

Progress in adsorption-based CO<sub>2</sub> capture

Chemical Society Reviews

41, 2308-2322

DOI: 10.1039/c1cs15221a

Citation Report

#	ARTICLE	IF	CITATIONS
2	Non-covalent surface modification of metal-macrocycle framework with mono-substituted benzenes. <i>Supramolecular Chemistry</i> , 2012, 24, 867-877.	1.5	18
3	Efficacy of carbenes for CO <sub>2</sub> chemical fixation and activation by their superbasicity/alcohol: a DFT study. <i>New Journal of Chemistry</i> , 2012, 36, 2549.	1.4	27
4	CO <sub>2</sub> Capture by Metal-Organic Frameworks with van der Waals Density Functionals. <i>Journal of Physical Chemistry A</i> , 2012, 116, 4957-4964.	1.1	92
5	Dynamic porous metal-organic frameworks: synthesis, structure and sorption property. <i>CrystEngComm</i> , 2012, 14, 8569.	1.3	33
6	Biomimetic Catalysis of a Porous Iron-Based Metal-Metalloporphyrin Framework. <i>Inorganic Chemistry</i> , 2012, 51, 12600-12602.	1.9	230
7	A novel fluorinated metal-organic framework with rhombic channels. <i>Inorganic Chemistry Communication</i> , 2012, 24, 50-54.	1.8	1
8	Characterization and Comparison of the Performance of IRMOF-1, IRMOF-8, and IRMOF-10 for CO <sub>2</sub> Adsorption in the Subcritical and Supercritical Regimes. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22938-22946.	1.5	25
9	New metal complexes with di(mono)acylhydrazidate molecules. <i>Dalton Transactions</i> , 2012, 41, 10267.	1.6	18
10	Synthesis, structural characterization and photoluminescence property of four di(mono)acylhydrazidate-coordinated Cd <sup>2+</sup> and Zn <sup>2+</sup> compounds. <i>CrystEngComm</i> , 2012, 14, 8162.	1.3	20
11	Fungi-based porous carbons for CO <sub>2</sub> adsorption and separation. <i>Journal of Materials Chemistry</i> , 2012, 22, 13911.	6.7	204
12	Ligand-Assisted Enhancement of CO <sub>2</sub> Capture in Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2012, 134, 6714-6719.	6.6	95
13	Cu-TDPAT, an <i>η</i> -Type Dual-Functional Metal-Organic Framework Offering Significant Potential for Use in H <sub>2</sub> and Natural Gas Purification Processes Operating at High Pressures. <i>Journal of Physical Chemistry C</i> , 2012, 116, 16609-16618.	1.5	68
14	Assembly of Two Porous Cadmium(II) Frameworks: Selective Adsorption and Luminescent Property. <i>Crystal Growth and Design</i> , 2012, 12, 4083-4089.	1.4	54
15	Absorption of Hydrogen Bond Donors by Pyridyl Bis-Urea Crystals. <i>Chemistry of Materials</i> , 2012, 24, 4773-4781.	3.2	9
16	A Calcium Coordination Framework Having Permanent Porosity and High CO <sub>2</sub> /N <sub>2</sub> Selectivity. <i>Crystal Growth and Design</i> , 2012, 12, 2162-2165.	1.4	127
17	Microporous metal-organic framework with potential for carbon dioxide capture at ambient conditions. <i>Nature Communications</i> , 2012, 3, 954.	5.8	716
18	Trace Flue Gas Contaminants Poison Coordinatively Unsaturated Metal-Organic Frameworks: Implications for CO <sub>2</sub> Adsorption and Separation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 20480-20488.	1.5	90
19	Improving Predictions of Gas Adsorption in Metal-Organic Frameworks with Coordinatively Unsaturated Metal Sites: Model Potentials, ab initio Parameterization, and GCMC Simulations. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18899-18909.	1.5	102

#	ARTICLE	IF	CITATIONS
20	Comparative Study of Activation Methods on Tuning Gas Sorption Properties of a Metal-Organic Framework with Nanosized Ligands. <i>Inorganic Chemistry</i> , 2012, 51, 11232-11234.	1.9	51
21	Computer-Aided Design of Interpenetrated Tetrahydrofuran-Functionalized 3D Covalent Organic Frameworks for CO <sub>2</sub> Capture. <i>Crystal Growth and Design</i> , 2012, 12, 5349-5356.	1.4	37
23	Picking up 30 CO <sub>2</sub> Molecules by a Porous Metal Oxide Capsule Based on the Same Number of Receptors. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10528-10531.	7.2	28
24	Metal-organic framework (MOF)-8 nanocrystals as pseudostationary phase for capillary electrokinetic chromatography. <i>Electrophoresis</i> , 2012, 33, 2896-2902.	1.3	44
25	Spectroscopic characterization of van der Waals interactions in a metal organic framework with unsaturated metal centers: MOF-74-Mg. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 424203.	0.7	32
26	CO <sub>2</sub> Capture in Different Carbon Materials. <i>Environmental Science &amp; Technology</i> , 2012, 46, 7407-7414.	4.6	127
27	Metal-organic frameworks constructed from imidazole dicarboxylates bearing aromatic substituents at the 2-position. <i>CrystEngComm</i> , 2012, 14, 7382.	1.3	48
28	Preparation of Ni-MOF-74 membrane for CO <sub>2</sub> separation by layer-by-layer seeding technique. <i>Microporous and Mesoporous Materials</i> , 2012, 163, 169-177.	2.2	115
29	Luminescent Microporous Metal-Organic Framework with Functional Lewis Basic Sites on the Pore Surface: Specific Sensing and Removal of Metal Ions. <i>Inorganic Chemistry</i> , 2012, 51, 10089-10091.	1.9	203
30	Ultrasensitive sorption behavior of isostructural lanthanide-organic frameworks induced by lanthanide contraction. <i>Journal of Materials Chemistry</i> , 2012, 22, 21076.	6.7	48
31	Nanoporous Porphyrin Polymers for Gas Storage and Separation. <i>Macromolecules</i> , 2012, 45, 7413-7419.	2.2	108
32	Opening ZIF-8: A Catalytically Active Zeolitic Imidazolate Framework of Sodalite Topology with Unsubstituted Linkers. <i>Journal of the American Chemical Society</i> , 2012, 134, 18790-18796.	6.6	370
33	Tetraethylenepentamine-modified mesoporous adsorbents for CO <sub>2</sub> capture: effects of preparation methods. <i>Adsorption</i> , 2012, 18, 431-437.	1.4	28
34	Selective CO <sub>2</sub> Capture from Flue Gas Using Metal-Organic Frameworks-A Fixed Bed Study. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9575-9581.	1.5	176
35	Unusual room temperature CO <sub>2</sub> uptake in a fluoro-functionalized MOF: insight from Raman spectroscopy and theoretical studies. <i>Chemical Communications</i> , 2012, 48, 8487.	2.2	78
36	Metal-Organic Frameworks for Removal of Xe and Kr from Nuclear Fuel Reprocessing Plants. <i>Langmuir</i> , 2012, 28, 11584-11589.	1.6	172
37	Bifunctional 3D Cu-MOFs containing glutarates and bipyridyl ligands: selective CO <sub>2</sub> sorption and heterogeneous catalysis. <i>Dalton Transactions</i> , 2012, 41, 12759.	1.6	63
38	Organic-inorganic hybrid polyaspartimide involving polyhedral oligomeric silsesquioxane via Michael addition for CO <sub>2</sub> capture. <i>Journal of Polymer Science Part A</i> , 2012, 50, 2521-2526.	2.5	16

#	ARTICLE	IF	CITATIONS
39	Design and Synthesis of Mixed Valent Coordination Networks Containing Pyridine Appended Terpyridyl, Halide, and Dicarboxylates. <i>Crystal Growth and Design</i> , 2012, 12, 4264-4274.	1.4	23
40	Recent advances in carbon dioxide capture with metal-organic frameworks. , 2012, 2, 239-259.		301
41	Switching Kr/Xe Selectivity with Temperature in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2012, 134, 9046-9049.	6.6	160
42	Influence of Anions in Silver Supramolecular Frameworks: Structural Characteristics and Sorption Properties.. <i>Journal of the American Chemical Society</i> , 2012, 134, 9142-9145.	6.6	52
43	Selective Metal Cation Capture by Soft Anionic Metal-Organic Frameworks via Drastic Single-Crystal-to-Single-Crystal Transformations. <i>Journal of the American Chemical Society</i> , 2012, 134, 9581-9584.	6.6	121
44	Catalysis by metal nanoparticles embedded on metal-organic frameworks. <i>Chemical Society Reviews</i> , 2012, 41, 5262.	18.7	929
45	Carbon dioxide adsorption by physisorption and chemisorption interactions in piperazine-grafted Ni <sub>2</sub> (dobdc) (dobdc = 1,4-dioxido-2,5-benzenedicarboxylate). <i>Dalton Transactions</i> , 2012, 41, 11739.	1.6	30
46	A pillared metal-organic framework incorporated with 1,2,3-triazole moieties exhibiting remarkable enhancement of CO <sub>2</sub> uptake. <i>Chemical Communications</i> , 2012, 48, 8898.	2.2	77
47	Engineering ZIF-8 Thin Films for Hybrid MOF-Based Devices. <i>Advanced Materials</i> , 2012, 24, 3970-3974.	11.1	213
49	In Situ X-ray Structural Studies of a Flexible Host Responding to Incremental Gas Loading. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4913-4916.	7.2	62
50	Control of Porosity by Using Isorecticular Zeolitic Imidazolate Frameworks (IRZIFs) as a Template for Porous Carbon Synthesis. <i>Chemistry - A European Journal</i> , 2012, 18, 11399-11408.	1.7	122
52	Investigation of the synthesis, activation, and isosteric heats of CO <sub>2</sub> adsorption of the isostructural series of metal-organic frameworks M <sub>3</sub> (BTC) <sub>2</sub> (M = Cr, Fe, Ni, Cu, Mo, Ru). <i>Dalton Transactions</i> , 2012, 41, 7931.	1.6	184
53	Adsorption and molecular simulation of CO <sub>2</sub> and CH <sub>4</sub> in two-dimensional metal-organic frameworks with the same layered substrate. <i>CrystEngComm</i> , 2013, 15, 6782.	1.3	12
54	Rationally -clicked-post-modification of a highly stable metal-organic framework and its high improvement on CO <sub>2</sub> -selective capture. <i>RSC Advances</i> , 2013, 3, 15566.	1.7	29
55	Carbon dioxide (CO <sub>2</sub> ) absorption behavior of mixed matrix polymer composites containing a flexible coordination polymer. <i>Journal of Colloid and Interface Science</i> , 2013, 393, 278-285.	5.0	26
56	The strategies for improving carbon dioxide chemisorption by functionalized ionic liquids. <i>RSC Advances</i> , 2013, 3, 15518.	1.7	127
57	New amine-functionalized cobalt cluster-based frameworks with open metal sites and suitable pore sizes: multipoint interactions enhanced CO <sub>2</sub> sorption. <i>Dalton Transactions</i> , 2013, 42, 13990.	1.6	25
58	Periodic mesoporous organosilicas functionalized with a wide variety of amines for CO <sub>2</sub> adsorption. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9792.	1.3	69

#	ARTICLE	IF	CITATIONS
59	Post-combustion CO <sub>2</sub> capture with the HKUST-1 and MIL-101(Cr) metal-organic frameworks: Adsorption, separation and regeneration investigations. <i>Microporous and Mesoporous Materials</i> , 2013, 179, 191-197.	2.2	109
60	Conformational Supramolecular Isomerism in Two-Dimensional Fluorescent Coordination Polymers Based on Flexible Tetracarboxylate Ligand. <i>Crystal Growth and Design</i> , 2013, 13, 4092-4099.	1.4	46
61	Carbon, silicon, germanium, tin and lead. <i>Annual Reports on the Progress of Chemistry Section A</i> , 2013, 109, 53.	0.8	1
62	Structural diversity and properties of four complexes with 4-acyl pyrazolone derivative. <i>Polyhedron</i> , 2013, 55, 209-215.	1.0	15
63	Metal-organic frameworks for upgrading biogas via CO <sub>2</sub> adsorption to biogas green energy. <i>Chemical Society Reviews</i> , 2013, 42, 9304.	18.7	366
64	Microwave synthesis and characterization of MOF-74 (M=Ni, Mg) for gas separation. <i>Microporous and Mesoporous Materials</i> , 2013, 180, 114-122.	2.2	218
65	Zn-MOFs Containing Flexible $\beta$ -Alkane (or Alkene)-Dicarboxylates and 1,2-Bis(4-pyridyl)ethane Ligands: CO <sub>2</sub> Sorption and Photoluminescence. <i>Crystal Growth and Design</i> , 2013, 13, 4815-4823.	1.4	47
66	Synthesis of microporous organic polymers with high CO <sub>2</sub> -over-N <sub>2</sub> selectivity and CO <sub>2</sub> adsorption. <i>Journal of Materials Chemistry A</i> , 2013, 1, 3406.	5.2	134
67	Gas Sorption, Second-Order Nonlinear Optics, and Luminescence Properties of a Series of Lanthanide-Organic Frameworks Based on Nanosized Tris((4-carboxyl)phenyl)duryl)amine Ligand. <i>Inorganic Chemistry</i> , 2013, 52, 12758-12762.	1.9	96
68	Structure and Photoluminescent Properties of Lanthanide Coordination Polymers Formed by the Interweaving of Bis(triple-stranded) Helical Chains. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 5631-5640.	1.0	11
69	Third-Generation Breathing Metal-Organic Framework with Selective, Stepwise, Reversible, and Hysteretic Adsorption Properties. <i>Inorganic Chemistry</i> , 2013, 52, 12866-12868.	1.9	64
70	Amino Acid-Functionalized Ionic Liquid Solid Sorbents for Post-Combustion Carbon Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 8670-8677.	4.0	107
71	Solvent or Temperature Induced Diverse Coordination Polymers of Silver(I) Sulfate and Bipyrazole Systems: Syntheses, Crystal Structures, Luminescence, and Sorption Properties. <i>Inorganic Chemistry</i> , 2013, 52, 14018-14027.	1.9	86
72	Investigation of NaY Zeolite with adsorbed CO <sub>2</sub> by neutron powder diffraction. <i>Microporous and Mesoporous Materials</i> , 2013, 172, 95-104.	2.2	59
73	Perfluoroalkane Functionalization of NU-1000 via Solvent-Assisted Ligand Incorporation: Synthesis and CO <sub>2</sub> Adsorption Studies. <i>Journal of the American Chemical Society</i> , 2013, 135, 16801-16804.	6.6	473
74	High-Capacity Gas Storage by a Microporous Oxalamide-Functionalized NbO-Type Metal-Organic Framework. <i>Crystal Growth and Design</i> , 2013, 13, 5001-5006.	1.4	71
75	The role of membranes in post-combustion CO <sub>2</sub> capture. , 2013, 3, 318-337.		69
76	Pressure swing adsorption process for the separation of nitrogen and propylene with a MOF adsorbent MIL-100(Fe). <i>Separation and Purification Technology</i> , 2013, 110, 101-111.	3.9	39

#	ARTICLE	IF	CITATIONS
77	Facile synthesis of cost-effective porous aromatic materials with enhanced carbon dioxide uptake. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13926.	5.2	79
78	Selective gas adsorption and unique phase transition properties in a stable magnesium metal-organic framework constructed from infinite metal chains. <i>CrystEngComm</i> , 2013, 15, 9688.	1.3	22
79	A highly porous agw-type metal-organic framework and its CO <sub>2</sub> and H <sub>2</sub> adsorption capacity. <i>CrystEngComm</i> , 2013, 15, 9348.	1.3	32
80	Indium(iii)-dicarboxylic microporous frameworks with high adsorption selectivity for CO <sub>2</sub> over N <sub>2</sub> . <i>Dalton Transactions</i> , 2013, 42, 10690.	1.6	15
81	A highly porous 4,4-paddlewheel-connected NbO-type metal-organic framework with a large gas-uptake capacity. <i>Dalton Transactions</i> , 2013, 42, 11304.	1.6	34
82	Metal-organic heat carrier nanofluids. <i>Nano Energy</i> , 2013, 2, 845-855.	8.2	66
83	Review of recent advances in carbon dioxide separation and capture. <i>RSC Advances</i> , 2013, 3, 22739.	1.7	632
84	Water-controlled synthesis and single-crystal structural transformations of a cyanide-bridged W(iv)-Ni(ii) molecular wheel complex and 3D networks. <i>Chemical Communications</i> , 2013, 49, 9582.	2.2	20
85	The multifaceted dissociation chemistry of anionic aggregates containing functionalised amines and CO <sub>2</sub> . <i>Chemical Communications</i> , 2013, 49, 10233.	2.2	3
86	Two isostructural amine-functionalized 3D self-penetrating microporous MOFs exhibiting high sorption selectivity for CO <sub>2</sub> . <i>CrystEngComm</i> , 2013, 15, 2057.	1.3	32
87	Synthesis, characterization, and high temperature CO <sub>2</sub> capture of new CaO based hollow sphere sorbents. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8037.	5.2	75
88	A Water Stable Metal-Organic Framework with Optimal Features for CO <sub>2</sub> Capture. <i>Angewandte Chemie</i> , 2013, 125, 10506-10510.	1.6	66
89	A new microporous carbon material synthesized via thermolysis of a porous aromatic framework embedded with an extra carbon source for low-pressure CO <sub>2</sub> uptake. <i>Chemical Communications</i> , 2013, 49, 10269.	2.2	76
90	A porous Mn(v) coordination framework with PtS topology: assessment of the influence of a terminal nitride on CO <sub>2</sub> sorption. <i>Dalton Transactions</i> , 2013, 42, 13308.	1.6	10
91	Fabrication of a new MgO/C sorbent for CO <sub>2</sub> capture at elevated temperature. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12919.	5.2	61
92	Coordination polymer micro/nano-crystals: controlled synthesis and formation mechanism in the case of Mn <sub>2</sub> Mo(CN) <sub>8</sub> ·xH <sub>2</sub> O. <i>CrystEngComm</i> , 2013, 15, 2909.	1.3	7
93	Oxalate-extended Cd <sub>2</sub> -acylhydrazidate coordination polymers: synthesis, structure and fluorescence property. <i>CrystEngComm</i> , 2013, 15, 5919.	1.3	20
94	Quest for a highly connected robust porous metal-organic framework on the basis of a bifunctional linear linker and a rare heptanuclear zinc cluster. <i>Chemical Communications</i> , 2013, 49, 10516.	2.2	35

#	ARTICLE	IF	CITATIONS
95	New Cd <sup>2+</sup> , Pb <sup>2+</sup> complexes with acylhydrazidate molecules from in situ acylation reactions. Dalton Transactions, 2013, 42, 8771.	1.6	23
96	Stable Mg-Metal-Organic Framework (MOF) and Unstable Zn-MOF Based on Nanosized Tris((4-carboxyl)phenyliduryl)amine Ligand. Crystal Growth and Design, 2013, 13, 6-9.	1.4	67
97	Enhancing CO <sub>2</sub> adsorption enthalpy and selectivity via amino functionalization of a tetrahedral framework material. CrystEngComm, 2013, 15, 658-661.	1.3	31
98	Adsorptive removal of hazardous materials using metal-organic frameworks (MOFs): A review. Journal of Hazardous Materials, 2013, 244-245, 444-456.	6.5	1,140
99	Mixed-linker MOFs with CAU-10 structure: synthesis and gas sorption characteristics. Dalton Transactions, 2013, 42, 4840.	1.6	81
100	Synthesis, Structures and Photoluminescence Properties of a Series of Alkaline Earth Metal-Based Coordination Networks Synthesized Using Thiophene-Based Linkers. Crystal Growth and Design, 2013, 13, 326-332.	1.4	44
101	Unique (3,8)-connected lanthanide arene disulfonate metal-organic frameworks containing benzimidazole-5,6-dicarboxylic acid co-ligand: Syntheses, structures and luminescence. Journal of Solid State Chemistry, 2013, 206, 85-90.	1.4	11
102	ZnII coordination polymers constructed with malonate and bipyridyl ligands: Photoluminescence and heterogeneous catalytic reactivity. Polyhedron, 2013, 53, 166-171.	1.0	25
103	DFT study on the effect of exocyclic substituents on the proton affinity of 1-methylimidazole. Chemical Physics, 2013, 416, 21-25.	0.9	12
104	Development of microporous carbons for CO <sub>2</sub> capture by KOH activation of African palm shells. Journal of CO <sub>2</sub> Utilization, 2013, 2, 35-38.	3.3	122
105	A combined computational and experimental study of high pressure and supercritical CO <sub>2</sub> adsorption on Basolite MOFs. Microporous and Mesoporous Materials, 2013, 175, 34-42.	2.2	45
107	Porous metal-organic frameworks with high stability and selective sorption for CO <sub>2</sub> over N <sub>2</sub> . Microporous and Mesoporous Materials, 2013, 172, 61-66.	2.2	36
108	New Zn-Aminotriazolate-Dicarboxylate Frameworks: Synthesis, Structures, and Adsorption Properties. Crystal Growth and Design, 2013, 13, 2118-2123.	1.4	76
109	Dynamic Photo-switching in Metal-Organic Frameworks as a Route to Low-Energy Carbon Dioxide Capture and Release. Angewandte Chemie - International Edition, 2013, 52, 3695-3698.	7.2	309
110	Construction of a Polyhedral Metal-Organic Framework via a Flexible Octacarboxylate Ligand for Gas Adsorption and Separation. Inorganic Chemistry, 2013, 52, 3127-3132.	1.9	85
111	Shape assisted fabrication of fluorescent cages of squarate based metal-organic coordination frameworks. Chemical Communications, 2013, 49, 3937.	2.2	17
112	Activated Carbon Spheres for CO <sub>2</sub> Adsorption. ACS Applied Materials & Interfaces, 2013, 5, 1849-1855.	4.0	402
113	Critical role of small micropores in high CO <sub>2</sub> uptake. Physical Chemistry Chemical Physics, 2013, 15, 2523.	1.3	228

#	ARTICLE	IF	CITATIONS
114	Syntheses, crystal structures and luminescent properties of four Zn(ii) coordination polymers with pyrazolone derivatives and 4,4'-bipyridine. <i>CrystEngComm</i> , 2013, 15, 2873.	1.3	38
115	Microporous organic polymers for gas storage and separation applications. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5430.	1.3	181
116	A Combined Pulsed Electron Paramagnetic Resonance Spectroscopic and DFT Analysis of the $^{13}\text{C}$ and $^{13}\text{C}$ CO Adsorption on the Metal-Organic Framework $\text{Cu}_{2.97}\text{Zn}_{0.03}(\text{btc})_2$ . <i>Journal of Physical Chemistry C</i> , 2013, 117, 8231-8240.	1.5	28
117	Screening Hofmann Compounds as $\text{CO}_2$ Sorbents: Nontraditional Synthetic Route to Over 40 Different Pore-Functionalized and Flexible Pillared Cyanonickelates. <i>Inorganic Chemistry</i> , 2013, 52, 4205-4216.	1.9	61
118	Two-Dimensional Charge-Separated Metal-Organic Framework for Hysteretic and Modulated Sorption. <i>Inorganic Chemistry</i> , 2013, 52, 4198-4204.	1.9	35
119	Molecular-level Insight into Unusual Low Pressure $\text{CO}_2$ Affinity in Pillared Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2013, 135, 7172-7180.	6.6	100
120	Porous covalent-organic materials: synthesis, clean energy application and design. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2691-2718.	5.2	329
121	Mesoporous Poly(Melamine-Formaldehyde) Solid Sorbent for Carbon Dioxide Capture. <i>ChemSusChem</i> , 2013, 6, 1186-1190.	3.6	77
122	Co(II)-tricarboxylate metal-organic frameworks constructed from solvent-directed assembly for $\text{CO}_2$ adsorption. <i>Microporous and Mesoporous Materials</i> , 2013, 176, 194-198.	2.2	34
123	Isostructural Metal-Organic Frameworks Assembled from Functionalized Diisophthalate Ligands through a Ligand-Truncation Strategy. <i>Chemistry - A European Journal</i> , 2013, 19, 5637-5643.	1.7	115
124	Efficient fixation of atmospheric $\text{CO}_2$ as carbonate by lanthanide-based complex via synergistic effect of zinc ion. <i>Dalton Transactions</i> , 2013, 42, 8571.	1.6	24
125	A Water Stable Metal-Organic Framework with Optimal Features for $\text{CO}_2$ Capture. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10316-10320.	7.2	303
126	An unprecedented acylamide-functionalized 2D $\rightarrow$ 3D microporous metal-organic polycatenation framework exhibiting highly selective $\text{CO}_2$ capture. <i>Dalton Transactions</i> , 2013, 42, 9822.	1.6	32
127	Gas adsorption by nanoporous materials: Future applications and experimental challenges. <i>MRS Bulletin</i> , 2013, 38, 412-421.	1.7	65
128	Supramolecular self-assemblies as functional nanomaterials. <i>Nanoscale</i> , 2013, 5, 7098.	2.8	610
129	Activated carbons and amine-modified materials for carbon dioxide capture – a review. <i>Frontiers of Environmental Science and Engineering</i> , 2013, 7, 326-340.	3.3	134
130	Construction of transition-metal coordination polymers using multifunctional imidazole dicarboxylates as spacers. <i>CrystEngComm</i> , 2013, 15, 4885.	1.3	30
131	Mixed matrix membranes based on polyetherurethane and polyesterurethane containing silica nanoparticles for separation of $\text{CO}_2/\text{CH}_4$ gases. <i>Separation and Purification Technology</i> , 2013, 116, 1-12.	3.9	80



#	ARTICLE	IF	CITATIONS
132	Nitrogen-Rich Porous Adsorbents for CO <sub>2</sub> Capture and Storage. Chemistry - an Asian Journal, 2013, 8, 1680-1691.	1.7	103
133	Application of the piperazine-grafted CuBTTri metal-organic framework in postcombustion carbon dioxide capture. Microporous and Mesoporous Materials, 2013, 174, 74-80.	2.2	41
134	Molecular-Level Insights into the Oxidative Degradation of Grafted Amines. Chemistry - A European Journal, 2013, 19, 10543-10550.	1.7	29
135	Comparison of Conventional and HF-Free-Synthesized MIL-101 for CO <sub>2</sub> Adsorption Separation and Their Water Stabilities. Energy & Fuels, 2013, 27, 7612-7618.	2.5	26
136	MOFs for CO <sub>2</sub> capture and separation from flue gas mixtures: the effect of multifunctional sites on their adsorption capacity and selectivity. Chemical Communications, 2013, 49, 653-661.	2.2	564
137	Experiments with the titanium dioxide-ruthenium tris-bipyridine-nickel cyclam system for the photocatalytic reduction of CO <sub>2</sub> . Green Processing and Synthesis, 2013, 2, .	1.3	0
138	Syntheses, crystal structures, and photoluminescent properties of two new Cd(II) coordination polymers based on biphenyl-2,2',4,4'-tetracarboxylate and dipyrindyl-containing ligands. Journal of Coordination Chemistry, 2013, 66, 3979-3988.	0.8	20
139	Structure and Properties of [Al <sub>4</sub> (OH) <sub>8</sub> (C <sub>6</sub> H <sub>4</sub> (CO <sub>2</sub> ) <sub>2</sub> ) <sub>2</sub> ] <sub>n</sub> ·xH <sub>2</sub> O a Layered Aluminum Phthalate. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 2785-2789.	0.6	17
140	Guest effect on spin-crossover frameworks. Reviews in Inorganic Chemistry, 2014, 34, 199-216.	1.8	31
141	Anhydrous Lanthanide MOFs and Direct Photoluminescent Sensing for Polyoxometalates in Aqueous Solution. Chemistry - A European Journal, 2014, 20, 3712-3723.	1.7	71
142	Cross-linked polymers of diethynylbenzene and phenylacetylene as new polymer precursors for high-yield synthesis of high-performance nanoporous activated carbons for supercapacitors, hydrogen storage, and CO <sub>2</sub> capture. Journal of Materials Chemistry A, 2014, 2, 20316-20330.	5.2	40
143	Carbon Dioxide Capture and Dyes Separation in a Porous Framework with Anionic Sqi Net. International Journal of Nanoscience, 2014, 13, 1460001.	0.4	0
145	Amide and N-oxide functionalization of T-shaped ligands for isorecticular MOFs with giant enhancements in CO <sub>2</sub> separation. Chemical Communications, 2014, 50, 14631-14634.	2.2	107
146	Porous crystals as active catalysts for the synthesis of cyclic carbonates. Journal of Applied Polymer Science, 2014, 131, .	1.3	40
148	Structures and properties of gallium-MOFs with MIL-53-topology based on aliphatic linker molecules. Microporous and Mesoporous Materials, 2014, 200, 311-316.	2.2	26
149	Hysteretic adsorption of CO <sub>2</sub> onto a Cu <sub>2</sub> (pzdcbpy) porous coordination polymer and concomitant framework distortion. Dalton Transactions, 2014, 43, 10877-10884.	1.6	25
151	Enhanced Uptake and Selectivity of CO <sub>2</sub> Adsorption in a Hydrostable Metal-Organic Frameworks via Incorporating Methylol and Methyl Groups. ACS Applied Materials & Interfaces, 2014, 6, 16932-16940.	4.0	46
152	Synthesis of a Rigid C <sub>3</sub> v-Symmetric Tris-salicylaldehyde as a Precursor for a Highly Porous Molecular Cube. Chemistry - A European Journal, 2014, 20, 16707-16720.	1.7	83

#	ARTICLE	IF	CITATIONS
154	Architectures in Copper Metal-Organic Frameworks from 4-Substituted Anionic 1,2,4-Triazoles. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 3125-3132.	1.0	5
155	Evolution of an Adenine-Copper Cluster to a Highly Porous Cuboidal Framework: Solution-Phase Ripening and Gas Adsorption Properties. <i>Chemistry - A European Journal</i> , 2014, 20, 12262-12268.	1.7	29
156	Design, Synthesis, and X-Ray Crystal Structure of a Fullerene-Linked Metal-Organic Framework. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 160-163.	7.2	55
157	Aminosilanes Grafted to Basic Alumina as CO <sub>2</sub> Adsorbents: Role of Grafting Conditions on CO <sub>2</sub> Adsorption Properties. <i>ChemSusChem</i> , 2014, 7, 3145-3156.	3.6	34
158	Metal organic frameworks (MOF) as CO <sub>2</sub> adsorbents. <i>Russian Journal of Organic Chemistry</i> , 2014, 50, 1551-1555.	0.3	8
160	Electrospun Nanofibrous Sorbents and Membranes for Carbon Dioxide Capture. <i>Nanostructure Science and Technology</i> , 2014, , 249-263.	0.1	3
161	Carbon Dioxide Adsorption Behavior of Modified HKUST-1. <i>International Journal of Nanoscience</i> , 2014, 13, 1460002.	0.4	1
162	Post-metalation of porous aromatic frameworks for highly efficient carbon capture from CO <sub>2</sub> + N <sub>2</sub> and CH <sub>4</sub> + N <sub>2</sub> mixtures. <i>Polymer Chemistry</i> , 2014, 5, 144-152.	1.9	101
163	Recent Advances in Carbon Dioxide Capture, Fixation, and Activation by using N-Heterocyclic Carbenes. <i>ChemSusChem</i> , 2014, 7, 962-998.	3.6	162
164	Alkylamine-Ethered Stable Metal-Organic Framework for CO <sub>2</sub> Capture from Flue Gas. <i>ChemSusChem</i> , 2014, 7, 734-737.	3.6	131
165	Insight into the mechanism of CO <sub>2</sub> adsorption on Cu-BTC and its composites with graphite oxide or aminated graphite oxide. <i>Chemical Engineering Journal</i> , 2014, 239, 399-407.	6.6	71
166	Hydrothermal Synthesis, Characterization and Gas Adsorption Study of a Zn(II) Based 1D Coordination Polymer. <i>Proceedings of the National Academy of Sciences India Section A - Physical Sciences</i> , 2014, 84, 213-219.	0.8	4
167	Tailoring microporosity and nitrogen content in carbons for achieving high uptake of CO <sub>2</sub> at ambient conditions. <i>Adsorption</i> , 2014, 20, 287-293.	1.4	33
168	Adsorption separation of CO <sub>2</sub> and N <sub>2</sub> on MIL-101 metal-organic framework and activated carbon. <i>Journal of the Iranian Chemical Society</i> , 2014, 11, 741-749.	1.2	11
169	Crystal Engineering of an nbo Topology Metal-Organic Framework for Chemical Fixation of CO <sub>2</sub> under Ambient Conditions. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2615-2619.	7.2	505
170	Armored MOFs: Enforcing Soft Microporous MOF Nanocrystals with Hard Mesoporous Silica. <i>Journal of the American Chemical Society</i> , 2014, 136, 5631-5639.	6.6	157
171	1D and 2D Thiazole-Based Copper(II) Coordination Polymers: Synthesis and Applications in Carbon Dioxide Capture. <i>ChemPlusChem</i> , 2014, 79, 406-412.	1.3	18
172	Covalent Heme Framework as a Highly Active Heterogeneous Biomimetic Oxidation Catalyst. <i>Chemistry of Materials</i> , 2014, 26, 1639-1644.	3.2	76

#	ARTICLE	IF	CITATIONS
173	Metal-organic frameworks based on flexible ligands (FL-MOFs): structures and applications. <i>Chemical Society Reviews</i> , 2014, 43, 5867-5895.	18.7	739
174	High Pressure Adsorption of CO <sub>2</sub> and CH <sub>4</sub> on Zr-MOFs. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 15500-15507.	1.8	63
176	Composites of metal-organic frameworks: Preparation and application in adsorption. <i>Materials Today</i> , 2014, 17, 136-146.	8.3	349
177	Carbon dioxide adsorption on MIL-100(M) (M=Cr, V, Sc) metal-organic frameworks: IR spectroscopic and thermodynamic studies. <i>Microporous and Mesoporous Materials</i> , 2014, 190, 234-239.	2.2	38
178	High CO <sub>2</sub> /N <sub>2</sub> and CO <sub>2</sub> /CH <sub>4</sub> selectivity in a chiral metal-organic framework with contracted pores and multiple functionalities. <i>Chemical Communications</i> , 2014, 50, 6886-6889.	2.2	63
179	Electrochemical Synthesis of a Microporous Conductive Polymer Based on a Metal-Organic Framework Thin Film. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6454-6458.	7.2	119
180	Study of van der Waals bonding and interactions in metal organic framework materials. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 133002.	0.7	34
181	CO <sub>2</sub> adsorption on LTA zeolites: Effect of mesoporosity. <i>Applied Surface Science</i> , 2014, 311, 107-109.	3.1	51
182	Metal-Organic Frameworks for Air Purification of Toxic Chemicals. <i>Chemical Reviews</i> , 2014, 114, 5695-5727.	23.0	825
183	Construction of Bis-pyrazole Based Co(II) Metal-Organic Frameworks and Exploration of Their Chirality and Magnetic Properties. <i>Crystal Growth and Design</i> , 2014, 14, 2853-2865.	1.4	32
184	Enhanced noble gas adsorption in Ag@MOF-74Ni. <i>Chemical Communications</i> , 2014, 50, 466-468.	2.2	153
185	A highly porous NbO type metal-organic framework constructed from an expanded tetracarboxylate. <i>Chemical Communications</i> , 2014, 50, 1552.	2.2	44
186	Metal-Cation-Directed <i>de Novo</i> Assembly of a Functionalized Guest Molecule in the Nanospace of a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2014, 136, 1202-1205.	6.6	168
187	CO <sub>2</sub> capture performance of HKUST-1 in a sound assisted fluidized bed. <i>Chemical Engineering Journal</i> , 2014, 239, 75-86.	6.6	77
188	Construction of Two Microporous Metal-Organic Frameworks with flu and pyr Topologies Based on Zn <sub>4</sub> (1/4) <sub>3</sub> -OH) <sub>2</sub> (CO <sub>2</sub> ) <sub>6</sub> and Zn <sub>6</sub> (1/4) <sub>6</sub> -O)(CO <sub>2</sub> ) <sub>6</sub> Secondary Building Units. <i>Inorganic Chemistry</i> , 2014, 53, 1032-1038.	1.9	48
189	Dichotomous adsorption behaviour of dyes on an amino-functionalised metal-organic framework, amino-MIL-101(Al). <i>Journal of Materials Chemistry A</i> , 2014, 2, 193-203.	5.2	343
190	Transient breakthroughs of CO <sub>2</sub> /CH <sub>4</sub> and C <sub>3</sub> H <sub>6</sub> /C <sub>3</sub> H <sub>8</sub> mixtures in fixed beds packed with Ni-MOF-74. <i>Chemical Engineering Science</i> , 2014, 117, 407-415.	1.9	49
191	Adsorbate Interactions in Metal Organic Frameworks Studied by Vibrational Spectroscopy. <i>Comments on Inorganic Chemistry</i> , 2014, 34, 78-102.	3.0	10

#	ARTICLE	IF	CITATIONS
192	Carbon dioxide adsorption using amine-functionalized mesocellular siliceous foams. <i>Journal of Materials Science</i> , 2014, 49, 7585-7596.	1.7	12
193	CO <sub>2</sub> adsorption on amine-modified mesoporous silicas. <i>Journal of Porous Materials</i> , 2014, 21, 859-867.	1.3	11
194	Correlation of Mesh Size of Metal-Organic Carboxylate Layer with Degree of Interpenetration in Pillared-Layer Frameworks. <i>Crystal Growth and Design</i> , 2014, 14, 5608-5616.	1.4	21
195	Two novel four-coordinated zinc(II) polymers: Synthesis, structures, and properties. <i>Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya</i> , 2014, 40, 539-546.	0.3	0
196	Microporous adsorbents for CO <sub>2</sub> capture – a case for microporous polymers?. <i>Materials Today</i> , 2014, 17, 397-403.	8.3	111
197	Robust tri(4-ethynylphenyl)amine-based porous aromatic frameworks for carbon dioxide capture. <i>Polymer Chemistry</i> , 2014, 5, 2266.	1.9	49
198	A porous metal organic framework with a bcu-type topology involving in situ ligand formation – synthesis, structure, magnetic property and gas adsorption studies. <i>CrystEngComm</i> , 2014, 16, 369-374.	1.3	48
199	New Zn <sup>2+</sup> coordination polymers with mixed triazolate/tetrazolate and acylhydrazidate as linkers. <i>CrystEngComm</i> , 2014, 16, 2692.	1.3	19
200	Highly microporous polymer-based carbons for CO <sub>2</sub> and H <sub>2</sub> adsorption. <i>RSC Advances</i> , 2014, 4, 14795.	1.7	23
201	Porous Molecular Crystals by Macrocyclic Coordination Supramolecules. <i>Journal of the American Chemical Society</i> , 2014, 136, 14883-14895.	6.6	48
203	A robust porous pillar-chained Cd-framework with selective sorption for CO <sub>2</sub> and guest-driven tunable luminescence. <i>CrystEngComm</i> , 2014, 16, 3848.	1.3	18
204	A new tetrazolate zeolite-like framework for highly selective CO <sub>2</sub> /CH <sub>4</sub> and CO <sub>2</sub> /N <sub>2</sub> separation. <i>Chemical Communications</i> , 2014, 50, 12101-12104.	2.2	91
205	An efficient one-step condensation and activation strategy to synthesize porous carbons with optimal micropore sizes for highly selective CO <sub>2</sub> adsorption. <i>Nanoscale</i> , 2014, 6, 4148-4156.	2.8	80
206	Construction of acylhydrazidate-extended metal-organic frameworks. <i>Dalton Transactions</i> , 2014, 43, 11646.	1.6	21
207	Synthesis optimization of the ultra-microporous [Ni <sub>3</sub> (HCOO) <sub>6</sub> ] framework to improve its CH <sub>4</sub> /N <sub>2</sub> separation selectivity. <i>RSC Advances</i> , 2014, 4, 42326-42336.	1.7	25
208	Dynamic 2D manganese(II) isonicotinate framework with reversible crystal-to-amorphous transformation and selective guest adsorption. <i>CrystEngComm</i> , 2014, 16, 4959.	1.3	21
209	Four cluster-containing highly connected coordination networks: syntheses, structures, and properties. <i>CrystEngComm</i> , 2014, 16, 6372.	1.3	19
210	Selective adsorption of CO <sub>2</sub> /CH <sub>4</sub> and CO <sub>2</sub> /N <sub>2</sub> within a charged metal-organic framework. <i>Journal of Materials Chemistry A</i> , 2014, 2, 17771-17778.	5.2	80

#	ARTICLE	IF	CITATIONS
211	Structure–property relationships of water adsorption in metal–organic frameworks. <i>New Journal of Chemistry</i> , 2014, 38, 3102-3111.	1.4	252
212	Control of porosity of novel carbazole-modified polytriazine frameworks for highly selective separation of CO <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , 2014, 2, 7795-7801.	5.2	72
213	Water Stability and Adsorption in Metal–Organic Frameworks. <i>Chemical Reviews</i> , 2014, 114, 10575-10612.	23.0	1,951
214	Cadmium coordination polymers based on flexible bis(imidazole) ligands: A rare example for doublet of doublet cadmium polyhedron arrangements. <i>Journal of Molecular Structure</i> , 2014, 1075, 147-153.	1.8	5
215	Metallosalen-based microporous organic polymers: synthesis and carbon dioxide uptake. <i>RSC Advances</i> , 2014, 4, 37767-37772.	1.7	14
216	Targeted Manipulation of Metal–Organic Frameworks To Direct Sorption Properties. <i>ChemPhysChem</i> , 2014, 15, 823-839.	1.0	46
217	From Molecules to Materials: Computational Design of N-Containing Porous Aromatic Frameworks for CO <sub>2</sub> Capture. <i>ChemPhysChem</i> , 2014, 15, 1772-1778.	1.0	11
218	High storage capacity and separation selectivity for C <sub>2</sub> hydrocarbons over methane in the metal–organic framework Cu–TDPAT. <i>Journal of Materials Chemistry A</i> , 2014, 2, 15823-15828.	5.2	102
219	Metal-directed assembly of coordination polymers with the versatile ligand 2-(1H-benzotriazol-1-yl) acetic acid: from discrete structures to two-dimensional networks. <i>CrystEngComm</i> , 2014, 16, 2660.	1.3	44
220	Development of a photo-electrochemical (PEC) reactor to convert carbon dioxide into methanol for biorefining. , 2014, , 186-215.		1
221	A novel porous MgO sorbent fabricated through carbon insertion. <i>Journal of Materials Chemistry A</i> , 2014, 2, 12014-12022.	5.2	41
222	Evaluating different classes of porous materials for carbon capture. <i>Energy and Environmental Science</i> , 2014, 7, 4132-4146.	15.6	186
223	Comprehensive study of carbon dioxide adsorption in the metal–organic frameworks M <sub>2</sub> (dobdc) (M = Mg, Mn, Fe, Co, Ni, Cu, Zn). <i>Chemical Science</i> , 2014, 5, 4569-4581.	3.7	342
224	Two highly connected frameworks and one polythreading architecture based on multidentate N-donor ligands: Syntheses, structures, characterizations and photoluminescent properties. <i>Inorganic Chemistry Communication</i> , 2014, 49, 155-158.	1.8	9
225	Zinc Metal–Organic Frameworks Based on a Flexible Benzylaminetetracarboxylic Acid and Bipyridine Colinkers. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 3133-3139.	1.0	3
226	Organic Cation Templated Synthesis of Three Zinc–2,5-Thiophenedicarboxylate Frameworks for Selective Gas Sorption. <i>Crystal Growth and Design</i> , 2014, 14, 3493-3498.	1.4	19
227	Integration of an Inorganic Semiconductor with a Metal–Organic Framework: A Platform for Enhanced Gaseous Photocatalytic Reactions. <i>Advanced Materials</i> , 2014, 26, 4783-4788.	11.1	380
228	Analysis of High and Selective Uptake of CO <sub>2</sub> in an Oxamide–Containing {Cu <sub>2</sub> (OOCR) <sub>4</sub> }–Based Metal–Organic Framework. <i>Chemistry - A European Journal</i> , 2014, 20, 7317-7324.	1.7	119

#	ARTICLE	IF	CITATIONS
229	Probing the potential of polyester for CO <sub>2</sub> capture. Journal of Environmental Sciences, 2014, 26, 1423-1427.	3.2	16
230	Divergent Kinetic and Thermodynamic Hydration of a Porous Cu(II) Coordination Polymer with Exclusive CO <sub>2</sub> Sorption Selectivity. Journal of the American Chemical Society, 2014, 136, 10906-10909.	6.6	227
231	A set of alkali and alkaline-earth coordination polymers based on the ligand 2-(1H-benzotriazol-1-yl) acetic acid: Effects the radius of metal ions on structures and properties. Journal of Solid State Chemistry, 2014, 219, 55-66.	1.4	19
232	Oligo( <i>p</i> -phenyleneethynylene)-Derived Porous Luminescent Nanoscale Coordination Polymer of Gd <sup>III</sup> : Bimodal Imaging and Nitroaromatic Sensing. Journal of Physical Chemistry C, 2014, 118, 12241-12249.	1.5	36
233	Mesoporous architectures with highly crystallized frameworks. Journal of Materials Chemistry A, 2014, 2, 12096-12103.	5.2	26
234	A Combinatorial Approach towards Water-Stable Metal-Organic Frameworks for Highly Efficient Carbon Dioxide Separation. ChemSusChem, 2014, 7, 2791-2795.	3.6	82
235	Zn(II)-Benzotriazolate Clusters Based Amide Functionalized Porous Coordination Polymers with High CO <sub>2</sub> Adsorption Selectivity. Inorganic Chemistry, 2014, 53, 8842-8844.	1.9	62
236	Highly selective separation of small hydrocarbons and carbon dioxide in a metal-organic framework with open copper(ii) coordination sites. RSC Advances, 2014, 4, 23058.	1.7	35
237	Advancement of sorption-based heat transformation by a metal coating of highly-stable, hydrophilic aluminium fumarate MOF. RSC Advances, 2014, 4, 24073-24082.	1.7	231
238	A novel acylamide MOF showing self-catenated h <sub>x</sub> g-d-4-Fddd nets with 3-fold interpenetration and highly selective adsorption of CO <sub>2</sub> over N <sub>2</sub> , CH <sub>4</sub> , and CO. Inorganic Chemistry Communication, 2014, 49, 56-58.	1.8	15
239	Facilitated separation of CO <sub>2</sub> and SO <sub>2</sub> through supported liquid membranes using carboxylate-based ionic liquids. Journal of Membrane Science, 2014, 471, 227-236.	4.1	91
240	Metal-Organic Frameworks for Oxygen Storage. Angewandte Chemie - International Edition, 2014, 53, 14092-14095.	7.2	106
241	Theoretical Modeling of Spin Crossover in Metal-Organic Frameworks: [Fe(pz) <sub>2</sub> Pt(CN) <sub>4</sub> ] as a Case Study. Inorganic Chemistry, 2014, 53, 11020-11028.	1.9	38
242	A 3-D diamondoid MOF catalyst based on in situ generated [Cu(L) <sub>2</sub> ] N-heterocyclic carbene (NHC) linkers: hydroboration of CO <sub>2</sub> . Chemical Communications, 2014, 50, 11760-11763.	2.2	70
243	Formation Mechanism of the Secondary Building Unit in a Chromium Terephthalate Metal-Organic Framework. Chemistry of Materials, 2014, 26, 6401-6409.	3.2	33
244	Solvent/Temperature and Dipyridyl Ligands Induced Diverse Coordination Polymers Based on 3-(2,5-Dicarboxylphenyl)pyridine. Crystal Growth and Design, 2014, 14, 1110-1127.	1.4	103
245	Selective Capture of Carbon Dioxide under Humid Conditions by Hydrophobic Chabazite-Type Zeolitic Imidazolate Frameworks. Angewandte Chemie - International Edition, 2014, 53, 10645-10648.	7.2	225
246	Hydrogen storage in nanoporous materials. , 2014, , 410-450.		2

#	ARTICLE	IF	CITATIONS
247	Synthesis of metal-organic-framework related core-shell heterostructures and their application to ion enrichment in aqueous conditions. <i>Chemical Communications</i> , 2014, 50, 7686.	2.2	22
248	Synthesis and Characterization of Two Lanthanide ( $Gd^{3+}$ and $Dy^{3+}$ )-Based Three-Dimensional Metal Organic Frameworks with Squashed Metallomacrocyclic Type Building Blocks and Their Magnetic, Sorption, and Fluorescence Properties Study. <i>Crystal Growth and Design</i> , 2014, 14, 1287-1295.	1.4	93
249	Programming MIL-101Cr for selective and enhanced $CO_2$ adsorption at low pressure by postsynthetic amine functionalization. <i>Dalton Transactions</i> , 2014, 43, 1338-1347.	1.6	69
250	Synthesis and characterization of conductive copper-based metal-organic framework/graphene-like composites. <i>Materials Chemistry and Physics</i> , 2014, 147, 744-750.	2.0	54
251	Nanoporous metal organic framework materials for smart applications. <i>Materials Science and Technology</i> , 2014, 30, 1598-1612.	0.8	87
252	Multiscale Modeling of Water in Mg-MOF-74: From Electronic Structure Calculations to Adsorption Isotherms. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16218-16227.	1.5	29
253	Utilising hinged ligands in MOF synthesis: a covalent linking strategy for forming 3D MOFs. <i>CrystEngComm</i> , 2014, 16, 6364-6371.	1.3	10
254	Nitrogen-Doped Carbons: Remarkably Stable Materials for $CO_2$ Capture. <i>Energy &amp; Fuels</i> , 2014, 28, 2727-2731.	2.5	59
255	Enhanced $CO_2/N_2$ selectivity in amidoxime-modified porous carbon. <i>Carbon</i> , 2014, 67, 457-464.	5.4	92
256	Crystallographic studies of gas sorption in metal-organic frameworks. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2014, 70, 404-422.	0.5	79
257	Introduction of $\pi$ -Complexation into Porous Aromatic Framework for Highly Selective Adsorption of Ethylene over Ethane. <i>Journal of the American Chemical Society</i> , 2014, 136, 8654-8660.	6.6	383
258	Preparation and Adsorption Performance of $GrO@Cu-BTC$ for Separation of $CO_2/CH_4$ . <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 11176-11184.	1.8	124
259	Metal-Organic Frameworks Reactivate Deceased Diatoms to be Efficient $CO_2$ Absorbents. <i>Advanced Materials</i> , 2014, 26, 1229-1234.	11.1	44
260	Microporous Metal-Organic Frameworks for Gas Separation. <i>Chemistry - an Asian Journal</i> , 2014, 9, 1474-1498.	1.7	183
261	Water adsorption in MOFs: fundamentals and applications. <i>Chemical Society Reviews</i> , 2014, 43, 5594-5617.	18.7	1,094
262	Syntheses, X-ray structures, gas adsorption and luminescent properties of three coordination polymers of $Zn^{II}$ dicarboxylates mixed with a linear, neutral, and rigid N-donor ligand. <i>CrystEngComm</i> , 2014, 16, 4783-4795.	1.3	38
263	A triazine functionalized porous organic polymer: excellent $CO_2$ storage material and support for designing Pd nanocatalyst for $C-C$ cross-coupling reactions. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11642.	5.2	138
264	Metal-Organic Frameworks with Precisely Designed Interior for Carbon Dioxide Capture in the Presence of Water. <i>Journal of the American Chemical Society</i> , 2014, 136, 8863-8866.	6.6	369

#	ARTICLE	IF	CITATIONS
265	Advancing Adsorption and Membrane Separation Processes for the Gigaton Carbon Capture Challenge. Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 479-505.	3.3	79
266	Complexity of CO <sub>2</sub> adsorption on nanoporous sulfur-doped carbons – Is surface chemistry an important factor?. Carbon, 2014, 74, 207-217.	5.4	109
267	Synthesis and Characterization of Functionalized Metal-organic Frameworks. Journal of Visualized Experiments, 2014, , e52094.	0.2	3
271	Layered Graphene–Hexagonal BN Nanocomposites: Experimentally Feasible Approach to Charge-Induced Switchable CO <sub>2</sub> Capture. ChemSusChem, 2015, 8, 2987-2993.	3.6	43
272	Effect of catalyst concentration and high-temperature activation on the CO <sub>2</sub> adsorption of carbon nanospheres prepared by solvothermal carbonization of β <sup>2</sup> -cyclodextrin. Journal of Materials Research, 2015, 30, 1761-1771.	1.2	8
273	Conductive Graphitic Carbon Nitride as an Ideal Material for Electrocatalytically Switchable CO <sub>2</sub> Capture. Scientific Reports, 2015, 5, 17636.	1.6	60
274	Two supramolecules constructed from 2-o-chlorophenylimidazole dicarboxylate: Syntheses, crystal structures, and thermal properties. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2015, 41, 524-531.	0.3	2
275	Adsorption of Uranyl ions on Amine-functionalization of MIL-101(Cr) Nanoparticles by a Facile Coordination-based Post-synthetic strategy and X-ray Absorption Spectroscopy Studies. Scientific Reports, 2015, 5, 13514.	1.6	78
276	Recent Developments in Membrane Technologies for CO <sub>2</sub> Separation. , 2015, , 85-133.		2
278	Preliminary Design of a Vacuum Pressure Swing Adsorption Process for Natural Gas Upgrading Based on Amino-Functionalized MIL-53. Chemical Engineering and Technology, 2015, 38, 1183-1194.	0.9	16
279	A Cationic MOF with High Uptake and Selectivity for CO <sub>2</sub> due to Multiple CO <sub>2</sub> -philic Sites. Chemistry - A European Journal, 2015, 21, 16525-16531.	1.7	72
280	Combination of Optimization and Metalated-Ligand Exchange: An Effective Approach to Functionalize UiO-66(Zr) MOFs for CO <sub>2</sub> Separation. Chemistry - A European Journal, 2015, 21, 17246-17255.	1.7	82
281	Direct Air Capture of CO <sub>2</sub> by Physisorbent Materials. Angewandte Chemie - International Edition, 2015, 54, 14372-14377.	7.2	382
282	Tailoring the Optical Absorption of Water-Stable Zr <sup>IV</sup> - and Hf <sup>IV</sup> -Based Metal-Organic Framework Photocatalysts. Chemistry - an Asian Journal, 2015, 10, 2660-2668.	1.7	62
283	Exploiting Large-Pore Metal-Organic Frameworks for Separations through Entropic Molecular Mechanisms. ChemPhysChem, 2015, 16, 2046-2067.	1.0	27
284	Generalized Mechanochemical Synthesis of Biomass-Derived Sustainable Carbons for High Performance CO <sub>2</sub> Storage. Advanced Energy Materials, 2015, 5, 1500867.	10.2	130
285	Functionalization of Metal-Organic Frameworks for Enhanced Stability under Humid Carbon Dioxide Capture Conditions. ChemSusChem, 2015, 8, 3405-3409.	3.6	35
286	Rational Design and Synthesis of a Highly Porous Copper-Based Interpenetrated Metal-Organic Framework for High CO <sub>2</sub> and H <sub>2</sub> Adsorption. ChemPlusChem, 2015, 80, 1259-1266.	1.3	9



#	ARTICLE	IF	CITATIONS
287	Gas promotes the crystallization of nano-sized metal-organic frameworks in ionic liquid. <i>Chemical Communications</i> , 2015, 51, 11445-11448.	2.2	28
288	Microporous covalent triazine polymers: efficient Friedel-Crafts synthesis and adsorption/storage of CO <sub>2</sub> and CH <sub>4</sub> . <i>Journal of Materials Chemistry A</i> , 2015, 3, 6792-6797.	5.2	160
289	Adsorbents for CO <sub>2</sub> Capture. <i>Springer Briefs in Molecular Science</i> , 2015, , 25-41.	0.1	0
290	Ultrafast high-performance extraction of uranium from seawater without pretreatment using an acylamide- and carboxyl-functionalized metal-organic framework. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13724-13730.	5.2	161
291	Gas sensing using porous materials for automotive applications. <i>Chemical Society Reviews</i> , 2015, 44, 4290-4321.	18.7	406
292	A microporous lanthanum metal-organic framework as a bi-functional chemosensor for the detection of picric acid and Fe <sup>3+</sup> ions. <i>Dalton Transactions</i> , 2015, 44, 13340-13346.	1.6	114
293	Emerging CO <sub>2</sub> capture systems. <i>International Journal of Greenhouse Gas Control</i> , 2015, 40, 126-166.	2.3	352
294	Unraveling the multi-functional behavior in a series of Metal Organic Frameworks. <i>Journal of Solid State Chemistry</i> , 2015, 229, 103-111.	1.4	6
295	Toward understanding the activity of cobalt carbonic anhydrase: A comparative study of zinc- and cobalt-cyclen. <i>Applied Catalysis A: General</i> , 2015, 492, 151-159.	2.2	11
296	Preparation and enhanced CO <sub>2</sub> adsorption capacity of UiO-66/graphene oxide composites. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 27, 102-107.	2.9	224
297	4-(4-Carboxyphenoxy)phthalate-based coordination polymers and their application in sensing nitrobenzene. <i>Dalton Transactions</i> , 2015, 44, 1655-1663.	1.6	43
298	A Microporous Co <sup>2+</sup> Metal Organic Framework with Single-Crystal to Single-Crystal Transformation Properties and High CO <sub>2</sub> Uptake. <i>Crystal Growth and Design</i> , 2015, 15, 185-193.	1.4	24
299	Perceptive Approach in Assessing Rigidity versus Flexibility in the Construction of Diverse Metal-Organic Coordination Networks: Synthesis, Structure, and Magnetism. <i>Crystal Growth and Design</i> , 2015, 15, 1407-1421.	1.4	42
300	Hysteretic Gas and Vapor Sorption in Flexible Interpenetrated Lanthanide-Based Metal-Organic Frameworks with Coordinated Molecular Gating via Reversible Single-Crystal-to-Single-Crystal Transformation for Enhanced Selectivity. <i>Chemistry of Materials</i> , 2015, 27, 1502-1516.	3.2	76
301	Polar Group and Defect Engineering in a Metal-Organic Framework: Synergistic Promotion of Carbon Dioxide Sorption and Conversion. <i>ChemSusChem</i> , 2015, 8, 878-885.	3.6	193
302	Utilizing transient breakthroughs for evaluating the potential of Kureha carbon for CO <sub>2</sub> capture. <i>Chemical Engineering Journal</i> , 2015, 269, 135-147.	6.6	22
303	Carbon dioxide adsorption characteristics of synthesized MgO with various porous structures achieved by varying calcination temperature. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2015, 470, 39-45.	2.3	36
304	Amine impregnated porous silica gel sorbents synthesized from water-glass precursors for CO <sub>2</sub> capturing. <i>Chemical Engineering Journal</i> , 2015, 269, 335-342.	6.6	62

#	ARTICLE	IF	CITATIONS
305	A New Porous MOF with Two Uncommon Metal-“Carboxylate”-Pyrazolate Clusters and High CO <sub>2</sub> /N <sub>2</sub> Selectivity. <i>Inorganic Chemistry</i> , 2015, 54, 1841-1846.	1.9	71
306	Phase Formation Study of Ca-Terephthalate MOF-Type Materials. <i>Crystal Growth and Design</i> , 2015, 15, 617-624.	1.4	18
308	In situ spectroscopy studies of CO <sub>2</sub> adsorption in a dually functionalized microporous metal-“organic framework. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4945-4953.	5.2	41
309	Metal-“Organic Frameworks Based on Alkaline Earth Metals “ Hydrothermal Synthesis, X-ray Structures, Gas Adsorption, and Heterogeneously Catalyzed Hydrogenation Reactions. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 1053-1064.	1.0	25
310	A 1D Helical Ni(II) Coordination Polymer Based on Butylphenyl Imidazole Dicarboxylate. <i>Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry</i> , 2015, 45, 719-724.	0.6	0
311	Progress in hydrotalcite like compounds and metal-based oxides for CO <sub>2</sub> capture: a review. <i>Journal of Cleaner Production</i> , 2015, 103, 171-196.	4.6	184
312	Chromium-based metal-“organic framework/mesoporous carbon composite: synthesis, characterization and CO <sub>2</sub> adsorption. <i>Adsorption</i> , 2015, 21, 77-86.	1.4	30
313	A UiO-66 analogue with uncoordinated carboxylic acids for the broad-spectrum removal of toxic chemicals. <i>New Journal of Chemistry</i> , 2015, 39, 2396-2399.	1.4	133
314	Reprint of: Transient breakthroughs of CO <sub>2</sub> /CH <sub>4</sub> and C <sub>3</sub> H <sub>6</sub> /C <sub>3</sub> H <sub>8</sub> mixtures in fixed beds packed with Ni-MOF-74. <i>Chemical Engineering Science</i> , 2015, 124, 109-117.	1.9	30
315	Monodentate hydroxide as a super strong yet reversible active site for CO <sub>2</sub> capture from high-humidity flue gas. <i>Energy and Environmental Science</i> , 2015, 8, 1011-1016.	15.6	233
316	Metal-“organic framework materials for light-harvesting and energy transfer. <i>Chemical Communications</i> , 2015, 51, 3501-3510.	2.2	409
317	Metal-“organic framework based mixed matrix membranes: a solution for highly efficient CO <sub>2</sub> capture?. <i>Chemical Society Reviews</i> , 2015, 44, 2421-2454.	18.7	732
318	Monolithic High Performance Surface Anchored Metal-“Organic Framework Bragg Reflector for Optical Sensing. <i>Chemistry of Materials</i> , 2015, 27, 1991-1996.	3.2	54
319	Hybrid metal-organic framework nanomaterials with enhanced carbon dioxide and methane adsorption enthalpy by incorporation of carbon nanotubes. <i>Inorganic Chemistry Communication</i> , 2015, 58, 79-83.	1.8	40
320	Two microporous MOFs constructed from different metal cluster SBUs for selective gas adsorption. <i>Chemical Communications</i> , 2015, 51, 14211-14214.	2.2	51
321	A hydrothermally stable Zn(II)-based metal-“organic framework: structural modulation and gas adsorption. <i>Dalton Transactions</i> , 2015, 44, 15697-15702.	1.6	49
322	Porphyryns as nanoreactors in the carbon dioxide capture and conversion: a review. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19615-19637.	5.2	131
323	Mapping the Cu-BTC metal-“organic framework (HKUST-1) stability envelope in the presence of water vapour for CO <sub>2</sub> adsorption from flue gases. <i>Chemical Engineering Journal</i> , 2015, 281, 669-677.	6.6	248

#	ARTICLE	IF	CITATIONS
324	Nuclear Magnetic Resonance Studies of CO <sub>2</sub> Absorption and Desorption in Aqueous Sodium Salt of Alanine. <i>Energy &amp; Fuels</i> , 2015, 29, 3780-3784.	2.5	20
325	Real-Time Multiple Beam Interferometry Reveals Complex Deformations of Metal-Organic-Framework Crystals upon Humidity Adsorption/Desorption. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16769-16776.	1.5	7
326	A MOF platform for incorporation of complementary organic motifs for CO <sub>2</sub> binding. <i>Chemical Communications</i> , 2015, 51, 12478-12481.	2.2	45
327	The impact of water vapor on CO <sub>2</sub> separation performance of mixed matrix membranes. <i>Journal of Membrane Science</i> , 2015, 492, 471-477.	4.1	29
328	Removal of chlorine gas by an amine functionalized metal-organic framework via electrophilic aromatic substitution. <i>Chemical Communications</i> , 2015, 51, 12474-12477.	2.2	66
329	Multifunctional metal-organic frameworks: from academia to industrial applications. <i>Chemical Society Reviews</i> , 2015, 44, 6774-6803.	18.7	766
330	Syntheses, characterization and properties of nine novel Zn coordination polymers based on 4,4'-((phenylazanediyl)dibenzoic acid and various N-donor ligands. <i>CrystEngComm</i> , 2015, 17, 5451-5467.	1.3	18
331	Large-scale continuous hydrothermal production and activation of ZIF-8. <i>Chemical Communications</i> , 2015, 51, 12811-12814.	2.2	86
332	Expanded graphite/phenolic resin-based carbon composite adsorbents for post-combustion CO <sub>2</sub> capture. <i>RSC Advances</i> , 2015, 5, 62604-62610.	1.7	10
333	Crystal engineering of cadmium coordination polymers decorated with nitro-functionalized thiophene-2,5-dicarboxylate and structurally related bis(imidazole) ligands with varying flexibility. <i>CrystEngComm</i> , 2015, 17, 6441-6449.	1.3	21
334	Coordination polymers from a highly flexible alkyldiamine-derived ligand: structure, magnetism and gas adsorption studies. <i>Dalton Transactions</i> , 2015, 44, 17494-17507.	1.6	29
335	Tuning the Dimensionality of Interpenetration in a Pair of Framework-Catenation Isomers To Achieve Selective Adsorption of CO <sub>2</sub> and Fluorescent Sensing of Metal Ions. <i>Inorganic Chemistry</i> , 2015, 54, 6084-6086.	1.9	22
336	Assembly and Properties of Four New Metal-Organic Complexes Based on 1,4-Naphthalenedicarboxylate: Effect of Four Bis-pyridyl-bis-amide Ligands with Diverse Spacers in the Structures. <i>Australian Journal of Chemistry</i> , 2015, 68, 1550.	0.5	7
337	A (3,8)-connected metal-organic framework with a unique binuclear [Ni <sub>2</sub> (1/4-OH)(COO) <sub>2</sub> ] node for high H <sub>2</sub> and CO <sub>2</sub> adsorption capacities. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15399-15402.	5.2	30
338	Spherical potassium intercalated activated carbon beads for pulverised fuel CO <sub>2</sub> post-combustion capture. <i>Carbon</i> , 2015, 94, 243-255.	5.4	65
339	A designable magnetic MOF composite and facile coordination-based post-synthetic strategy for the enhanced removal of Hg <sup>2+</sup> from water. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11587-11595.	5.2	179
340	Crystal engineering of coordination polymers containing flexible bis-pyridyl-bis-amide ligands. <i>CrystEngComm</i> , 2015, 17, 4611-4626.	1.3	53
341	Fast, Sensitive, and Selective Ion-Triggered Disassembly and Release Based on Tris(bipyridine)ruthenium(II)-Functionalized Metal-Organic Frameworks. <i>Analytical Chemistry</i> , 2015, 87, 4864-4870.	3.2	76

#	ARTICLE	IF	CITATIONS
342	Creating extra pores in microporous carbon via a template strategy for a remarkable enhancement of ambient-pressure CO <sub>2</sub> uptake. <i>Chemical Communications</i> , 2015, 51, 8683-8686.	2.2	11
343	Size-controlled silver nanoparticles stabilized on thiol-functionalized MIL-53(Al) frameworks. <i>Nanoscale</i> , 2015, 7, 9738-9745.	2.8	53
344	A rapid microwave-assisted synthesis of a sodium-cadmium metal-organic framework having improved performance as a CO <sub>2</sub> adsorbent for CCS. <i>Dalton Transactions</i> , 2015, 44, 9955-9963.	1.6	35
345	Transition metal carboxylate coordination polymers with amide-bridged polypyridine co-ligands: assemblies and properties. <i>CrystEngComm</i> , 2015, 17, 3887-3907.	1.3	57
346	Long and local range structural changes in M[(bdc)(ted) <sub>0.5</sub> ] (M = Zn, Ni or Cu) metal organic frameworks upon spontaneous thermal dispersion of LiCl and adsorption of carbon dioxide. <i>Microporous and Mesoporous Materials</i> , 2015, 212, 8-17.	2.2	28
347	Novel Microporous Metal-Organic Framework Exhibiting High Acetylene and Methane Storage Capacities. <i>Inorganic Chemistry</i> , 2015, 54, 4377-4381.	1.9	36
348	Microporous carbonaceous adsorbents for CO <sub>2</sub> separation via selective adsorption. <i>RSC Advances</i> , 2015, 5, 30310-30330.	1.7	119
349	A flexible zinc tetrazolate framework exhibiting breathing behaviour on xenon adsorption and selective adsorption of xenon over other noble gases. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10747-10752.	5.2	80
350	Hydrophobic and moisture-stable metal-organic frameworks. <i>Dalton Transactions</i> , 2015, 44, 13490-13497.	1.6	55
351	Effect of various alkaline agents on the size and morphology of nano-sized HKUST-1 for CO <sub>2</sub> adsorption. <i>RSC Advances</i> , 2015, 5, 27901-27911.	1.7	49
352	A triazine-based covalent organic polymer for efficient CO <sub>2</sub> adsorption. <i>Chemical Communications</i> , 2015, 51, 10050-10053.	2.2	248
353	Non-covalent Interactions of CO <sub>2</sub> with Functional Groups of Metal-Organic Frameworks from a CCSD(T) Scheme Applicable to Large Systems. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 1574-1584.	2.3	32
354	Evidence of Amine-CO <sub>2</sub> Interactions in Two Pillared Layer MOFs Probed by X-ray Crystallography. <i>Chemistry - A European Journal</i> , 2015, 21, 7238-7244.	1.7	36
355	A porous cobalt-based MOF with high CO <sub>2</sub> selectivity and uptake capacity. <i>RSC Advances</i> , 2015, 5, 29505-29508.	1.7	6
356	Gas Sorption Using Porous Organic Frameworks. <i>Springer Briefs in Molecular Science</i> , 2015, , 57-85.	0.1	3
357	Encapsulation of Hemin in Metal-Organic Frameworks for Catalyzing the Chemiluminescence Reaction of the H <sub>2</sub> O <sub>2</sub> -Luminol System and Detecting Glucose in the Neutral Condition. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 11322-11329.	4.0	186
358	The local electric field favours more than exposed nitrogen atoms on CO <sub>2</sub> capture: a case study on the <i>h</i> -type MOF platform. <i>Chemical Communications</i> , 2015, 51, 9636-9639.	2.2	48
359	Metal-organic framework composite membranes: Synthesis and separation applications. <i>Chemical Engineering Science</i> , 2015, 135, 232-257.	1.9	208

#	ARTICLE	IF	CITATIONS
361	A Zr metal-organic framework based on tetrakis(4-carboxyphenyl) silane and factors affecting the hydrothermal stability of Zr-MOFs. Dalton Transactions, 2015, 44, 8049-8061.	1.6	77
362	Selective CO <sub>2</sub> adsorption in a microporous metal-organic framework with suitable pore sizes and open metal sites. Inorganic Chemistry Frontiers, 2015, 2, 550-557.	3.0	26
363	Synthesizing MgO with a high specific surface for carbon dioxide adsorption. RSC Advances, 2015, 5, 30929-30935.	1.7	66
364	Conversion of a metal-organic framework to N-doped porous carbon incorporating Co and CoO nanoparticles: direct oxidation of alcohols to esters. Chemical Communications, 2015, 51, 8292-8295.	2.2	191
365	Magnesium-based systems for carbon dioxide capture, storage and recycling: from leaves to synthetic nanostructured materials. RSC Advances, 2015, 5, 36192-36239.	1.7	61
366	Two robust metal-organic frameworks with uncoordinated N atoms for CO <sub>2</sub> adsorption. CrystEngComm, 2015, 17, 8198-8201.	1.3	12
367	Computational Design of Functionalized Imidazolate Linkers of Zeolitic Imidazolate Frameworks for Enhanced CO <sub>2</sub> Adsorption. Journal of Physical Chemistry C, 2015, 119, 23607-23618.	1.5	22
368	An efficient low-temperature route to nitrogen-doping and activation of mesoporous carbons for CO <sub>2</sub> capture. Chemical Communications, 2015, 51, 17261-17264.	2.2	47
369	Aspartate links for stable sodium metal-organic frameworks. Chemical Communications, 2015, 51, 17463-17466.	2.2	28
370	Two Microporous Metal-Organic Frameworks with Suitable Pore Size Displaying the High CO <sub>2</sub> /CH <sub>4</sub> Selectivity. Crystal Growth and Design, 2015, 15, 5382-5387.	1.4	37
371	Many Simple Molecular Cavitands Are Intrinsically Porous (Zero-Dimensional Pore) Materials. Chemistry of Materials, 2015, 27, 7337-7354.	3.2	56
372	Nanomechanical investigation of thin-film electroceramic/metal-organic framework multilayers. Applied Physics Letters, 2015, 107, .	1.5	9
373	A Zn Metal-Organic Framework with High Stability and Sorption Selectivity for CO <sub>2</sub> . Inorganic Chemistry, 2015, 54, 10587-10592.	1.9	26
374	Insights of CO <sub>2</sub> adsorption performance of amine impregnated mesoporous silica (SBA-15) at wide range pressure and temperature conditions. International Journal of Greenhouse Gas Control, 2015, 43, 22-32.	2.3	44
375	Experimental and Theoretical Investigations of CO <sub>2</sub> Sorption by a 3D In-MOF with Multiple 1D Channels. European Journal of Inorganic Chemistry, 2015, 2015, 4038-4043.	1.0	7
376	Reversible Single-Crystal to Single-Crystal Transformations of a Zn(II)-Salicyaldimine Coordination Polymer Accompanying Changes in Coordination Sphere and Network Dimensionality upon Dehydration and Rehydration. Inorganic Chemistry, 2015, 54, 10918-10924.	1.9	20
377	Flexible and mechanically-stable MIL-101(Cr)@PFs for efficient benzene vapor and CO <sub>2</sub> adsorption. RSC Advances, 2015, 5, 94276-94282.	1.7	21
378	Structure and adsorption properties of a porous copper hexacyanoferrate polymorph. Journal of Physics and Chemistry of Solids, 2015, 86, 65-73.	1.9	6

#	ARTICLE	IF	CITATIONS
379	Facile one-pot synthesis of mesoporous carbon and N-doped carbon for CO <sub>2</sub> capture by a novel melting-assisted solvent-free method. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23990-23999.	5.2	46
380	Seeking metal-organic frameworks for methane storage in natural gas vehicles. <i>Adsorption</i> , 2015, 21, 499-507.	1.4	20
381	Water stable triazolyl phosphonate MOFs: steep water uptake and facile regeneration. <i>Dalton Transactions</i> , 2015, 44, 18727-18730.	1.6	28
382	Electronic structure of porphyrin-based metal-organic frameworks and their suitability for solar fuel production photocatalysis. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23458-23465.	5.2	59
383	Highly active self-immobilized FI-Zr catalysts in a PCP framework for ethylene polymerization. <i>Chemical Communications</i> , 2015, 51, 16703-16706.	2.2	22
384	Porous Materials to Store Clear Energy Gases. , 2015, , 297-327.		2
385	Identifying Highly Selective Metal Organic Frameworks for CH <sub>4</sub> /H <sub>2</sub> Separations Using Computational Tools. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 8479-8491.	1.8	51
386	Opportunities and challenges of MOF-based membranes in gas separations. <i>Separation and Purification Technology</i> , 2015, 152, 207-237.	3.9	233
387	A 1D anionic coordination polymer showing superior Congo Red sorption and its dye composite exhibiting remarkably enhanced photocurrent response. <i>Chemical Communications</i> , 2015, 51, 14893-14896.	2.2	113
388	A Cd(II) based metal organic framework: a photosensitive current conductor. <i>Dalton Transactions</i> , 2015, 44, 16149-16155.	1.6	31
389	Novel mode of 2-fold interpenetration observed in a primitive cubic network of formula [Ni(1,2-bis(4-pyridyl)acetylene) <sub>2</sub> (Cr <sub>2</sub> O <sub>7</sub> ) <sub>n</sub> ]. <i>Chemical Communications</i> , 2015, 51, 14832-14835.	2.2	47
390	Recent Advances in CO <sub>2</sub> Capture by Functionalized Ionic Liquids. <i>ACS Symposium Series</i> , 2015, , 341-369.	0.5	9
391	MOF Crystal Chemistry Paving the Way to Gas Storage Needs: Aluminum-Based <i>sof</i> -MOF for CH <sub>4</sub> , O <sub>2</sub> , and CO <sub>2</sub> Storage. <i>Journal of the American Chemical Society</i> , 2015, 137, 13308-13318.	6.6	632
392	A triazine-resorcinol based porous polymer with polar pores and exceptional surface hydrophobicity showing CO <sub>2</sub> uptake under humid conditions. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21116-21122.	5.2	39
393	Recent advances and progress in the development of graphene-based adsorbents for CO <sub>2</sub> capture. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21968-21989.	5.2	142
394	Grafting alkylamine in UiO-66 by charge-assisted coordination bonds for carbon dioxide capture from high-humidity flue gas. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21849-21855.	5.2	83
395	Detailed investigation of N-doped microporous carbons derived from urea furfural resin for CO <sub>2</sub> capture. <i>Journal of Porous Materials</i> , 2015, 22, 1663-1672.	1.3	15
396	Effects of molecular simulation parameters on predicting gas separation performance of ZIFs. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 1707-1718.	1.6	11

#	ARTICLE	IF	CITATIONS
397	Synthesis of Microporous Nitrogen-Rich Covalent-Organic Framework and Its Application in CO <sub>2</sub> Capture. Chinese Journal of Chemistry, 2015, 33, 90-94.	2.6	67
398	The first example of a zirconium-oxide based metal-organic framework constructed from monocarboxylate ligands. Dalton Transactions, 2015, 44, 1516-1519.	1.6	26
399	Cross-Linking Amine-Rich Compounds into High Performing Selective CO <sub>2</sub> Absorbents. Scientific Reports, 2015, 4, 7304.	1.6	42
401	Potassium salt-assisted synthesis of highly microporous carbon spheres for CO <sub>2</sub> adsorption. Carbon, 2015, 82, 297-303.	5.4	126
402	Fabrication of integrally skinned asymmetric membranes based on nanocomposite polyethersulfone by supercritical CO <sub>2</sub> for gas separation. Journal of Supercritical Fluids, 2015, 97, 6-15.	1.6	18
403	Effect of solvent on the CO <sub>2</sub> capture ability of polyester: A comparative study. Journal of Industrial and Engineering Chemistry, 2015, 21, 1373-1378.	2.9	9
404	Enhanced CO <sub>2</sub> adsorption capacity of amine-functionalized MIL-100(Cr) metal-organic frameworks. CrystEngComm, 2015, 17, 430-437.	1.3	60
405	Selective adsorption in two porous triazolate-oxalate-bridged antiferromagnetic metal-azolate frameworks obtained via in situ decarboxylation of 3-amino-1,2,4-triazole-5-carboxylic acid. Journal of Solid State Chemistry, 2015, 223, 73-78.	1.4	9
406	Highly porous organic polymers bearing tertiary amine group and their exceptionally high CO <sub>2</sub> uptake capacities. Journal of Solid State Chemistry, 2015, 222, 7-11.	1.4	54
407	Metal organic framework membranes for carbon dioxide separation. Chemical Engineering Science, 2015, 124, 3-19.	1.9	195
408	Metal-organic framework nanosheets in polymer composite materials for gas separation. Nature Materials, 2015, 14, 48-55.	13.3	1,780
409	A flexible zwitterion ligand based lanthanide metal-organic framework for luminescence sensing of metal ions and small molecules. Dalton Transactions, 2015, 44, 10914-10917.	1.6	124
410	Tuning the functional sites in metal-organic frameworks to modulate CO <sub>2</sub> heats of adsorption. CrystEngComm, 2015, 17, 706-718.	1.3	60
411	Removal of congo red from aqueous solution by its sorption onto the metal organic framework MIL-100(Fe): equilibrium, kinetic and thermodynamic studies. Desalination and Water Treatment, 2015, 56, 709-721.	1.0	30
412	Location of CO <sub>2</sub> during its uptake by the flexible porous metal-organic framework MIL-53(Fe): a high resolution powder X-ray diffraction study. CrystEngComm, 2015, 17, 422-429.	1.3	19
413	Facile Synthesis and Enhanced Adsorption Ability of Pt-GO/MOF Nanomaterials. Materials and Manufacturing Processes, 2016, 31, 141-145.	2.7	5
414	(Co <sub>0.94</sub> Fe <sub>0.06</sub> ) <sub>3</sub> O <sub>4</sub> Nanoparticles Embedded Porous Hollow Carbon Nanowire Derived from Co-based metal-organic Frameworks and Its Capacitive Behavior. International Journal of Electrochemical Science, 2016, 11, 9216-9227.	0.5	6
415	Highly and Stably Water Permeable Thin Film Nanocomposite Membranes Doped with MIL-101 (Cr) Nanoparticles for Reverse Osmosis Application. Materials, 2016, 9, 870.	1.3	90

#	ARTICLE	IF	CITATIONS
416	Review of Recent Developments in CO <sub>2</sub> Capture Using Solid Materials: Metal Organic Frameworks (MOFs)., 0, , .		17
417	Molecular Simulations for Adsorption-Based CO <sub>2</sub> Separation Using Metal Organic Frameworks. , 2016, , .		0
418	Increased Selectivity in CO <sub>2</sub> /CH <sub>4</sub> Separation with Mixed-Matrix Membranes of Polysulfone and Mixed-MOFs MIL-101(Cr) and ZIF-8. European Journal of Inorganic Chemistry, 2016, 2016, 4363-4367.	1.0	57
419	Alkaline Earth Metal-Based Metal-Organic Frameworks: Synthesis, Properties, and Applications. , 0, , 73-103.		6
420	Metal-organic framework membrane process for high purity CO <sub>2</sub> production. AIChE Journal, 2016, 62, 3836-3841.	1.8	68
421	A Robust Metal-Organic Framework for Dynamic Light-Induced Swing Adsorption of Carbon Dioxide. Chemistry - A European Journal, 2016, 22, 11176-11179.	1.7	55
422	Bimetallic Metal-Organic Frameworks: Probing the Lewis Acid Site for CO <sub>2</sub> Conversion. Small, 2016, 12, 2334-2343.	5.2	122
423	Facile synthesis of mesoporous melamine-formaldehyde spheres for carbon dioxide capture. RSC Advances, 2016, 6, 59619-59623.	1.7	13
424	Dynamic Entangled Porous Framework for Hydrocarbon (C <sub>2</sub> -C <sub>3</sub> ) Storage, CO <sub>2</sub> Capture, and Separation. Chemistry - A European Journal, 2016, 22, 6059-6070.	1.7	48
425	Abnormal N-Heterocyclic Carbene-Mediated Fixation of CO <sub>2</sub> and N <sub>2</sub> O, and the Activation of Tetrahydrofuran and Tetrahydrothiophene under Ambient Conditions. European Journal of Inorganic Chemistry, 2016, 2016, 913-920.	1.0	21
426	Anionic Metal-Organic Framework for Selective Dye Removal and CO <sub>2</sub> Fixation. European Journal of Inorganic Chemistry, 2016, 2016, 4373-4377.	1.0	66
427	Covalent Organic Frameworks for CO <sub>2</sub> Capture. Advanced Materials, 2016, 28, 2855-2873.	11.1	873
428	Magnetic Metal-Organic Frameworks for Efficient Carbon Dioxide Capture and Remote Trigger Release. Advanced Materials, 2016, 28, 1839-1844.	11.1	107
429	A novel carbonized polydopamine (CPDA) adsorbent with high CO <sub>2</sub> adsorption capacity and water vapor resistance. AIChE Journal, 2016, 62, 3730-3738.	1.8	43
430	Imidazolium Ionic Liquids, Imidazolylidene Heterocyclic Carbenes, and Zeolitic Imidazolate Frameworks for CO <sub>2</sub> Capture and Photochemical Reduction. Angewandte Chemie - International Edition, 2016, 55, 2308-2320.	7.2	377
431	CO <sub>2</sub> Capture in Aluminum-Based Metal-Organic Frameworks: A Theoretical Study. Journal of the Chinese Chemical Society, 2016, 63, 459-464.	0.8	4
432	Superexchange Charge Transport in Loaded Metal Organic Frameworks. ACS Nano, 2016, 10, 7085-7093.	7.3	62
433	In silico design and screening of hypothetical MOF-74 analogs and their experimental synthesis. Chemical Science, 2016, 7, 6263-6272.	3.7	69



#	ARTICLE	IF	CITATIONS
434	Syntheses, Structures, and Electrochemical Properties of Two Bis(2,3-dicarboxylate Coordination Polymers. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2016, 642, 812-816.	0.6	0
435	Inserting CO <sub>2</sub> into Aryl C-H Bonds of Metal-Organic Frameworks: CO <sub>2</sub> Utilization for Direct Heterogeneous C-H Activation. Angewandte Chemie - International Edition, 2016, 55, 5472-5476.	7.2	129
436	Metal-Organic Framework-templated Porous Carbon for Highly Efficient Catalysis: The Critical Role of Pyrrolic Nitrogen Species. Chemistry - A European Journal, 2016, 22, 3470-3477.	1.7	79
437	Carboxylate-Hydrazone Mixed-Linker Metal-Organic Frameworks: Synthesis, Structure, and Selective Gas Adsorption. European Journal of Inorganic Chemistry, 2016, 2016, 4450-4456.	1.0	27
438	Imidazolatsysteme zur CO <sub>2</sub> -Abscheidung und photochemischen Reduktion. Angewandte Chemie, 2016, 128, 2352-2364.	1.6	52
439	Fivefold increase of hydrogen uptake in MOF74 through linker decorations. Physical Review B, 2016, 94, .	1.1	5
440	Effective Dye Removal from Waste Water Using a Novel Low-Cost NaOH-Modified Fly Ash. Clays and Clay Minerals, 2016, 64, 695-705.	0.6	10
441	Novel nanostructured carbons derived from epoxy resin and their adsorption characteristics for CO <sub>2</sub> capture. RSC Advances, 2016, 6, 97728-97738.	1.7	30
442	Probing the ultrafast dynamics in nanomaterial complex systems by femtosecond transient absorption spectroscopy. High Power Laser Science and Engineering, 2016, 4, .	2.0	26
443	Materials design for electrocatalytic carbon capture. APL Materials, 2016, 4, .	2.2	20
444	Porous Covalent Triazine Polymer as a Potential Nanocargo for Cancer Therapy and Imaging. ACS Applied Materials & Interfaces, 2016, 8, 8947-8955.	4.0	87
445	Photo-responsive azo MOF exhibiting high selectivity for CO <sub>2</sub> and xylene isomers. Journal of Coordination Chemistry, 2016, 69, 1179-1187.	0.8	20
446	Syntheses, structures and properties of group 12 element (Zn, Cd, Hg) coordination polymers with a mixed-functional phosphonate-biphenyl-carboxylate linker. CrystEngComm, 2016, 18, 5209-5223.	1.3	23
447	Novel bipyridinyl oxadiazole-based metal coordination complexes: High efficient and green synthesis of 3,4-dihydropyrimidin-2(1H)-ones through the Biginelli reactions. Journal of Solid State Chemistry, 2016, 241, 86-98.	1.4	18
448	Cutting the cost of carbon capture: a case for carbon capture and utilization. Faraday Discussions, 2016, 192, 391-414.	1.6	33
449	BH <sub>3</sub> Activation by Phosphorus-Stabilized Geminal Dianions: Synthesis of Ambiphilic Organoborane, DFT Studies, and Catalytic CO <sub>2</sub> Reduction into Methanol Derivatives. ACS Catalysis, 2016, 6, 3030-3035.	5.5	28
450	Dynamic separation of Xe and Kr by metal-organic framework and covalent-organic materials: a comparison with activated charcoal. Science China Chemistry, 2016, 59, 643-650.	4.2	24
451	Selective separation of CO <sub>2</sub> -CH <sub>4</sub> mixed gases via magnesium aminoethylphosphonate nanoparticles. RSC Advances, 2016, 6, 12446-12452.	1.7	4

#	ARTICLE	IF	CITATIONS
452	Tuning the properties of the metal-organic framework UiO-67-bpy via post-synthetic N-quaternization of pyridine sites. Dalton Transactions, 2016, 45, 8614-8621.	1.6	62
453	Hexagonal boron nitride and graphene in-plane heterostructures: An experimentally feasible approach to charge-induced switchable CO <sub>2</sub> capture. Chemical Physics, 2016, 478, 139-144.	0.9	25
454	The role of metal-organic frameworks in a carbon-neutral energy cycle. Nature Energy, 2016, 1, .	19.8	374
455	A Zn-MOF constructed from electron-rich $\pi$ -conjugated ligands with an interpenetrated graphene-like net as an efficient nitroaromatic sensor. RSC Advances, 2016, 6, 45475-45481.	1.7	94
456	A Robust Open Framework Formed by Decavanadate Clusters and Copper(II) Complexes of Macrocyclic Polyamines: Permanent Microporosity and Catalytic Oxidation of Cycloalkanes. Inorganic Chemistry, 2016, 55, 4970-4979.	1.9	50
457	Enhancement of CO <sub>2</sub> capture by using synthesized nano-zeolite. Journal of the Taiwan Institute of Chemical Engineers, 2016, 64, 220-226.	2.7	43
458	Significantly increasing porosity of mesoporous carbon by NaNH <sub>2</sub> activation for enhanced CO <sub>2</sub> adsorption. Microporous and Mesoporous Materials, 2016, 230, 100-108.	2.2	47
459	Rational construction of functional molybdenum (tungsten)-copper-sulfur coordination oligomers and polymers from preformed cluster precursors. Chemical Society Reviews, 2016, 45, 4995-5019.	18.7	113
460	New red-luminescent cadmium coordination polymers with 4-amino-2,1,3-benzothiadiazole. Journal of Coordination Chemistry, 2016, 69, 3284-3293.	0.8	12
461	Highly stable MIL-101(Cr) doped water permeable thin film nanocomposite membranes for water treatment. RSC Advances, 2016, 6, 82669-82675.	1.7	43
462	Influence of the Amide Groups in the CO <sub>2</sub> /N <sub>2</sub> Selectivity of a Series of Isoreticular, Interpenetrated Metal-Organic Frameworks. Crystal Growth and Design, 2016, 16, 6016-6023.	1.4	73
463	Hype among low-carbon technologies: Carbon capture and storage in comparison. Global Environmental Change, 2016, 41, 124-141.	3.6	28
464	Chemistry in confined spaces: reactivity of the Zn-MOF-74 channels. Journal of Materials Chemistry A, 2016, 4, 13176-13182.	5.2	7
465	Defining a performance map of porous carbon sorbents for high-pressure carbon dioxide uptake and carbon dioxide-methane selectivity. Journal of Materials Chemistry A, 2016, 4, 14739-14751.	5.2	33
466	Understanding The Fascinating Origins of CO <sub>2</sub> Adsorption and Dynamics in MOFs. Chemistry of Materials, 2016, 28, 5829-5846.	3.2	66
467	Pyrolytic synthesis and luminescence of porous lanthanide Eu-MOF. Luminescence, 2016, 31, 190-194.	1.5	11
468	A nitrogen-rich, azaindole-based microporous organic network: synergistic effect of local dipole and dipole-quadrupole interactions on carbon dioxide uptake. Polymer Chemistry, 2016, 7, 5768-5772.	1.9	25
469	Hydrogen adsorption in azolium and metalated N-heterocyclic carbene containing MOFs. CrystEngComm, 2016, 18, 7003-7010.	1.3	17

#	ARTICLE	IF	CITATIONS
470	Direct Capture of CO <sub>2</sub> from Ambient Air. <i>Chemical Reviews</i> , 2016, 116, 11840-11876.	23.0	1,455
471	A microporous Cu-MOF with optimized open metal sites and pore spaces for high gas storage and active chemical fixation of CO <sub>2</sub> . <i>Chemical Communications</i> , 2016, 52, 11147-11150.	2.2	119
472	Removal of SDS from biological protein digests for proteomic analysis by mass spectrometry. <i>Proteome Science</i> , 2016, 14, 11.	0.7	14
473	Water Adsorption Properties of NOTT-401 and CO <sub>2</sub> Capture under Humid Conditions. <i>ACS Omega</i> , 2016, 1, 305-310.	1.6	43
474	Giant Hysteretic Sorption of CO <sub>2</sub> : In Situ Crystallographic Visualization of Guest Binding within a Breathing Framework at 298 K. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13271-13275.	7.2	62
475	High-Throughput Screening of Metal-Organic Frameworks for CO <sub>2</sub> Capture in the Presence of Water. <i>Langmuir</i> , 2016, 32, 10368-10376.	1.6	124
476	Giant Hysteretic Sorption of CO <sub>2</sub> : In Situ Crystallographic Visualization of Guest Binding within a Breathing Framework at 298 K. <i>Angewandte Chemie</i> , 2016, 128, 13465-13469.	1.6	5
477	Amide-CO <sub>2</sub> Interaction Induced Gate-Opening Behavior for CO <sub>2</sub> Adsorption in 2-Fold Interpenetrating Framework. <i>ChemistrySelect</i> , 2016, 1, 2923-2929.	0.7	14
478	Cobalt-based metal coordination polymers with 4,4'-bipyridinyl groups: highly efficient catalysis for one-pot synthesis of 3,4-dihydropyrimidin-2(1 <i>H</i> )-ones under solvent-free conditions. <i>Applied Organometallic Chemistry</i> , 2016, 30, 1009-1021.	1.7	18
479	Microporous Organic Polyimides for CO <sub>2</sub> and H <sub>2</sub> O Capture and Separation from CH <sub>4</sub> and N <sub>2</sub> Mixtures: Interplay between Porosity and Chemical Function. <i>Chemistry of Materials</i> , 2016, 28, 5461-5470.	3.2	61
480	Selective gas capture via kinetic trapping. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 21760-21766.	1.3	5
481	Putting an ultrahigh concentration of amine groups into a metal-organic framework for CO <sub>2</sub> capture at low pressures. <i>Chemical Science</i> , 2016, 7, 6528-6533.	3.7	197
482	Solvent-Controlled Assembly of Ionic Metal-Organic Frameworks Based on Indium and Tetracarboxylate Ligand: Topology Variety and Gas Sorption Properties. <i>Crystal Growth and Design</i> , 2016, 16, 5554-5562.	1.4	46
483	Rapid, Microwave-Assisted Synthesis of Cubic, Three-Dimensional, Highly Porous MOF-205 for Room Temperature CO <sub>2</sub> Fixation via Cyclic Carbonate Synthesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33723-33731.	4.0	146
484	MaLISA - a cooperative method to release adsorbed gases from metal-organic frameworks. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18757-18762.	5.2	46
485	[BMIM][PF <sub>6</sub> ] Incorporation Doubles CO <sub>2</sub> Selectivity of ZIF-8: Elucidation of Interactions and Their Consequences on Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 30992-31005.	4.0	131
486	Metal-organic frameworks for membrane-based separations. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	602
487	Visible Light Triggered CO <sub>2</sub> Liberation from Silver Nanocrystals Incorporated Metal-Organic Frameworks. <i>Advanced Functional Materials</i> , 2016, 26, 4815-4821.	7.8	53

#	ARTICLE	IF	CITATIONS
488	Inserting CO <sub>2</sub> into Aryl C-H Bonds of Metal-Organic Frameworks: CO <sub>2</sub> Utilization for Direct Heterogeneous C-H Activation. <i>Angewandte Chemie</i> , 2016, 128, 5562-5566.	1.6	41
489	Adsorption of Carbon Dioxide on Unsaturated Metal Sites in M <sub>2</sub> (dobpdc) Frameworks with Exceptional Structural Stability and Relation between Lewis Acidity and Adsorption Enthalpy. <i>Chemistry - A European Journal</i> , 2016, 22, 7444-7451.	1.7	30
490	Multiple Modes of Motion: Realizing the Dynamics of CO Adsorbed in MOF-74 (M = Mg, Zn) by Using Solid-State NMR Spectroscopy. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 2017-2024.	1.0	28
491	Metal-Organic Frameworks as Highly Active Electrocatalysts for High-Energy Density, Aqueous Zinc-Polyiodide Redox Flow Batteries. <i>Nano Letters</i> , 2016, 16, 4335-4340.	4.5	79
492	Improvement of CO <sub>2</sub> capture by graphite oxide in presence of polyethylenimine. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 14351-14359.	3.8	61
493	Natural gas origin, composition, and processing: A review. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 34, 34-54.	2.1	463
494	Magnetic metal-organic frameworks for selective enrichment and exclusion of proteins for MALDI-TOF MS analysis. <i>Analyst</i> , 2016, 141, 4568-4572.	1.7	17
495	Moisture-Stable Zn(II) Metal-Organic Framework as a Multifunctional Platform for Highly Efficient CO <sub>2</sub> Capture and Nitro Pollutant Vapor Detection. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 18043-18050.	4.0	84
496	Enhanced selective adsorption of CO <sub>2</sub> on nitrogen-doped porous carbon monoliths derived from IRMOF-3. <i>Chemical Communications</i> , 2016, 52, 9757-9760.	2.2	32
497	Enhanced CO <sub>2</sub> adsorption on Al-MIL-53 by introducing hydroxyl groups into the framework. <i>RSC Advances</i> , 2016, 6, 55266-55271.	1.7	37
498	Bench scale study of CO <sub>2</sub> adsorption performance of MgO in the presence of water vapor. <i>Energy</i> , 2016, 112, 101-110.	4.5	27
499	Interpenetrating Metalloporphyrin Framework for Selective CO <sub>2</sub> Uptake and Chemical Transformation of CO <sub>2</sub> . <i>Inorganic Chemistry</i> , 2016, 55, 7291-7294.	1.9	115
500	Emerging applications of metal-organic frameworks. <i>CrystEngComm</i> , 2016, 18, 6532-6542.	1.3	125
501	Commensurate CO <sub>2</sub> Capture, and Shape Selectivity for HCCH over H <sub>2</sub> CCH <sub>2</sub> , in Zigzag Channels of a Robust Cu <sup>I</sup> (CN)(L) Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2016, 55, 6195-6200.	1.9	18
502	Silver nanoparticles embedded over porous metal organic frameworks for carbon dioxide fixation via carboxylation of terminal alkynes at ambient pressure. <i>Journal of Colloid and Interface Science</i> , 2016, 477, 220-229.	5.0	83
503	Interplay between hydrophobicity and basicity toward the catalytic activity of isostructural MOF organocatalysts. <i>New Journal of Chemistry</i> , 2016, 40, 6970-6976.	1.4	20
504	Underlying mechanism of the hydrothermal instability of Cu <sub>3</sub> (BTC) <sub>2</sub> metal-organic framework. <i>Frontiers of Chemical Science and Engineering</i> , 2016, 10, 103-107.	2.3	48
505	Composites of metal-organic frameworks and carbon-based materials: preparations, functionalities and applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3584-3616.	5.2	301

#	ARTICLE	IF	CITATIONS
506	Enhanced aging properties of HKUST-1 in hydrophobic mixed-matrix membranes for ammonia adsorption. <i>Chemical Science</i> , 2016, 7, 2711-2716.	3.7	145
507	Optimization of Two-Stage Pressure/Vacuum Swing Adsorption with Variable Dehydration Level for Postcombustion Carbon Capture. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 3338-3350.	1.8	75
508	Novel nitrogen enriched porous carbon adsorbents for CO <sub>2</sub> capture: Breakthrough adsorption study. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 346-356.	3.3	60
509	Kinetics analysis and regeneration performance of 1-butyl-3-methylimidazolium glycinate solutions for CO <sub>2</sub> capture. <i>Chemical Engineering Journal</i> , 2016, 295, 64-72.	6.6	30
510	A Facile Post-Synthetic Modification Method To Improve Hydrothermal Stability and CO <sub>2</sub> Selectivity of CuBTC Metal-Organic Framework. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 7941-7949.	1.8	65
511	Hydrothermally stable MOFs for CO <sub>2</sub> hydrogenation over iron-based catalyst to light olefins. <i>Journal of CO<sub>2</sub> Utilization</i> , 2016, 15, 89-95.	3.3	82
512	1-Methyl-3-octylimidazolium tetrafluoroborate/AgO nanoparticles composite membranes for facilitated gas transport. <i>Korean Journal of Chemical Engineering</i> , 2016, 33, 666-668.	1.2	9
513	Structural stabilization of a metal-organic framework for gas sorption investigation. <i>Dalton Transactions</i> , 2016, 45, 6830-6833.	1.6	21
514	Coumarin-modified microporous-mesoporous Zn-MOF-74 showing ultra-high uptake capacity and photo-switched storage/release of UVI ions. <i>Journal of Hazardous Materials</i> , 2016, 311, 30-36.	6.5	126
515	Seed-Mediated Synthesis of Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2016, 138, 5316-5320.	6.6	104
516	Synthesis, characterization and evaluation of porous polybenzimidazole materials for CO <sub>2</sub> adsorption at high pressures. <i>Adsorption</i> , 2016, 22, 247-260.	1.4	15
517	Synthesis of HKUST-1/MCF compositing materials for CO <sub>2</sub> adsorption. <i>Microporous and Mesoporous Materials</i> , 2016, 226, 476-481.	2.2	50
518	Influence of the precursor on the porous structure and CO <sub>2</sub> adsorption characteristics of MgO. <i>RSC Advances</i> , 2016, 6, 19069-19077.	1.7	30
519	Enhanced Selective CO <sub>2</sub> Capture upon Incorporation of Dimethylformamide in the Cobalt Metal-Organic Framework [Co <sub>3</sub> (OH) <sub>2</sub> (btca) <sub>2</sub> ]. <i>Energy &amp; Fuels</i> , 2016, 30, 526-530.	2.5	11
520	Facile synthesis of amine-functionalized MIL-53(Al) by ultrasound microwave method and application for CO <sub>2</sub> capture. <i>Journal of Porous Materials</i> , 2016, 23, 857-865.	1.3	27
521	New microwave-assisted synthesis of ZIF-8. <i>Mendeleev Communications</i> , 2016, 26, 43-44.	0.6	33
522	A Triazole-Containing Metal-Organic Framework as a Highly Effective and Substrate Size-Dependent Catalyst for CO <sub>2</sub> Conversion. <i>Journal of the American Chemical Society</i> , 2016, 138, 2142-2145.	6.6	504
523	Exceptionally Robust In-Based Metal-Organic Framework for Highly Efficient Carbon Dioxide Capture and Conversion. <i>Inorganic Chemistry</i> , 2016, 55, 3558-3565.	1.9	199

#	ARTICLE	IF	CITATIONS
524	Size effects of alkylimidazolium cations on the interfacial properties and CO <sub>2</sub> uptake capacity in layered organic–inorganic imidazolium–TiO <sub>2</sub> hybrids. RSC Advances, 2016, 6, 23102-23109.	1.7	5
525	Design of chiral Co(II)-MOFs and their application in environmental remediation and waste water treatment. RSC Advances, 2016, 6, 25149-25158.	1.7	43
526	Preparation and Characterization of a Hydrophobic Metal–Organic Framework Membrane Supported on a Thin Porous Metal Sheet. Industrial & Engineering Chemistry Research, 2016, 55, 3823-3832.	1.8	27
527	Novel photo- and/or thermochromic MOFs derived from bipyridinium carboxylate ligands. Inorganic Chemistry Frontiers, 2016, 3, 814-820.	3.0	59
528	Two isomeric Zn(II)-based metal–organic frameworks constructed from a bifunctional triazolate–carboxylate tecton exhibiting distinct gas sorption behaviors. CrystEngComm, 2016, 18, 2579-2584.	1.3	24
529	Synthesis and thermal stability study of a cobalt-organic framework with tetrahedral cages. Inorganic Chemistry Communication, 2016, 67, 51-54.	1.8	6
530	Understanding and controlling water stability of MOF-74. Journal of Materials Chemistry A, 2016, 4, 5176-5183.	5.2	155
531	Selective CO <sub>2</sub> uptake and vapor adsorption study within Sn(IV) porphyrin crystals. CrystEngComm, 2016, 18, 1515-1522.	1.3	2
532	Ionic liquid-based materials: a platform to design engineered CO <sub>2</sub> separation membranes. Chemical Society Reviews, 2016, 45, 2785-2824.	18.7	347
533	In situ synthesis of carbon nanotube doped metal–organic frameworks for CO <sub>2</sub> capture. RSC Advances, 2016, 6, 4382-4386.	1.7	32
534	MIL-91(Ti), a small pore metal–organic framework which fulfils several criteria: an upscaled green synthesis, excellent water stability, high CO <sub>2</sub> selectivity and fast CO <sub>2</sub> transport. Journal of Materials Chemistry A, 2016, 4, 1383-1389.	5.2	82
535	Adsorption, separation, and catalytic properties of densified metal-organic frameworks. Coordination Chemistry Reviews, 2016, 311, 38-52.	9.5	272
536	Equilibrium isotherms and isosteric heat for CO <sub>2</sub> adsorption on nanoporous carbons from polymers. Adsorption, 2016, 22, 581-588.	1.4	23
537	Palladium nanoparticles stabilized with N-doped porous carbons derived from metal–organic frameworks for selective catalysis in biofuel upgrade: the role of catalyst wettability. Green Chemistry, 2016, 18, 1212-1217.	4.6	148
538	Tunable gas adsorption properties of porous coordination polymers by modification of macrocyclic metallic tectons. CrystEngComm, 2016, 18, 4084-4093.	1.3	11
539	Evaluation of CO <sub>2</sub> interactions with S-doped nanoporous carbon and its composites with a reduced GO: Effect of surface features on an apparent physical adsorption mechanism. Carbon, 2016, 98, 250-258.	5.4	51
540	Synthesis of cyclophosphazene bridged mesoporous organosilicas for CO <sub>2</sub> capture and Cr(VI) removal. Microporous and Mesoporous Materials, 2016, 219, 93-102.	2.2	43
541	Cu <sub>2</sub> (pzdc) <sub>2</sub> L [L=dipyridyl-based ligands] porous coordination polymers: Hysteretic adsorption and diffusion kinetics of CO <sub>2</sub> and CH <sub>4</sub> . Chemical Engineering Journal, 2016, 283, 806-815.	6.6	11

#	ARTICLE	IF	CITATIONS
542	Phase change amino acid salt separates into CO <sub>2</sub> -rich and CO <sub>2</sub> -lean phases upon interacting with CO <sub>2</sub> . <i>Applied Energy</i> , 2016, 161, 41-47.	5.1	77
543	Evidence for CO <sub>2</sub> reactive adsorption on nanoporous S- and N-doped carbon at ambient conditions. <i>Carbon</i> , 2016, 96, 856-863.	5.4	79
544	Structure and properties of Al-MIL-53-ADP, a breathing MOF based on the aliphatic linker molecule adipic acid. <i>Dalton Transactions</i> , 2016, 45, 4179-4186.	1.6	54
545	Dual-porous metal organic framework for room temperature CO <sub>2</sub> fixation via cyclic carbonate synthesis. <i>Green Chemistry</i> , 2016, 18, 232-242.	4.6	220
546	Enhancement in CO <sub>2</sub> adsorption capacity and selectivity in the chalcogenide aerogel CuSb <sub>2</sub> S <sub>4</sub> by post-synthetic modification with LiCl. <i>Microporous and Mesoporous Materials</i> , 2016, 220, 247-252.	2.2	12
547	Finely tuning MOFs towards high-performance post-combustion CO <sub>2</sub> capture materials. <i>Chemical Communications</i> , 2016, 52, 443-452.	2.2	131
548	Computational characterization and prediction of metal-organic framework properties. <i>Coordination Chemistry Reviews</i> , 2016, 307, 211-236.	9.5	206
549	An investigation of CO <sub>2</sub> adsorption kinetics on porous magnesium oxide. <i>Chemical Engineering Journal</i> , 2016, 283, 175-183.	6.6	179
550	Engineering Copper Carboxylate Functionalities on Water Stable Metal-Organic Frameworks for Enhancement of Ammonia Removal Capacities. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3310-3319.	1.5	25
551	Two linkers are better than one: enhancing CO <sub>2</sub> capture and separation with porous covalent triazine-based frameworks from mixed nitrile linkers. <i>Journal of Materials Chemistry A</i> , 2017, 5, 3609-3620.	5.2	86
552	MgO-based adsorbents for CO <sub>2</sub> adsorption: Influence of structural and textural properties on the CO <sub>2</sub> adsorption performance. <i>Journal of Environmental Sciences</i> , 2017, 57, 418-428.	3.2	66
553	Rational Design of a Low-Cost, High-Performance Metal-Organic Framework for Hydrogen Storage and Carbon Capture. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1171-1181.	1.5	84
554	Rational Synthesis and Investigation of Porous Metal-Organic Framework Materials from a Preorganized Heterometallic Carboxylate Building Block. <i>Inorganic Chemistry</i> , 2017, 56, 1599-1608.	1.9	63
555	The Highly Connected MOFs Constructed from Nonanuclear and Trinuclear Lanthanide-Carboxylate Clusters: Selective Gas Adsorption and Luminescent pH Sensing. <i>Inorganic Chemistry</i> , 2017, 56, 2159-2164.	1.9	101
556	Two microporous Fe-based MOFs with multiple active sites for selective gas adsorption. <i>Chemical Communications</i> , 2017, 53, 2394-2397.	2.2	72
557	Imparting surface hydrophobicity to metal-organic frameworks using a facile solution-immersion process to enhance water stability for CO <sub>2</sub> capture. <i>Nanoscale</i> , 2017, 9, 2003-2008.	2.8	77
558	Sizable dynamics in small pores: CO <sub>2</sub> location and motion in the $\text{I}^{\pm}$ -Mg formate metal-organic framework. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 6130-6141.	1.3	35
559	Aminopolymer functionalization of boron nitride nanosheets for highly efficient capture of carbon dioxide. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16241-16248.	5.2	67

#	ARTICLE	IF	CITATIONS
560	Polar Ketone-Functionalized Metal-Organic Framework Showing a High CO <sub>2</sub> Adsorption Performance. <i>Inorganic Chemistry</i> , 2017, 56, 2363-2366.	1.9	44
561	Adsorption and molecular siting of CO <sub>2</sub> , water, and other gases in the superhydrophobic, flexible pores of FMOF-1 from experiment and simulation. <i>Chemical Science</i> , 2017, 8, 3989-4000.	3.7	60
562	Stepwise crystallographic visualization of dynamic guest binding in a nanoporous framework. <i>Chemical Science</i> , 2017, 8, 3171-3177.	3.7	66
563	Orthogonal self-assembly of a trigonal triptycene triacid: signaling of exfoliation of porous 2D metal-organic layers by fluorescence and selective CO <sub>2</sub> capture by the hydrogen-bonded MOF. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5402-5412.	5.2	105
564	A Robust Metal-Organic Framework Combining Open Metal Sites and Polar Groups for Methane Purification and CO <sub>2</sub> /Fluorocarbon Capture. <i>Chemistry - A European Journal</i> , 2017, 23, 4060-4064.	1.7	62
565	Epitaxial Growth of Oriented Metalloporphyrin Network Thin Film for Improved Selectivity of Volatile Organic Compounds. <i>Small</i> , 2017, 13, 1604035.	5.2	32
566	Ship-in-a-bottle CMPO in MIL-101(Cr) for selective uranium recovery from aqueous streams through adsorption. <i>Journal of Hazardous Materials</i> , 2017, 335, 1-9.	6.5	90
567	Synthesis of Water-Sensitive Metal-Organic Frameworks within Fiber Sorbent Modules. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 5070-5077.	1.8	30
568	Effect of metal oxides modification on CO <sub>2</sub> adsorption performance over mesoporous carbon. <i>Microporous and Mesoporous Materials</i> , 2017, 249, 34-41.	2.2	47
569	3d-4f Heterometal-Organic Frameworks for Efficient Capture and Conversion of CO <sub>2</sub> . <i>Crystal Growth and Design</i> , 2017, 17, 3128-3133.	1.4	43
570	CH <sub>3</sub> -Tagged Bis(pyrazolato)-Based Coordination Polymers and Metal-Organic Frameworks: An Experimental and Theoretical Insight. <i>Crystal Growth and Design</i> , 2017, 17, 3854-3867.	1.4	19
571	Mo <sub>2</sub> C/CNT: An Efficient Catalyst for Rechargeable Li- <sup>+</sup> CO <sub>2</sub> Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1700564.	7.8	236
572	Effect of Morphology of MgO on the CO <sub>2</sub> Adsorption Capacity for Low Temperature Applications. <i>Materials Science Forum</i> , 0, 888, 503-507.	0.3	1
573	A mixed-linker approach towards improving covalent triazine-based frameworks for CO <sub>2</sub> capture and separation. <i>Microporous and Mesoporous Materials</i> , 2017, 241, 303-315.	2.2	49
574	Nitroaromatic explosives detection by a luminescent Cd(II) based metal organic framework. <i>Polyhedron</i> , 2017, 123, 217-225.	1.0	35
575	Polar Pore Surface Guided Selective CO <sub>2</sub> Adsorption in a Prefunctionalized Metal-Organic Framework. <i>Crystal Growth and Design</i> , 2017, 17, 3581-3587.	1.4	34
576	Synthesis of metal-organic framework hybrid nanocomposites based on GO and CNT with high adsorption capacity for dye removal. <i>Chemical Engineering Journal</i> , 2017, 326, 1145-1158.	6.6	494
577	Electrospun metal-organic framework polymer composites for the catalytic degradation of methyl paraoxon. <i>New Journal of Chemistry</i> , 2017, 41, 8748-8753.	1.4	64



#	ARTICLE	IF	CITATIONS
578	Computational Modeling and Simulation of CO <sub>2</sub> Capture by Aqueous Amines. <i>Chemical Reviews</i> , 2017, 117, 9524-9593.	23.0	143
579	Insight Into the CO <sub>2</sub> Capturer Derived From Graphene/MgO Composite. <i>Clean - Soil, Air, Water</i> , 2017, 45, 1600755.	0.7	4
580	Novel glucose-based adsorbents (Glc-Cs) with high CO <sub>2</sub> capacity and excellent CO <sub>2</sub> /CH <sub>4</sub> /N <sub>2</sub> adsorption selectivity. <i>Chemical Engineering Journal</i> , 2017, 327, 51-59.	6.6	54
581	A review on synthesis, crystal structure and functionality of naphthalenedicarboxylate ligated metal-organic frameworks. <i>Inorganica Chimica Acta</i> , 2017, 466, 308-323.	1.2	26
582	Synthesis of Hierarchically Structured Hybrid Materials by Controlled Self-Assembly of Metal-Organic Framework with Mesoporous Silica for CO <sub>2</sub> Adsorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 23060-23071.	4.0	105
583	An Exceptionally Water Stable Metal-Organic Framework with Amide-Functionalized Cages: Selective CO <sub>2</sub> /CH <sub>4</sub> Uptake and Removal of Antibiotics and Dyes from Water. <i>Chemistry - A European Journal</i> , 2017, 23, 13058-13066.	1.7	64
584	Improved catalytic performance of porous metal-organic frameworks for the ring opening of styrene oxide. <i>CrystEngComm</i> , 2017, 19, 4219-4226.	1.3	19
585	Crystal structures and gas adsorption behavior of new lanthanide-benzene-1,4-dicarboxylate frameworks. <i>Microporous and Mesoporous Materials</i> , 2017, 251, 155-164.	2.2	10
586	MOFs with PCU Topology for the Inclusion of One-Dimensional Water Cages: Selective Sorption of Water Vapor, CO <sub>2</sub> , and Dyes and Luminescence Properties. <i>Crystal Growth and Design</i> , 2017, 17, 3885-3892.	1.4	26
587	Zeolite cage-lock strategy for in situ synthesis of highly nitrogen-doped porous carbon for selective adsorption of carbon dioxide gas. <i>RSC Advances</i> , 2017, 7, 24195-24203.	1.7	16
588	Synthesis and characterization of novel polymeric organic-inorganic complex framework based on sodium 2,4-dioxo-6-aryl-3-oxa-bicyclo[3.1.0]hexane-1,5-dicarboxylate (SDAOBDC) with three-dimensional hybrid networks. <i>Journal of the Iranian Chemical Society</i> , 2017, 14, 2143-2156.	1.2	4
589	cis-Protected palladium( <i>ii</i> ) based binuclear complexes as tectons in crystal engineering and the imperative role of the cis-protecting agent. <i>CrystEngComm</i> , 2017, 19, 5157-5172.	1.3	15
590	Adsorption and diffusion of carbon dioxide on the metal-organic framework CuBTB. <i>Chemical Engineering Science</i> , 2017, 167, 10-17.	1.9	23
591	Improvement of the CO <sub>2</sub> Capture Capability of a Metal-Organic Framework by Encapsulating Dye Molecules inside the Mesopore Space. <i>Crystal Growth and Design</i> , 2017, 17, 2688-2693.	1.4	14
592	Single molecular magnet of lanthanide coordination polymer with 1D helical-like chain based on flexible Salen-type ligand. <i>Polyhedron</i> , 2017, 129, 157-163.	1.0	12
593	Robust MOFs of $\alpha$ -Topology Based on Trigonal Prismatic Organic and Metal Cluster SBUs: Single Crystal to Single Crystal Postsynthetic Metal Exchange and Selective CO <sub>2</sub> Capture. <i>Chemistry - A European Journal</i> , 2017, 23, 7297-7305.	1.7	26
594	Clathrate Hydrates: A Powerful Tool to Mitigate Greenhouse Gas. <i>Green Energy and Technology</i> , 2017, , 157-168.	0.4	3
595	Perspectives on metal-organic frameworks with intrinsic electrocatalytic activity. <i>CrystEngComm</i> , 2017, 19, 4049-4065.	1.3	72

#	ARTICLE	IF	CITATIONS
596	Optimal Faujasite structures for post combustion CO <sub>2</sub> capture and separation in different swing adsorption processes. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 19, 100-111.	3.3	35
597	High CO <sub>2</sub> Adsorption Capacity and CO <sub>2</sub> /CH <sub>4</sub> Selectivity by Nanocomposites of MOF-199. <i>Energy &amp; Fuels</i> , 2017, 31, 5376-5384.	2.5	103
598	A nanoporous Ag( <i>scp</i> ) coordination polymer for selective adsorption of carcinogenic dye Acid Red 26. <i>Chemical Communications</i> , 2017, 53, 4767-4770.	2.2	71
599	Ground-State versus Excited-State Interchromophoric Interaction: Topology Dependent Excimer Contribution in Metal-Organic Framework Photophysics. <i>Journal of the American Chemical Society</i> , 2017, 139, 5973-5983.	6.6	122
600	Quenched breathing effect, enhanced CO <sub>2</sub> uptake and improved CO <sub>2</sub> /CH <sub>4</sub> selectivity of MIL-53(Cr)/graphene oxide composites. <i>Chemical Engineering Science</i> , 2017, 167, 98-104.	1.9	36
601	Enhanced Stability toward Humidity in a Family of Hybrid Ultramicroporous Materials Incorporating Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup> Pillars. <i>Crystal Growth and Design</i> , 2017, 17, 1933-1937.	1.4	12
602	Carbon Utilization. <i>Green Energy and Technology</i> , 2017, , .	0.4	1
603	The Influence of Intrinsic Framework Flexibility on Adsorption in Nanoporous Materials. <i>Journal of the American Chemical Society</i> , 2017, 139, 5547-5557.	6.6	100
604	Highly selective CO <sub>2</sub> vs. N <sub>2</sub> adsorption in the cavity of a molecular coordination cage. <i>Chemical Communications</i> , 2017, 53, 4398-4401.	2.2	25
605	Two metal-organic frameworks sharing the same basic framework show distinct interpenetration degrees and different performances in CO <sub>2</sub> catalytic conversion. <i>CrystEngComm</i> , 2017, 19, 4157-4161.	1.3	12
606	CO <sub>2</sub> -Selective Absorbents in Air: Reverse Lipid Bilayer Structure Forming Neutral Carbamic Acid in Water without Hydration. <i>Journal of the American Chemical Society</i> , 2017, 139, 4639-4642.	6.6	46
607	A Porous Zn(II)-Metal-Organic Framework Constructed from Fluorinated Ligands for Gas Adsorption. <i>Crystal Growth and Design</i> , 2017, 17, 1476-1479.	1.4	25
608	Polydimethylsiloxane/postmodified MIL-53 composite layer coated on asymmetric hollow fiber membrane for improving gas separation performance. <i>Journal of Applied Polymer Science</i> , 2017, 134, .	1.3	7
609	A Modulator-Induced Defect-Formation Strategy to Hierarchically Porous Metal-Organic Frameworks with High Stability. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 563-567.	7.2	486
610	Fine-Tuning of the Carbon Dioxide Capture Capability of Diamine-Grafted Metal-Organic Framework Adsorbents Through Amine Functionalization. <i>ChemSusChem</i> , 2017, 10, 541-550.	3.6	88
611	Adsorptive separation of CO <sub>2</sub> in sulfur-doped nanoporous carbons: Selectivity and breakthrough simulation. <i>Microporous and Mesoporous Materials</i> , 2017, 241, 226-237.	2.2	53
612	Hydrogen Uptake by an Inclined Polycatenated Dynamic Metal-Organic Framework Based Material. <i>Inorganic Chemistry</i> , 2017, 56, 713-716.	1.9	30
613	Tuning the iron redox state inside a microporous porphyrinic metal organic framework. <i>Dalton Transactions</i> , 2017, 46, 517-523.	1.6	10

#	ARTICLE	IF	CITATIONS
614	Facilely synthesized meso-macroporous polymer as support of poly(ethyleneimine) for highly efficient and selective capture of CO <sub>2</sub> . <i>Chemical Engineering Journal</i> , 2017, 314, 466-476.	6.6	81
615	A Modulator-Induced Defect-Formation Strategy to Hierarchically Porous Metal-Organic Frameworks with High Stability. <i>Angewandte Chemie</i> , 2017, 129, 578-582.	1.6	96
616	An In-Depth Structural Study of the Carbon Dioxide Adsorption Process in the Porous Metal-Organic Frameworks CPO-27-M. <i>ChemSusChem</i> , 2017, 10, 1710-1719.	3.6	30
617	Montmorillonite-supported PdO, FeO, CuO and AgO nanoparticles: Properties and affinity towards CO <sub>2</sub> . <i>Applied Surface Science</i> , 2017, 402, 314-322.	3.1	21
618	Syntheses, Structures, Electrochemistry, and Electrocatalysis of Three Copper(II) Coordination Polymers constructed from 5-[4-(1H-Imidazol-1-yl)phenyl]-1H-tetrazole. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2017, 643, 235-242.	0.6	4
619	Carbon Dioxide Capture Adsorbents: Chemistry and Methods. <i>ChemSusChem</i> , 2017, 10, 1303-1317.	3.6	313
620	Computational design of two-dimensional nanomaterials for charge modulated CO <sub>2</sub> /H <sub>2</sub> capture and/or storage. <i>Energy Storage Materials</i> , 2017, 8, 169-183.	9.5	25
621	Recent advances in the synthesis of covalent organic frameworks for CO <sub>2</sub> capture. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 17, 137-161.	3.3	94
622	Intrinsic Thermal Management Capabilities of Flexible Metal-Organic Frameworks for Carbon Dioxide Separation and Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 41066-41077.	4.0	61
623	A Stable Amino-Functionalized Interpenetrated Metal-Organic Framework Exhibiting Gas Selectivity and Pore-Size-Dependent Catalytic Performance. <i>Inorganic Chemistry</i> , 2017, 56, 13634-13637.	1.9	34
624	Resorcin[4]arene-Based Microporous Metal-Organic Framework as an Efficient Catalyst for CO <sub>2</sub> Cycloaddition with Epoxides and Highly Selective Luminescent Sensing of Cr <sup>2+</sup> . <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 39441-39449.	4.0	93
625	Carbon dioxide capture and conversion by an acid-base resistant metal-organic framework. <i>Nature Communications</i> , 2017, 8, 1233.	5.8	286
626	Novel Metal-Organic Framework (MOF) Based Composite Material for the Sequestration of U(VI) and Th(IV) Metal Ions from Aqueous Environment. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36026-36037.	4.0	405
627	Unprecedented CO <sub>2</sub> uptake in vertically aligned carbon nanotubes. <i>Carbon</i> , 2017, 125, 327-335.	5.4	20
628	Oxygen plasma treatment of HKUST-1 for porosity retention upon exposure to moisture. <i>Chemical Communications</i> , 2017, 53, 12100-12103.	2.2	28
629	Probing the role of O-containing groups in CO <sub>2</sub> adsorption of N-doped porous activated carbon. <i>Nanoscale</i> , 2017, 9, 17593-17600.	2.8	44
630	A porous copper-organic framework with intersecting channels and gas adsorption properties. <i>Dalton Transactions</i> , 2017, 46, 13952-13956.	1.6	11
631	The Role of Partial Atomic Charge Assignment Methods on the Computational Screening of Metal-Organic Frameworks for CO <sub>2</sub> Capture under Humid Conditions. <i>ChemistrySelect</i> , 2017, 2, 9458-9465.	0.7	18

#	ARTICLE	IF	CITATIONS
632	Charge-modulated CO <sub>2</sub> capture. <i>Current Opinion in Electrochemistry</i> , 2017, 4, 118-123.	2.5	8
633	Dative post synthetic methods on SBUs of MWCNT@MOFs hybrid composite and its effect on CO <sub>2</sub> uptake properties. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 4516-4523.	3.3	22
634	Computational simulation study of the influence of faujasite Si/Al ratio on CO <sub>2</sub> capture by temperature swing adsorption. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 21, 261-269.	3.3	16
635	Evaluation of CO <sub>2</sub> adsorption capacity of electrospun carbon fibers with thermal and chemical activation. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45534.	1.3	27
636	Stepwise engineering of pore environments and enhancement of CO <sub>2</sub> /R22 adsorption capacity through dynamic spacer installation and functionality modification. <i>Chemical Communications</i> , 2017, 53, 11403-11406.	2.2	22
637	Rational Design of a Bifunctional, Two-Fold Interpenetrated Zn <sup>II</sup> -Metal-Organic Framework for Selective Adsorption of CO <sub>2</sub> and Efficient Aqueous Phase Sensing of 2,4,6-Trinitrophenol. <i>Chemistry - A European Journal</i> , 2017, 23, 16204-16212.	1.7	100
638	Catalysis and CO <sub>2</sub> Capture by Palladium-Incorporated Covalent Organic Frameworks. <i>ChemPlusChem</i> , 2017, 82, 1253-1265.	1.3	46
639	A Diaminopropane-Appended Metal-Organic Framework Enabling Efficient CO <sub>2</sub> Capture from Coal Flue Gas via a Mixed Adsorption Mechanism. <i>Journal of the American Chemical Society</i> , 2017, 139, 13541-13553.	6.6	206
640	Metal-organic frameworks (MOFs) for photocatalytic CO <sub>2</sub> reduction. <i>Catalysis Science and Technology</i> , 2017, 7, 4893-4904.	2.1	258
641	Metal organic framework derived mesoporous carbon nitrides with a high specific surface area and chromium oxide nanoparticles for CO <sub>2</sub> and hydrogen adsorption. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21542-21549.	5.2	45
642	Heat-Treatment of Defective UiO-66 from Modulated Synthesis: Adsorption and Stability Studies. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23471-23479.	1.5	73
643	Effect of Temperature, Dilute CO <sub>2</sub> and MEA Impregnation on the CO <sub>2</sub> Uptake of MIL-53 and HKUST-1 at Ambient Pressure. <i>Energy Procedia</i> , 2017, 114, 2405-2409.	1.8	0
644	Design and synthesis of coordination polymers with chelated units and their application in nanomaterials science. <i>RSC Advances</i> , 2017, 7, 42242-42288.	1.7	74
645	A Poly(ethyleneglycol) Functionalized ZIF-8 Membrane Prepared by Coordination-Based Post-Synthetic Strategy for the Enhanced Adsorption of Phenolic Endocrine Disruptors from Water. <i>Scientific Reports</i> , 2017, 7, 8912.	1.6	18
646	A new zeolitic hydroxymethylimidazolate material and its use in mixed matrix membranes based on 6FDA-DAM for gas separation. <i>Journal of Membrane Science</i> , 2017, 544, 88-97.	4.1	11
647	Elucidating the CO <sub>2</sub> adsorption mechanisms in the triangular channels of the bis(pyrazolate) MOF Fe <sub>2</sub> (BPEB) <sub>3</sub> by in situ synchrotron X-ray diffraction and molecular dynamics simulations. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16964-16975.	5.2	21
648	Molecular Dynamics Simulations for Loading-Dependent Diffusion of CO <sub>2</sub> , SO <sub>2</sub> , CH <sub>4</sub> , and Their Binary Mixtures in ZIF-10: The Role of Hydrogen Bond. <i>Langmuir</i> , 2017, 33, 11543-11553.	1.6	13
649	Construction of a Multi-Cage-Based MOF with a Unique Network for Efficient CO <sub>2</sub> Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 26177-26183.	4.0	75

#	ARTICLE	IF	CITATIONS
650	A Cd( $\text{SCp}^{\text{ii}}/\text{SCP}^{\text{>}}$ )-based MOF as a photosensitive Schottky diode: experimental and theoretical studies. <i>Dalton Transactions</i> , 2017, 46, 11239-11249.	1.6	66
651	Aqueous microwave-assisted synthesis of non-interpenetrated metal-organic framework for room temperature cycloaddition of $\text{CO}_2$ and epoxides. <i>Applied Catalysis A: General</i> , 2017, 544, 126-136.	2.2	40
652	Sandwich-like MIL-100(Fe)@Pt@MIL-100(Fe) nanoparticles for catalytic hydrogenation of 4-nitrophenol. <i>Catalysis Communications</i> , 2017, 102, 17-20.	1.6	14
653	Unveiling anomalous $\text{CO}_2$ -to- $\text{N}_2$ selectivity of graphene oxide. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 22743-22748.	1.3	21
654	Two-Dimensional Materials as Prospective Scaffolds for Mixed-Matrix Membrane-Based $\text{CO}_2$ Separation. <i>ChemSusChem</i> , 2017, 10, 3304-3316.	3.6	77
655	Mesoporous silica impregnated with organoamines for post-combustion $\text{CO}_2$ capture: a comparison of introduced amine types. , 2017, 7, 1116-1125.		11
656	Constructing semiconductive crystalline microporous materials by Coulomb interactions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18409-18413.	5.2	23
657	Substituted Benzoxazole and Catechol Cocrystals as an Adsorbent for $\text{CO}_2$ Capture: Synthesis and Mechanistic Studies. <i>Crystal Growth and Design</i> , 2017, 17, 4504-4510.	1.4	4
658	Computational evaluation of aluminophosphate zeotypes for $\text{CO}_2/\text{N}_2$ separation. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 22801-22812.	1.3	13
659	Insights into the Hydrothermal Stability of Triamine-Functionalized SBA-15 Silica for $\text{CO}_2$ Adsorption. <i>ChemSusChem</i> , 2017, 10, 4037-4045.	3.6	50
660	Characteristic Features of $\text{CO}_2$ and $\text{CO}$ Adsorptions to Paddle-Wheel-type Porous Coordination Polymer. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19129-19139.	1.5	13
661	Long-Term Effect of Steam Exposure on $\text{CO}_2$ Capture Performance of Amine-Grafted Silica. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 43747-43754.	4.0	36
662	Physisorption-induced structural change directing carbon monoxide chemisorption and nitric oxide coordination on hemilabile porous metal organic framework $\text{NaNi}_3(\text{OH})(\text{SIP})_2(\text{H}_2\text{O})_5 \cdot \text{H}_2\text{O}$ (SIP =) Tj ETQq0 0 0 rgBT / Overlock 10		
663	Using Artificial Neural Network and Ideal Adsorbed Solution Theory for Predicting the $\text{CO}_2/\text{CH}_4$ Selectivities of Metal-Organic Frameworks: A Comparative Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 14610-14622.	1.8	30
664	Pyridine-Functionalized and Metallized Meso-Macroporous Polymers for Highly Selective Capture and Catalytic Conversion of $\text{CO}_2$ into Cyclic Carbonates. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 15008-15016.	1.8	32
665	Efficient Construction of Free Energy Profiles of Breathing Metal-Organic Frameworks Using Advanced Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 5861-5873.	2.3	45
666	Four New 3D Metal-Organic Frameworks Constructed by a V-shaped Tetracarboxylates Ligand: Selective $\text{CO}_2$ Sorption and Luminescent Sensing. <i>Crystal Growth and Design</i> , 2017, 17, 6733-6740.	1.4	37
667	Highly thermally stable heterogeneous catalysts: study of 0D and 3D porphyrinic MOFs. <i>CrystEngComm</i> , 2017, 19, 7244-7252.	1.3	14

#	ARTICLE	IF	CITATIONS
668	Adsorption- and Membrane-Based CH <sub>4</sub> /N <sub>2</sub> Separation Performances of MOFs. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 8713-8722.	1.8	53
669	Post-Synthetic Annealing: Linker Self-Exchange in UiO-66 and Its Effect on Polymer-Metal Organic Framework Interaction. <i>Crystal Growth and Design</i> , 2017, 17, 4384-4392.	1.4	37
670	Non-activation MOF arrays as a coating layer to fabricate a stable superhydrophobic micro/nano flower-like architecture. <i>Chemical Communications</i> , 2017, 53, 8340-8343.	2.2	43
671	MOF-74 and UTSA-16 film growth on monolithic structures and their CO <sub>2</sub> adsorption performance. <i>Chemical Engineering Journal</i> , 2017, 313, 1346-1353.	6.6	107
672	Increasing the stability of Mg <sub>2</sub> (dobpdc) metal-organic framework in air through solvent removal. <i>Materials Chemistry Frontiers</i> , 2017, 1, 444-448.	3.2	30
673	Modelling adsorption in fluorinated TKL MOFs. <i>Molecular Simulation</i> , 2017, 43, 213-221.	0.9	1
674	A Hierarchical Bipyridine-Constructed Framework for Highly Efficient Carbon Dioxide Capture and Catalytic Conversion. <i>ChemSusChem</i> , 2017, 10, 1186-1192.	3.6	94
675	A facile one-pot cation-anion double hydrolysis approach to the synthesis of supported MgO/Al <sub>2</sub> O <sub>3</sub> with enhanced adsorption performance towards CO <sub>2</sub> . <i>Chemical Engineering Journal</i> , 2017, 310, 216-225.	6.6	42
676	Syntheses, structures, electrochemistry and catalytic oxidation degradation of organic dyes of two new coordination polymers derived from Cu(II) and Mn(II) and 1-(tetrazo-5-yl)-4-(triazole-1-yl)benzene. <i>Journal of Solid State Chemistry</i> , 2017, 246, 1-7.	1.4	8
677	CO <sub>2</sub> sorption behavior of imidazole, benzimidazole and benzoic acid based coordination polymers. <i>Coordination Chemistry Reviews</i> , 2017, 332, 100-121.	9.5	55
678	3D origami electrochemical device for sensitive Pb <sup>2+</sup> testing based on DNA functionalized iron-porphyrinic metal-organic framework. <i>Biosensors and Bioelectronics</i> , 2017, 87, 108-115.	5.3	66
679	Elucidation of Surface Species through in-situ FTIR Spectroscopy of Carbon Dioxide Adsorption on Amine-Grafted SBA-15. <i>ChemSusChem</i> , 2017, 10, 266-276.	3.6	122
680	Strategically designed azolyl-carboxylate MOFs for potential humid CO <sub>2</sub> capture. <i>Journal of Materials Chemistry A</i> , 2017, 5, 535-543.	5.2	50
681	Adsorptive removal and separation of chemicals with metal-organic frameworks: Contribution of $\pi$ -complexation. <i>Journal of Hazardous Materials</i> , 2017, 325, 198-213.	6.5	245
682	HKUST-1@ACM hybrids for adsorption applications: A systematic study of the synthesis conditions. <i>Microporous and Mesoporous Materials</i> , 2017, 237, 74-81.	2.2	15
683	Optimizing Carbon Dioxide Uptake and Carbon Dioxide-Methane Selectivity of Oxygen-Doped Porous Carbon Prepared from Oxygen Containing Polymer Precursors. <i>ChemistrySelect</i> , 2017, 2, 11959-11968.	0.7	6
684	Structure-directing effects of ionic liquids in the ionothermal synthesis of metal-organic frameworks. <i>IUCr</i> , 2017, 4, 380-392.	1.0	48
685	Gas sensing and capturing based on two-dimensional layered materials: Overview from theoretical perspective. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2018, 8, e1361.	6.2	101

#	ARTICLE	IF	CITATIONS
686	Adsorption of 1-Propanol in the Channel-Like InOF-1 Metal-Organic Framework and Its Influence on the CO <sub>2</sub> Capture Performances. Journal of Physical Chemistry C, 2018, 122, 5566-5577.	1.5	16
687	General strategies for effective capture and separation of noble gases by metal-organic frameworks. Dalton Transactions, 2018, 47, 4027-4031.	1.6	33
688	Mg <sup>1+</sup> Co <sup>x</sup> Li <sub>2</sub> (3,5-pdch) <sub>2</sub> (DMF) <sub>2</sub> ( <i>x</i> ) Tj ETQq0 0 0 rgBT /Over Co <sup>2+</sup> ions. New Journal of Chemistry, 2018, 42, 5096-5101.	1.4	3
689	Imide-Based Polymers of Intrinsic Microporosity: Probing the Microstructure in Relation to CO <sub>2</sub> Sorption Characteristics. ACS Omega, 2018, 3, 2757-2764.	1.6	20
690	Cocoa shell-deriving hydrochar modified through aminosilane grafting and cobalt particle dispersion as potential carbon dioxide adsorbent. Chemical Engineering Journal, 2018, 342, 420-428.	6.6	27
691	Tetracarboxylate Linker-Based Flexible Cu <sup>II</sup> Frameworks: Efficient Separation of CO <sub>2</sub> from CO <sub>2</sub> /N <sub>2</sub> and C <sub>2</sub> H <sub>2</sub> from C <sub>2</sub> H <sub>2</sub> /C <sub>2</sub> H <sub>4</sub> Mixtures. ACS Omega, 2018, 3, 2018-2026.	1.6	18
692	Activated polypyrrole-derived carbon spheres for superior CO <sub>2</sub> uptake at ambient conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 549, 147-154.	2.3	25
693	Enhancement of CO <sub>2</sub> Uptake and Selectivity in a Metal-Organic Framework by the Incorporation of Thiophene Functionality. Inorganic Chemistry, 2018, 57, 5074-5082.	1.9	50
694	BTC-based metal-organic frameworks: Correlation between relevant structural features and CO <sub>2</sub> adsorption performances. Fuel, 2018, 222, 319-326.	3.4	50
695	Xenon Gas Separation and Storage Using Metal-Organic Frameworks. CheM, 2018, 4, 466-494.	5.8	182
696	Large uniform copper 1,3,5-benzenetricarboxylate metal-organic-framework particles from slurry crystallization and their outstanding CO <sub>2</sub> gas adsorption capacity. Microporous and Mesoporous Materials, 2018, 264, 190-197.	2.2	13
697	A 3D Calcium Spirobifluorene Metal-Organic Framework: Single-Crystal-to-Single-Crystal Transformation and Toluene Detection by a Quartz Crystal Microbalance Sensor. Inorganic Chemistry, 2018, 57, 1689-1692.	1.9	31
698	Novel MgO/hollow carbon sphere composites for CO <sub>2</sub> adsorption. New Journal of Chemistry, 2018, 42, 5674-5679.	1.4	11
699	Template-free and room temperature synthesis of hierarchical porous zeolitic imidazolate framework nanoparticles and their dye and CO <sub>2</sub> sorption. Green Chemistry, 2018, 20, 1074-1084.	4.6	129
700	Cascade applications of robust MIL-96 metal organic frameworks in environmental remediation: Proof of concept. Chemical Engineering Journal, 2018, 341, 262-271.	6.6	26
701	Titanium-based metal-organic frameworks for photocatalytic applications. Coordination Chemistry Reviews, 2018, 359, 80-101.	9.5	246
702	Density Functional Theory-Based Adsorption Isotherms for Pure and Flue Gas Mixtures on Mg-MOF-74. Application in CO <sub>2</sub> Capture Swing Adsorption Processes. Journal of Physical Chemistry C, 2018, 122, 3945-3957.	1.5	38
703	Coordination Polymers Containing Metal Chelate Units. Springer Series in Materials Science, 2018, , 633-759.	0.4	2

#	ARTICLE	IF	CITATIONS
704	Coupled GCMC and LBM simulation method for visualizations of CO <sub>2</sub> /CH <sub>4</sub> gas separation through Cu-BTC membranes. <i>Journal of Membrane Science</i> , 2018, 550, 448-461.	4.1	26
705	A solvent "squeezing"™ strategy to graft ethylenediamine on Cu <sub>3</sub> (BTC) <sub>2</sub> for highly efficient CO <sub>2</sub> /CO separation. <i>Chemical Engineering Science</i> , 2018, 184, 85-92.	1.9	31
706	<i>In situ</i> microcalorimetric investigation on the formation of cadmium-organic framework based on 5-mercaptoisophthalic acid. <i>Functional Materials Letters</i> , 2018, 11, 1850002.	0.7	0
707	A highly stable MnII phosphonate as a highly efficient catalyst for CO <sub>2</sub> fixation under ambient conditions. <i>Chemical Communications</i> , 2018, 54, 1758-1761.	2.2	40
708	Bifunctional Pyridinium-Based Ionic-Liquid-Immobilized Diindium Tris(diphenic acid) Bis(1,10-phenanthroline) for CO <sub>2</sub> Fixation. <i>ChemSusChem</i> , 2018, 11, 924-932.	3.6	32
709	Comparative Study on Temperature-Dependent CO <sub>2</sub> Sorption Behaviors of Two Isostructural N-Oxide-Functionalized 3D Dynamic Microporous MOFs. <i>Inorganic Chemistry</i> , 2018, 57, 1455-1463.	1.9	19
711	Modeling the Interaction of Carbon Monoxide with Flexible Graphene: From Coupled Cluster Calculations to Molecular Dynamics Simulations. <i>ChemPhysChem</i> , 2018, 19, 774-783.	1.0	23
712	Influences of Deprotonation and Modulation on Nucleation and Growth of UiO-66: Intergrowth and Orientation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 2200-2206.	1.5	47
713	Core-Shell Zeolitic Imidazolate Frameworks for Enhanced Hydrogen Storage. <i>ACS Omega</i> , 2018, 3, 167-175.	1.6	120
714	Bulky substituent and solvent-induced alternative nodes for layered Cd-isophthalate/acylhydrazone frameworks. <i>CrystEngComm</i> , 2018, 20, 2841-2849.	1.3	11
715	Two Iron Complexes as Homogeneous and Heterogeneous Catalysts for the Chemical Fixation of Carbon Dioxide. <i>Inorganic Chemistry</i> , 2018, 57, 4649-4656.	1.9	23
716	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
717	Enzyme inspired complexes for industrial CO <sub>2</sub> capture: Opportunities and challenges. <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 24, 419-429.	3.3	38
718	CO <sub>2</sub> Sequestration: Processes and Methodologies. , 2018, , 1-50.		1
719	The simple system of fixing CO <sub>2</sub> to synthesize benzimidazolones at atmospheric pressure. <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 24, 250-255.	3.3	11
720	Carbon capture and storage (CCS): the way forward. <i>Energy and Environmental Science</i> , 2018, 11, 1062-1176.	15.6	2,378
721	Study of synthesis parameters of MIL-53(Al) using experimental design methodology for CO <sub>2</sub> /CH <sub>4</sub> separation. <i>Adsorption Science and Technology</i> , 2018, 36, 247-269.	1.5	17
722	Covalent organic frameworks: efficient, metal-free, heterogeneous organocatalysts for chemical fixation of CO <sub>2</sub> under mild conditions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 374-382.	5.2	238



#	ARTICLE	IF	CITATIONS
723	CO <sub>2</sub> capture using triamine-grafted SBA-15: The impact of the support pore structure. <i>Chemical Engineering Journal</i> , 2018, 334, 1260-1269.	6.6	113
724	Overcoming double-step CO <sub>2</sub> adsorption and minimizing water co-adsorption in bulky diamine-appended variants of Mg <sub>2</sub> (dobpdc). <i>Chemical Science</i> , 2018, 9, 160-174.	3.7	88
725	A search for selectivity to enable CO <sub>2</sub> capture with porous adsorbents. <i>Energy and Environmental Science</i> , 2018, 11, 57-70.	15.6	457
726	A novel ion-imprinted polymer induced by the glycyglycine modified metal-organic framework for the selective removal of Co(II) from aqueous solutions. <i>Chemical Engineering Journal</i> , 2018, 333, 280-288.	6.6	80
727	Functionalized MIL-101 with imidazolium-based ionic liquids for the cycloaddition of CO <sub>2</sub> and epoxides under mild condition. <i>Applied Surface Science</i> , 2018, 428, 218-225.	3.1	69
728	Immobilizing Organic-Based Molecular Switches into Metal-Organic Frameworks: A Promising Strategy for Switching in Solid State. <i>Macromolecular Rapid Communications</i> , 2018, 39, 1700388.	2.0	23
729	Gas adsorption properties of hybrid graphene-MOF materials. <i>Journal of Colloid and Interface Science</i> , 2018, 514, 801-813.	5.0	143
730	Design strategies for metal-organic frameworks selectively capturing harmful gases. <i>Journal of Organometallic Chemistry</i> , 2018, 854, 94-105.	0.8	34
731	Rational Fabrication of Polyethylenimine-Linked Microbeads for Selective CO <sub>2</sub> Capture. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 250-258.	1.8	34
732	Template-directed fabrication of MIL-101(Cr)/mesoporous silica composite: Layer-packed structure and enhanced performance for CO <sub>2</sub> capture. <i>Journal of Colloid and Interface Science</i> , 2018, 513, 891-902.	5.0	54
733	Screening of bimetallic M-Cu-BTC MOFs for CO <sub>2</sub> activation and mechanistic study of CO <sub>2</sub> hydrogenation to formic acid: A DFT study. <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 24, 64-72.	3.3	27
734	Molecular Layer Deposition-Modified 5A Zeolite for Highly Efficient CO <sub>2</sub> Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 769-775.	4.0	50
735	Temperature-tuned topologies and interpenetrations of two 3D porous copper(II)-organic frameworks and gas adsorption behaviors. <i>Inorganica Chimica Acta</i> , 2018, 471, 180-185.	1.2	8
736	Enhancing the stability and porosity of penetrated metal-organic frameworks through the insertion of coordination sites. <i>Chemical Science</i> , 2018, 9, 950-955.	3.7	34
737	Charge- and Electric-Field-Controlled Switchable Carbon Dioxide Capture and Gas Separation on a C <sub>2</sub> N Monolayer. <i>Energy Technology</i> , 2018, 6, 205-212.	1.8	42
738	Advances in Porous Adsorbents for CO <sub>2</sub> Capture and Storage. , 2018, , .		7
739	The Importance of CH <sub>3</sub> -X (X = O, ĩ) Interaction of a New Mixed Ligand Cu(II) Coordination Polymer: Structure, Hirshfeld Surface and Theoretical Studies. <i>Crystals</i> , 2018, 8, 455.	1.0	47
741	Functionalized ionic liquid membranes for CO <sub>2</sub> separation. <i>Chemical Communications</i> , 2018, 54, 12671-12685.	2.2	81

#	ARTICLE	IF	CITATIONS
742	Humidity-induced CO <sub>2</sub> capture enhancement in Mg-CUK-1. Dalton Transactions, 2018, 47, 15827-15834.	1.6	29
743	Potential of ultramicroporous metal-organic frameworks in CO <sub>2</sub> clean-up. Chemical Communications, 2018, 54, 13472-13490.	2.2	49
744	Chlorine-functionalized keto-enamine-based covalent organic frameworks for CO <sub>2</sub> separation and capture. CrystEngComm, 2018, 20, 7621-7625.	1.3	33
745	Investigation of CO <sub>2</sub> adsorption on amine-functionalized silicas and metal-organic polymers. Russian Chemical Bulletin, 2018, 67, 1595-1600.	0.4	1
746	State-of-the-Art Advances and Challenges of Iron-Based Metal Organic Frameworks from Attractive Features, Synthesis to Multifunctional Applications. Small, 2019, 15, e1803088.	5.2	111
747	Theoretical Insight into Gate-Opening Adsorption Mechanism and Sigmoidal Adsorption Isotherm into Porous Coordination Polymer. Journal of the American Chemical Society, 2018, 140, 13958-13969.	6.6	48
748	Porous coordination/covalent hybridized polymers synthesized from pyridine-zinc coordination compound and their CO <sub>2</sub> capture ability, fluorescence and selective response properties. Chemical Communications, 2018, 54, 12025-12028.	2.2	8
749	Coordination supramolecules with oxazoline-containing ligands. CrystEngComm, 2018, 20, 6109-6121.	1.3	7
750	Ligand Isomerism in Coordination Cages. Inorganic Chemistry, 2018, 57, 12222-12231.	1.9	24
751	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
754	Photochromic and photomodulated luminescence properties of two metal-organic viologen complexes constructed by a tetracarboxylate-anchored bipyridinium-based ligand. CrystEngComm, 2018, 20, 6412-6419.	1.3	32
755	Tuning carbon dioxide capture capability with structural and compositional design in mmen(Mg,Zn)(dobpdc) metal-organic framework: density functional theory investigation. , 2018, 8, 580-586.		5
756	Highly Nitrogen-Doped Porous Carbon Derived from Zeolitic Imidazolate Framework for CO <sub>2</sub> Capture. Chemistry - an Asian Journal, 2018, 13, 2069-2076.	1.7	39
757	Selective CO <sub>2</sub> adsorption by a new metal-organic framework: synergy between open metal sites and a charged imidazolinium backbone. Dalton Transactions, 2018, 47, 10527-10535.	1.6	31
758	Enhancement of CO <sub>2</sub> binding and mechanical properties upon diamine functionalization of M <sub>2</sub> (dobpdc) metal-organic frameworks. Chemical Science, 2018, 9, 5197-5206.	3.7	39
759	CO <sub>2</sub> adsorption performance of functionalized metal-organic frameworks of varying topologies by molecular simulations. Chemical Engineering Science, 2018, 189, 65-74.	1.9	22
760	Direct synthesis of an aliphatic amine functionalized metal-organic framework for efficient CO <sub>2</sub> removal and CH <sub>4</sub> purification. CrystEngComm, 2018, 20, 5969-5975.	1.3	13
761	Synthesis and characterization of three new Cd(II) coordination polymers with bidentate flexible ligands: Formation of 3D and 1D structures. Journal of Molecular Structure, 2018, 1169, 31-38.	1.8	6

#	ARTICLE	IF	CITATIONS
762	Discrete Triptycene-Based Hexakis(metal)sphens): Extrinsic Soluble Porous Molecules of Isostructural Constitution. <i>Chemistry - A European Journal</i> , 2018, 24, 11433-11437.	1.7	16
763	Immobilization of thiol-functionalized ionic liquids onto the surface of MIL-101(Cr) frameworks by S Cr coordination bond for biodiesel production. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 553, 593-600.	2.3	43
764	Modulating CO <sub>2</sub> Adsorption in Metal-Organic Frameworks via Metal-Ion Doping. <i>Inorganic Chemistry</i> , 2018, 57, 6135-6141.	1.9	21
765	Electroactive Co(salen) metal complexes and the electrophoretic deposition of their porous organic polymers onto glassy carbon. <i>RSC Advances</i> , 2018, 8, 24128-24142.	1.7	18
766	Carbon dioxide capture in MOFs: The effect of ligand functionalization. <i>Polyhedron</i> , 2018, 154, 236-251.	1.0	65
767	Cu(II)-Schiff base covalently anchored to MIL-125(Ti)-NH <sub>2</sub> as heterogeneous catalyst for oxidation reactions. <i>Journal of Colloid and Interface Science</i> , 2018, 532, 700-710.	5.0	44
768	Graphitic Carbon Nitride Functionalized with Polyethylenimine for Highly Effective Capture of Carbon Dioxide. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 11031-11038.	1.8	26
769	Green applications of metal-organic frameworks. <i>CrystEngComm</i> , 2018, 20, 5899-5912.	1.3	54
770	First-Principles Study of Electrocatalytically Reversible CO <sub>2</sub> Capture on Graphene-like C <sub>3</sub> N. <i>ChemPhysChem</i> , 2018, 19, 2788-2795.	1.0	51
771	A pillar-layered porous Co <sup>II</sup> -MOF with dual active sites for selective gas adsorption. <i>CrystEngComm</i> , 2018, 20, 4905-4909.	1.3	21
772	CO <sub>2</sub> Capture by Alkaline Solution for Carbonate Production: A Comparison between a Packed Column and a Membrane Contactor. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 996.	1.3	38
773	Zr-based metal-organic framework with dual Brønsted acid-base functions. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 383, 012011.	0.3	2
774	Co <sub>2</sub> and Co <sub>3</sub> Mixed Cluster Secondary Building Unit Approach toward a Three-Dimensional Metal-Organic Framework with Permanent Porosity. <i>Molecules</i> , 2018, 23, 755.	1.7	19
775	Enhancing Gas Sorption and Separation Performance via Bisbenzimidazole Functionalization of Highly Porous Covalent Triazine Frameworks. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 26678-26686.	4.0	52
776	A metal-organic framework nanomaterial as an ideal loading platform for ultrasensitive electrochemiluminescence immunoassays. <i>New Journal of Chemistry</i> , 2018, 42, 13558-13564.	1.4	12
777	Prolonged HKUST-1 functionality under extreme hydrothermal conditions by electrospinning polystyrene fibers as a new coating method. <i>Microporous and Mesoporous Materials</i> , 2018, 270, 34-39.	2.2	25
778	Synthesis chemistry of metal-organic frameworks for CO <sub>2</sub> capture and conversion for sustainable energy future. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 92, 570-607.	8.2	89
779	Novel stable metal-organic framework photocatalyst for light-driven hydrogen production. <i>CrystEngComm</i> , 2018, 20, 3228-3233.	1.3	39

#	ARTICLE	IF	CITATIONS
780	Highly reversible sorption of H <sub>2</sub> S and CO <sub>2</sub> by an environmentally friendly Mg-based MOF. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16900-16909.	5.2	81
781	Mixed Matrix Membranes Based on Metal-Organic Frameworks with Tunable Pore Size for CO <sub>2</sub> Separation. <i>Crystal Growth and Design</i> , 2018, 18, 4365-4371.	1.4	31
782	Novel 3D Nitrogen-Rich Metal Organic Framework for Highly Efficient CO <sub>2</sub> Adsorption and Catalytic Conversion to Cyclic Carbonates under Ambient Temperature. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8727-8735.	3.2	106
783	Porous Metal-Organic Polyhedral Framework containing Cuboctahedron Cages as SBUs with High Affinity for H <sub>2</sub> and CO <sub>2</sub> Sorption: A Heterogeneous Catalyst for Chemical Fixation of CO <sub>2</sub> . <i>Chemistry - A European Journal</i> , 2018, 24, 10988-10993.	1.7	48
784	Carbon Dioxide Absorption by the Imidazolium-Amino Acid Ionic Liquids, Kinetics, and Mechanism Approach. <i>Journal of Physical Chemistry A</i> , 2018, 122, 5721-5729.	1.1	13
785	Metal-Organic Framework-Based Catalysts for Photoreduction of CO <sub>2</sub> . <i>Advanced Materials</i> , 2018, 30, e1705512.	11.1	415
786	Density Functional Theory Analysis of Host-Guest Interactions in Cu(II)-Based Metal-Organic Frameworks for Pesticide Detection. <i>ACS Applied Nano Materials</i> , 2019, 2, 5469-5474.	2.4	18
787	Controlling the strength of interaction between carbon dioxide and nitrogen-rich carbon materials by molecular design. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2819-2827.	2.5	28
788	Trends in Solid Adsorbent Materials Development for CO <sub>2</sub> Capture. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 34533-34559.	4.0	215
789	Catalytic CO <sub>2</sub> Fixation over a Robust Lactam-Functionalized Cu(II) Metal Organic Framework. <i>Inorganic Chemistry</i> , 2019, 58, 9723-9732.	1.9	39
790	Micro- and Mesoporous Carbons Derived from KOH Activations of Polycyanurates with High Adsorptions for CO <sub>2</sub> and Iodine. <i>ACS Omega</i> , 2019, 4, 12018-12027.	1.6	7
791	Energy Storage Analysis of UIO-66 and Water Mixed Nanofluids: An Experimental and Theoretical Study. <i>Energies</i> , 2019, 12, 2521.	1.6	42
792	Potential of hydrophobic metal-organic framework-based materials for environmental applications. , 2019, , 319-354.		3
793	Synthesis, crystal structure, electrochemiluminescence property of a novel cadmium (II) coordination polymer possessing 4-cyanopyrazole. <i>Inorganic Chemistry Communication</i> , 2019, 107, 107489.	1.8	3
794	Water Enables Efficient CO <sub>2</sub> Capture from Natural Gas Flue Emissions in an Oxidation-Resistant Diamine-Appended Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2019, 141, 13171-13186.	6.6	107
795	Efficient One-Pot Synthesis of a Hexamethylenetetramine-Doped Cu-BDC Metal-Organic Framework with Enhanced CO <sub>2</sub> Adsorption. <i>Nanomaterials</i> , 2019, 9, 1063.	1.9	21
796	Isostructural Ni <sup>II</sup> Metal-Organic Frameworks (MOFs) for Efficient Electrocatalysis of Oxygen Evolution Reaction and for Gas Sorption Properties. <i>Chemistry - A European Journal</i> , 2019, 25, 11141-11146.	1.7	16
797	Recent Advances in Metal-Organic Frameworks for Photo-/Electrocatalytic CO <sub>2</sub> Reduction. <i>Chemistry - A European Journal</i> , 2019, 25, 14026-14035.	1.7	50

#	ARTICLE	IF	CITATIONS
798	NH <sub>2</sub> -UiO-66/C <sub>3</sub> N <sub>4</sub> /CdTe composites for photocatalytic CO <sub>2</sub> reduction under visible light. <i>APL Materials</i> , 2019, 7, .	2.2	14
799	Engineering Structural Dynamics of Zirconium Metal-Organic Frameworks Based on Natural C <sub>4</sub> Linkers. <i>Journal of the American Chemical Society</i> , 2019, 141, 17207-17216.	6.6	54
800	Advances in Spectroscopy: Molecules to Materials. <i>Springer Proceedings in Physics</i> , 2019, , .	0.1	4
801	Adsorption of CO <sub>2</sub> on amine-functionalized green metal-organic framework: an interaction between amine and CO <sub>2</sub> molecules. <i>Environmental Science and Pollution Research</i> , 2019, 26, 36214-36225.	2.7	20
802	NO <sub>x</sub> Adsorption and Optical Detection in Rare Earth Metal-Organic Frameworks. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 43270-43277.	4.0	61
803	Potential Utilization of Metal-Organic Frameworks in Heterogeneous Catalysis: A Case Study of Hydrogen-Bond Donating and Single-Site Catalysis. <i>Chemistry - an Asian Journal</i> , 2019, 14, 4087-4102.	1.7	25
804	Dispensing Technology of 3D Printing Optical Lens with Its Applications. <i>Energies</i> , 2019, 12, 3118.	1.6	2
805	Membrane-Coated UiO-66 MOF Adsorbents. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 1352-1362.	1.8	17
806	Design Strategy for the Controlled Generation of Cationic Frameworks and Ensuing Anion-Exchange Capabilities. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 3181-3188.	4.0	11
807	Two microporous Co <sup>II</sup> -MOFs with dual active sites for highly selective adsorption of CO <sub>2</sub> /CH <sub>4</sub> and CO <sub>2</sub> /N <sub>2</sub> . <i>Dalton Transactions</i> , 2019, 48, 13541-13545.	1.6	14
808	Structure-Driven Photoluminescence Enhancement in a Zn-Based Metal-Organic Framework. <i>Chemistry of Materials</i> , 2019, 31, 7933-7940.	3.2	21
809	Facile Synthesis of Aromatic Porous Organic Polymer for Highly Selective Capture of CO <sub>2</sub> via Enhanced Local Dipole-π and Dipole-Quadrupole Interactions by Adjacent Benzene. <i>Polymer Science - Series B</i> , 2019, 61, 629-636.	0.3	0
810	Porous Zn(Bmic)(AT) MOF with Abundant Amino Groups and Open Metal Sites for Efficient Capture and Transformation of CO <sub>2</sub> . <i>Inorganic Chemistry</i> , 2019, 58, 13917-13926.	1.9	68
811	Magnesium based coordination polymers: Syntheses, structures, properties and applications. <i>Coordination Chemistry Reviews</i> , 2019, 399, 213025.	9.5	17
812	Dissolving uptake-hindering surface defects in metal-organic frameworks. <i>Chemical Science</i> , 2019, 10, 153-160.	3.7	55
813	From CO <sub>2</sub> methanation to ambitious long-chain hydrocarbons: alternative fuels paving the path to sustainability. <i>Chemical Society Reviews</i> , 2019, 48, 205-259.	18.7	205
814	Nanosheets of MIL-53(Al) applied in membranes with improved CO <sub>2</sub> /N <sub>2</sub> and CO <sub>2</sub> /CH <sub>4</sub> selectivities. <i>Dalton Transactions</i> , 2019, 48, 3392-3403.	1.6	21
815	Post-synthetic modulation of the charge distribution in a metal-organic framework for optimal binding of carbon dioxide and sulfur dioxide. <i>Chemical Science</i> , 2019, 10, 1472-1482.	3.7	62

#	ARTICLE	IF	CITATIONS
816	A facile low-temperature synthesis of hierarchical porous Co <sub>3</sub> O <sub>4</sub> micro/nano structures derived from ZIF-67 assisted by ammonium perchlorate. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 715-722.	3.0	68
817	Water Contaminant Elimination Based on Metal-Organic Frameworks and Perspective on Their Industrial Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 4548-4563.	3.2	165
818	Co(II)-based Metal-Organic Frameworks and Their Application in Gas Sorption and Solvatochromism. <i>Crystal Growth and Design</i> , 2019, 19, 1640-1648.	1.4	25
819	Quenching of photoluminescence in a Zn-MOF sensor by nitroaromatic molecules. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2625-2632.	2.7	54
820	Mechanochemical synthesis of metal-organic frameworks. <i>Polyhedron</i> , 2019, 162, 59-64.	1.0	161
821	A Ni <sup>II</sup> -cluster-based MOF as an efficient heterogeneous catalyst for the chemical transformation of CO <sub>2</sub> . <i>Dalton Transactions</i> , 2019, 48, 1246-1250.	1.6	17
822	Pyridine-grafted Cr-based metal-organic frameworks for adsorption and removal of microcystin-LR from aqueous solution. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 577-584.	1.2	5
823	MOFs containing a linear bis-pyridyl-tris-amide and angular carboxylates: exploration of proton conductivity, water vapor and dye sorptions. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 184-191.	3.0	41
824	Template-free synthesis of carbon hollow spheres and reduced graphene oxide from spent lithium-ion batteries towards efficient gas storage. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3244-3252.	5.2	83
825	Computational prediction of promising pyrazine and bipyridine analogues of a fluorinated MOF platform, MFN-Ni-L (M = Si/Al; N = SIX/FIVE; L = pyr/bipyr), for CO <sub>2</sub> capture under pre-humidified conditions. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 16127-16136.	1.3	13
826	Highly Active Ultrasmall Ni Nanoparticle Embedded Inside a Robust Metal-Organic Framework: Remarkably Improved Adsorption, Selectivity, and Solvent-Free Efficient Fixation of CO <sub>2</sub> . <i>Inorganic Chemistry</i> , 2019, 58, 8100-8110.	1.9	67
827	Synthetic, spectral, structural and catalytic activity of infinite 3-D and 2-D copper coordination polymers for substrate size-dependent catalysis for CO <sub>2</sub> conversion. <i>Dalton Transactions</i> , 2019, 48, 10078-10088.	1.6	16
828	Preparation of polydopamine-modified zeolitic imidazolate framework-8 functionalized electrospun fibers for efficient removal of tetracycline. <i>Journal of Colloid and Interface Science</i> , 2019, 552, 506-516.	5.0	72
829	Stability of amine-functionalized CO <sub>2</sub> adsorbents: a multifaceted puzzle. <i>Chemical Society Reviews</i> , 2019, 48, 3320-3405.	18.7	260
830	Fabrication and orientation of Ni-LAB membranes by linker salt approach. <i>Microporous and Mesoporous Materials</i> , 2019, 287, 135-143.	2.2	3
831	Challenges and opportunities for adsorption-based CO <sub>2</sub> capture from natural gas combined cycle emissions. <i>Energy and Environmental Science</i> , 2019, 12, 2161-2173.	15.6	119
832	Preparation and Characterization of Functionalized Metal-Organic Frameworks with Core/Shell Magnetic Particles (Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> @MOFs) for Removal of Congo Red and Methylene Blue from Water Solution. <i>Journal of Chemical &amp; Engineering Data</i> , 2019, 64, 2455-2463.	1.0	74
833	A Stable Mesoporous Zr-Based Metal Organic Framework for Highly Efficient CO <sub>2</sub> Conversion. <i>Inorganic Chemistry</i> , 2019, 58, 7480-7487.	1.9	51

#	ARTICLE	IF	CITATIONS
834	Facile synthesis of aminated indole-based porous organic polymer for highly selective capture of CO <sub>2</sub> by the coefficient effect of π-π-stacking and hydrogen bonding. RSC Advances, 2019, 9, 11851-11854.	1.7	3
835	Hybrid MIL-101(Cr)@MIL-53(Al) composite for carbon dioxide capture from biogas. RSC Advances, 2019, 9, 15141-15150.	1.7	9
836	New Materials for Gas Separation Applications: Mixed Matrix Membranes Made from Linear Polyimides and Porous Polymer Networks Having Lactam Groups. Industrial & Engineering Chemistry Research, 2019, 58, 9585-9595.	1.8	22
837	Biomass-Derived Hierarchically Porous Carbons Abundantly Decorated with Nitrogen Sites for Efficient CO <sub>2</sub> Catalytic Utilization. Industrial & Engineering Chemistry Research, 2019, 58, 7980-7988.	1.8	25
838	Liquid marble-derived solid-liquid hybrid superparticles for CO <sub>2</sub> capture. Nature Communications, 2019, 10, 1854.	5.8	52
839	A Zn metal-organic framework constructed by a mixed-ligand strategy for CO <sub>2</sub> capture and gas separation. CrystEngComm, 2019, 21, 3289-3294.	1.3	14
840	Combining CO <sub>2</sub> capture and catalytic conversion to methane. Waste Disposal & Sustainable Energy, 2019, 1, 53-65.	1.1	74
841	Mesoporous Composite Nanomaterials for Dye Removal and Other Applications. , 2019, , 265-293.		17
842	Surfactants as promising media in the field of metal-organic frameworks. Coordination Chemistry Reviews, 2019, 391, 30-43.	9.5	296
843	CO <sub>2</sub> Storage on Nanoporous Carbons. Green Energy and Technology, 2019, , 287-330.	0.4	8
844	Nanoporous Materials for Gas Storage. Green Energy and Technology, 2019, , .	0.4	14
845	Carbon capture and conversion using metal-organic frameworks and MOF-based materials. Chemical Society Reviews, 2019, 48, 2783-2828.	18.7	1,685
846	Atomic Layer Deposition for Preparation of Highly Efficient Catalysts for Dry Reforming of Methane. Catalysts, 2019, 9, 266.	1.6	4
847	Effect of Ionic Liquid Impregnation in Highly Water-Stable Metal-Organic Frameworks, Covalent Organic Frameworks, and Carbon-Based Adsorbents for Post-combustion Flue Gas Treatment. Energy & Fuels, 2019, 33, 3421-3428.	2.5	27
848	Fabrication of metal-organic framework@Yeast composite materials for efficient removal of Pb <sup>2+</sup> in water. Journal of Solid State Chemistry, 2019, 274, 26-31.	1.4	12
849	Copper and palladium loaded polyol dendrimer-montmorillonite composites as potential adsorbents for CO <sub>2</sub> and H <sub>2</sub> . Journal of Materials Science: Materials in Electronics, 2019, 30, 8182-8190.	1.1	7
850	A new metal-organic framework constructed from Cu(II) and 3-bromo-5-(4-carboxyphenyl)pyridine: Synthesis, structure, photoluminescent and magnetic properties. Journal of Molecular Structure, 2019, 1185, 276-280.	1.8	3
851	Deep eutectic solvents appended to UiO-66 type metal organic frameworks: Preserved open metal sites and extra adsorption sites for CO <sub>2</sub> capture. Applied Surface Science, 2019, 480, 770-778.	3.1	48

#	ARTICLE	IF	CITATIONS
852	Five new 3D transition MOFs based on 1-(3,5-dicarboxylatobenzyl)-3,5-pyrazole dicarboxylic acid displaying unique luminescence sensing towards Fe <sup>3+</sup> and magnetic properties. Dalton Transactions, 2019, 48, 7786-7793.	1.6	17
853	N-rich covalent organic frameworks with different pore size for high-pressure CO <sub>2</sub> adsorption. Microporous and Mesoporous Materials, 2019, 285, 70-79.	2.2	41
854	Electrospun Nanofibers for Carbon Dioxide Capture. , 2019, , 619-640.		4
855	Modeling Gas Adsorption in Flexible Metal-Organic Frameworks via Hybrid Monte Carlo/Molecular Dynamics Schemes. Advanced Theory and Simulations, 2019, 2, 1800177.	1.3	40
856	Metal-organic framework-based heterogeneous catalysts for the conversion of C1 chemistry: CO, CO <sub>2</sub> and CH <sub>4</sub> . Coordination Chemistry Reviews, 2019, 387, 79-120.	9.5	298
857	Molecular Insights into Carbon Dioxide Sorption in Hydrazone-Based Covalent Organic Frameworks with Tertiary Amine Moieties. Chemistry of Materials, 2019, 31, 1946-1955.	3.2	71
858	Porous High-Valence Metal-Organic Framework Featuring Open Coordination Sites for Effective Water Adsorption. Inorganic Chemistry, 2019, 58, 3058-3064.	1.9	22
859	Highly selective CO <sub>2</sub> removal for one-step liquefied natural gas processing by physisorbents. Chemical Communications, 2019, 55, 3219-3222.	2.2	31
860	Revealing an unusual temperature-dependent CO <sub>2</sub> adsorption trend and selective CO <sub>2</sub> uptake over water vapors in a polyamine-appended metal-organic framework. Materials Chemistry Frontiers, 2019, 3, 2759-2767.	3.2	19
861	Kinetic evaluation and comparative study of cationic and anionic dyes adsorption on Zeolitic imidazolate frameworks based metal organic frameworks. Materials Research Express, 2019, 6, 125088.	0.8	19
862	Ionic Liquid-Impregnated Metal-Organic Frameworks for CO <sub>2</sub> /CH <sub>4</sub> Separation. ACS Applied Nano Materials, 2019, 2, 7933-7950.	2.4	51
863	Sequential Co-immobilization of Enzymes in Metal-Organic Frameworks for Efficient Biocatalytic Conversion of Adsorbed CO <sub>2</sub> to Formate. Frontiers in Bioengineering and Biotechnology, 2019, 7, 394.	2.0	68
864	An overview of the most common lab-made coating materials in solid phase microextraction. Talanta, 2019, 191, 283-306.	2.9	104
865	Advancement in porous adsorbents for post-combustion CO <sub>2</sub> capture. Microporous and Mesoporous Materials, 2019, 276, 107-132.	2.2	129
866	Towards a cleaner natural gas production: recent developments on purification technologies. Separation Science and Technology, 2019, 54, 2461-2497.	1.3	6
867	CO <sub>2</sub> Sequestration: Processes and Methodologies. , 2019, , 1-50.		0
868	A Flexible Cu-MOF as Crystalline Sponge for Guests Determination. Inorganic Chemistry, 2019, 58, 61-64.	1.9	22
869	Carbon nanotube silica composite hollow fibers impregnated with polyethylenimine for CO <sub>2</sub> capture. Chemical Engineering Journal, 2019, 359, 476-484.	6.6	40



#	ARTICLE	IF	CITATIONS
870	Click chemistry as a versatile reaction for construction and modification of metal-organic frameworks. <i>Coordination Chemistry Reviews</i> , 2019, 380, 484-518.	9.5	86
871	Direct Catalytic Conversion of CO <sub>2</sub> to Cyclic Organic Carbonates under Mild Reaction Conditions by Metal-Organic Frameworks. <i>Catalysts</i> , 2019, 9, 34.	1.6	47
872	Cobalt nanoparticles embedded into polydimethylsiloxane-grafted cocoa shell: functional agrowaste for CO <sub>2</sub> capture. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 3942-3951.	1.1	0
873	Molecular-Level Understanding of Translational and Rotational Motions of C <sub>2</sub> H <sub>6</sub> , C <sub>3</sub> H <sub>8</sub> , and <i>n</i> -C <sub>4</sub> H <sub>10</sub> and Their Binary Mixtures with CO <sub>2</sub> in ZIF-10. <i>Journal of Chemical &amp; Engineering Data</i> , 2019, 64, 484-496.	1.0	4
874	A Zn(II)-based pillar-layered metal-organic framework: Synthesis, structure, and CO <sub>2</sub> selective adsorption. <i>Polyhedron</i> , 2019, 158, 283-289.	1.0	10
875	Diffusion of Water and Carbon Dioxide and Mixtures Thereof in Mg-MOF-74. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8212-8220.	1.5	19
876	Luminescent Triazene-Based Covalent Organic Frameworks Functionalized with Imine and Azine: N <sub>2</sub> and H <sub>2</sub> Sorption and Efficient Removal of Organic Dye Pollutants. <i>Crystal Growth and Design</i> , 2019, 19, 362-368.	1.4	32
877	Metallopolymers for advanced sustainable applications. <i>Chemical Society Reviews</i> , 2019, 48, 558-636.	18.7	139
878	Trace Carbon Dioxide Capture by Metal-Organic Frameworks. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 82-93.	3.2	92
879	Copper benzene-1,3,5-tricarboxylate (Cu-BTC) metal-organic framework (MOF) and porous carbon composites as efficient carbon dioxide adsorbents. <i>Journal of Colloid and Interface Science</i> , 2019, 535, 122-132.	5.0	85
880	Metal-organic frameworks and porous organic polymers for sustainable fixation of carbon dioxide into cyclic carbonates. <i>Coordination Chemistry Reviews</i> , 2019, 378, 32-65.	9.5	329
881	Recent advances about metal-organic frameworks in the removal of pollutants from wastewater. <i>Coordination Chemistry Reviews</i> , 2019, 378, 17-31.	9.5	479
882	Nanomaterial for CO <sub>2</sub> Sequestration. , 2020, , 598-605.		0
883	Carbon dioxide capacity retention on elastic layered metal organic frameworks subjected to hydrothermal cycling. <i>Microporous and Mesoporous Materials</i> , 2020, 292, 109371.	2.2	4
884	C <sub>2</sub> H <sub>2</sub> /CH <sub>4</sub> and CO <sub>2</sub> /CH <sub>4</sub> separations on a ethoxyl-functionalized Cobalt(II)-Organic framework with open metal sites. <i>Microporous and Mesoporous Materials</i> , 2020, 293, 109777.	2.2	9
885	Tannin-derived micro-mesoporous carbons prepared by one-step activation with potassium oxalate and CO <sub>2</sub> . <i>Journal of Colloid and Interface Science</i> , 2020, 558, 55-67.	5.0	31
886	Scalable synthesis of multi-substituted aryl-phosphonates: Exploring the limits of isoretical expansion and the synthesis of new triazene-based phosphonates. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2020, 195, 231-244.	0.8	1
887	Sorbenten zur direkten Gewinnung von CO <sub>2</sub> aus der Umgebungsluft. <i>Angewandte Chemie</i> , 2020, 132, 7048-7072.	1.6	18

#	ARTICLE	IF	CITATIONS
888	Sorbents for the Direct Capture of CO <sub>2</sub> from Ambient Air. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6984-7006.	7.2	341
889	Synthesis and effect of metal-organic frameworks on CO <sub>2</sub> adsorption capacity at various pressures: A contemplating review. <i>Energy and Environment</i> , 2020, 31, 367-388.	2.7	29
890	Encapsulation of a Porous Organic Cage into the Pores of a Metal-Organic Framework for Enhanced CO <sub>2</sub> Separation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6068-6073.	7.2	50
891	Encapsulation of a Porous Organic Cage into the Pores of a Metal-Organic Framework for Enhanced CO <sub>2</sub> Separation. <i>Angewandte Chemie</i> , 2020, 132, 6124-6129.	1.6	15
892	Two-dimensional materials and metal-organic frameworks for the CO <sub>2</sub> reduction reaction. <i>Materials Today Advances</i> , 2020, 5, 100038.	2.5	48
893	A CO <sub>2</sub> -induced ROCO <sub>2</sub> Na/ROCO <sub>2</sub> H buffer solution promoted the carboxylative cyclization of propargyl alcohol to synthesize cyclic carbonates. <i>Catalysis Science and Technology</i> , 2020, 10, 736-741.	2.1	8
894	Exploring the limits of adsorption-based CO <sub>2</sub> capture using MOFs with PVSA from molecular design to process economics. <i>Molecular Systems Design and Engineering</i> , 2020, 5, 212-231.	1.7	82
895	Combined experimental and computational studies on preferential CO <sub>2</sub> adsorption over a zinc-based porous framework solid. <i>New Journal of Chemistry</i> , 2020, 44, 1806-1816.	1.4	4
896	Facile synthesis of tetraphenylethene-based conjugated microporous polymers as adsorbents for CO <sub>2</sub> and organic vapor uptake. <i>New Journal of Chemistry</i> , 2020, 44, 317-321.	1.4	10
897	Ionization of a covalent organic framework for catalyzing the cycloaddition reaction between epoxides and carbon dioxide. <i>Chinese Journal of Catalysis</i> , 2020, 41, 485-493.	6.9	54
898	A review of N-functionalized solid adsorbents for post-combustion CO <sub>2</sub> capture. <i>Applied Energy</i> , 2020, 260, 114244.	5.1	143
899	Zinc hydroxide nitrate nanosheets conversion into hierarchical zeolitic imidazolate frameworks nanocomposite and their application for CO <sub>2</sub> sorption. <i>Materials Today Chemistry</i> , 2020, 15, 100222.	1.7	34
900	Synergetic Effect of Ru and NiO in the Electrocatalytic Decomposition of Li <sub>2</sub> CO <sub>3</sub> to Enhance the Performance of a Li-CO <sub>2</sub> /O <sub>2</sub> Battery. <i>ACS Catalysis</i> , 2020, 10, 1640-1651.	5.5	85
901	Regulation of the Degree of Interpenetration in Metal-Organic Frameworks. <i>Topics in Current Chemistry</i> , 2020, 378, 4.	3.0	29
902	Charge-modulated/electric-field controlled reversible CO <sub>2</sub> /H <sub>2</sub> capture and storage on metal-free N-doped penta-graphene. <i>Chemical Engineering Journal</i> , 2020, 391, 123577.	6.6	35
903	Encapsulated HKUST-1 nanocrystal with enhanced vapor stability and its CO <sub>2</sub> adsorption at low partial pressure in unitary and binary systems. <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 36, 1-8.	3.3	8
904	Toward a Rational Design of Titanium Metal-Organic Frameworks. <i>Matter</i> , 2020, 2, 440-450.	5.0	58
905	A Highly Stable Triazole-Functionalized Metal-Organic Framework Integrated with Exposed Metal Sites for Selective CO <sub>2</sub> Capture and Conversion. <i>Chemistry - A European Journal</i> , 2020, 26, 2658-2665.	1.7	23

#	ARTICLE	IF	CITATIONS
906	Solvent-free and one-pot synthesis of ultramicroporous carbons with ultrahigh nitrogen contents for sulfur dioxide capture. <i>Chemical Engineering Journal</i> , 2020, 391, 123579.	6.6	32
907	A review on production of metal organic frameworks (MOF) for CO <sub>2</sub> adsorption. <i>Science of the Total Environment</i> , 2020, 707, 135090.	3.9	385
908	A comparative study of the physical and chemical properties of pelletized HKUST-1, ZIF-8, ZIF-67 and UiO-66 powders. <i>Heliyon</i> , 2020, 6, e04883.	1.4	18
909	Reticular Materials for Artificial Photoreduction of CO <sub>2</sub> . <i>Advanced Energy Materials</i> , 2020, 10, 2002091.	10.2	92
910	DNA intercalative trinuclear Cu(II) complex with new <i>trans</i> axial nitrato ligation as an efficient catalyst for atmospheric CO <sub>2</sub> fixation to epoxides. <i>CrystEngComm</i> , 2020, 22, 8374-8386.	1.3	6
911	Carbon dioxide capacity retention on elastic layered metal organic frameworks subjected to hydrothermal cycling. <i>Microporous and Mesoporous Materials</i> , 2020, 304, 110377.	2.2	6
912	Highly efficient synergistic CO <sub>2</sub> conversion with epoxide using copper polyhedron-based MOFs with Lewis acid and base sites. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 4517-4526.	3.0	36
913	Fabrication of heterostructured UiO-66-NH <sub>2</sub> /CNTs with enhanced activity and selectivity over photocatalytic CO <sub>2</sub> reduction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 30634-30646.	3.8	30
914	A Flexible Robust Copper(II) Metal-Organic Framework Constructed from a Fluorinated Ligand for CO <sub>2</sub> /R <sub>22</sub> Capture. <i>Inorganic Chemistry</i> , 2020, 59, 14856-14860.	1.9	14
915	Polar Sulfone-Functionalized Oxygen-Rich Metal-Organic Frameworks for Highly Selective CO <sub>2</sub> Capture and Sensitive Detection of Acetylacetone at ppb Level. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 11724-11736.	4.0	53
916	Seven Zn(II) and Cd(II) 1D coordination polymers based on azine donor linkers and decorated with 2-thiophenecarboxylate: Syntheses, structural parallels, Hirshfeld surface analysis, and spectroscopic and inclusion properties. <i>Polyhedron</i> , 2020, 188, 114702.	1.0	8
917	Effect of molar ration of Ti/Ligand on the synthesis of MIL-125(Ti) and its adsorption and photocatalytic properties. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 90, 166-177.	2.9	22
918	Preparation of ZIF-8 Membranes on Porous ZnO Hollow Fibers by a Facile ZnO-Induced Method. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 15576-15585.	1.8	18
919	A microporous, amino acid functionalized Zn(II)-organic framework nanoflower for selective CO <sub>2</sub> capture and solvent encapsulation. <i>Materials Advances</i> , 2020, 1, 1455-1463.	2.6	9
920	Electro-reduction of carbon dioxide at low over-potential at a metal-organic framework decorated cathode. <i>Nature Communications</i> , 2020, 11, 5464.	5.8	62
921	Carbon capture using nanoporous adsorbents. , 2020, , 265-303.		0
922	Porous Ti-MOF-74 Framework as a Strong-Binding Nitric Oxide Scavenger. <i>Journal of the American Chemical Society</i> , 2020, 142, 16562-16568.	6.6	27
923	H <sub>2</sub> O-prompted CO <sub>2</sub> capture on metal silicates <i>in situ</i> generated from SBA-15. <i>RSC Advances</i> , 2020, 10, 28731-28740.	1.7	3

#	ARTICLE	IF	CITATIONS
924	A reference high-pressure CH <sub>4</sub> adsorption isotherm for zeolite Y: results of an interlaboratory study. <i>Adsorption</i> , 2020, 26, 1253-1266.	1.4	27
925	Accelerating Biodiesel Catalytic Production by Confined Activation of Methanol over High-Concentration Ionic Liquid-Grafted UiO-66 Solid Superacids. <i>ACS Catalysis</i> , 2020, 10, 11848-11856.	5.5	32
926	Recent Advances on Metalloporphyrin-Based Materials for Visible-Light-Driven CO <sub>2</sub> Reduction. <i>ChemSusChem</i> , 2020, 13, 6124-6140.	3.6	49
927	Autonomous Underwater Vehicle Powered by Direct Methanol Fuel Cell-Based Power Plants: A Quick Preliminary Design Model. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7687.	1.3	2
928	In situ deposition of M(M=Zn; Ni; Co)-MOF-74 over structured carriers for cyclohexene oxidation - Spectroscopic and microscopic characterisation. <i>Microporous and Mesoporous Materials</i> , 2020, 303, 110249.	2.2	28
929	Using Site Heterogeneity in Metal-Organic Frameworks with Bimetallic Open Metal Sites for Olefin/Paraffin Separations. <i>ACS Applied Nano Materials</i> , 2020, 3, 5291-5300.	2.4	10
930	An Ultra-Microporous Metal-Organic Framework with Exceptional Xe Capacity. <i>Chemistry - A European Journal</i> , 2020, 26, 12544-12548.	1.7	10
931	Microporous 3D Graphene-like Zeolite-Templated Carbons for Preferential Adsorption of Ethane. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 28484-28495.	4.0	25
932	Emerging trends in porous materials for CO <sub>2</sub> capture and conversion. <i>Chemical Society Reviews</i> , 2020, 49, 4360-4404.	18.7	473
933	Catalytic conversion of CO <sub>2</sub> to chemicals and fuels: the collective thermocatalytic/photocatalytic/electrocatalytic approach with graphitic carbon nitride. <i>Materials Advances</i> , 2020, 1, 1506-1545.	2.6	96
934	Accelerated Formation Kinetics of a Multicomponent Metal-Organic Framework Derived from Preferential Site Occupancy. <i>Inorganic Chemistry</i> , 2020, 59, 9350-9355.	1.9	7
935	Catalytic reduction of CO <sub>2</sub> into fuels and fine chemicals. <i>Green Chemistry</i> , 2020, 22, 4002-4033.	4.6	162
936	Ethylenediamine-incorporated MIL-101(Cr)-NH <sub>2</sub> metal-organic frameworks for enhanced CO <sub>2</sub> adsorption. <i>Korean Journal of Chemical Engineering</i> , 2020, 37, 1206-1211.	1.2	29
937	Unconventional Pyridyl Ligand Inclusion within a Flexible Metal-Organic Framework Bearing an N <sub>2</sub> -Diethylformamide (DEF)-Solvated Cd <sub>5</sub> Cluster Secondary Building Unit. <i>ChemPlusChem</i> , 2020, 85, 503-509.	1.3	6
938	Photocatalytic CO <sub>2</sub> reduction over metal-organic framework-based materials. <i>Coordination Chemistry Reviews</i> , 2020, 412, 213262.	9.5	401
939	Coordinatively unsaturated metal sites (open metal sites) in metal-organic frameworks: design and applications. <i>Chemical Society Reviews</i> , 2020, 49, 2751-2798.	18.7	449
940	Highly efficient CO <sub>2</sub> capture and conversion of a microporous acylamide functionalized <i>cis</i> -type metal-organic framework. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 1939-1948.	3.0	24
941	Strategies to Enhance Carbon Dioxide Capture in Metal-Organic Frameworks. <i>ChemPlusChem</i> , 2020, 85, 538-547.	1.3	49

#	ARTICLE	IF	CITATIONS
942	Salts Induced Formation of Hierarchical Porous ZIF-8 and Their Applications for CO <sub>2</sub> Sorption and Hydrogen Generation via NaBH <sub>4</sub> Hydrolysis. <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 2000031.	1.1	51
943	Zeolitic Metal Cluster Carboxylic Framework for Selective Carbon Dioxide Chemical Fixation through the Superlarge Cage. <i>Inorganic Chemistry</i> , 2020, 59, 3912-3918.	1.9	19
944	Synergistic dual-Li+ sites for CO <sub>2</sub> separation in metal-organic framework composites. <i>Chemical Engineering Journal</i> , 2020, 402, 126201.	6.6	17
945	Electrical conductivity and magnetic bistability in metal-organic frameworks and coordination polymers: charge transport and spin crossover at the nanoscale. <i>Chemical Society Reviews</i> , 2020, 49, 5601-5638.	18.7	122
946	A practical guide to calculate the isosteric heat/enthalpy of adsorption <i>via</i> adsorption isotherms in metal-organic frameworks, MOFs. <i>Dalton Transactions</i> , 2020, 49, 10295-10307.	1.6	189
947	Green Synthesis of Hierarchical Metal-Organic Framework/Wood Functional Composites with Superior Mechanical Properties. <i>Advanced Science</i> , 2020, 7, 1902897.	5.6	99
948	A Set of phenyl sulfonate metal coordination complexes triggered Biginelli reaction for the high efficient synthesis of 3,4-dihydropyrimidin-2(1 <i>H</i> )-ones under solvent-free conditions. <i>Applied Organometallic Chemistry</i> , 2020, 34, e5542.	1.7	13
949	Construction of a functionalized hierarchical pore metal-organic framework <i>via</i> a palladium-reduction induced strategy. <i>Nanoscale</i> , 2020, 12, 6250-6255.	2.8	13
950	High-Performance Li-CO <sub>2</sub> Batteries from Free-Standing, Binder-Free, Bifunctional Three-Dimensional Carbon Catalysts. <i>ACS Energy Letters</i> , 2020, 5, 916-921.	8.8	81
951	Microrespirometric assessment of the metal-organic framework [Co <sub>2</sub> (btec)(bipy)(DMF) <sub>2</sub> ] <sub>n</sub> (MOF-Co) to prevent inhibition by arsenic in activated sludge. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 1153-1162.	1.2	4
952	Efficient removal of As(V) from simulated arsenic-contaminated wastewater via a novel metal-organic framework material: Synthesis, structure, and response surface methodology. <i>Applied Organometallic Chemistry</i> , 2020, 34, e5584.	1.7	13
953	Gas Adsorption, Proton Conductivity, and Sensing Potential of a Nanoporous Gadolinium Coordination Framework. <i>Inorganic Chemistry</i> , 2020, 59, 3053-3061.	1.9	9
954	ZIF-8/Nanocrystalline Zirconosilicate Integrated Porous Material for the Activation and Utilization of CO <sub>2</sub> in Insertion Reactions. <i>Chemistry - an Asian Journal</i> , 2020, 15, 1132-1139.	1.7	10
955	A facile method for in situ fabrication of silica/cellulose aerogels and their application in CO <sub>2</sub> capture. <i>Carbohydrate Polymers</i> , 2020, 236, 116079.	5.1	35
956	Design of Highly Nitrogen-Doped, Two-Dimensional Hierarchical Porous Carbons with Superior Performance for Selective Capture of CO <sub>2</sub> and SO <sub>2</sub> . <i>Energy &amp; Fuels</i> , 2020, 34, 3557-3565.	2.5	10
957	Effects of nitrogen and oxygen functional groups and pore width of activated carbon on carbon dioxide capture: Temperature dependence. <i>Chemical Engineering Journal</i> , 2020, 389, 124413.	6.6	71
958	High performance MIL-101(Cr)/FDA-mPD and MOF-199/FDA-mPD mixed-matrix membranes for CO <sub>2</sub> /CH <sub>4</sub> separation. <i>Dalton Transactions</i> , 2020, 49, 1822-1829.	1.6	14
959	Multiple CO <sub>2</sub> capture in pristine and Sr-decorated graphyne: A DFT-D3 and AIMD study. <i>Computational Materials Science</i> , 2020, 176, 109539.	1.4	21

#	ARTICLE	IF	CITATIONS
960	Synthesis of bio-based cyclic carbonate from vegetable oil methyl ester by CO <sub>2</sub> fixation with acid-base pair MOFs. <i>Industrial Crops and Products</i> , 2020, 145, 112155.	2.5	13
961	Unlocking the Effect of H <sub>2</sub> O on CO <sub>2</sub> Separation Performance of Promising MOFs Using Atomically Detailed Simulations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 3141-3152.	1.8	26
962	Facile synthesis of microporous carbon xerogels for highly selective CO <sub>2</sub> adsorption. <i>Journal of Cleaner Production</i> , 2020, 253, 120023.	4.6	13
963	A novel 3D pillar-layered metal-organic framework: Pore-size-dependent catalytic activity and CO <sub>2</sub> /N <sub>2</sub> affinity. <i>Polyhedron</i> , 2020, 180, 114422.	1.0	9
964	Endowing chloroplasts with artificial "cell walls" using metal-organic frameworks. <i>Nanoscale</i> , 2020, 12, 11582-11592.	2.8	7
965	Metal-organic frameworks for photocatalysis. <i>Interface Science and Technology</i> , 2020, 31, 541-579.	1.6	13
966	Direct Crystallographic Observation of CO <sub>2</sub> Captured in Zig Zag Channels of a Copper(I) Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2020, 59, 6376-6381.	1.9	5
967	Recent advances in naphthalenediimide-based metal-organic frameworks: Structures and applications. <i>Coordination Chemistry Reviews</i> , 2021, 430, 213665.	9.5	65
968	Rare-earth element extraction from geothermal brine using magnetic core-shell nanoparticles-techno-economic analysis. <i>Geothermics</i> , 2021, 89, 101938.	1.5	15
969	The state of the field: from inception to commercialization of metal-organic frameworks. <i>Faraday Discussions</i> , 2021, 225, 9-69.	1.6	70
970	High CO <sub>2</sub> uptake capacity and selectivity in a N-oxide-functionalized 3D Ni(II) microporous metal-organic framework. <i>Polyhedron</i> , 2021, 193, 114839.	1.0	3
971	Exploring UiO-66(Zr) frameworks as nanotraps for highly efficient removal of EDTA-complexed heavy metals from water. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104932.	3.3	21
972	Immobilization of N and Si as center species toward microporous organic polymers for CO <sub>2</sub> adsorption via dipole-quadrupole interaction. <i>Polymer</i> , 2021, 212, 123307.	1.8	9
973	Iron(III)-bipyridine incorporated metal-organic frameworks for photocatalytic reduction of CO <sub>2</sub> with improved performance. <i>Dalton Transactions</i> , 2021, 50, 384-390.	1.6	30
974	PKU-2: An intrinsically microporous aluminoborate with the potential in selective gas separation of CO <sub>2</sub> /CH <sub>4</sub> and C <sub>2</sub> H <sub>2</sub> /C <sub>2</sub> H <sub>4</sub> . <i>Microporous and Mesoporous Materials</i> , 2021, 312, 110782.	2.2	1
975	Inquiry for the multifunctional design of metal-organic frameworks: in situ equipping additional open metal sites (OMSs) inducing high CO <sub>2</sub> capture/conversion abilities. <i>Materials Chemistry Frontiers</i> , 2021, 5, 1398-1404.	3.2	10
976	Capture of carbon dioxide using solid carbonaceous and non-carbonaceous adsorbents: a review. <i>Environmental Chemistry Letters</i> , 2021, 19, 851-873.	8.3	40
977	Facile and environmentally friendly synthesis of ultramicroporous carbon spheres: A significant improvement in CVD method. <i>Carbon</i> , 2021, 171, 426-436.	5.4	18

#	ARTICLE	IF	CITATIONS
978	Metal-to-Ligand Ratio Controlled Assembly of Two Ni(II) Complexes: Structures, Luminescent and Electrochemical Properties. <i>Journal of Chemical Crystallography</i> , 2021, 51, 265-272.	0.5	0
979	Novel Systems and Membrane Technologies for Carbon Capture. <i>International Journal of Chemical Engineering</i> , 2021, 2021, 1-23.	1.4	10
980	Titanium-based metal-organic frameworks for photocatalytic applications. , 2021, , 37-63.		2
981	Post synthetically modified IRMOF-3 for efficient recovery and selective sensing of U( $\text{VI}$ ) from aqueous medium. <i>RSC Advances</i> , 2021, 11, 28126-28137.	1.7	18
982	CO <sub>2</sub> capture by MOFs. , 2021, , 407-448.		5
983	Uncommon thioether-modified metal-organic frameworks with unique selective CO <sub>2</sub> sorption and efficient catalytic conversion. <i>CrystEngComm</i> , 2021, 23, 1447-1454.	1.3	1
984	Recent progress in the design and synthesis of zeolite-like metal-organic frameworks (ZMOFs). <i>Dalton Transactions</i> , 2021, 50, 3450-3458.	1.6	8
985	Alkali and alkaline earth coordination polymers constructed from benzene-1,2,4,5-tetracarboxylic acid and flexible dicarboxylate acid ligands: syntheses, structures and spectroscopic and thermal properties. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2021, 77, 90-99.	0.2	1
986	Adsorption properties of acetylene, ethylene and ethane in UiO-66 with linker defects and NO <sub>2</sub> functionalization. <i>Materials Advances</i> , 2021, 2, 426-433.	2.6	3
987	A turn-on fluorescence sensing strategy for rapid detection of flumequine in water environments using covalent-coordination functionalized MOFs. <i>CrystEngComm</i> , 2021, 23, 5345-5352.	1.3	6
988	Engineering metal-organic frameworks for adsorption-based gas separations: from process to atomic scale. <i>Molecular Systems Design and Engineering</i> , 2021, 6, 841-875.	1.7	36
989	CO <sub>2</sub> adsorption mechanisms on MOFs: a case study of open metal sites, ultra-microporosity and flexible framework. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 1118-1133.	1.9	22
990	Establishing a New Piecewise Method for Understanding and Rectifying Mass Balance Miscalculation of Gas Adsorption on Coal and Shale. <i>Energy &amp; Fuels</i> , 2021, 35, 4283-4295.	2.5	1
991	Sepiolite-based adsorbents for carbon dioxide capture. <i>Polish Journal of Chemical Technology</i> , 2021, 23, 1-6.	0.3	2
992	Environmental Applications of Nanotechnology: Nano-enabled Remediation Processes in Water, Soil and Air Treatment. <i>Water, Air, and Soil Pollution</i> , 2021, 232, 1.	1.1	14
993	Efficient and Highly Selective CO <sub>2</sub> Capture, Separation, and Chemical Conversion under Ambient Conditions by a Polar-Group-Appended Copper(II) Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2021, 60, 5071-5080.	1.9	23
994	Metal-organic frameworks for biogas upgrading: Recent advancements, challenges, and future recommendations. <i>Applied Materials Today</i> , 2021, 22, 100925.	2.3	16
995	Isotherm, Kinetic, Process Modeling, and Techno-Economic Analysis of a Diamine-Appended Metal-Organic Framework for CO <sub>2</sub> Capture Using Fixed Bed Contactors. <i>Energy &amp; Fuels</i> , 2021, 35, 6040-6055.	2.5	37

#	ARTICLE	IF	CITATIONS
996	Porphyrinic zirconium metal-organic frameworks: Synthesis and applications for adsorption/catalysis. Korean Journal of Chemical Engineering, 2021, 38, 653-673.	1.2	32
997	Microporous Cd(II) Metal-Organic Framework for CO <sub>2</sub> Catalysis, Luminescent Sensing, and Absorption of Methyl Green. Crystal Growth and Design, 2021, 21, 2734-2743.	1.4	29
998	Synthesis and Applications of Stable Iron-Based Metal-Organic Framework Materials. Crystal Growth and Design, 2021, 21, 3100-3122.	1.4	34
999	Molecular simulations of the adsorption and separation of hydrogen sulfide, carbon dioxide, methane, and nitrogen and their binary mixtures (H <sub>2</sub> S/CH <sub>4</sub> ), (CO <sub>2</sub> /CH <sub>4</sub> ) on NUM-3a metal-organic frameworks. Journal of Molecular Modeling, 2021, 27, 133.	0.8	5
1000	Metal-Organic Frameworks as Heterogeneous Electrocatalysts for Water Splitting and CO <sub>2</sub> Fixation. Crystal Growth and Design, 2021, 21, 3123-3142.	1.4	24
1001	Preparation of Cu <sub>3</sub> (BTC) <sub>2</sub> /PVC mixed matrix membrane for pomegranate seed storage. Journal of Food Process Engineering, 2021, 44, e13754.	1.5	1
1002	Nanoporous Titanium-Oxo Molecular Cluster for CO <sub>2</sub> Selective Adsorption. Bulletin of the Korean Chemical Society, 2021, 42, 1014-1019.	1.0	2
1003	Solid sorbents for CO <sub>2</sub> and CH <sub>4</sub> adsorption: The effect of metal organic framework hybridization with graphene-like layers on the gas sorption capacities at high pressure. Renewable and Sustainable Energy Reviews, 2021, 141, 110816.	8.2	27
1004	Deciphering the Weak CO <sub>2</sub> -MOF Framework Interactions in Microporous MOFs Functionalized with Strong Adsorption Sites: A Ubiquitous Observation. ACS Applied Materials & Interfaces, 2021, 13, 24976-24983.	4.0	17
1005	Tuning Surface Functionalization and Pore Structure of UiO-66 Metal-Organic Framework Nanoparticles for Organic Pollutant Elimination. ACS Applied Nano Materials, 2021, 4, 5486-5495.	2.4	27
1006	Characterization of an Isostructural MOF Series of Imidazolate Frameworks Potsdam by Means of Sorption Experiments with Water Vapor. Nanomaterials, 2021, 11, 1400.	1.9	4
1007	Understanding the Effect of Water on CO <sub>2</sub> Adsorption. Chemical Reviews, 2021, 121, 7280-7345.	23.0	194
1008	Construction of OH sites within MIL-101(Cr)-NH <sub>2</sub> framework for enhanced CO <sub>2</sub> adsorption and CO <sub>2</sub> /N <sub>2</sub> selectivity. Korean Journal of Chemical Engineering, 2021, 38, 1676-1685.	1.2	17
1009	Polymer-Grafted Porous Silica Nanoparticles with Enhanced CO <sub>2</sub> Permeability and Mechanical Performance. ACS Applied Materials & Interfaces, 2021, 13, 27411-27418.	4.0	14
1010	Carbon dioxide capture using nonwoven activated carbon nanofiber. IOP Conference Series: Earth and Environmental Science, 2021, 779, 012056.	0.2	3
1011	A catalytic approach of blending CO <sub>2</sub> -activating MOF struts for cycloaddition reaction in a helically interlaced Cu(II) amino acid imidazolate framework: DFT-corroborated investigation. Research on Chemical Intermediates, 2021, 47, 3979-3997.	1.3	7
1012	Advances in Enzyme and Ionic Liquid Immobilization for Enhanced in MOFs for Biodiesel Production. Molecules, 2021, 26, 3512.	1.7	28
1013	Facile synthesis of zinc-based organic framework for aqueous Hg(II) removal: Adsorption performance and mechanism. Nano Materials Science, 2021, 3, 429-439.	3.9	35



#	ARTICLE	IF	CITATIONS
1014	Flexible Zn-MOF with Rare Underlying <i>scu</i> Topology for Effective Separation of C6 Alkane Isomers. ACS Applied Materials & Interfaces, 2021, 13, 51997-52005.	4.0	22
1015	Synthesis of microporous hydrogen-bonded supramolecular organic frameworks through guanosine self-assembly. Cell Reports Physical Science, 2021, 2, 100519.	2.8	3
1016	Highly efficient CO <sub>2</sub> adsorption by imidazole and tetraethylenepentamine functional sorbents: Optimization and analysis using response surface methodology. Journal of Environmental Chemical Engineering, 2021, 9, 105639.	3.3	10
1017	Selective Conversion of CO <sub>2</sub> into Cyclic Carbonate on Atom Level Catalysts. ACS Materials Au, 2021, 1, 107-115.	2.6	15
1018	Large-scale simulations of CO <sub>2</sub> diffusion in metal-organic frameworks with open Cu sites. Chinese Journal of Chemical Engineering, 2022, 42, 1-9.	1.7	3
1019	Recent advances on ZIF-8 composites for adsorption and photocatalytic wastewater pollutant removal: Fabrication, applications and perspective. Coordination Chemistry Reviews, 2021, 441, 213985.	9.5	180
1020	A 'two-in-one' crystal having two different dimensionality in the extended structures: a series of cadmium(II) coordination polymers from V-shaped organic linkers. Polyhedron, 2021, , 115508.	1.0	0
1021	A review for Metal-Organic Frameworks (MOFs) utilization in capture and conversion of carbon dioxide into valuable products. Journal of CO <sub>2</sub> Utilization, 2021, 53, 101715.	3.3	58
1022	MOFs industrialization: a complete assessment of production costs. Faraday Discussions, 2021, 231, 326-341.	1.6	55
1023	Computational Screening of MOFs for CO <sub>2</sub> Capture. , 2021, , 205-238.		0
1024	The Amazing Chemistry of Metal-Organic Frameworks. , 2017, , 339-369.		3
1025	Realization of Switching Mechanism of CO <sub>2</sub> by Alkaline Adatoms on g-B4N3 Surface. Springer Proceedings in Physics, 2019, , 423-440.	0.1	3
1026	MOF-based materials for photo- and electrocatalytic CO <sub>2</sub> reduction. EnergyChem, 2020, 2, 100033.	10.1	177
1027	Mechanochemical synthesis of three-component graphene oxide/ordered mesoporous carbon/metal-organic framework composites. Journal of Colloid and Interface Science, 2020, 577, 163-172.	5.0	22
1028	Recent progress and remaining challenges in post-combustion CO <sub>2</sub> capture using metal-organic frameworks (MOFs). Progress in Energy and Combustion Science, 2020, 80, 100849.	15.8	235
1029	Particle size effects in the kinetic trapping of a structurally-locked form of a flexible MOF. CrystEngComm, 2016, 18, 4172-4179.	1.3	28
1030	Salen-Based Metal Complexes and the Physical Properties of their Porous Organic Polymers. Australian Journal of Chemistry, 2019, 72, 916.	0.5	1
1031	Preparation and Studies of Adsorption Properties of Microporous Carbon Spheres. Engineering and Protection of Environment, 2016, 19, 169-182.	0.3	15

#	ARTICLE	IF	CITATIONS
1032	Graphene-Like Layers from Unconventional Carbon Sources: New Perspectives on Hybrid Materials and $\pi$ - $\pi$ -system Synergisms. Eurasian Chemico-Technological Journal, 2017, 18, 263.	0.3	2
1034	Controlled Release of Doxycycline by Magnetized Microporous MIL53(Fe); Focus on Magnetization and Drug Loading. Current Drug Delivery, 2018, 16, 42-50.	0.8	2
1035	Zr-Fumarate MOF a Novel CO <sub>2</sub> -Adsorbing Material: Synthesis and Characterization. Aerosol and Air Quality Research, 2014, 14, 1605-1612.	0.9	37
1036	Cd <sup>II</sup> MOFs Constructed Using Succinate and Bipyridyl Ligands: Photoluminescence and Heterogeneous Catalytic Activity. Bulletin of the Korean Chemical Society, 2014, 35, 1777-1783.	1.0	18
1037	Investigation of carbon dioxide adsorption by nitrogen-doped carbons synthesized from cubic MCM-48 mesoporous silica. Carbon Letters, 2016, 18, 62-66.	3.3	6
1038	CO <sub>2</sub> & CH <sub>4</sub> Capture and Separation Using Ti Doped Vanadium Oxide Nanotube: Molecular Simulation Study. Separation Science and Technology, 0, , 1-16.	1.3	1
1039	Dual copper source strategy for green synthesizing high quality MOF-199 with zero discharge and its CO <sub>2</sub> gas adsorption. Microporous and Mesoporous Materials, 2021, 328, 111510.	2.2	5
1040	Mesoporous Co(III) bis(tetrazolate) Framework for CO <sub>2</sub> Adsorption. Communications in Computer and Information Science, 2012, , 445-451.	0.4	0
1041	CO <sub>2</sub> Adsorption in Metal-organic Frameworks. Korean Chemical Engineering Research, 2013, 51, 171-180.	0.2	1
1042	Carbon Capture and Storage. Green Energy and Technology, 2014, , 349-393.	0.4	2
1043	Zeolites: Their Features as Pressure Swing Adsorbents and CO <sub>2</sub> Adsorption Capacity. Journal of Environmental Science International, 2014, 23, 943-962.	0.0	1
1044	Modeling of Zeolitic-Like Hybrid Materials for Gas Separation. , 2015, , 381-418.		0
1046	Adsorption and Photocatalytic Degradation of Dyes Using Synthesized Metal-Organic Framework NH <sub>2</sub> -MIL-101(Fe). Journal of Environmental Science International, 2018, 27, 611-620.	0.0	1
1047	CO <sub>2</sub> Sequestration: Processes and Methodologies. , 2019, , 619-668.		2
1048	Large scale synthesis and propylene purification by a high-performance MOF sorbent Y-abtc. Separation and Purification Technology, 2022, 282, 120010.	3.9	12
1049	Selective Gas Adsorption and Separation of Carbon Dioxide in Metal-organic Frameworks and Composites. Journal of Physics: Conference Series, 2021, 2021, 012004.	0.3	2
1050	A series of three dimensional lanthanoid(III)-metal-organic frameworks with zwitterionic linker. Journal of Coordination Chemistry, 2021, 74, 2657-2669.	0.8	2
1051	MOF-inorganic nanocomposites: Bridging a gap with inorganic materials. Applied Materials Today, 2022, 26, 101283.	2.3	8

#	ARTICLE	IF	CITATIONS
1052	Molecular simulation of energy storage properties of R32, R134A and R1234YF in MOF-5 AND MOF-177. International Journal of Modern Physics B, 0, , .	1.0	1
1053	Molecule in soft-crystal at ground and excited states: Theoretical approach. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2022, 51, 100482.	5.6	5
1054	Urea and thiourea based coordination polymers and metal-organic frameworks: Synthesis, structure and applications. Coordination Chemistry Reviews, 2022, 453, 214314.	9.5	24
1055	Two novel luminescent metal-organic frameworks based on the thioether bond modification: The selective sensing and effective CO <sub>2</sub> fixation. Journal of Solid State Chemistry, 2022, 307, 122813.	1.4	2
1056	Carbon Dioxide Emissions, Capture, Storage and Utilization: Review of Materials, Processes and Technologies. Progress in Energy and Combustion Science, 2022, 89, 100965.	15.8	200
1057	Chitosan/ZIF-8 Composite Beads Fabricated by In Situ Growth of MOFs Crystals on Chitosan Beads for CO <sub>2</sub> Adsorption. ChemistrySelect, 2022, 7, e202103927.	0.7	7
1058	Counter-Intuitive Magneto-Water-Wetting Effect to CO <sub>2</sub> Adsorption at Room Temperature Using MgO/Mg(OH) <sub>2</sub> Nanocomposites. Materials, 2022, 15, 983.	1.3	2
1059	High-performance ZIF-302 mixed-matrix membranes for efficient CO <sub>2</sub> capture. Korean Journal of Chemical Engineering, 2022, 39, 1020-1027.	1.2	8
1060	Metal organic frameworks for efficient catalytic conversion of CO <sub>2</sub> and CO into applied products. Molecular Catalysis, 2022, 517, 112055.	1.0	17
1061	Highly efficient functionalized MOF-LIC-1 for extraction of U(VI) and Th(IV) from aqueous solution: experimental and theoretical studies. Dalton Transactions, 2022, 51, 3557-3571.	1.6	12
1062	Synthesizing and characterization of Cu(II) polymer complex: application for removing heavy metals from aqueous solutions. Journal of the Iranian Chemical Society, 2022, 19, 1963-1977.	1.2	4
1063	Chitin-derived fibrous carbon microspheres as support of polyamine for remarkable CO <sub>2</sub> capture. Green Chemical Engineering, 2022, 3, 267-279.	3.3	3
1064	Patterned microfluidic devices for rapid screening of metal-organic frameworks yield insights into polymorphism and non-monotonic growth. Lab on A Chip, 2022, 22, 211-224.	3.1	7
1065	Single-Crystal-to-Single-Crystal Transformation of Two Copper(II) Metal-Organic Frameworks Modulated by Auxiliary Ligands. Inorganic Chemistry, 2022, 61, 1360-1367.	1.9	9
1066	The mechanism of MOF as a heterogeneous catalyst for propene hydroformylation: a DFT study. Reaction Chemistry and Engineering, 2022, 7, 1156-1167.	1.9	8
1067	Novel 3D cross-shaped Zn/Co bimetallic zeolite imidazolate frameworks for simultaneous removal Cr(VI) and Congo Red. Environmental Science and Pollution Research, 2022, 29, 40041-40052.	2.7	4
1068	Study on CO <sub>2</sub> capture in humid flue gas using amine-modified ZIF-8. Separation and Purification Technology, 2022, 287, 120535.	3.9	24
1069	Efficient capture of ornidazole through cobalt/zinc-containing nanoporous carbons derived from cobalt/zinc-based MOF-74. Journal of Solid State Chemistry, 2022, 308, 122936.	1.4	12

#	ARTICLE	IF	CITATIONS
1071	A lamellar structure zeolite LTA for CO <sub>2</sub> capture. <i>New Journal of Chemistry</i> , 2022, 46, 6720-6728.	1.4	11
1072	Post-synthetic modification of IR-MOF as acidic-basic heterogeneous catalyst for one-pot synthesis of pyrimido[4,5-b]quinolones. <i>Research on Chemical Intermediates</i> , 2022, 48, 1773-1792.	1.3	10
1073	An assessment of density functionals for predicting CO <sub>2</sub> adsorption in diamine-functionalized metal-organic frameworks. <i>Journal of Chemical Physics</i> , 2022, 156, 154113.	1.2	7
1074	A Sulfonated Porphyrin Polymer/P25m Composite for Highly Selective Photocatalytic Conversion of CO <sub>2</sub> into CH <sub>4</sub> . <i>Catalysis Letters</i> , 0, , 1.	1.4	2
1075	Colossal Linear NTE and PTE in Two-Fold Interpenetrated Network of a MOF Induced by Hinge-like Motion. <i>Crystal Growth and Design</i> , 2022, 22, 3479-3484.	1.4	4
1076	The structural arrangement of the ligand-metal complex with centered zinc and nickel atoms and their optical features. <i>Journal of Molecular Structure</i> , 2022, 1262, 133010.	1.8	5
1077	A review of heavy metals removal from aqueous matrices by Metal-Organic Frameworks (MOFs): State-of-the art and recent advances. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107394.	3.3	51
1078	MOF modified with copolymers containing carboxyl and amidoxime groups and high efficiency U (VI) extraction from seawater. <i>Separation and Purification Technology</i> , 2022, 291, 120946.	3.9	28
1079	Recent advances in metal organic framework and cellulose nanomaterial composites. <i>Coordination Chemistry Reviews</i> , 2022, 461, 214496.	9.5	55
1080	Comparison of SDS and L-Methionine in promoting CO <sub>2</sub> hydrate kinetics: Implication for hydrate-based CO <sub>2</sub> storage. <i>Chemical Engineering Journal</i> , 2022, 438, 135504.	6.6	51
1081	Synthesis and characterization of advanced bio-carbon materials from Kraft lignin with enhanced CO <sub>2</sub> capture properties. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107471.	3.3	4
1082	Towards Computational CO <sub>2</sub> Capture and Storage Models. <i>The Global Environmental Engineers</i> , 0, 8, 55-69.	0.3	0
1083	Modeling of CO <sub>2</sub> adsorption capacity by porous metal organic frameworks using advanced decision tree-based models. <i>Scientific Reports</i> , 2021, 11, 24468.	1.6	34
1084	Cobalt sandwich complex-based covalent organic frameworks for chemical fixation of CO <sub>2</sub> . <i>Science China Materials</i> , 2022, 65, 1377-1382.	3.5	10
1085	Recent advances in the treatment of PAHs in the environment: Application of nanomaterial-based technologies. <i>Arabian Journal of Chemistry</i> , 2022, 15, 103918.	2.3	27
1087	Solid with infused reactive liquid (SWIRL): A novel liquid-based separation approach for effective CO <sub>2</sub> capture. <i>Science Advances</i> , 2022, 8, eabm0144.	4.7	13
1088	Recent advancement in bimetallic metal organic frameworks (MOFs): synthetic challenges and applications. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3003-3033.	3.0	18
1089	Regeneration and Reconstruction of Metal-Organic Frameworks: Opportunities for Industrial Usage. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
1090	Metal-Organic Framework-Based Selective Molecular Recognition of Organic Amines and Fixation of CO <sub>2</sub> into Cyclic Carbonates. <i>Inorganic Chemistry</i> , 2022, 61, 6977-6994.	1.9	22
1091	Post combustion carbon capture from diesel engine exhaust using phase change solvents with absorption technique. <i>Materials Today: Proceedings</i> , 2022, , .	0.9	0
1092	Emerging Dual-Functional 2D transition metal oxides for carbon capture and Utilization: A review. <i>Fuel</i> , 2022, 324, 124706.	3.4	15
1093	Applications of Metal-Organic Frameworks in Wastewater Treatment and Gas Separation and Purification. <i>ACS Symposium Series</i> , 0, , 271-337.	0.5	0
1094	CO <sub>2</sub> Capture by Hybrid Ultramicroporous TIFSI- $\text{Ni}$ under Humid Conditions Using Non-Equilibrium Cycling. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	17
1095	CO <sub>2</sub> Capture by Hybrid Ultramicroporous TIFSI- $\text{Ni}$ under Humid Conditions Using Non-Equilibrium Cycling. <i>Angewandte Chemie</i> , 0, , .	1.6	3
1096	Periodic Mesoporous Organosilica Nanoparticles for CO <sub>2</sub> Adsorption at Standard Temperature and Pressure. <i>Molecules</i> , 2022, 27, 4245.	1.7	4
1097	Porous Adsorption Materials for Carbon Dioxide Capture in Industrial Flue Gas. <i>Frontiers in Chemistry</i> , 0, 10, .	1.8	20
1098	A microporous 2D cobalt-based MOF with pyridyl sites and open metal sites for selective adsorption of CO <sub>2</sub> . <i>Microporous and Mesoporous Materials</i> , 2022, 341, 112098.	2.2	117
1099	A contemporary report on explications of flexible metal-organic frameworks with regards to structural simulation, dynamics and material applications. <i>Polyhedron</i> , 2022, 225, 116041.	1.0	2
1101	Research progress of ionic liquids for CO <sub>2</sub> capture. , 2022, , .		0
1102	Metal-Organic Frameworks for CO <sub>2</sub> Separation from Flue and Biogas Mixtures. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	46
1103	Design of Gas Separation Processes Using Type II Porous Liquids as Physical Solvents. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 11908-11921.	1.8	1
1104	Regeneration and reconstruction of metal-organic frameworks: Opportunities for industrial usage. <i>Coordination Chemistry Reviews</i> , 2022, 472, 214776.	9.5	15
1105	A cobalt-based MOF with the synergistic effect of size sieving and multi-functional sites for selective gas adsorption. <i>Journal of Solid State Chemistry</i> , 2022, 316, 123566.	1.4	12
1106	Cost and technology readiness level assessment of emerging technologies, new perspectives, and future research directions in H <sub>2</sub> production. <i>Sustainable Energy and Fuels</i> , 2022, 6, 4357-4374.	2.5	12
1107	Rapid room-temperature synthesis and characterizations of high-surface-area nanoparticles of zeolitic imidazolate framework-8 (ZIF-8) for CO <sub>2</sub> and CH <sub>4</sub> adsorption. <i>Journal of Materials Science</i> , 2022, 57, 16245-16257.	1.7	12
1108	Immobilization of Ionic Liquid on a Covalent Organic Framework for Effectively Catalyzing Cycloaddition of CO <sub>2</sub> to Epoxides. <i>Molecules</i> , 2022, 27, 6204.	1.7	6

#	ARTICLE	IF	CITATIONS
1109	A comprehensive overview of carbon dioxide capture: From materials, methods to industrial status. <i>Materials Today</i> , 2022, 60, 227-270.	8.3	13
1110	Highly Efficient Cu-Porphyrin-Based Metal-Organic Framework Nanosheet as Cathode for High-Rate Li <sub>2</sub> CO <sub>2</sub> Battery. <i>Small</i> , 2022, 18, .	5.2	21
1111	Binderless zeolite LTA beads with hierarchical porosity for selective CO <sub>2</sub> adsorption in biogas upgrading. <i>Microporous and Mesoporous Materials</i> , 2022, 344, 112208.	2.2	9
1112	Enhanced Peroxidase-like Activity of Bimetal (Fe/Co) MIL-101 for Determination of Tetracycline and Hydrogen Peroxide. <i>New Journal of Chemistry</i> , 0, , .	1.4	4
1113	A Sensitive Co-MOF/CNTs/SiO <sub>2</sub> Composite Based Electrode for Determination of Gallic Acid. <i>Chemosensors</i> , 2022, 10, 443.	1.8	4
1114	Concept of a hybrid compression-adsorption heat pump cycle. <i>Cell Reports Physical Science</i> , 2022, 3, 101131.	2.8	3
1115	Evaluation of adsorbent materials for carbon dioxide capture. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2022, 53, 1392-1409.	0.5	0
1116	Multivariate indium-organic frameworks for highly efficient carbon dioxide capture and electrocatalytic conversion. <i>Inorganic Chemistry Frontiers</i> , 2022, 10, 158-167.	3.0	4
1117	Engineering metal-organic frameworks (MOFs) based thin-film nanocomposite (TFN) membranes for molecular separation. <i>Chemical Engineering Journal</i> , 2023, 454, 140447.	6.6	50
1118	Recent progress in metal-organic frameworks (MOFs) for CO <sub>2</sub> capture at different pressures. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108930.	3.3	28
1119	High-Selective CO <sub>2</sub> Capture in Amine-Decorated Al-MOFs. <i>Nanomaterials</i> , 2022, 12, 4056.	1.9	5
1120	Correlation between structure and dynamics of CO <sub>2</sub> confined in Mg-MOF-74 and the role of inter-crystalline space: A molecular dynamics simulation study. <i>Applied Surface Science</i> , 2023, 612, 155909.	3.1	5
1121	Two-dimensional oxalamide based isostructural MOFs for CO <sub>2</sub> capture. <i>Journal of Solid State Chemistry</i> , 2023, 319, 123778.	1.4	2
1122	Coordination-Driven Self-Assembly of Complexes Constructed from Two Helical Ligands: Synthesis, Structures, and Selective Gas Adsorption Properties. <i>Inorganic Chemistry</i> , 2022, 61, 19512-19523.	1.9	5
1123	Multi-Scale Computer-Aided Design of Covalent Organic Frameworks for CO <sub>2</sub> Capture in Wet Flue Gas. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 56353-56362.	4.0	9
1124	Metal-Organic Frameworks as Photocatalysts for Solar-Driven Overall Water Splitting. <i>Chemical Reviews</i> , 2023, 123, 445-490.	23.0	84
1125	A Structured Ultramicroporous Metal-Organic Framework for Carbon Dioxide Capture. <i>Chinese Journal of Chemistry</i> , 2023, 41, 763-768.	2.6	3
1127	Green Synthesis of Silver Nanoparticles (Ag-NPs) Using <i>Debregeasia Salicifolia</i> for Biological Applications. <i>Materials</i> , 2023, 16, 129.	1.3	6

#	ARTICLE	IF	CITATIONS
1128	Effect of Modulation and Functionalization of UiO-66 Type MOFs on Their Surface Thermodynamic Properties and Lewis Acid–Base Behavior. <i>Catalysts</i> , 2023, 13, 205.	1.6	2
1129	Effect of Metal Atom in Zeolitic Imidazolate Frameworks (ZIF-8 & 67) for Removal of Dyes and Antibiotics from Wastewater: A Review. <i>Catalysts</i> , 2023, 13, 155.	1.6	25
1130	Porous framework materials for energy & environment relevant applications: A systematic review. <i>Green Energy and Environment</i> , 2024, 9, 217-310.	4.7	12
1131	N-doped porous polymer with protonated ionic liquid sites for efficient conversion of CO <sub>2</sub> to cyclic carbonates. <i>Microporous and Mesoporous Materials</i> , 2023, 350, 112447.	2.2	6
1132	ZIF-8@Zn-MOF-74 core–shell metal–organic framework (MOF) with open metal sites: Synthesis, characterization, and gas adsorption performance. <i>Fuel</i> , 2023, 339, 127463.	3.4	13
1133	Revisiting Competitive Adsorption of Small Molecules in the Metal–Organic Framework Ni-MOF-74. <i>Inorganic Chemistry</i> , 2023, 62, 950-956.	1.9	5
1134	Fe <sub>3</sub> O <sub>4</sub> supported UiO-66 (Zr) metal–organic framework for removal of drug contaminants from water: fuzzy logic modeling approach. <i>Environmental Science and Pollution Research</i> , 0, , .	2.7	0
1135	A Review of HKUST-1 Metal-Organic Frameworks in Gas Adsorption. <i>IOP Conference Series: Earth and Environmental Science</i> , 2023, 1135, 012030.	0.2	0
1136	Metal Organic Frameworks as an Efficient Method for Carbon dioxide capture. , 2023, , 211-230.		0
1137	Organic polymers for CO <sub>2</sub> capture and conversion. , 2023, , 77-99.		0
1138	Effect of pendent alkyl group of ancillary ligand on molecular structures of new metal(II)-2, 4-dinitro benzoate complexes- spectral, structural and photoluminescence studies. <i>Journal of Molecular Structure</i> , 2023, 1283, 135275.	1.8	0
1139	Covalent Organic Frameworks: The Rising Star Platforms for the Design of CO <sub>2</sub> Separation Membranes. <i>Small</i> , 2023, 19, .	5.2	21
1140	Progress on fundamentals of adsorption transport of metal-organic frameworks materials and sustainable applications for water harvesting and carbon capture. <i>Journal of Cleaner Production</i> , 2023, 393, 136253.	4.6	6
1141	Explosive and pollutant nitroaromatic sensing through a Cd(II) based ladder shaped 1D coordination polymer. <i>Heliyon</i> , 2023, 9, e13504.	1.4	4
1142	Strategies for CO <sub>2</sub> capture: positive and negative feature. <i>Zeitschrift Fur Physikalische Chemie</i> , 2023, 237, 351-363.	1.4	1
1143	Zeolites as Selective Adsorbents for CO <sub>2</sub> Separation. <i>ACS Applied Energy Materials</i> , 2023, 6, 2634-2656.	2.5	45
1144	Insertion of CO <sub>2</sub> in metal ion-doped two-dimensional covalent organic frameworks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	3.3	5
1145	Electronic structural and lattice thermodynamic properties of MAIO <sub>2</sub> and M <sub>5</sub> AlO <sub>4</sub> (M = Li, Na, K) sorbents for CO <sub>2</sub> capture applications. <i>Discover Chemical Engineering</i> , 2023, 3, .	1.1	3

#	ARTICLE	IF	CITATIONS
1146	MIL-160(Al) as a Candidate for Biogas Upgrading and CO <sub>2</sub> Capture by Adsorption Processes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2023, 62, 5216-5229.	1.8	7
1155	Historical and contemporary perspectives on metal-organic frameworks for gas sensing applications: a review. , 2023, 1, 1125-1149.		2
1168	Application of metal-organic skeletons and cellulose composites in nanomedicine. <i>Cellulose</i> , 0, , .	2.4	1
1182	Pore engineering of metal-organic frameworks for boosting low-pressure CO <sub>2</sub> capture. <i>Journal of Materials Chemistry A</i> , 2023, 11, 25784-25802.	5.2	0
1185	Rich oxygen atom-decorated conjugated microporous polymers for carbon dioxide capture. <i>New Journal of Chemistry</i> , 2023, 47, 21600-21603.	1.4	0
1192	Non-CO <sub>2</sub> greenhouse gas separation using advanced porous materials. <i>Chemical Society Reviews</i> , 2024, 53, 2056-2098.	18.7	1
1203	The significant role of waste to energy on decarbonization. , 2024, , 323-344.		0