optimizing bromide anchors for easy tethering of amines, nitriles and thiols in porous organic polymers towards enhanced CO ₂ capture. <i>Microporous and Mesoporous Materials</i> , 2021, 328, 111450.	2.2	10
127	Post modification of Oxo-clusters in robust Zirconium-Based metal organic framework for durable SO ₂ capture from flue gas. <i>Separation and Purification Technology</i> , 2021, 276, 119349.	3.9	22
128	Remediation of environmentally hazardous organophosphates by artificial metalloenzymes. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021, 32, 100529.	3.2	10

#	ARTICLE	IF	CITATIONS
129	The low-temperature NO ₂ removal by tailoring metal node in porphyrin-based metal-organic frameworks. <i>Science of the Total Environment</i> , 2021, 801, 149710.	3.9	17
130	Hydroxy functionalized triptycene based covalent organic polymers for ultra-high radioactive iodine uptake. <i>Chemical Engineering Journal</i> , 2022, 427, 130950.	6.6	35
131	One-component nano-metal-organic frameworks with superior multienzyme-mimic activities for 1,4-dihydropyridine metabolism. <i>Journal of Colloid and Interface Science</i> , 2022, 605, 214-222.	5.0	13
132	Hierarchically porous metal hydroxide/metal-organic framework composite nanoarchitectures as broad-spectrum adsorbents for toxic chemical filtration. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 272-285.	5.0	7
133	NH ₂ -MIL-125 filled mixed matrix membrane contactor with SO ₂ enrichment for flue gas desulfurization. <i>Chemical Engineering Journal</i> , 2022, 428, 132595.	6.6	15
134	A 3D ultramicroporous porous organic frameworks for SO ₂ and aromatic sulfides capture with high capacity and selectivity. <i>Chemical Engineering Journal</i> , 2022, 429, 132480.	6.6	18
135	Isomer of linker for NU-1000 yields a new <i>she</i> -type, catalytic, and hierarchically porous, Zr-based metal-organic framework. <i>Chemical Communications</i> , 2021, 57, 3571-3574.	2.2	25
136	Atomic resolution tracking of nerve-agent simulant decomposition and host metal-organic framework response in real space. <i>Communications Chemistry</i> , 2021, 4, .	2.0	8
137	Flexible luminescent non-lanthanide metal-organic frameworks as small molecules sensors. <i>Dalton Transactions</i> , 2021, 50, 14513-14531.	1.6	22
138	Zero-valent metals in metal-organic frameworks: <i>fac</i> -M(CO) ₃ (pyrazine) ₃ . <i>Chemical Communications</i> , 2021, 57, 3861-3864.	2.2	12
139	Rapid, Biomimetic Degradation of a Nerve Agent Simulant by Incorporating Imidazole Bases into a Metal-Organic Framework. <i>ACS Catalysis</i> , 2021, 11, 1424-1429.	5.5	36
140	Supramolecular catalysis: the role of H-bonding interactions in substrate orientation and activation. <i>Dalton Transactions</i> , 2021, 50, 14951-14966.	1.6	7
141	Uncovering the Role of Metal-Organic Framework Topology on the Capture and Reactivity of Chemical Warfare Agents. <i>Chemistry of Materials</i> , 2020, 32, 4609-4617.	3.2	70
142	Programmable Triboelectric Nanogenerators Dependent on the Secondary Building Units in Cadmium Coordination Polymers. <i>Inorganic Chemistry</i> , 2021, 60, 550-554.	1.9	21
143	One Robust Microporous Tm ^{III} -Organic Framework for Highly Catalytic Activity on Chemical CO ₂ Fixation and Knoevenagel Condensation. <i>Inorganic Chemistry</i> , 2021, 60, 1028-1036.	1.9	32
144	Visualizing the degradation of nerve agent simulants using functionalized Zr-based MOFs: from solution to hydrogels. <i>Chemical Communications</i> , 2021, 57, 11681-11684.	2.2	8
145	Pressure Tunable Electronic Bistability in Fe(II) Hofmann-like Two-Dimensional Coordination Polymer [Fe(Fpz) ₂ Pt(CN) ₄]: A Comprehensive Experimental and Theoretical Study. <i>Inorganic Chemistry</i> , 2021, 60, 16016-16028.	1.9	16
146	Micropore environment regulation of zirconium MOFs for instantaneous hydrolysis of an organophosphorus chemical. <i>Cell Reports Physical Science</i> , 2021, 2, 100612.	2.8	10

#	ARTICLE	IF	CITATIONS
147	Highly Breathable Chemically Protective MOF-Fiber Catalysts. <i>Advanced Functional Materials</i> , 2022, 32, 2108004.	7.8	19
148	Nanoflake-Engineered Zirconic Fibrous Aerogels with Parallel-Arrayed Conduits for Fast Nerve Agent Degradation. <i>Nano Letters</i> , 2021, 21, 8839-8847.	4.5	10
149	Adsorption and Decomposition of Sarin on Dry and Wet Cu ₂ O(111) and CuO(111) Surfaces: Insight from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2021, 125, 24396-24405.	1.5	6
150	Dual-purpose high-efficiency air filter paper loaded with reactive zirconium hydroxide for the filtration aerosols and degradation of chemical warfare agents. <i>RSC Advances</i> , 2021, 11, 35245-35257.	1.7	8
151	Local structure determination using total scattering data. , 2023, , 222-247.		1
152	Green MIP-202(Zr) Catalyst: Degradation and Thermally Robust Biomimetic Sensing of Nerve Agents. <i>Journal of the American Chemical Society</i> , 2021, 143, 18261-18271.	6.6	33
153	A new two-dimensional folding sheet-like coordination polymer assembled from cadmium(II) and (<i>S</i>)-2-(benzylamino)succinic acid: synthesis, structure and properties. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2021, 77, 770-776.	0.2	0
154	Bis-isonicotinoyl linkers containing polyaromatic scaffolds: synthesis, structure and spectroscopic properties. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 1191-1201.	1.3	1
155	A hybrid nanobiocatalyst with in situ encapsulated enzyme and exsolved Co nanoclusters for complete chemoenzymatic conversion of methyl parathion to 4-aminophenol. <i>Journal of Hazardous Materials</i> , 2022, 424, 127755.	6.5	10
156	Highly Dispersed Ionic Liquids in Mesoporous Molecular Sieves Enable a Record NH ₃ Absorption. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 16363-16372.	3.2	14
157	On the Role of Dioxane in the Synthesis of In-Derived MOFs. <i>Crystal Growth and Design</i> , 2021, 21, 6840-6846.	1.4	2
158	Enhanced Adsorption and Mass Transfer of Hierarchically Porous Zr-MOF Nanoarchitectures toward Toxic Chemical Removal. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58848-58861.	4.0	15
159	PolyMOFs: Molecular Level Integration of MOFs and Polymers. <i>RSC Smart Materials</i> , 2021, , 6-30.	0.1	0
160	MOF-enabled confinement and related effects for chemical catalyst presentation and utilization. <i>Chemical Society Reviews</i> , 2022, 51, 1045-1097.	18.7	148
161	Low temperature heat capacity and thermodynamic functions of Al-MIL-53-X metal-organic frameworks. <i>Chemical Thermodynamics and Thermal Analysis</i> , 2022, 5, 100027.	0.7	1
162	Effect of amine type on acidic toxic gas adsorption at ambient conditions on modified CuBTC. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107261.	3.3	7
163	Metal-Organic Network-Forming Glasses. <i>Chemical Reviews</i> , 2022, 122, 4163-4203.	23.0	121
164	Guanidyl-implanted UiO-66 as an efficient catalyst for the enhanced conversion of carbon dioxide into cyclic carbonates. <i>Dalton Transactions</i> , 2022, 51, 2567-2576.	1.6	15

#	ARTICLE	IF	CITATIONS
165	Organophosphorus chemical security from a peaceful perspective: sustainable practices in its synthesis, decontamination and detection. <i>Green Chemistry</i> , 2022, 24, 585-613.	4.6	19
166	Comparative Study of Nitro- and Azide-Functionalized Zn ^{II} -Based Coordination Polymers (CPs) as Fluorescent Turn-On Probes for Rapid and Selective Detection of H ₂ S in Living Cells. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	4
167	Investigating the Influence of Hexanuclear Clusters in Isostructural Metal-Organic Frameworks on Toxic Gas Adsorption. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 3048-3056.	4.0	18
168	Reticular Chemistry for Highly Porous Metal-Organic Frameworks: The Chemistry and Applications. <i>Accounts of Chemical Research</i> , 2022, 55, 579-591.	7.6	145
169	One-step construction of hierarchical porous channels on electrospun MOF/polymer/graphene oxide composite nanofibers for effective arsenate removal from water. <i>Chemical Engineering Journal</i> , 2022, 435, 134830.	6.6	44
170	Hypothetical yet effective: Computational identification of high-performing MOFs for CO ₂ capture. <i>Computers and Chemical Engineering</i> , 2022, 160, 107705.	2.0	11
171	Selective CO ₂ adsorption at low pressure with a Zr-based UiO-67 metal-organic framework functionalized with aminosilanes. <i>Journal of Materials Chemistry A</i> , 2022, 10, 8856-8865.	5.2	29
172	Metal-organic cages against toxic chemicals and pollutants. <i>Chemical Communications</i> , 2022, 58, 5055-5071.	2.2	24
173	Recent advances in metal-organic frameworks for gas adsorption/separation. <i>Nanoscale Advances</i> , 2022, 4, 2077-2089.	2.2	59
174	Energy Transfer in Metal-Organic Frameworks for Fluorescence Sensing. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 9970-9986.	4.0	109
175	Chiral Metal-Organic Frameworks. <i>Chemical Reviews</i> , 2022, 122, 9078-9144.	23.0	175
176	Environmentally Benign Biosynthesis of Hierarchical MOF/Bacterial Cellulose Composite Sponge for Nerve Agent Protection. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	28
177	Environmentally Benign Biosynthesis of Hierarchical MOF/Bacterial Cellulose Composite Sponge for Nerve Agent Protection. <i>Angewandte Chemie</i> , 0, , .	1.6	0
178	Metal-organic framework (MOF-808) functionalized with ethyleneamines: Selective adsorbent to capture CO ₂ under low pressure. <i>Journal of CO₂ Utilization</i> , 2022, 58, 101932.	3.3	36
179	Using recycled coffee grounds for the synthesis of ZIF-8@BC to remove Congo red in water. <i>Ecotoxicology and Environmental Safety</i> , 2022, 236, 113450.	2.9	15
180	Potential sensing of toxic chemical warfare agents (CWAs) by twisted nanographenes: A first principle approach. <i>Science of the Total Environment</i> , 2022, 824, 153858.	3.9	41
181	MOF-on-MOF nanoarchitecturing of Fe ₂ O ₃ @ZnFe ₂ O ₄ radial-heterospindles towards multifaceted superiorities for acetone detection. <i>Chemical Engineering Journal</i> , 2022, 442, 136094.	6.6	31
182	Friedländer, Knoevenagel, and Michael Reactions Employing the Same MOF: Synthesis, Structure, and		

#	ARTICLE	IF	CITATIONS
183	Zwitterionic iodonium species afford halogen bond-based porous organic frameworks. <i>Chemical Science</i> , 2022, 13, 5650-5658.	3.7	16
184	Strategic design of a bifunctional Ag(<i>scp</i>)-grafted NHC-MOF for efficient chemical fixation of CO ₂ from a dilute gas under ambient conditions. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 2583-2593.	3.0	26
185	Degradation of G-Type Nerve Agent Simulant with Phase-Inverted Spherical Polymeric-MOF Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 19747-19755.	4.0	15
186	Microwave-Assisted Synthesis of Porous Composites MOF@Textile for the Protection against Chemical and Nuclear Hazards. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 21497-21508.	4.0	28
187	Flexible Cuprous Triazolate Frameworks as Highly Stable and Efficient Electrocatalysts for CO ₂ Reduction with Tunable C ₂ H ₄ /CH ₄ Selectivity. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	50
188	Room-Temperature Reversible Chemisorption of Carbon Monoxide on Nickel(0) Complexes. <i>Journal of the American Chemical Society</i> , 2022, 144, 8818-8826.	6.6	7
189	A Porous Sulfonated 2D Zirconium Metal-Organic Framework as a Robust Platform for Proton Conduction. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	8
190	Flexible Cuprous Triazolate Frameworks as Highly Stable and Efficient Electrocatalysts for CO ₂ Reduction with Tunable C ₂ H ₄ /CH ₄ Selectivity. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
191	Ultrafast Degradation and High Adsorption Capability of a Sulfur Mustard Simulant under Ambient Conditions Using Granular UiO-66-NH ₂ Metal-Organic Gels. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 23383-23391.	4.0	17
192	A versatile route to fabricate Metal/UiO-66 (Metal=Pt, Pd, Ru) with high activity and stability for the catalytic oxidation of various volatile organic compounds. <i>Chemical Engineering Journal</i> , 2022, 448, 136900.	6.6	33
193	Hierarchical microspheres constructed by NiCo ₂ O ₄ /NiO@C composite nanorods for lithium-ion batteries with enhanced reversible capacity and cycle performance. <i>Journal of Alloys and Compounds</i> , 2022, , 165456.	2.8	5
194	<i>In situ</i> ligand-induced Ln-MOFs based on a chromophore moiety: white light emission and turn-on detection of trace antibiotics. <i>CrystEngComm</i> , 2022, 24, 4187-4200.	1.3	15
195	Triptycene-based and imine linked porous uniform microspheres for efficient and reversible scavenging of iodine from various media: a systematic study. <i>Environmental Science Advances</i> , 2022, 1, 320-330.	1.0	9
196	Superelastic and Photothermal RGO/Zr-Doped TiO ₂ Nanofibrous Aerogels Enable the Rapid Decomposition of Chemical Warfare Agents. <i>Nano Letters</i> , 2022, 22, 4368-4375.	4.5	15
197	Aggregation-Suppressed Porous Processable Hexa-Zirconium/Polymer Composites for Detoxification of a Nerve Agent Simulant. <i>Chemistry of Materials</i> , 2022, 34, 4983-4991.	3.2	7
198	Synthesis, Crystal Structures, H ₂ S, and Iodine Uptake Properties of Four New Coordination Polymers Constructed from Group 12 Transition Metal Ions and a Bidentate Sulfur Donor Ligand. <i>Crystal Growth and Design</i> , 2022, 22, 4343-4356.	1.4	6
199	Zirconium Metal-Organic Polyhedra with Dual Behavior for Organophosphate Poisoning Treatment. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 26501-26506.	4.0	9
200	Combined Deep Learning and Classical Potential Approach for Modeling Diffusion in UiO-66. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 3593-3606.	2.3	19

#	ARTICLE	IF	CITATIONS
201	Batch-screening guided continuous flow synthesis of the metal-organic framework HKUST-1 in a millifluidic droplet reactor. <i>Microporous and Mesoporous Materials</i> , 2022, 339, 112005.	2.2	4
202	Pillared-layer ultramicroporous material for highly selective SO ₂ capture from CO ₂ mixtures. <i>Separation and Purification Technology</i> , 2022, 295, 121337.	3.9	8
203	Regeneration strategies for metal-organic frameworks post acidic gas capture. <i>Coordination Chemistry Reviews</i> , 2022, 467, 214629.	9.5	9
204	Environmental Applications of Metal-Organic Frameworks and Derivatives: Recent Advances and Challenges. <i>ACS Symposium Series</i> , 0, , 257-298.	0.5	1
205	Layer-by-layer coating of MIL-100(Fe) on a cotton fabric for purification of water-soluble dyes by the combined effect of adsorption and photocatalytic degradation. <i>RSC Advances</i> , 2022, 12, 17505-17513.	1.7	4
206	Construction and application of base-stable MOFs: a critical review. <i>Chemical Society Reviews</i> , 2022, 51, 6417-6441.	18.7	147
207	Hydrogen sulfide capture and removal technologies: A comprehensive review of recent developments and emerging trends. <i>Separation and Purification Technology</i> , 2022, 298, 121448.	3.9	70
208	Aminal-Linked Porphyrinic Covalent Organic Framework for Rapid Photocatalytic Decontamination of Mustard-Gas Simulant. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	33
209	Photoinduced Phase Transition of Ce-Uio-66 to Ce-BDC-OH. <i>Inorganic Chemistry</i> , 0, , .	1.9	4
210	Analogize of metal-organic frameworks (MOFs) adsorbents functional sites for Hg ²⁺ ions removal. <i>Separation and Purification Technology</i> , 2022, 297, 121471.	3.9	22
211	Facile in-situ strategy for incorporating amphoteric dopamine into metal-organic framework with optimized degradation capacity of nerve agents simulant. <i>Chemical Engineering Journal</i> , 2022, 448, 137702.	6.6	9
212	Metal-organic frameworks (MOFs), rare earth MOFs, and rare earth functionalized MOF hybrid materials. , 2022, , 3-40.		0
213	Aminal-Linked Porphyrinic Covalent Organic Framework for Rapid Photocatalytic Decontamination of Mustard-Gas Simulant. <i>Angewandte Chemie</i> , 0, , .	1.6	2
214	Intracellular fate and immune response of porphyrin-based nano-sized metal-organic frameworks. <i>Chemosphere</i> , 2022, 307, 135680.	4.2	6
215	Heteroatom-Doped Porous Carbons as Effective Adsorbents for Toxic Industrial Gasses. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33173-33180.	4.0	8
216	Solid and Hollow Poly(<i>p</i> -xylylene) Particles Synthesis via Metal-Organic Framework-Templated Chemical Vapor Polymerization. <i>Chemistry of Materials</i> , 0, , .	3.2	4
217	Multifunctional nanomaterials and nanocomposites for sensing and monitoring of environmentally hazardous heavy metal contaminants. <i>Environmental Research</i> , 2022, 214, 113795.	3.7	17
218	Synthesis of Hierarchical Porous MOFs via Ligand Thermolysis for High-Performance Supercapacitor. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2022, 32, 4412-4421.	1.9	6

#	ARTICLE	IF	CITATIONS
219	Advances in Noble-Metal Nanoparticle-Based Fluorescence Detection of Organophosphorus Chemical Warfare Agents. <i>ACS Omega</i> , 2022, 7, 27079-27089.	1.6	2
220	Simultaneous Occurrence of Vapochromism and Vapoluminescence in Formaldehyde-Responsive Amino-Functionalized Copper(I) Polymorphic Coordination Polymers. <i>Inorganic Chemistry</i> , 2022, 61, 11734-11745.	1.9	7
221	In Search of Preferential Macrocyclic Hosts for Sulfur Mustard Sensing and Recognition: A Computational Investigation through the New Composite Method r2SCAN-3c of the Key Factors Influencing the Host-Guest Interactions. <i>Nanomaterials</i> , 2022, 12, 2517.	1.9	5
222	Experimental and Simulation Studies of the Adsorption of Methylbenzene by Fe(III)-Doped NU-1000 (Zr). <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 40052-40061.	4.0	4
223	CsCu ₂ I ₃ Nanoparticles Incorporated within a Mesoporous Metal-Organic Porphyrin Framework as a Catalyst for One-Pot Click Cycloaddition and Oxidation/Knoevenagel Tandem Reaction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 36515-36526.	4.0	16
224	Computational Investigations of Metal-Organic Frameworks as Sorbents for BTEX Removal. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 8150-8156.	2.1	4
225	Extremely Stable Sulfuric Acid Covalent Organic Framework for Highly Effective Ammonia Capture. <i>Chinese Journal of Chemistry</i> , 2022, 40, 2445-2450.	2.6	14
226	Metal-Organic Frameworks for CO ₂ Separation from Flue and Biogas Mixtures. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	46
227	Recent Advances in Research on the Effect of Physicochemical Properties on the Cytotoxicity of Metal-Organic Frameworks. <i>Small Science</i> , 2022, 2, .	5.8	20
228	Output Enhancement of Triboelectric Nanogenerators Based on Hierarchically Regular Cadmium Coordination Polymers for Photocycloaddition. <i>Inorganic Chemistry</i> , 2022, 61, 12736-12745.	1.9	13
229	Regulating the Pore Microenvironment of Microporous Metal-Organic Frameworks for Efficient Adsorption of Low-Concentration Ammonia. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 10945-10954.	3.2	7
230	Surface Assessment <i>via</i> Grid Evaluation (SuAVE) for Every Surface Curvature and Cavity Shape. <i>Journal of Chemical Information and Modeling</i> , 2022, 62, 4690-4701.	2.5	6
231	Metal-organic frameworks composed of nitro groups: Preparation and applications in adsorption and catalysis. <i>Chemical Engineering Journal</i> , 2023, 451, 138538.	6.6	39
232	Ultrahigh carbon monoxide capture by novel protic cuprous-functionalized dicationic ionic liquids through complexation interactions. <i>Chemical Engineering Journal</i> , 2023, 451, 138519.	6.6	9
233	Graphene aerogel encapsulated Co ₃ O ₄ open-ended microcage anode with enhanced performance for lithium-ion batteries. <i>Applied Surface Science</i> , 2022, 605, 154759.	3.1	7
234	Coalescing aptamers and liquid-crystals for sensing applications. <i>Microchemical Journal</i> , 2022, 183, 107980.	2.3	4
235	Soft detoxification of chemical warfare agent simulants and pesticides under pressure. <i>Organic and Biomolecular Chemistry</i> , 2022, 20, 7604-7608.	1.5	4
236	A Combined Experimental and Computational Study on the Adsorption Sites of Zinc-Based MOFs for Efficient Ammonia Capture. <i>Molecules</i> , 2022, 27, 5615.	1.7	7

#	ARTICLE	IF	CITATIONS
237	Computational Exploration of a Metal(II) Catecholate-Functionalized UiO-66 Nanoporous Metal-Organic Framework for Effective NO _x Capture. ACS Applied Nano Materials, 2022, 5, 15123-15132.	2.4	5
238	Oxime-functionalized cerium-based metal-organic framework for determination of two pesticides in water and biological samples by HPLC method. Journal of Nanostructure in Chemistry, 2024, 14, 95-112.	5.3	4
239	Metal-organic frameworks as platforms for the removal of per- and polyfluoroalkyl substances from contaminated waters. Matter, 2022, 5, 3161-3193.	5.0	13
240	Recent advances in application of metal-organic frameworks (MOFs) as adsorbent and catalyst in removal of persistent organic pollutants (POPs). Journal of Hazardous Materials, 2023, 442, 130127.	6.5	63
241	ZIF-8 modified polyvinyl alcohol/chitosan composite aerogel for efficient removal of Congo red. Journal of Solid State Chemistry, 2022, 316, 123628.	1.4	6
242	Thermally responsive morphological changes of layered coordination polymers induced by disordering/ordering of flexible alkyl chains. Dalton Transactions, 2022, 51, 17967-17972.	1.6	0
243	Cooperative Catalysis between Dual Copper Centers in a Metal-Organic Framework for Efficient Detoxification of Chemical Warfare Agent Simulants. Journal of the American Chemical Society, 2022, 144, 21046-21055.	6.6	18
244	Single-Crystalline Hydrogen-Bonded Crosslinked Organic Frameworks and Their Dynamic Guest Sorption. Accounts of Materials Research, 2022, 3, 1186-1200.	5.9	9
245	Enhanced cataluminescence sensing of MIL-53(Al)/Sb ₂ SnO ₅ composites for isobutanol detection. Measurement Science and Technology, 0, , .	1.4	0
246	Impact of Loading-Dependent Intrinsic Framework Flexibility on Adsorption in UiO-66. Journal of Physical Chemistry C, 2022, 126, 17699-17711.	1.5	7
247	A Zirconium-Organic Framework Constructed from Saddle-Shaped Tetratopic Carboxylate for High-Rate and -Efficiency Iodine Capture. Inorganic Chemistry, 2022, 61, 17109-17114.	1.9	7
248	Preparation and applications of metal-organic frameworks composed of sulfonic acid. Coordination Chemistry Reviews, 2023, 474, 214868.	9.5	25
249	MIP-202 catalyst-integrated solid-contact potentiometric chloride sensor for versatile multiphasic detection of a sulfur mustard simulant. Sensors and Actuators B: Chemical, 2023, 375, 132818.	4.0	4
250	MOFs with bridging or terminal hydroxo ligands: Applications in adsorption, catalysis, and functionalization. Coordination Chemistry Reviews, 2023, 475, 214912.	9.5	43
251	Ionic metal-organic frameworks (iMOFs): progress and prospects as ionic functional materials. Chemical Communications, 2022, 58, 13676-13698.	2.2	22
252	High-pressure study of spin-crossover phenomenon in two-dimensional Hoffmann-like complex [Fe(Fpz) ₂ Pt(CN) ₄], 2022, , .		0
253	In Situ Synthesis of Hierarchical Porous Zr-MOFs on Columnar Activated Carbon and Application in Toxic Gas Adsorption. Inorganic Chemistry, 2022, 61, 18355-18364.	1.9	1
254	Adsorption and Degradation of the G-Type Nerve Agent Soman and Its Simulant Dimethyl 4-Nitrophenylphosphate by Metal-Exchange-Modified MFU-4l Metal-Organic Frameworks. Journal of Physical Chemistry C, 2022, 126, 19159-19168.	1.5	2

#	ARTICLE	IF	CITATIONS
255	Tunable Ammonia Adsorption within Metal-Organic Frameworks with Different Unsaturated Metal Sites. <i>Molecules</i> , 2022, 27, 7847.	1.7	5
256	Gas sensing of organophosphorous compounds with III-V semiconductor plasmonics. <i>Sensors and Actuators B: Chemical</i> , 2023, 376, 132987.	4.0	5
257	A TD-DFT study of a class of fluorescent probes for detection of typical oxidants. <i>Organic and Biomolecular Chemistry</i> , 2023, 21, 315-322.	1.5	2
258	SO ₂ capture enhancement due to confined methanol within MIL-53(Al)-TDC. <i>Dalton Transactions</i> , 2022, 52, 16-19.	1.6	2
259	Zeolitic-imidazolate framework derived magnetic N-doped hierarchical carbons with ultrahigh indole-3-butyric acid adsorption capacities: Behavior and mechanism. <i>Applied Surface Science</i> , 2023, 613, 156029.	3.1	1
260	Molecular imprinting-based nanocomposite adsorbents for typical pollutants removal. <i>Journal of Hazardous Materials Letters</i> , 2023, 4, 100073.	2.0	3
261	Two Cd(II)-Based MOFs Constructed from Tris(3-F-4-carboxybiphenyl)amine: Synthesis, Crystal Structure, Luminescence Sensing towards Nitrophenols and Acetylacetone. <i>Crystals</i> , 2022, 12, 1708.	1.0	2
262	Reticular Chemistry with Art: A Case Study of Olympic Rings-Inspired Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2022, 144, 22170-22177.	6.6	12
263	A New MBH Adduct as an Efficient Ligand in the Synthesis of Metallodrugs: Characterization, Geometrical Optimization, XRD, Biological Activities, and Molecular Docking Studies. <i>Molecules</i> , 2022, 27, 8150.	1.7	0
264	General Synthesis of MOF Nanotubes via Hydrogen-Bonded Organic Frameworks toward Efficient Hydrogen Evolution Electrocatalysts. <i>ACS Nano</i> , 2022, 16, 20851-20864.	7.3	28
265	MOF-Based Materials with Sensing Potential: Pyrrolidine-Fused Chlorin at UiO-66(Hf) for Enhanced NO ₂ Detection. <i>Chemosensors</i> , 2022, 10, 511.	1.8	0
266	Nanoarchitectonics of metal-organic frameworks having hydroxy group for adsorption, catalysis, and sensing. <i>Journal of Industrial and Engineering Chemistry</i> , 2023, 119, 181-192.	2.9	8
267	Protection against Chemical Warfare Agents and Biological Threats Using Metal-Organic Frameworks as Active Layers. <i>Accounts of Materials Research</i> , 2023, 4, 168-179.	5.9	6
268	Porous framework materials for energy & environment relevant applications: A systematic review. <i>Green Energy and Environment</i> , 2024, 9, 217-310.	4.7	12
269	Multifunctional Eu ³⁺ coordination polymer for highly selective recognition of Fe ³⁺ and MnO ₄ ⁻ ions in water and efficient catalytic fixation of carbon dioxide. <i>Applied Organometallic Chemistry</i> , 0, .	1.7	0
270	Efficient Detection of Nerve Agents through Carbon Nitride Quantum Dots: A DFT Approach. <i>Nanomaterials</i> , 2023, 13, 251.	1.9	13
271	MOF-Polymer Mixed Matrix Membranes as Chemical Protective Layers for Solid-Phase Detoxification of Toxic Organophosphates. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 2933-2939.	4.0	2
272	Pore Environment Optimization of Microporous Metal-Organic Frameworks with Huddled Pyrazine Pillars for C ₂ H ₂ /CO ₂ Separation. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 4208-4215.	4.0	6

#	ARTICLE	IF	CITATIONS
273	Overview of the materials design and sensing strategies of nanopore devices. <i>Coordination Chemistry Reviews</i> , 2023, 478, 214998.	9.5	12
274	Optimization and Synthesis of a La-TMA MOF with Some Improvements in Its Properties. <i>ACS Omega</i> , 2023, 8, 262-270.	1.6	2
275	ZnFe ₂ O ₄ /ZrO ₂ /NaX zeolite nanocomposite catalyst: elaboration and its application for the removal of dimethyl 4-nitrophenyl phosphate (DMNP) chemical nerve agent simulant from water solution. <i>Research on Chemical Intermediates</i> , 0, , .	1.3	0
276	Metal-Organic Framework Materials for Production and Distribution of Ammonia. <i>Journal of the American Chemical Society</i> , 2023, 145, 1998-2012.	6.6	12
277	Carrier Variety Used in Immobilization of His6-OPH Extends Its Application Areas. <i>Polymers</i> , 2023, 15, 591.	2.0	2
278	Catalytic metal-organic framework-melamine foam composite as an efficient material for the elimination of organic pollutants. <i>Environmental Science and Pollution Research</i> , 2023, 30, 44266-44275.	2.7	2
279	Quantitatively Visualizing the Thermal Dehydration Process and Isotope Effect in Single HKUST-1 Metal-Organic Framework Particles. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 2099-2105.	2.1	2
280	Investigations of cadmium ion-doped L-histidine hydrochloride crystal growth, vibration, optical, thermal, SHG, and MTT assays for biological and optoelectronic applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2023, 34, .	1.1	0
281	Preparation of D-histidine modified zeolitic imidazolate framework-90 coated capillary column and its application in open-tube capillary electrochromatography enantioseparation. <i>Journal of Separation Science</i> , 2023, 46, .	1.3	2
282	Multifunctional Metal-Organic Framework (MOF)-Based Nanoplatfoms for Crop Protection and Growth Promotion. <i>Journal of Agricultural and Food Chemistry</i> , 0, , .	2.4	6
283	Ionic liquid hybrid metal-organic frameworks for efficient adsorption and selective separation of ammonia at high temperature. <i>Chemical Engineering Journal</i> , 2023, 464, 142728.	6.6	30
284	Boosting temperature sensing capacity within isorecticular zinc(II) metal-organic frameworks luminescent thermometers. <i>Journal of Solid State Chemistry</i> , 2023, 322, 124002.	1.4	1
285	Recent Advances in Metal-Organic Framework-Based Composites for Efficient Sequestration of Organophosphorus Pesticides (OPPs). <i>ChemistrySelect</i> , 2023, 8, .	0.7	2
286	A rapid self-healing glassy polymer/metal-organic-framework hybrid membrane at room temperature. <i>Dalton Transactions</i> , 2023, 52, 3148-3157.	1.6	0
287	Rational construction of noble metal-free Cu(I) anchored Zr-MOF for efficient fixation of CO ₂ from dilute gas at ambient conditions. <i>Microporous and Mesoporous Materials</i> , 2023, 351, 112494.	2.2	7
288	Nanoporous semi-cycloaliphatic polyaminal networks for capture of SO ₂ , NH ₃ , and H ₂ . <i>Journal of Materials Chemistry A</i> , 2023, 11, 6329-6335.	5.2	11
289	Recent advances and emerging applications of membrane contactors. <i>Chemical Engineering Journal</i> , 2023, 461, 141948.	6.6	13
290	Spontaneously super-hygroscopic MOF-gel microreactors for efficient detoxification of nerve agent simulant in atmospheric environments. <i>Applied Catalysis B: Environmental</i> , 2023, 328, 122516.	10.8	7

#	ARTICLE	IF	CITATIONS
291	Morphology control through the synthesis of metal-organic frameworks. <i>Advances in Colloid and Interface Science</i> , 2023, 314, 102864.	7.0	14
292	Zirconium-Based Metal-Organic Frameworks as Reusable Antibacterial Peroxide Carriers for Protective Textiles. <i>Chemistry of Materials</i> , 2023, 35, 2342-2352.	3.2	6
293	<sc>MOFs</sc> for desulfurization of fuel oil: Recent advances and future insights. <i>Journal of the Chinese Chemical Society</i> , 2023, 70, 789-824.	0.8	3
295	Aptamer-modified Zr-MOFs to construct nanocatalysts with engineered specificity toward paraoxon. <i>Chemical Communications</i> , 2023, 59, 4388-4391.	2.2	0
296	Phase Change Thermal Storage Materials for Interdisciplinary Applications. <i>Chemical Reviews</i> , 2023, 123, 6953-7024.	23.0	79
297	Design and Preparation of Porous Meta-Aramid Fibers Filled with Highly Exposed Activated Carbon for Chemical Hazard Protection Fabrics. <i>ACS Applied Polymer Materials</i> , 2023, 5, 2716-2726.	2.0	1
298	Efficient capture and storage of ammonia in robust aluminium-based metal-organic frameworks. <i>Communications Chemistry</i> , 2023, 6, .	2.0	7
299	Single copper sites dispersed on metal-organic frameworks boost the degradation of nerve agent simulants. <i>Science China Materials</i> , 0, , .	3.5	0
300	Closer Look at Adsorption of Sarin and Simulants on Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 18559-18567.	4.0	9
301	Putting forward a Ni-metallosalphen-based porous organic polymer for detoxification of sulfur mustard gas simulant. <i>Chemical Communications</i> , 2023, 59, 5067-5070.	2.2	6
302	Weak Bonds, Strong Effects: Enhancing the Separation Performance of UiO-66 toward Chlorobenzenes via Halogen Bonding. , 2023, 5, 1340-1349.		4
303	Modulation of Uptake and Reactivity of Nitrogen Dioxide in Metal-Organic Framework Materials. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	2
304	Competitive adsorption and selectivity of water vapor/R134a on activated carbon for indoor air purification. <i>Separation and Purification Technology</i> , 2023, 317, 123741.	3.9	8
305	MODULATION OF UPTAKE AND REACTIVITY OF NITROGEN DIOXIDE IN METAL-ORGANIC FRAMEWORK MATERIALS. <i>Angewandte Chemie</i> , 0, , .	1.6	0
306	Modeling of multi-temperature IV and V-type water vapor adsorption isotherms on activated carbons for chemical protection. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 670, 131486.	2.3	8
307	Charge Separation in Metal-Organic Framework Enables Heterogeneous Thiol Catalysis. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	8
308	Charge Separation in Metal-Organic Framework Enables Heterogeneous Thiol Catalysis. <i>Angewandte Chemie</i> , 0, , .	1.6	0
309	Dynamic Bond-Directed Synthesis of Stable Mesoporous Metal-Organic Frameworks under Room Temperature. <i>Journal of the American Chemical Society</i> , 2023, 145, 10227-10235.	6.6	5

#	ARTICLE	IF	CITATIONS
316	A mesoporous Zr-based metal-organic framework driven by the assembly of an octatopic linker. Chemical Communications, 2023, 59, 7803-7806.	2.2	2
317	Rational design of stable functional metal-organic frameworks. Materials Horizons, 2023, 10, 3257-3268.	6.4	13
337	Ionic Liquids Functionalized MOFs for Adsorption. Chemical Reviews, 2023, 123, 10432-10467.	23.0	31
358	Activity regulation and applications of metal-organic framework-based nanozymes. Rare Metals, 2024, 43, 900-914.	3.6	2
364	Fundamentals of metal-organic frameworks. , 2024, , 25-34.		0
372	Amorphous porous Fe-BTC prepared <i>via</i> the post-synthetic metal-ion metathesis of HKUST-1. Journal of Materials Chemistry A, 2023, 11, 24591-24597.	5.2	0
400	Adsorption of BBR dye by ZIF-67 and C@ZIF-67. AIP Conference Proceedings, 2024, , .	0.3	0