

CITATION REPORT

List of articles citing

Selective gas adsorption and separation in metal-organic frameworks

DOI: 10.1039/b802426j

Chemical Society Reviews, 2009, 38, 1477-504.

Source: <https://exaly.com/paper-pdf/46578619/citation-report.pdf>

Version: 2024-04-23

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
2276	Computational Screening of Nanoporous Materials for Hexane and Heptane Isomer Separation.		
2275	Novel Hierarchical Meso-Microporous Hydrogen-Bonded Organic Framework for Selective Separation of Acetylene and Ethylene versus Methane.		
2274	Immobilization of Oxygen Atoms in the Pores of Microporous MetalOrganic Frameworks for C ₂ H ₂ Separation and Purification.		
2273	Kinetic Significance of ProtonElectron Transfer during Condensed Phase Reduction of Carbonyls on Transition Metal Clusters.		
2272	Impacts of the Imidazolate Linker Substitution (CH ₃ , Cl or Br) on the Structural and Adsorptive Properties of ZIF8.		
2271	Water-Stable Anionic MetalOrganic Framework for Highly Selective Separation of Methane from Natural Gas and Pyrolysis Gas.		
2270	A Robust Ethane-Trapping MetalOrganic Framework with a High Capacity for Ethylene Purification.		
2269	Why Porous Materials Have Selective Adsorptions: A Rational Aspect from Electrostatics.		
2268	Gas adsorption applications of porous metalorganic frameworks. 2009 , 81, 2235-2251		91
2267	ChemInform Abstract: Selective Gas Adsorption and Separation in MetalOrganic Frameworks. 2009 , 40, no		1
2266	Engineering a MetalOrganic Framework Catalyst by Using Postsynthetic Modification. 2009 , 121, 7560-7563		66
2265	Engineering a metal-organic framework catalyst by using postsynthetic modification. 2009 , 48, 7424-7		220
2264	Natural gas treating by selective adsorption: Material science and chemical engineering interplay. 2009 , 155, 553-566		320
2263	Coordination Polymers Based on the 2,5-Dihydroxyterephthalate Ion and Alkaline Earth Metal (Ca, Sr) and Manganese Cations". 2009 , 635, 1953-1958		40
2262	Mixed-ligand coordination polymers constructed from flexible 2,2'-biphenyldicarboxylate and rigid isomeric bipyridines. 2009 , 28, 2997-3004		4
2261	Ionothermal synthesis of a new cobalt metal-organic framework based on tetranuclear cobalt clusters. 2009 , 12, 956-958		9
2260	Two-dimensional networks of lanthanide cubane-shaped dumbbells. 2009 , 48, 11748-54		62

2259	Variable Lithium Coordination Modes in Two- and Three-Dimensional Lithium Boron Imidazolate Frameworks. 2009 , 21, 3830-3837	50
2258	Reversible Two-Dimensional to Three Dimensional Framework Transformation within a Prototype Metal-Organic Framework. 2009 , 9, 5293-5296	91
2257	Virtual high throughput screening confirmed experimentally: porous coordination polymer hydration. 2009 , 131, 15834-42	704
2256	Multiroute synthesis of porous anionic frameworks and size-tunable extraframework organic cation-controlled gas sorption properties. 2009 , 131, 16027-9	233
2255	Modulating metal-organic frameworks to breathe: a postsynthetic covalent modification approach. 2009 , 131, 16675-7	199
2254	Selective gas adsorption in a magnesium-based metal-organic framework. 2009 , 5436-8	112
2253	New heterometallic carboxylate frameworks: synthesis, structure, robustness, flexibility, and porosity. 2009 , 48, 7970-6	27
2252	Reliable Formation of an Unusual and Chiral Two-Dimensional Network Containing Entanglement of the Ligand in the Presence of Different Anions. 2009 , 9, 3848-3851	23
2251	Cobalt(II) sheet-like systems based on diacetic ligands: from subtle structural variances to different magnetic behaviors. 2009 , 48, 6086-95	50
2250	Crystal to Crystal Guest Exchange in a Mixed Ligand Metal-Organic Framework. 2009 , 9, 4588-4591	39
2249	Application of metal-organic frameworks with coordinatively unsaturated metal sites in storage and separation of methane and carbon dioxide. 2009 , 19, 7362	581
2248	Describing the Diffusion of Guest Molecules Inside Porous Structures. 2009 , 113, 19756-19781	244
2247	Zeolitic imidazole frameworks: structural and energetics trends compared with their zeolite analogues. 2009 , 11, 2272	181
2246	A pillared-layer coordination polymer with a rotatable pillar acting as a molecular gate for guest molecules. 2009 , 131, 12792-800	274
2245	Zeolitic imidazolate framework membrane with molecular sieving properties by microwave-assisted solvothermal synthesis. 2009 , 131, 16000-1	966
2244	Synthesis and gas sorption properties of a metal-azolium framework (MAF) material. 2009 , 48, 9971-3	76
2243	Prediction of breathing and gate-opening transitions upon binary mixture adsorption in metal-organic frameworks. 2009 , 131, 11329-31	133
2242	Synthesis, Properties, and Gas Separation Studies of a Robust Diimide-Based Microporous Organic Polymer. 2009 , 21, 3033-3035	252

2241	A nanotubular metal-organic framework with permanent porosity: structure analysis and gas sorption studies. 2009 , 4049-51	78
2240	Zeolitic imidazolate frameworks for kinetic separation of propane and propene. 2009 , 131, 10368-9	552
2239	Co(II) and Cr(III) complexes of formate-formamide mixed ligands: synthesis, structures, single crystal-to-single crystal transformation and magnetic behaviour. 2009 , 10343-52	15
2238	Eliminating the need for independent counterions in the construction of metal-organic rotaxane frameworks (MORFs). 2009 , 5585-7	56
2237	Interpenetrating polyhedral MOF with a primitive cubic network based on supermolecular building blocks constructed of a semirigid C3-symmetric carboxylate ligand. 2009 , 48, 8057-9	69
2236	Self-assembly of metal-organic coordination polymers constructed from a bent dicarboxylate ligand: diversity of coordination modes, structures, and gas adsorption. 2009 , 48, 11067-78	74
2235	A large-surface-area boracite-network-topology porous MOF constructed from a conjugated ligand exhibiting a high hydrogen uptake capacity. 2009 , 48, 7519-21	62
2234	Consecutive irreversible single-crystal to single-crystal and reversible single-crystal to glass transformations and associated magnetism of the coordination polymer, [Mn(II)(rac-pnH)(H ₂ O)Cr(III)(CN) ₆].H ₂ O. 2009 , 48, 10726-36	29
2233	From metalloligand to interpenetrating channels: synthesis, characterization, and properties of a 2p-3d-4f heterometallic coordination polymer {[Na ₅ Cu ₈ Sm ₄ (NTA) ₈ (ClO ₄) ₈ (H ₂ O) ₂₂] x ClO ₄ x 8 H ₂ O} _n . 2009 , 48, 6326-8	52
2232	A Simulation Study of Hydrogen in Metal-Organic Frameworks. 2010 , 28, 823-835	12
2231	Conductivity, Doping, and Redox Chemistry of a Microporous Dithiolene-Based Metal-Organic Framework. 2010 , 22, 4120-4122	403
2230	Studies of capillary phase transitions of methane in metal-organic frameworks by gauge cell Monte Carlo simulation. 2010 , 26, 5160-6	7
2229	Understanding gas separation in metal-organic frameworks using computer modeling. 2010 , 20, 10308	76
2228	MOFs, MILs and more: concepts, properties and applications for porous coordination networks (PCNs). 2010 , 34, 2366	934
2227	The effect of the conformation of flexible carboxylate ligands on the structures of metal-organic supramolecules. 2010 , 34, 2496	15
2226	Two robust porous metal-organic frameworks sustained by distinct catenation: selective gas sorption and single-crystal-to-single-crystal guest exchange. 2010 , 5, 2358-68	52
2225	Anion-Controlled Assembly of Silver(I) Complexes of Multiring Heterocyclic Ligands: A Structural and Photophysical Study. 2010 , 10, 1269-1282	43
2224	Water stability of microporous coordination polymers and the adsorption of pharmaceuticals from water. 2010 , 26, 17198-202	364

2223	Control over catenation in metal-organic frameworks via rational design of the organic building block. 2010 , 132, 950-2	321
2222	Synthesis, crystal structures, luminescent and thermal properties of two new metal-organic coordination polymers based on zinc(II) carboxylates. 2010 , 34, 2445	31
2221	Stress-Based Model for the Breathing of Metal-Organic Frameworks. 2010 , 1, 445-9	187
2220	Assembling coordination networks of bis-amido pyridines via hydrogen bonds: isostructurality and large hydrophobic cavities for guest inclusion. 2010 , 34, 2415	30
2219	A novel combined manufacturing technique for rapid production of IRMOF-1 using ultrasound and microwave energies. 2010 , 165, 966-973	88
2218	Synthesis and structural characterization of different topological coordination polymers based on tunable Cu ₄ Br ₄ ·m secondary building units and macrocyclic azacalixaromatics. 2010 , 183, 3010-3016	13
2217	Investigating the reasons for the significant influence of lattice flexibility on self-diffusivity of ethane in Zn(tbip). 2010 , 130, 92-96	36
2216	CO ₂ adsorption, selectivity and water tolerance of pillared-layer metal organic frameworks. 2010 , 132, 305-310	97
2215	Assembling one-dimensional coordination polymers into three-dimensional architectures via hydrogen bonds. 2010 , 122, 707-720	10
2214	Thiazolo[5,4-d]thiazole-2,5-dicarboxylic acid, C ₆ H ₂ N ₂ O ₄ S ₂ , and its coordination polymers. 2010 , 12, 795-802	12
2213	Building MOF bottles around phosphotungstic acid ships: One-pot synthesis of bi-functional polyoxometalate-MIL-101 catalysts. 2010 , 269, 229-241	290
2212	Selective guest docking in metal-organic framework materials. 2010 , 11, 55-7	8
2211	New microporous materials for acetylene storage and C ₂ H ₂ /CO ₂ separation: insights from molecular simulations. 2010 , 11, 2220-9	94
2210	Hydrogen sulfide adsorption on MOFs and MOF/graphite oxide composites. 2010 , 11, 3678-84	173
2209	Effect of Water Concentration and Acidity on the Synthesis of Porous Chromium Benzenedicarboxylates. 2010 , 2010, 1043-1048	43
2208	A Series of Lanthanide Metal-Organic Frameworks Based on Biphenyl-3,4,5-tricarboxylate: Syntheses, Structures, Luminescence and Magnetic Properties. 2010 , 2010, 3842-3849	83
2207	Manganese-Based Metal-Organic Frameworks as Heterogeneous Catalysts for the Cyanosilylation of Acetaldehyde. 2010 , 2010, 3804-3812	58
2206	Topological Diversity, Adsorption and Fluorescence Properties of MOFs Based on a Tetracarboxylate Ligand. 2010 , 2010, 3835-3841	31

2205	A Dynamically Entangled Coordination Polymer: Synthesis, Structure, Luminescence, Single-Crystal-to-Single-Crystal Reversible Guest Inclusion and Structural Transformation. 2010 , 2010, 3829-3834	13
2204	Accelerated Syntheses of Porous Isostructural Lanthanide Benzenetricarboxylates (LnBTC) Under Ultrasound at Room Temperature. 2010 , 2010, 4975-4981	56
2203	Structural Investigation of Coordination Polymers Constructed from a Conformational Bis-triazole Ligand and V-Shaped Bridging Carboxylate Anions: Hydrothermal Syntheses, Crystal Structures, and Property Studies. 2010 , 2010, 5545-5555	45
2202	Three New Polycatenation Networks Based on 4,4'-Oxybis(benzoate) and Bis(imidazole) Ligands: Synthesis, Structure and Photoluminescence. 2010 , 2010, 5478-5483	29
2201	Topology Control of Porous Coordination Polymers by Building Block Symmetry. 2010 , 2010, 5055-5057	44
2200	Controllable synthesis of metal-organic frameworks: From MOF nanorods to oriented MOF membranes. 2010 , 22, 3322-6	327
2199	Novel MOF-membrane for molecular sieving predicted by IR-diffusion studies and molecular modeling. 2010 , 22, 4741-3	205
2198	Zeolithe als Sorptionsmittel. 2010 , 82, 929-940	19
2197	Neue nanoporöse Molekularsiebmembranen: Zeolithe contra MOFs [Gewinner und Verlierer. 2010 , 82, 837-847	4
2196	Structures and H ₂ adsorption properties of porous scandium metal-organic frameworks. 2010 , 16, 13671-9	71
2195	Heterometallic modular metal-organic 3D frameworks assembled via new tris-β-diketonate metalloligands: nanoporous materials for anion exchange and scaffolding of selected anionic guests. 2010 , 16, 12328-41	95
2194	Unusual chain-length dependence of the diffusion of n-alkanes in the metal-organic framework MIL-47(V): The Blowgun effect. 2010 , 16, 10337-41	39
2193	Post-synthetic reversible incorporation of organic linkers into porous metal-organic frameworks through single-crystal-to-single-crystal transformations and modification of gas-sorption properties. 2010 , 16, 11662-9	132
2192	High gas sorption and metal-ion exchange of microporous metal-organic frameworks with incorporated imide groups. 2010 , 16, 14043-50	224
2191	Flexibility and sorption selectivity in rigid metal-organic frameworks: the impact of ether-functionalised linkers. 2010 , 16, 14296-306	113
2190	Highly selective CO ₂ capture by a flexible microporous metal-organic framework (MMOF) material. 2010 , 16, 13951-4	152
2189	Hierarchical Self-Assembly of a Chiral Metal-Organic Framework Displaying Pronounced Porosity. 2010 , 122, 1093-1096	11
2188	Water-Vapor-Induced Reversible Switching of Electronic States in an MMX-Type Chain Complex with Retention of Single Crystallinity. 2010 , 122, 562-565	1

2187	Time-Resolved In Situ Diffraction Study of the Solvothermal Crystallization of Some Prototypical Metal-Organic Frameworks. 2010 , 122, 775-778	39
2186	Molecular Sieve Membrane: Supported Metal-Organic Framework with High Hydrogen Selectivity. 2010 , 122, 558-561	153
2185	Metall-organische Membranen: hohes Potenzial, große Zukunft?. 2010 , 122, 1572-1574	33
2184	Metal-Organic Framework MIL-101 for High-Resolution Gas-Chromatographic Separation of Xylene Isomers and Ethylbenzene. 2010 , 122, 1519-1522	39
2183	Abscheidung von Kohlendioxid: Perspektiven für neue Materialien. 2010 , 122, 6194-6219	275
2182	Coordinatively Immobilized Monolayers on Porous Coordination Polymer Crystals. 2010 , 122, 5455-5458	30
2181	A Shape-Persistent Organic Molecular Cage with High Selectivity for the Adsorption of CO ₂ over N ₂ . 2010 , 122, 6492-6495	62
2180	Generating Reactive MILs: Isocyanate- and Isothiocyanate-Bearing MILs through Postsynthetic Modification. 2010 , 122, 4748-4752	24
2179	Single-Crystal-to-Single-Crystal Transformations of Two Three-Dimensional Coordination Polymers through Regioselective [2+2] Photodimerization Reactions. 2010 , 122, 4877-4880	52
2178	Metal-Organic Frameworks from Edible Natural Products. 2010 , 122, 8812-8816	55
2177	Flexibility in a Metal-Organic Framework Material Controlled by Weak Dispersion Forces: The Bistability of MIL-53(Al). 2010 , 122, 7663-7665	30
2176	Cinchona Alkaloid-Metal Complexes: Noncovalent Porous Materials with Unique Gas Separation Properties. 2010 , 122, 7189-7193	8
2175	A Catenated Strut in a Catenated Metal-Organic Framework. 2010 , 122, 6903-6907	26
2174	Cation-Exchange Porosity Tuning in Anionic Metal-Organic Frameworks for the Selective Separation of Gases and Vapors and for Catalysis. 2010 , 122, 7466-7469	25
2173	A High-Performance Gas-Separation Membrane Containing Submicrometer-Sized Metal-Organic Framework Crystals. 2010 , 122, 10059-10062	79
2172	Hierarchical self-assembly of a chiral metal-organic framework displaying pronounced porosity. 2010 , 49, 1075-8	83
2171	Water-vapor-induced reversible switching of electronic states in an MMX-type chain complex with retention of single crystallinity. 2010 , 49, 552-5	20
2170	Time-resolved in situ diffraction study of the solvothermal crystallization of some prototypical metal-organic frameworks. 2010 , 49, 763-6	172

2169	Molecular sieve membrane: supported metal-organic framework with high hydrogen selectivity. 2010 , 49, 548-51	497
2168	Metal-organic framework membranes--high potential, bright future?. 2010 , 49, 1530-2	221
2167	Metal-organic framework MIL-101 for high-resolution gas-chromatographic separation of xylene isomers and ethylbenzene. 2010 , 49, 1477-80	368
2166	Carbon dioxide capture: prospects for new materials. 2010 , 49, 6058-82	3035
2165	Coordinatively immobilized monolayers on porous coordination polymer crystals. 2010 , 49, 5327-30	121
2164	A shape-persistent organic molecular cage with high selectivity for the adsorption of CO ₂ over N ₂ . 2010 , 49, 6348-51	189
2163	Generating reactive MILs: isocyanate- and isothiocyanate-bearing MILs through postsynthetic modification. 2010 , 49, 4644-8	108
2162	Single-crystal-to-single-crystal transformations of two three-dimensional coordination polymers through regioselective [2+2] photodimerization reactions. 2010 , 49, 4767-70	311
2161	Metal-organic frameworks from edible natural products. 2010 , 49, 8630-4	426
2160	Flexibility in a metal-organic framework material controlled by weak dispersion forces: the bistability of MIL-53(Al). 2010 , 49, 7501-3	141
2159	Cinchona alkaloid-metal complexes: noncovalent porous materials with unique gas separation properties. 2010 , 49, 7035-9	41
2158	A catenated strut in a catenated metal-organic framework. 2010 , 49, 6751-5	96
2157	Cation-exchange porosity tuning in anionic metal-organic frameworks for the selective separation of gases and vapors and for catalysis. 2010 , 49, 7308-11	145
2156	A high-performance gas-separation membrane containing submicrometer-sized metal-organic framework crystals. 2010 , 49, 9863-6	558
2155	Adsorptive removal of methyl orange from aqueous solution with metal-organic frameworks, porous chromium-benzenedicarboxylates. 2010 , 181, 535-535	476
2154	Synthesis, characterization, and theoretical calculations of mononuclear copper(II) benzoate complex with 2-propylimidazole, [Cu(PIM)2(PhCOO)2]. 2010 , 967, 54-60	27
2153	Synthesis, crystal structure and thermal behavior of two hydrated forms of lanthanide phthalates Ln ₂ (O ₂ C ₆ H ₄ CO ₂) ₃ (H ₂ O) (Ln=Ce, Nd) and Nd ₂ (O ₂ C ₆ H ₄ CO ₂) ₃ (H ₂ O) ₃ . 2010 , 183, 1943-1948	4
2152	Copper benzenedicarboxylate coordination polymers incorporating a long-spanning neutral co-ligand: Effect of anion inclusion and carboxylate pendant-arm length on topology and magnetism. 2010 , 29, 303-311	45

2151	Synthesis, characterization and X-ray crystallographic investigation of 2-D hybrid hydrogen bonded and rectangular grid networks in Cu(II) and Co(II) metal complexes. 2010 , 29, 1801-1809	17
2150	Two- and three-dimensional aliphatic dicarboxylate copper coordination polymers with bis(3-pyridylmethyl)piperazine tethers. 2010 , 29, 2239-2249	13
2149	Coordination steric effect of N,N-dimethylformamide, N,N-dimethylacetamide and N-methyl-2-pyrrolidone on the assembly of coordination polymers. 2010 , 29, 2851-2856	8
2148	Zinc maleate and fumarate coordination polymers containing hydrogen-bonding capable organodiiimines featuring ligand dependent in situ cis/trans isomerization. 2010 , 363, 250-256	15
2147	Effect of pendant arm length and nitrogen donor disposition on the topology of luminescent cadmium phenylenedicarboxylate coordination polymers with bis(pyridylmethyl)piperazine co-ligands. 2010 , 363, 88-96	29
2146	Coordinated cations in dipicolinato complexes of divalent metal ions. 2010 , 363, 1479-1487	30
2145	Divalent metal 1,3-phenylenediacetate coordination polymers with rigid or flexible dipyridyl tethers: Chains, layers, and interpenetrated networks. 2010 , 363, 2233-2242	18
2144	Synthesis, structure and properties of copper(II) and manganese(II) coordination polymers with 1,5-dinitronaphthalene-3,7-dicarboxylate. 2010 , 363, 2481-2487	13
2143	Magnetic properties and circular dichroism of 1D chains built from chiral mononuclear and non-chiral trinuclear Cu(II) complexes with α -aminocarboxylates. 2010 , 363, 3453-3460	15
2142	Topological diversity in copper aromatic meta-dicarboxylate coordination polymers with bis(pyridylformyl)piperazine coligands. 2010 , 363, 3865-3873	36
2141	Chiral and achiral layered divalent metal aromatic ortho-dicarboxylate coordination polymers with bis(4-pyridylmethyl)piperazine ligands: Luminescent behavior and magnetic properties. 2010 , 363, 3951-3958	12
2140	Pendant arm length control of dimensionality in cobalt dipyridylamine coordination polymers containing meta-benzenedicarboxylate ligands. 2010 , 363, 3966-3972	11
2139	Syntheses and molecular structures of Co_3Na^+ and Co_3K^+ coordination polymers constructed using mono- and bis-chelated cobalt(III) complexes of bis(2-pyridylcarbonyl)amide ion. 2010 , 363, 4008-4016	10
2138	Porosity tuning of carborane-based metal-organic frameworks (MOFs) via coordination chemistry and ligand design. 2010 , 364, 266-271	52
2137	Vapor-phase adsorption of alkylaromatics on aluminum-trimesate MIL-96: An unusual increase of adsorption capacity with temperature. 2010 , 129, 274-277	22
2136	$[\text{Co}(\text{en})_3]_{1/3}[\text{In}(\text{ox})_2]_{1/3} \cdot 5\text{H}_2\text{O}$: A zeolitic metal-organic framework templated by $\text{Co}(\text{en})_3\text{Cl}_3$. 2010 , 132, 453-457	41
2135	Structure, spectroscopy, and theory calculations of mononuclear mixed-ligand copper(II) complex with malonate and 2-propylimidazole, $[\text{Cu}(\text{mal})(\text{PIM})_2(\text{H}_2\text{O})]$. 2010 , 971, 47-52	10
2134	Luminescent cadmium phenylenediacetate coordination polymers with bis(pyridylformyl)piperazine tethers: Influence of pendant arm position on topology. 2010 , 983, 162-168	14

2133	Molecular simulation of hydrogen adsorption in metal-organic frameworks. 2010 , 357, 35-42	26
2132	A 3-D lanthanum-organic framework containing double chains: La ₂ [NC ₅ H ₃ (CO ₂) ₂] ₃ ·3H ₂ O. 2010 , 13, 649-652	6
2131	Poly[[tetraaqua(mu ⁷ -pyridine-2,3,5,6-tetracarboxylato)dicadmium(II)] monohydrate]. 2010 , 66, m110-3	1
2130	One-Dimensional and Two-Dimensional Coordination Polymers of Copper(II) Nitrobenzoate with Bridging 3-Pyridylmethanol Ligand. 2010 , 636, 589-594	4
2129	Hydrogen-Bond-Based Magnetic Exchange Between Diethylnicotinamide(aqua)bis(X-salicylato)copper(II) Polymeric Chains. 2010 , 637, n/a-n/a	
2128	Enhancement of the structure stability of MOF-5 confined to multiwalled carbon nanotubes. 2010 , 247, 2664-2668	26
2127	Metal-Organic Frameworks in Monolithic Structures. 2010 , 93, 2476-2479	93
2126	Rapid preparation of flexible porous coordination polymer nanocrystals with accelerated guest adsorption kinetics. 2010 , 2, 410-6	308
2125	Selective sorption of oxygen and nitric oxide by an electron-donating flexible porous coordination polymer. 2010 , 2, 633-7	277
2124	De novo synthesis of a metal-organic framework material featuring ultrahigh surface area and gas storage capacities. 2010 , 2, 944-8	1350
2123	Flexible two-dimensional square-grid coordination polymers: structures and functions. 2010 , 11, 3803-45	92
2122	catena-Poly[[[aqua-pyridine-zinc(II)]-(2)-3,3'-(p-phenyl-ene)diacrylato] pyridine solvate]. 2010 , 66, m1163	
2121	Molecular chemisorption on open metal sites in Cu ₃ (benzenetricarboxylate) ₂ : A spatially periodic density functional theory study. 2010 , 133, 094509	76
2120	Synthesis, structure, and thermal properties of 3-D coordination polymers constructed from asymmetrical carboxylates. 2010 , 63, 3060-3070	8
2119	Metal-Organic Framework Materials. 2010 , 1-67	2
2118	RECENT ADVANCES IN THE STUDY OF MESOPOROUS METAL-ORGANIC FRAMEWORKS. 2010 , 31, 165-195	77
2117	Advances towards synthetic machines at the molecular and nanoscale level. 2010 , 11, 2453-72	15
2116	Syntheses and characterization of new nickel coordination polymers with 4,4'-dipyridylsulfide. Dynamic rearrangements of one-dimensional chains responding to external stimuli: temperature variation and guest releases/re-inclusions. 2010 , 11, 2821-38	2

2115	Two-dimensional coordination polymer with a non-interpenetrated (4,4) net showing anion exchange and structural transformation in single-crystal-to-single-crystal fashion. 2010 , 49, 5883-9	77
2114	Structural diversification and metal-directed assembly of coordination architectures based on tetrabromoterephthalic acid and a bent dipyridyl tecton 2,5-bis(4-pyridyl)-1,3,4-oxadiazole. 2010 , 12, 4392	38
2113	Rational synthesis and characterization of porous Cu(II) coordination polymers. 2010 , 12, 2519-31	37
2112	Metal insertion in a microporous metal-organic framework lined with 2,2'-bipyridine. 2010 , 132, 14382-4	463
2111	Rational design, synthesis, purification, and activation of metal-organic framework materials. 2010 , 43, 1166-75	1127
2110	MOF-5 metal-organic framework as sorbent for in-field sampling and preconcentration in combination with thermal desorption GC/MS for determination of atmospheric formaldehyde. 2010 , 82, 1365-70	202
2109	Selective CO ₂ and H ₂ adsorption in a chiral magnesium-based metal organic framework (Mg-MOF) with open metal sites. 2010 , 20, 9073	131
2108	The osmotic framework adsorbed solution theory: predicting mixture coadsorption in flexible nanoporous materials. 2010 , 12, 10904-13	66
2107	Highly selective carbon dioxide sorption in an organic molecular porous material. 2010 , 132, 12200-2	268
2106	Reactive adsorption of ammonia on Cu-based MOF/graphene composites. 2010 , 26, 15302-9	181
2105	pH-Dependent Binary Metal-Organic Compounds Assembled from Different Helical Units: Structural Variation and Supramolecular Isomers. 2010 , 10, 1699-1705	61
2104	Zeolitic polyoxometalates metal organic frameworks (Z-POMOF) with imidazole ligands and epsilon-Keggin ions as building blocks; computational evaluation of hypothetical polymorphs and a synthesis approach. 2010 , 12, 8632-9	49
2103	Control over the nucleation process determines the framework topology of porous coordination polymers. 2010 , 12, 2350	50
2102	Kleine Poren große Wirkung. 2010 , 58, 1003-1007	3
2101	CO ₂ and CH ₄ Separation by Adsorption Using Cu-BTC Metal-Organic Framework. 2010 , 49, 7497-7503	205
2100	Multiscale simulation and modelling of adsorptive processes for energy gas storage and carbon dioxide capture in porous coordination frameworks. 2010 , 3, 1469	130
2099	Assembly of Two Metal-Organic Frameworks with Intrinsic Chiral Topology from Achiral Materials. 2010 , 10, 492-494	69
2098	DABCO-functionalized metal-organic framework bearing a C _{2h} -symmetric terphenyl dicarboxylate linker. 2010 , 39, 5608-10	52

2097	Tunable emission from a porous metal-organic framework by employing an excited-state intramolecular proton transfer responsive ligand. 2010 , 46, 7906-8	151
2096	Two cationic metal-organic frameworks based on cadmium and tetrakisulfonate anions and their photoluminescent properties. 2010 , 39, 11193-200	15
2095	Introduction of cavities up to 4 nm into a hierarchically-assembled metal-organic framework using an angular, tetrapodal ligand. 2010 , 46, 5223-5	35
2094	Metal-organic frameworks as sensors: a ZIF-8 based Fabry-Pérot device as a selective sensor for chemical vapors and gases. 2010 , 132, 7832-3	875
2093	A robust highly interpenetrated metal-organic framework constructed from pentanuclear clusters for selective sorption of gas molecules. 2010 , 49, 8444-8	93
2092	Cobalt phenylenediacetate coordination polymers containing long-spanning dipyriddy ligands: rectangular grid, primitive cubic, and 5-connected Archimedean layered net topologies. 2010 , 12, 1927	39
2091	Rapid syntheses of a metal-organic framework material Cu ₃ (BTC) ₂ (H ₂ O) ₃ under microwave: a quantitative analysis of accelerated syntheses. 2010 , 12, 2625-31	73
2090	Molecular Simulation Studies of Separation of CO ₂ /N ₂ , CO ₂ /CH ₄ , and CH ₄ /N ₂ by ZIFs. 2010 , 114, 8515-8522	231
2089	A double-walled triangular metal-organic macrocycle based on a [Cu ₂ (COO) ₄] square paddle-wheel secondary building unit. 2010 , 39, 6178-80	14
2088	Au@ZIFs: Stabilization and Encapsulation of Cavity-Size Matching Gold Clusters inside Functionalized Zeolite Imidazolate Frameworks, ZIFs. 2010 , 22, 6393-6401	232
2087	Self-assembly, thermal stability and photoluminescence of two mixed-ligand silver(I) networks via 2D-2D and 2D-3D parallel interpenetration of (4,4) nets. 2010 , 12, 4161	56
2086	Synthesis and properties of nano zeolitic imidazolate frameworks. 2010 , 46, 4878-80	206
2085	Zeolites and Other Micro- and Mesoporous Molecular Sieves. 2010 , 1	1
2084	Porous Metal-Organic Frameworks Containing Alkali-Bridged Two-Fold Interpenetration: Synthesis, Gas Adsorption, and Fluorescence Properties. 2010 , 10, 1301-1306	41
2083	Nanoporous gold: a new material for catalytic and sensor applications. 2010 , 12, 12919-30	261
2082	A unique example of a 3D framework based on the binuclear dysprosium(III) azobenzene-3,5,4'-tricarboxylate with 3,6-connected topology showing ferromagnetic properties. 2010 , 12, 3476	25
2081	HKUST-1 membranes on porous supports using secondary growth. 2010 , 20, 3938	190
2080	A rutile-type porous zinc(II)-phosphonocarboxylate framework: local proton transfer and size-selected catalysis. 2010 , 46, 1100-2	58

2079	Porous coordination polymers of transition metal sulfides with P6S topology built on a semirigid tetrahedral linker. 2010 , 49, 7685-91	45
2078	Synthesis of isostructural porous metal-benzenedicarboxylates: Effect of metal ions on the kinetics of synthesis. 2010 , 12, 2749	41
2077	Pd nanoparticles embedded into a metal-organic framework: synthesis, structural characteristics, and hydrogen sorption properties. 2010 , 132, 2991-7	290
2076	Highly emissive metal-organic framework composites by host-guest chemistry. 2010 , 9, 846-53	52
2075	Moisture-resistant and superhydrophobic metal-organic frameworks obtained via postsynthetic modification. 2010 , 132, 4560-1	420
2074	Microreactors with Electrical Fields. 2010 , 38, 37-102	5
2073	Enhanced selectivity of CO ₂ from a ternary gas mixture in an interdigitated porous framework. 2010 , 46, 4258-60	101
2072	Metal-organic frameworks as semiconductors. 2010 , 20, 3141	401
2071	Storage and separation applications of nanoporous metal-organic frameworks. 2010 , 12, 1337-1353	139
2070	Zinc(II)-boron(III)-imidazolate framework (ZBIF) with unusual pentagonal channels prepared from deep eutectic solvent. 2010 , 39, 697-9	44
2069	High and selective CO ₂ uptake in a cobalt adeninate metal-organic framework exhibiting pyrimidine- and amino-decorated pores. 2010 , 132, 38-9	823
2068	Tuning MOF CO ₂ adsorption properties via cation exchange. 2010 , 132, 5578-9	501
2067	Effect of Anions on the Self-Assembly of Cd(II)-Containing Coordination Polymers Based on a Novel Flexible Tetrakis(imidazole) Ligand. 2010 , 10, 995-1016	150
2066	Short-Range and Long-Range Magnetic Ordering, in Third Generation Brannerite Type Inorganic/Organic Vanadates: $[\{Mn(Bpy)\}(VO_3)_2](H_2O)_{1.16}$ and $[\{Mn(Bpy)_{0.5}\}(VO_3)_2](H_2O)_{0.62}$. 2010 , 22, 5543-5553	22
2065	Describing Mixture Diffusion in Microporous Materials under Conditions of Pore Saturation. 2010 , 114, 11557-11563	22
2064	Microporous La(III) Metal-Organic Framework Using a Semirigid Tricarboxylic Ligand: Synthesis, Single-Crystal to Single-Crystal Sorption Properties, and Gas Adsorption Studies. 2010 , 10, 3410-3417	64
2063	Magnetic metal-organic framework constructed from a paramagnetic metalloligand exhibiting a significant sorption and reversible magnetic conversions. 2010 , 46, 8779-81	57
2062	Influence of the synthetic conditions on the structural diversity of extended manganese-oxalato-1,2-bis(4-pyridyl)ethylene systems. 2010 , 49, 11346-61	27

2061	Highlighting a variety of unusual characteristics of adsorption and diffusion in microporous materials induced by clustering of guest molecules. 2010 , 26, 8450-63	50
2060	Unprecedented marriage of a cationic pentanuclear cluster and a 2D polymeric anionic layer based on a flexible tripodal ligand and a Cu(II) ion. 2010 , 49, 769-71	85
2059	Efficient Detection of Organophosphate Pesticide Based on a Metal-Organic Framework Derived from Biphenyltetracarboxylic Acid. 2010 , 10, 2835-2838	59
2058	Nonclassical active site for enhanced gas sorption in porous coordination polymer. 2010 , 132, 6654-6	283
2057	From metal-organic squares to porous zeolite-like supramolecular assemblies. 2010 , 132, 18038-41	113
2056	Novel functionalized metal-organic framework based on unique hexagonal prismatic clusters. 2010 , 49, 8647-9	29
2055	Monitoring adsorption-induced switching by (^{129}Xe) NMR spectroscopy in a new metal-organic framework $\text{Ni}(2)(2,6\text{-ndc})(2)(\text{dabco})$. 2010 , 12, 11778-84	118
2054	Coordination Polymers and Networks Constructed from Bidentate Ligands Linked with Sulfonamide and Silver(I) Ions. 2010 , 10, 2291-2297	21
2053	Exceptional CO_2 Capture Capability and Molecular-Level Segregation in a Li-Modified Metal-Organic Framework. 2010 , 114, 16611-16617	65
2052	Synthesis and Structural Characterization of a 3-D Lithium Based Metal-Organic Framework Showing Dynamic Structural Behavior. 2010 , 10, 2801-2805	52
2051	Molecular dynamics simulations of stability of metal-organic frameworks against H_2O using the ReaxFF reactive force field. 2010 , 46, 5713-5	105
2050	Largest molecular clusters in the supertetrahedral T_n series. 2010 , 132, 10823-31	86
2049	Molecular hydrogen "pairing" interaction in a metal organic framework system with unsaturated metal centers (MOF-74). 2010 , 132, 14834-48	59
2048	A two-fold interpenetrated (3,6)-connected metal-organic framework with rutile topology showing a large solvent cavity. 2010 , 34, 2396	37
2047	Structural and chemical control in assembly of multicomponent metal-organic coordination networks on a surface. 2010 , 132, 10756-61	87
2046	Regulation and Properties of Diversiform Cd(II) Supramolecular Complexes with a Bulky Naphthalene-Based Dicarboxyl Tecton and Different N-Donor Co-Ligands. 2010 , 10, 4773-4785	61
2045	Latent porosity in potassium dodecafluoro-closo-dodecaborate(2-). Structures and rapid room temperature interconversions of crystalline $\text{K}_2\text{B}_{12}\text{F}_{12}$, $\text{K}_2(\text{H}_2\text{O})_2\text{B}_{12}\text{F}_{12}$, and $\text{K}_2(\text{H}_2\text{O})_4\text{B}_{12}\text{F}_{12}$ in the presence of water vapor. 2010 , 132, 13902-13	35
2044	Interconversion between a nonporous nanocluster and a microporous coordination polymer showing selective gas adsorption. 2010 , 132, 912-3	85

2043	Metal-organic frameworks with designed chiral recognition sites. 2010 , 46, 4911-3	71
2042	Construction of Metal-Organic Frameworks with Novel {Zn8O13} SBU or Chiral Channels through in Situ Ligand Reaction. 2010 , 10, 3324-3326	50
2041	Metal-Organic Framework Isomers with Diamondoid Networks Constructed of a Semirigid Tetrahedral Linker. 2010 , 10, 5327-5333	31
2040	A porous metal-organic replica of PbO_2 for capture of nerve agent surrogate. 2010 , 132, 17996-9	65
2039	Exceptional thermal stability in a supramolecular organic framework: porosity and gas storage. 2010 , 132, 14457-69	281
2038	Controlled Multiscale Synthesis of Porous Coordination Polymer in Nano/Micro Regimes. 2010 , 22, 4531-4538	393
2037	Synthesis and Stability of Tagged UiO-66 Zr-MOFs. 2010 , 22, 6632-6640	1210
2036	Probing the surfaces of heterogeneous catalysts by in situ IR spectroscopy. <i>Chemical Society Reviews</i> , 2010 , 39, 4951-5001	58.5 354
2035	Rigid pillars and double walls in a porous metal-organic framework: single-crystal to single-crystal, controlled uptake and release of iodine and electrical conductivity. 2010 , 132, 2561-3	564
2034	A novel microporous MOF with the capability of selective adsorption of xylenes. 2010 , 46, 8612-4	98
2033	"Systematic Synthesis of a Metal Organic Framework Based on Triangular $\text{Cu}_3(\text{B})\text{-OH}$ Secondary Building Units: From a 0-D Complex, to an 1-D Chain and a 3-D Lattice". 2010 , 10, 2606-2612	33
2032	Two-step adsorption on jungle-gym-type porous coordination polymers: dependence on hydrogen-bonding capability of adsorbates, ligand-substituent effect, and temperature. 2010 , 49, 10133-43	59
2031	Heteroepitaxial Growth of Isostructural Metal-Organic Frameworks and Their Hybrid Films. 2010 , 10, 1283-1288	102
2030	From simple, neutral triatomic molecules to complex chemistry. <i>Chemical Society Reviews</i> , 2010 , 39, 1435-47	58.5 45
2029	Reactive adsorption of NO_2 on copper-based metal-organic framework and graphite oxide/metal-organic framework composites. 2010 , 2, 3606-13	128
2028	Selective gas adsorption in the flexible metal-organic frameworks $\text{Cu}(\text{BDTri})\text{L}$ ($\text{L}=\text{DMF}$, DEF). 2010 , 16, 5902-8	107
2027	Chromatography in a single metal-organic framework (MOF) crystal. 2010 , 132, 16358-61	177
2026	Interaction of the Explosive Molecules RDX and TATP with IRMOF-8. 2010 , 114, 7535-7540	18

2025	New chiral and flexible metal-organic framework with a bifunctional spiro linker and Zn ₄ O-nodes. 2010 , 49, 4440-6	48
2024	Structure and physical properties of substituted malonate divalent metal coordination polymers with dipyridylamine co-ligands: acentric chain, herringbone layer, and novel binodal network topologies. 2010 , 12, 888-897	20
2023	Control over interpenetration in lanthanide-organic frameworks: synthetic strategy and gas-adsorption properties. 2010 , 49, 7605-7	118
2022	Multistep N ₂ breathing in the metal-organic framework co(1,4-benzenedipyrzolate). 2010 , 132, 13782-8	197
2021	Sorbents for CO ₂ capture from flue gas--aspects from materials and theoretical chemistry. 2010 , 2, 1819-41	202
2020	Structural Diversity in Metal-Organic Frameworks Built from Rigid Tetrahedral [Si(p-C ₆ H ₄ CO ₂) ₄] ₄₈ struts. 2010 , 10, 4571-4581	64
2019	Three new coordination complexes based on 2-methyl-4, 5-imidazole dicarboxylic acid varying from zero- to two-dimensionality. 2010 , 63, 4201-4214	29
2018	Gas-Induced Expansion and Contraction of a Fluorinated Metal-Organic Framework. 2010 , 10, 1037-1039	145
2017	The roles of the coordination modes of bridging ligands for the formation of two 3D metal-organic coordination networks. 2010 , 12, 3437	9
2016	Phase-Transition and Phase-Selective Synthesis of Porous Chromium-Benzenedicarboxylates. 2010 , 10, 1860-1865	93
2015	Selecting metal organic frameworks as enabling materials in mixed matrix membranes for high efficiency natural gas purification. 2010 , 3, 343	159
2014	Long-range ordering or not: magnetic properties modulated by second ligands in flexible three-dimensional metal-organic frameworks. 2010 , 46, 5349-51	44
2013	In situ 2,5-pyrazinedicarboxylate and oxalate ligands synthesis leading to a microporous europium-organic framework capable of selective sensing of small molecules. 2010 , 12, 4372	117
2012	Zeolitic Imidazolate Frameworks as H ₂ Adsorbents: Ab Initio Based Grand Canonical Monte Carlo Simulation. 2010 , 114, 12039-12047	52
2011	Topologies of metal-organic frameworks based on pyrimidine-5-carboxylate and unexpected gas-sorption selectivity for CO ₂ . 2010 , 49, 10833-9	35
2010	Understanding the Effect of Confinement on the Liquid-Gas Transition: A Study of Adsorption Isotherms in a Family of Metal-Organic Frameworks. 2010 , 114, 21631-21637	22
2009	Evaluation of Energy Heterogeneity in Metal-Organic Frameworks: Absence of Henry's Region in MIL-53 and MIL-68 Materials?. 2010 , 114, 17665-17674	16
2008	Alkali metal cation doped Al-SBA-15 for carbon dioxide adsorption. 2010 , 12, 5240-7	32

2007	Gas storage in porous metal-organic frameworks for clean energy applications. 2010 , 46, 44-53	1102
2006	X-ray absorption spectroscopies: useful tools to understand metallorganic frameworks structure and reactivity. <i>Chemical Society Reviews</i> , 2010 , 39, 4885-927	58.5 112
2005	Metal-organic framework thin film for enhanced localized surface plasmon resonance gas sensing. 2010 , 82, 8042-6	279
2004	Postsynthetic diazeniumdiolate formation and NO release from MOFs. 2010 , 12, 2335	83
2003	New three-dimensional porous metal organic framework with tetrazole functionalized aromatic carboxylic Acid: synthesis, structure, and gas adsorption properties. 2010 , 49, 11581-6	126
2002	Investigating cluster formation in adsorption of CO ₂ , CH ₄ , and Ar in zeolites and metal organic frameworks at subcritical temperatures. 2010 , 26, 3981-92	67
2001	Adsorption of light hydrocarbons in the flexible MIL-53(Cr) and rigid MIL-47(V) metal-organic frameworks: a combination of molecular simulations and microcalorimetry/gravimetry measurements. 2010 , 12, 6428-37	76
2000	Thermosensitive gating effect and selective gas adsorption in a porous coordination nanocage. 2010 , 46, 7352-4	80
1999	A metal-organic framework replete with ordered donor-acceptor catenanes. 2010 , 46, 380-2	84
1998	Computational screening of metal-organic frameworks for large-molecule chemical sensing. 2010 , 12, 12621-9	77
1997	Chemical reduction of a diimide based porous polymer for selective uptake of carbon dioxide versus methane. 2010 , 46, 1056-8	134
1996	A microporous metal-organic framework constructed from a 1D column made of linear trinuclear manganese secondary building units. 2010 , 12, 2179	13
1995	A 4-connected anionic metal-organic nanotube constructed from indium isophthalate. 2010 , 12, 3385	29
1994	4-Carboxylphthalhydrazidate-bridged layered Pb(II) coordination polymers. 2010 , 12, 1850	24
1993	Spontaneous resolution upon crystallization of chiral La(III) and Gd(III) MOFs from achiral dihydroxymalonate. 2010 , 46, 8270-2	108
1992	Systematic exploration of a rutile-type zinc(II)-phosphonocarboxylate open framework: the factors that influence the structure. 2010 , 39, 10712-8	13
1991	Homochiral helical coordination polymers of metallosalen complexes with tunable pitches. 2010 , 12, 2424	15
1990	Hydrogen storage in water-stable metal-organic frameworks incorporating 1,3- and 1,4-benzenedipyrazolate. 2010 , 3, 117-123	158

1989	Selective separation of larger molecules from a Lewis-base mixture by flexible one-dimensional Cu(II) coordination polymer with shape-recognizing space. 2010 , 46, 3134-6	21
1988	Stepwise and hysteretic sorption of N(2), O(2), CO(2), and H(2) gases in a porous metal-organic framework [Zn(2)(BPnDC)(2)(bpy)]. 2010 , 46, 610-2	137
1987	Counterion-induced controllable assembly of 2D and 3D metal-organic frameworks: effect of coordination modes of dinuclear Cu(II) paddle-wheel motifs. 2010 , 12, 3815	32
1986	Versatile functionalities in MOFs assembled from the same building units: interplay of structural flexibility, rigidity and regularity. 2010 , 20, 1322-1331	66
1985	Tetracarboxylate-based Co(II), Ni(II) and Cu(II) three-dimensional coordination polymers: syntheses, structures and magnetic properties. 2010 , 39, 9123-30	39
1984	Architecture of europium complexes with sulfobenzenedicarboxylates. 2010 , 12, 3145	29
1983	Water adsorption in hydrophobic MOF channels. 2010 , 12, 8123-9	66
1982	Solvothermal syntheses, structures, and physical properties of four new coordination compounds constructed from a bent dicarboxylate ligand. 2010 , 39, 8240-7	22
1981	Nanoporous metal-organic framework comprising of 1D cobalt oxalate chains and flexible ligands exhibiting both dynamic gas adsorption and antiferromagnetic chain behaviours. 2010 , 12, 2225	18
1980	Separation of gas mixtures using Co(II) carborane-based porous coordination polymers. 2010 , 46, 3478-80	128
1979	Modification of flexible part in Cu(2+) interdigitated framework for CH(4)/CO(2) separation. 2010 , 46, 9229-31	82
1978	Two temperature-induced isomers of metal-carboxylate frameworks based on different linear trinuclear Co ₃ (RCOO) ₈ clusters exhibiting different magnetic behaviours. 2010 , 12, 3834	49
1977	Isomer dependent self-penetrated topologies and cluster subunits in copper phenylenediacetate coordination polymers with flexible dipyridyl ligands. 2010 , 12, 2374	33
1976	Solvothermal synthesis of two unique metal-organic frameworks: a 3-fold interpenetrating (3,4,5)-connected network and a 2-fold interpenetrating (4,5)-connected network. 2010 , 12, 348-351	34
1975	The first anionic four-connected boron imidazolate framework. 2010 , 39, 2487-9	15
1974	New mimic of zeolite: heterometallic organic host framework accommodating inorganic cations. 2010 , 46, 3182-4	40
1973	Solvent effect on the construction of two microporous yttrium-organic frameworks with high thermostability via in situ ligand hydrolysis. 2010 , 39, 5683-7	30
1972	Large-Pore Cagelike Silica with Necks of Molecular Dimensions. 2010 , 114, 10910-10916	11

1971	A new Cd ₄ -2,4-pyridinedicarboxylate layered coordination polymer consisting of intralayer cavities and reversible network self-adaptation upon dehydration/moisture-absorption. 2010 , 12, 1779	21
1970	Selective gas adsorption within a five-connected porous metal-organic framework. 2010 , 20, 3984	58
1969	A versatile V-shaped tetracarboxylate building block for constructing mixed-ligand Co(II) and Mn(II) complexes incorporating various N-donor co-ligands. 2010 , 12, 1227-1237	57
1968	Luminescent boracite-like metal-organic frameworks constructed by Cu-centered CuCu ₄ tetrahedra and CuCu ₃ triangles with an acentric cubic superlarge cell. 2010 , 12, 55-58	14
1967	NaKA sorbents with high CO ₂ -over-N ₂ selectivity and high capacity to adsorb CO ₂ . 2010 , 46, 4502-4	120
1966	Chemoselective gas sensing ionic liquids. 2010 , 46, 2983-5	31
1965	Six new metal-organic frameworks with multi-carboxylic acids and imidazole-based spacers: syntheses, structures and properties. 2011 , 40, 11856-65	62
1964	An ionic porous coordination framework exhibiting high CO ₂ affinity and CO ₂ /CH ₄ selectivity. 2011 , 47, 926-8	103
1963	Two-step synthesis, structure and adsorption property of a dynamic zinc phosphonocarboxylate framework. 2011 , 13, 3378	30
1962	Titanium-decorated graphene oxide for carbon monoxide capture and separation. 2011 , 13, 21126-31	48
1961	A 9-connected metal-organic framework with gas adsorption properties. 2011 , 21, 15909	29
1960	NbO lattice MOFs based on octahedral M(II) and ditopic pyridyl substituted diketonate ligands: structure, encapsulation and guest-driven luminescent property. 2011 , 47, 10731-3	86
1959	Metal-containing triarylboron compounds for optoelectronic applications. 2011 , 40, 7805-16	162
1958	An unusual 1D ladder-like silver(I) coordination polymer involving novel 1D-3D five-folded interpenetrated and [3 + 2] catenated features generated by Ag ⁺ O interactions. 2011 , 13, 33-35	48
1957	A robust near infrared luminescent ytterbium metal-organic framework for sensing of small molecules. 2011 , 47, 5551-3	321
1956	New heterometallic frameworks with flexible sulfonate-carboxylate ligand: syntheses, structures, and properties. 2011 , 13, 6150	9
1955	Two new 1,2,4,5-cyclohexanetetracarboxylate-bridged frameworks with metal hydroxide subunits. Synthesis, structures, magnetism and adsorption. 2011 , 40, 3592-600	25
1954	Metal and ligand binding mode dependent topologies in phthalate coordination polymers with bis(4-pyridylformyl)piperazine co-ligands. 2011 , 13, 1391-1399	60

- 1953 Cucurbit[7]uril: an amorphous molecular material for highly selective carbon dioxide uptake. **2011**, 47, 7626-8 92
- 1952 Coordination polymers constructed by 1,3-bis(4-pyridyl)propane with four different conformations and 2,2'-dinitro-4,4'-biphenyldicarboxylate ligands: the effects of metal ions. **2011**, 13, 1291-1298 50
- 1951 Silver coordination networks and cages based on a semi-rigid bis(isoxazolyl) ligand. **2011**, 40, 5483-93 14
- 1950 Tuning the porosity of lanthanide MOFs with 2,5-pyrazinedicarboxylate and the first in situ hydrothermal carboxyl transfer. **2011**, 13, 985-991 39
- 1949 Role of hydrocarbons in pore expansion and contraction of a flexible metal-organic framework. **2011**, 47, 7077-9 25
- 1948 Metal-organic frameworks with rare topologies: lonsdaleite-type metal formates and their magnetic properties. **2011**, 13, 2197 15
- 1947 Selective CO₂ capture by a 3D coordination polymer material with 1D channel. **2011**, 13, 6013 16
- 1946 Temperature dependent selective gas sorption of the microporous metal-imidazolate framework [Cu(L)] [H₂L = 1,4-di(1H-imidazol-4-yl)benzene]. **2011**, 47, 752-4 157
- 1945 Ab-Initio Study of the Adsorption and Separation of NO_x and SO_x Gases in Functionalized IRMOF Ligands. **2011**, 115, 24906-24914 21
- 1944 Two Solvent-Dependent Zinc(II) Supramolecular Isomers: Rare kgd and Lonsdaleite Network Topologies Based on a Tripodal Flexible Ligand. **2011**, 11, 5182-5187 128
- 1943 Open-framework copper adeninate compounds with three-dimensional microchannels tailored by aliphatic monocarboxylic acids. **2011**, 50, 5330-2 45
- 1942 Two-dimensional {Co(3+)-Zn2+} and {Co(3+)-Cd2+} networks and their applications in heterogeneous and solvent-free ring opening reactions. **2011**, 40, 12454-61 42
- 1941 Multi-functional metal-organic frameworks based on H₄mdip: Crystal structure, photoluminescence, selective ion-exchange and catalysis. **2011**, 13, 7236 21
- 1940 Design and construction of coordination polymers based on 2,2'-dinitro-4,4'-biphenyldicarboxylate and imidazole-based ligands: The effect of ligand length and metal ions. **2011**, 13, 4592 40
- 1939 Ancillary ligand-mediated syntheses and fluorescence properties of zinc(II) complexes based on flexible benzene dicarboxylic acid. **2011**, 13, 3013 59
- 1938 Reversible single crystal to single crystal transformation with anion exchange-induced weak Cu²⁺ interactions and modification of the structures and properties of MOFs. **2011**, 47, 5271-3 84
- 1937 Two unique self-penetrating metal-organic frameworks based on flexible tripodal ligands, Cu(II) and N-containing bridging ligands. **2011**, 13, 6945 23
- 1936 {Co(HBpe)₂}(V₄O₁₂): pedal motion induced order-disorder P → C transition and disrupted C → C/m displacive transition due to thermal instability. **2011**, 13, 6488 10

1935	A flexible copper based microporous metal-organic framework displaying selective adsorption of hydrogen over nitrogen. 2011 , 40, 3398-401	19
1934	Hydrothermal syntheses, structures and luminescent properties of Zn(II) coordination polymers assembled with benzene-1,2,3-tricarboxylic acid involving in situ ligand reactions. 2011 , 13, 2764	48
1933	Four new metal-organic frameworks constructed from H ₂ DBTDC-O ₂ (H ₂ DBTDC-O ₂ = dibenzothiophene-5,5'-dioxide-3,7-dicarboxylic acid) ligand with guest-responsive photoluminescence. 2011 , 13, 1646-1653	33
1932	Vapour-adsorption and chromic behaviours of luminescent coordination polymers composed of a Pt(II)-diimine metalloligand and alkaline-earth metal ions. 2011 , 40, 8012-8	38
1931	A novel 3-connected [3 + 3] topological net showing both rotaxane- and catenane-like motifs. 2011 , 13, 4945	8
1930	Design and construction of coordination polymers by 2,2'-dinitro-4,4'-biphenyldicarboxylate and imidazole-based ligands: diverse structures based on different metal ions. 2011 , 13, 2457	26
1929	Multiple phase-transitions upon selective CO ₂ adsorption in an alkyl ether functionalized metal-organic framework – in situ X-ray diffraction study. 2011 , 13, 6399	45
1928	Synthesis of catalytically active porous organic polymers from metalloporphyrin building blocks. 2011 , 2, 686	157
1927	Syntheses, structures, and photoluminescence of five silver(I) coordination polymers based on tetrakis(imidazol-1-ylmethyl)methane. 2011 , 13, 5877	56
1926	Design, synthesis and noncentrosymmetric solid state organization of three novel pyridylphosphonic acids. 2011 , 13, 3474	17
1925	Homochiral 3D metal-organic frameworks from chiral 1D rods: 6-way helical packing. 2011 , 47, 9402-4	20
1924	New topology observed in highly rare interlaced triple-stranded molecular braid. 2011 , 13, 421-425	12
1923	Molecular simulation investigation into the performance of Cu-BTC metal-organic frameworks for carbon dioxide-methane separations. 2011 , 13, 20453-60	24
1922	Analysis of hydrogen storage in nanoporous materials for low carbon energy applications. 2011 , 151, 59-74; discussion 95-115	24
1921	A Covalent Organic Framework with 4 nm open pores. 2011 , 47, 1707-9	153
1920	Surface functionalization of metal-organic polyhedron for homogeneous cyclopropanation catalysis. 2011 , 47, 4968-70	91
1919	Small chemical causes drastic structural effects: the case of calcium glutarate. 2011 , 13, 1894-1898	34
1918	A route to functionalised pores in coordination polymers via mixed phosphonate and amino-triazole linkers. 2011 , 23, 278-282	11

1917	SERS-Active Metal-Organic Frameworks Embedding Gold Nanorods. 2011 , 23, 3132-3134	124
1916	Self-Assembly of Zr(C ₂ O ₄) ₄ Metallotectons and Bisimidazolium Cations: Influence of the Dication on H-Bonded Framework Dimensionality and Material Potential Porosity. 2011 , 11, 5424-5433	18
1915	Sonochemical Synthesis and Characterization of Submicrometer Crystals of the Metal-Organic Framework Cu[(hfpbb)(H ₂ hfpbb) _{0.5}]. 2011 , 11, 4505-4510	44
1914	Solvent-Induced Synthesis of Zinc(II) and Manganese(II) Coordination Polymers with a Semirigid Tetracarboxylic Acid. 2011 , 11, 2444-2452	57
1913	Selective Incorporation of Auxiliary Organic Ligands in Metal-Organic Frameworks Based on Twisted β -Shaped Building Blocks. 2011 , 11, 5167-5170	5
1912	Highly CO ₂ -selective organic molecular cages: what determines the CO ₂ selectivity. 2011 , 133, 6650-8	214
1911	Ligand geometry-driven formation of different coordination polymers from Zn(NO ₃) ₂ , 1,4-bpeb and phenylenediacetic acids. 2011 , 13, 1851-1857	60
1910	Magnetic structure of Ni(DCOO) ₂ (D ₂ O) ₂ . 2011 , 50, 1441-6	6
1909	Scalable Synthesis for Porous Organic Cages. 2011 , 41, 2146-2151	22
1908	Temperature-Driven Assembly of Ln(III) (Ln = Nd, Eu, Yb) Coordination Polymers of a Flexible Azo Calix[4]arene Polycarboxylate Ligand. 2011 , 11, 3479-3488	60
1907	Tether Length Control of Topology in Cadmium 4-Methylphthalate Two-Dimensional Coordination Polymers: An Acentric Buckled Grid and a Rare Self-Catenated Layer. 2011 , 11, 678-683	34
1906	Computational study of hydrocarbon adsorption in metal-organic framework Ni ₂ (dhtp). 2011 , 115, 2842-9	12
1905	Syntheses, structures, and properties of lead(II) and nickel(II) complexes with 3,5-di(1H-imidazol-1-yl)benzoate. 2011 , 64, 170-178	6
1904	Syntheses, Structures, and Porous/Luminescent Properties of Silver 3-Alkyl-1,2,4-Triazolate Frameworks with Rare 3-Connected Topologies. 2011 , 11, 796-802	28
1903	Exploration of the Long-Chain N-Alkanes Adsorption and Diffusion in the MOF-Type MIL-47 (V) Material by Combining Experimental and Molecular Simulation Tools. 2011 , 115, 13868-13876	46
1902	Syntheses of Metal-Organic Frameworks and Aluminophosphates under Microwave Heating: Quantitative Analysis of Accelerations. 2011 , 11, 4413-4421	37
1901	Accurate Treatment of Electrostatics during Molecular Adsorption in Nanoporous Crystals without Assigning Point Charges to Framework Atoms. 2011 , 115, 4824-4836	91
1900	Structural Diversity of a Series of Mn(II), Cd(II), and Co(II) Complexes with Pyridine Donor Diimide Ligands. 2011 , 11, 2763-2772	78

- 1899 Molecular Insight into the Adsorption and Diffusion of Water in the Versatile Hydrophilic/Hydrophobic Flexible MIL-53(Cr) MOF. **2011**, 115, 10764-10776 119
- 1898 ⁷¹Ga Slow-CTMAS NMR and Crystal Structures of MOF-Type Gallium Carboxylates with Infinite Edge-Sharing Octahedra Chains (MIL-120 and MIL-124). **2011**, 23, 39-47 47
- 1897 Gated channels in a honeycomb-like zinc-dicarboxylate-bipyridine framework with flexible alkyl ether side chains. **2011**, 133, 2064-7 147
- 1896 Kinetic separation of propene and propane in metal-organic frameworks: controlling diffusion rates in plate-shaped crystals via tuning of pore apertures and crystallite aspect ratios. **2011**, 133, 5228-31 211
- 1895 Entangled Coordination Frameworks with 1,4-Di(1H-imidazol-4-yl)benzene. **2011**, 11, 1082-1090 46
- 1894 Porous Nitrogen Rich Cadmium-Tetrazolate Based Metal Organic Framework (MOF) for H₂ and CO₂ Uptake. **2011**, 11, 5176-5181 42
- 1893 Divalent Metal Aliphatic Tricarboxylate Dipyridylamine Coordination Polymers with New or Rare Binodal Topologies. **2011**, 11, 4860-4875 17
- 1892 Biofuel purification by pervaporation and vapor permeation in metal-organic frameworks: a computational study. **2011**, 4, 2107 43
- 1891 A series of three-dimensional lanthanide(III) coordination polymers of 2,5-dihydroxy-1,4-benzenedicarboxylic acid based on dinuclear lanthanide units. **2011**, 13, 4981 34
- 1890 High-pressure in situ ¹²⁹Xe NMR spectroscopy and computer simulations of breathing transitions in the metal-organic framework Ni₂(2,6-ndc)₂(dabco) (DUT-8(Ni)). **2011**, 133, 8681-90 99
- 1889 Gas and liquid phase adsorption in isostructural Cu₃[biaryltricarboxylate]₂ microporous coordination polymers. **2011**, 47, 1452-4 68
- 1888 Adsorption Equilibria of CO₂, CH₄, N₂, O₂, and Ar on High Silica Zeolites. **2011**, 56, 4017-4023 57
- 1887 Computational Nanostructure Design for Hydrogen Storage. **2011**, 761-799
- 1886 Pore partition effect on gas sorption properties of an anionic metal-organic framework with exposed Cu²⁺ coordination sites. **2011**, 47, 10647-9 132
- 1885 Control of the charge-transfer interaction between a flexible porous coordination host and aromatic guests by framework isomerism. **2011**, 13, 3360 45
- 1884 Photochemical Response of Commercial MOFs: Al₂(BDC)₃ and Its Use As Active Material in Photovoltaic Devices. **2011**, 115, 22200-22206 81
- 1883 Novel route to size-controlled Fe-MIL-88B-NH₂ metal-organic framework nanocrystals. **2011**, 27, 15261-7 170
- 1882 Effect of time, temperature, and kinetics on the hysteretic adsorption-desorption of H₂, Ar, and N₂ in the metal-organic framework Zn₂(bpdca)₂(bpee). **2011**, 27, 14169-79 19

1881	Separation and Purification of Gases by MOFs. 2011 , 69-97	4
1880	Computer simulations for the adsorption and separation of CO ₂ /CH ₄ /H ₂ /N ₂ gases by UMCM-1 and UMCM-2 metal organic frameworks. 2011 , 21, 11259	72
1879	Hydrogen Sorption Properties of Materials. 2011 , 61-115	4
1878	Experimental Considerations. 2011 , 183-234	
1877	Gas detection by structural variations of fluorescent guest molecules in a flexible porous coordination polymer. 2011 , 10, 787-93	351
1876	A Zn ⁴⁺ -containing doubly interpenetrated porous metal-organic framework for photocatalytic decomposition of methyl orange. 2011 , 47, 11715-7	289
1875	Substituent effect of R-isophthalates (R = H, CH ₃ , OCH ₃ , tBu, OH, and NO ₂) on the construction of Cd(II) coordination polymers incorporating a dipyriddy tecton 2,5-bis(3-pyridyl)-1,3,4-oxadiazole. 2011 , 13, 1885-1893	82
1874	The diverse structures of Cd(II) coordination polymers with 1,3,5-benzenetricarboxate tuned by organic bases. 2011 , 13, 5825	24
1873	Pore-size tuning in double-pillared metal-organic frameworks containing cadmium clusters. 2011 , 13, 3321	47
1872	Single-crystal to single-crystal transformation of 1D coordination polymer via photochemical [2+2] cycloaddition reaction. 2011 , 40, 2170-2	48
1871	2D flexible metal-organic frameworks with [Cd ₂ (μ-X) ₂](X = Cl or Br) units exhibiting selective fluorescence sensing for small molecules. 2011 , 47, 2667-9	81
1870	Design of Functional Metal-Organic Frameworks by Post-Synthetic Modification. 2011 , 23-48	7
1869	Solvent-induced deviation in square-grid layers of microporous Cu(II) isophthalates: layer stacking and gas adsorption properties. 2011 , 13, 577-584	19
1868	Biomedical Applications of Metal Organic Frameworks. 2011 , 50, 1799-1812	420
1867	Catalysis by metal-organic frameworks: fundamentals and opportunities. 2011 , 13, 6388-96	331
1866	Structurally designed synthesis of mechanically stable poly(benzoxazine-co-resol)-based porous carbon monoliths and their application as high-performance CO ₂ capture sorbents. 2011 , 133, 11378-88	456
1865	Microporous metal-organic frameworks for acetylene storage and separation. 2011 , 13, 5983	146
1864	Toward understanding reactive adsorption of ammonia on Cu-MOF/graphite oxide nanocomposites. 2011 , 27, 13043-51	117

1863	Porous Metal-Organic Frameworks. 2011 , 1-20	3
1862	A zinc(II) metal-organic framework based on triazole and dicarboxylate ligands for selective adsorption of hexane isomers. 2011 , 47, 7197-9	44
1861	Solvent/additive-free synthesis of porous/zeolitic metal azolate frameworks from metal oxide/hydroxide. 2011 , 47, 9185-7	131
1860	Tuning the topology and functionality of metal-organic frameworks by ligand design. 2011 , 44, 123-33	859
1859	Construction of Coordination Polymers Based on Bent 4-Amino-3,5-bis(3-carboxyphenyl)-1,2,4-triazole Ligand: Diverse Structural Topology and Photoluminescent and Magnetic Properties. 2011 , 11, 1475-1485	41
1858	Remarkable adsorptive performance of a metal-organic framework, vanadium-benzenedicarboxylate (MIL-47), for benzothiophene. 2011 , 47, 1306-8	173
1857	Selective incorporation of functional dicarboxylates into zinc metal-organic frameworks. 2011 , 47, 3380-2	51
1856	Two Unprecedented Three-Dimensional PbII Polymorphs and Structural Diversities Built on a Kinked Flexible Dicarboxylate Building Block. 2011 , 11, 936-940	46
1855	Reductive electrosynthesis of crystalline metal-organic frameworks. 2011 , 133, 12926-9	184
1854	A new approach towards tetrahedral imidazolate frameworks for high and selective CO ₂ uptake. 2011 , 47, 5828-30	83
1853	Diffusion-controlled luminescence quenching in metal-organic frameworks. 2011 , 133, 4232-5	181
1852	Immobilization of MP-11 into a mesoporous metal-organic framework, MP-11@mesoMOF: a new platform for enzymatic catalysis. 2011 , 133, 10382-5	479
1851	Encapsulation, storage and controlled release of sulfur hexafluoride from a metal-organic capsule. 2011 , 47, 457-9	174
1850	Common Structural Features in Calcium Hydroxyphosphonoacetates. A High-Throughput Screening. 2011 , 11, 1713-1722	30
1849	Three-Dimensional Robust Porous Coordination Polymer with Schiff Base Site on the Pore Wall: Synthesis, Single-Crystal-to-Single-Crystal Reversibility, and Selective CO ₂ Adsorption. 2011 , 11, 3905-3911	57
1848	Porous metal-organic frameworks as platforms for functional applications. 2011 , 47, 3351-70	743
1847	Wide control of proton conductivity in porous coordination polymers. 2011 , 133, 2034-6	461
1846	Heating and separation using nanomagnet-functionalized metal-organic frameworks. 2011 , 47, 3075-7	118

1845	High-Pressure Adsorption Equilibrium of CO ₂ , CH ₄ , and CO on an Impregnated Activated Carbon. 2011 , 56, 390-397	15
1844	Homochiral nickel coordination polymers based on salen(Ni) metalloligands: synthesis, structure, and catalytic alkene epoxidation. 2011 , 50, 2191-8	99
1843	Temperature-controlled synthesis of two novel coordination polymers modeled by semi-rigid tetrapyridines. 2011 , 13, 7025	28
1842	Two unique antiferromagnetic 3D frameworks with unusual CuII ₄ cluster and alternate CuII ₄ + CuII structural motif tuned by aromatic polycarboxylate coligand. 2011 , 13, 2667	52
1841	Solvothermal growth of a ruthenium metal-organic framework featuring HKUST-1 structure type as thin films on oxide surfaces. 2011 , 47, 8509-11	99
1840	Inclusion of potassium 4,4'-biphenyldicarboxylate into β -cyclodextrin: the design and synthesis of an organic secondary building unit. 2011 , 35, 1280	4
1839	The novel metalloligand [Fe(bppd) ₃] (bppd = 1,3-bis(4-pyridyl)-1,3-propanedionate) for the crystal engineering of heterometallic coordination networks with different silver salts. Anionic control of the structures. 2011 , 13, 5891	39
1838	Metal Organic Frameworks as Promising High Surface Area Material for Work Function Gas Sensors. 2011 , 25, 108-111	23
1837	Cadmium(II) and zinc(II) metal-organic frameworks with anthracene-based dicarboxylic ligands: solvothermal synthesis, crystal structures, and luminescent properties. 2011 , 13, 5152	69
1836	Incorporation of active metal sites in MOFs via in situ generated ligand deficient metal-linker complexes. 2011 , 47, 11882-4	32
1835	Exploiting metal-organic coordination polymers as highly efficient immobilization matrixes of enzymes for sensitive electrochemical biosensing. 2011 , 83, 6511-7	67
1834	Syntheses, structures and luminescent properties of decorated lanthanide metal-organic frameworks of (E)-4,4'-(ethene-1,2-diyl)dibenzoic acids. 2011 , 13, 1821-1830	20
1833	Tuning the moisture stability of metal-organic frameworks by incorporating hydrophobic functional groups at different positions of ligands. 2011 , 47, 7377-9	202
1832	High heat of hydrogen adsorption and guest-responsive magnetic modulation in a 3D porous pillared-layer coordination framework. 2011 , 47, 538-40	83
1831	Postsynthetic modification at orthogonal reactive sites on mixed, bifunctional metal-organic frameworks. 2011 , 47, 7629-31	67
1830	Palladium Nanoparticles Confined in the Cages of MIL-101: An Efficient Catalyst for the One-Pot Indole Synthesis in Water. 2011 , 1, 1604-1612	140
1829	The coordination chemistry of Zn(II), Cd(II) and Hg(II) complexes with 1,2,4-triazole derivatives. 2011 , 40, 8475-90	111
1828	Chiral metal-organic frameworks for high-resolution gas chromatographic separations. 2011 , 133, 11892-5	251

1827	In silico screening of metal-organic frameworks in separation applications. 2011 , 13, 10593-616	279
1826	MgII, CaII, and CoII Metal-Organic Framework Materials with [Si(p-C6H4CO2)3(p-C6H4CO2H)]3□ Struts. 2011 , 64, 1239	17
1825	Role of solvents in coordination supramolecular systems. 2011 , 47, 5958-72	565
1824	Light-harvesting metal-organic frameworks (MOFs): efficient strut-to-strut energy transfer in bipyridyl and porphyrin-based MOFs. 2011 , 133, 15858-61	622
1823	Enhanced carbon dioxide capture upon incorporation of N,N'-dimethylethylenediamine in the metal-organic framework CuBTTri. 2011 , 2, 2022	445
1822	Solvent and temperature influence structural variation from nonporous 2D -3D parallel polycatenation to 3D microporous metal-organic framework. 2011 , 13, 3971	38
1821	Screening Metal-Organic Frameworks by Analysis of Transient Breakthrough of Gas Mixtures in a Fixed Bed Adsorber. 2011 , 115, 12941-12950	184
1820	Template-Free Synthesis of a Highly Porous Benzimidazole-Linked Polymer for CO2 Capture and H2 Storage. 2011 , 23, 1650-1653	361
1819	Selective CO2 adsorption in a flexible non-interpenetrated metal-organic framework. 2011 , 47, 4258-60	114
1818	Preparation of Ultrathin Films of Molecular Networks through Layer-by-Layer Cross-Linking Polymerization of Tetrafunctional Monomers. 2011 , 44, 7092-7095	42
1817	Ln-Co-based rock-salt-type porous coordination polymers: vapor response controlled by changing the lanthanide ion. 2011 , 50, 2061-3	21
1816	A nanoporous metal-organic framework with accessible Cu2+ sites for the catalytic Henry reaction. 2011 , 47, 2928-30	93
1815	Container molecules based on imine type ligands. 2012 , 319, 79-98	5
1814	Adsorbate Selectivity of Isoreticular Microporous Metal-Organic Frameworks with Similar Static Pore Dimensions. 2011 , 11, 5064-5071	16
1813	Three-dimensional porous metal-metalloporphyrin framework consisting of nanoscopic polyhedral cages. 2011 , 133, 16322-5	138
1812	3(BTC)2 and Metal-Organic Frameworks for Separation of CO2/CH4 Mixture. 2011 , 115, 19864-19871	126
1811	Modeling the effect of structural changes during dynamic separation processes on MOFs. 2011 , 27, 13064-71	52
1810	An Fe-based MOF constructed from paddle-wheel and rod-shaped SBUs involved in situ generated acetate. 2011 , 13, 6002	31

1809	Oriented Zeolitic Imidazolate Framework-8 Membrane with Sharp H ₂ /C ₃ H ₈ Molecular Sieve Separation. 2011 , 23, 2262-2269	388
1808	Two unusual (4,6)- and 8-connected metal-organic frameworks constructed from flexible 1,4-benzenebis(thioacetic acid) and pyridine-based ligands. 2011 , 13, 684-689	13
1807	A stepwise transition from microporosity to mesoporosity in metal-organic frameworks by thermal treatment. 2011 , 2, 103-106	82
1806	Series of Porous 3-D Coordination Polymers Based on Iron(III) and Porphyrin Derivatives. 2011 , 23, 4641-4651	66
1805	A Series of 2D and 3D Metal-Organic Frameworks Based on a Flexible Tetrakis(4-pyridyloxymethylene)methane Ligand and Polycarboxylates: Syntheses, Structures, and Photoluminescent Properties. 2011 , 11, 3609-3621	146
1804	A 3D chiral porous In(III) coordination polymer with PtS topological net. 2011 , 40, 9154-8	34
1803	Investigating the Validity of the Knudsen Prescription for Diffusivities in a Mesoporous Covalent Organic Framework. 2011 , 50, 7083-7087	19
1802	Terbium-based infinite coordination polymer hollow microspheres: preparation and white-light emission. 2011 , 21, 16574	107
1801	Understanding CO ₂ Adsorption in CuBTC MOF: Comparing Combined DFT and Initial Calculations with Microcalorimetry Experiments. 2011 , 115, 17925-17933	126
1800	Effect of graphite features on the properties of metal-organic framework/graphite hybrid materials prepared using an in situ process. 2011 , 27, 10234-42	55
1799	A time-resolved diffraction study of a window of stability in the synthesis of a copper carboxylate metal-organic framework. 2011 , 13, 103-108	113
1798	Three-dimensional pillar-layered copper(II) metal-organic framework with immobilized functional OH groups on pore surfaces for highly selective CO ₂ /CH ₄ and C ₂ H ₂ /CH ₄ gas sorption at room temperature. 2011 , 50, 3442-6	111
1797	Synthesis and characterization of two 3-D polymeric lanthanide complexes constructed from 1,2,4,5-benzenetetracarboxylic acid. 2011 , 64, 3767-3780	9
1796	Facile synthesis of hierarchically superstructured praseodymium benzenetricarboxylate with controllable morphologies. 2011 , 13, 452-458	12
1795	Synthesis and polymorphism of (4-ClpyH) ₂ [CuCl ₄]: solid-gas and solid-solid reactions. 2011 , 13, 3189-3196	36
1794	METAL-ORGANIC FRAMEWORKS. 2011 , 37-64	1
1793	Controlling the shifting degree of interpenetrated metal-organic frameworks by modulator and temperature and their hydrogen adsorption properties. 2011 , 47, 2556-8	51
1792	Engineering structured MOF at nano and macroscales for catalysis and separation. 2011 , 21, 7582	123

1791	MOF-on-MOF heteroepitaxy: perfectly oriented [Zn ₂ (ndc) ₂ (dabco)] _n grown on [Cu ₂ (ndc) ₂ (dabco)] _n thin films. 2011 , 40, 4954-8	134
1790	Syntheses, Structures, Photoluminescence, and Gas Adsorption of Rare Earth Organic Frameworks Based on a Flexible Tricarboxylate. 2011 , 11, 5469-5474	41
1789	Hydrogen Storage Materials. 2011 ,	112
1788	Effect of Pore Topology and Accessibility on Gas Adsorption Capacity in Zeolitic Imidazolate Frameworks: Bringing Molecular Simulation Close to Experiment. 2011 , 115, 8126-8135	44
1787	Molecular doping of porous organic cages. 2011 , 133, 14920-3	157
1786	Morphology design of porous coordination polymer crystals by coordination modulation. 2011 , 133, 15506-13	326
1785	A microporous hydrogen-bonded organic framework for highly selective C ₂ H ₂ /C ₂ H ₄ separation at ambient temperature. 2011 , 133, 14570-3	409
1784	Zeolitic imidazolate framework-8 as a luminescent material for the sensing of metal ions and small molecules. 2011 , 21, 6649	226
1783	Pro-porous coordination polymers of the 1,4-bis((3,5-dimethyl-1H-pyrazol-4-yl)-methyl)benzene ligand with late transition metals. 2011 , 50, 11506-13	28
1782	Metal-organic frameworks based on unprecedented trinuclear and pentanuclear metal-tetrazole clusters as secondary building units. 2011 , 50, 12133-40	56
1781	Solvent induced diverse dimensional coordination assemblies of cupric benzotriazole-5-carboxylate: syntheses, crystal structures, and magnetic properties. 2011 , 50, 11032-8	66
1780	Pressure-responsive curvature change of a "rigid" geodesic ligand in a (3,24)-connected mesoporous metal-organic framework. 2011 , 50, 10528-30	68
1779	Pore with gate: enhancement of the isosteric heat of adsorption of dihydrogen via postsynthetic cation exchange in metal-organic frameworks. 2011 , 50, 9374-84	83
1778	Selective gas sorption in a [2+3] 'propeller' cage crystal. 2011 , 47, 8919-21	56
1777	Isoreticular metal-organic frameworks and their membranes with enhanced crack resistance and moisture stability by surfactant-assisted drying. 2011 , 27, 2652-7	112
1776	Porous coordination polymer hybrid device with quartz oscillator: effect of crystal size on sorption kinetics. 2011 , 133, 11932-5	88
1775	A Series of Metal Organic Frameworks Based on Different Salicylic Derivatives and 1,1'-(1,4-Butanediyl)bis(imidazole) Ligand: Syntheses, Structures, and Luminescent Properties. 2011 , 11, 5540-5553	94
1774	1D + 1D → 1D polyrotaxane, 2D + 2D → 2D interpenetrated, and 3D self-penetrated divalent metal terephthalate bis(pyridylformyl)piperazine coordination polymers. 2011 , 50, 8997-9003	88

1773	An interpenetrated metal-organic framework and its gas storage behavior: simulation and experiment. 2011 , 50, 11055-63	40
1772	A metalloporphyrin functionalized metal-organic framework for selective oxidization of styrene. 2011 , 47, 5521-3	105
1771	Metal-biomolecule frameworks (MBioFs). 2011 , 47, 7287-302	314
1770	Fabrication of isorecticular metal-organic framework coated capillary columns for high-resolution gas chromatographic separation of persistent organic pollutants. 2011 , 83, 5093-100	118
1769	Enhancement of CO ₂ /N ₂ Mixture Separation Using the Thermodynamic Stepped Behavior of Adsorption in Metal-Organic Frameworks. 2011 , 115, 2790-2797	28
1768	Accurate Prediction of Methane Adsorption in a Metal-Organic Framework with Unsaturated Metal Sites by Direct Implementation of an ab Initio Derived Potential Energy Surface in GCMC Simulation. 2011 , 115, 23074-23080	82
1767	Adsorption and Separation of CO ₂ /CH ₄ on Amorphous Silica Molecular Sieve. 2011 , 115, 9713-9718	41
1766	Two-Dimensional Semiconductive Electronic Frameworks. 2011 , 155-174	
1765	Anion-tuned sorption and catalytic properties of a soft metal-organic solid with polycatenated frameworks. 2011 , 21, 7098	64
1764	Reversible and selective O ₂ chemisorption in a porous metal-organic host material. 2011 , 133, 10885-91	65
1763	Serine-based homochiral nanoporous frameworks for selective CO ₂ uptake. 2011 , 50, 11527-31	36
1762	Tripodal imidazole frameworks: Reversible vapour sorption both with and without significant structural changes. 2011 , 40, 573-82	30
1761	Ionic Liquid/Metal-Organic Framework Composite for CO ₂ Capture: A Computational Investigation. 2011 , 115, 21736-21742	99
1760	Polymer-assisted synthesis of nanocrystalline copper-based metal-organic framework for amine oxidation. 2011 , 12, 602-605	59
1759	Understanding the Thermodynamic and Kinetic Behavior of the CO ₂ /CH ₄ Gas Mixture within the Porous Zirconium Terephthalate UiO-66(Zr): A Joint Experimental and Modeling Approach. 2011 , 115, 13768-13774	154
1758	Mixed-component metal-organic frameworks (MC-MOFs): enhancing functionality through solid solution formation and surface modifications. 2011 , 13, 3623	308
1757	A multiunit catalyst with synergistic stability and reactivity: a polyoxometalate-metal organic framework for aerobic decontamination. 2011 , 133, 16839-46	437
1756	Methyl modified MOF-5: a water stable hydrogen storage material. 2011 , 47, 5244-6	192

1755	Doping metal-organic frameworks for water oxidation, carbon dioxide reduction, and organic photocatalysis. 2011 , 133, 13445-54		1187
1754	Porous Organic Polymers in Catalysis: Opportunities and Challenges. 2011 , 1, 819-835		699
1753	Metal-organic-framework-based tandem molecular sieves as a dual platform for selective microextraction and high-resolution gas chromatographic separation of n-alkanes in complex matrixes. 2011 , 83, 7094-101		249
1752	Metal-organic frameworks as adsorbents for hydrogen purification and precombustion carbon dioxide capture. 2011 , 133, 5664-7		405
1751	Why hybrid porous solids capture greenhouse gases?. <i>Chemical Society Reviews</i> , 2011 , 40, 550-62	58.5	562
1750	A new method to position and functionalize metal-organic framework crystals. 2011 , 2, 237		197
1749	CO(2) capture from dilute gases as a component of modern global carbon management. 2011 , 2, 31-52		196
1748	End-functionalization of a vinylidene fluoride oligomer in coordination nanochannels. 2011 , 21, 8021		7
1747	Deposition of Thin Films for Sensor Applications. 2011 , 309-335		3
1746	Structural Isomerism and Effect of Fluorination on Gas Adsorption in Copper-Tetrazolate Based Metal Organic Frameworks. 2011 , 23, 2908-2916		73
1745	Structural, magnetic, and gas adsorption study of a series of partially fluorinated metal-organic frameworks (HF-MOFs). 2011 , 50, 3855-65		80
1744	Synthesis, structure of 3D lanthanide (La(III), Pr(III)) nanoporous coordination polymers containing 1D channels as selective luminescent probes of Pb ²⁺ , Ca ²⁺ and Cd ²⁺ ions. 2011 , 161, 2230-2240		20
1743	Boronic acid building blocks: tools for self assembly. 2011 , 47, 1124-50		400
1742	Microporous magnets. <i>Chemical Society Reviews</i> , 2011 , 40, 3249-65	58.5	471
1741	Evaluating metal-organic frameworks for post-combustion carbon dioxide capture via temperature swing adsorption. 2011 , 4, 3030		782
1740	X-Ray crystal structure of [HSm{V(IV)O(TPPS)}] _n and encapsulation of nitrogen molecules in 1-D channels. 2011 , 40, 12826-31		17
1739	ZnO@ZIF-8: stabilization of quantum confined ZnO nanoparticles by a zinc methylimidazolate framework and their surface structural characterization probed by CO ₂ adsorption. 2011 , 21, 5907		95
1738	Adsorption of ethane, ethylene, propane, and propylene on a magnesium-based metal-organic framework. 2011 , 27, 13554-62		223

1737	Two Azolium Rings Are Better Than One: A Strategy for Controlling Catenation and Morphology in Zn and Cu Metal-Organic Frameworks. 2011 , 11, 4747-4750	44
1736	Preparation, Characterization, and Postsynthetic Modification of Metal-Organic Frameworks: Synthetic Experiments for an Undergraduate Laboratory Course in Inorganic Chemistry. 2011 , 88, 92-94	24
1735	Computational screening of metal-organic frameworks for xenon/krypton separation. 2011 , 57, 1759-1766	118
1734	A new approach to construct a doubly interpenetrated microporous metal-organic framework of primitive cubic net for highly selective sorption of small hydrocarbon molecules. 2011 , 17, 7817-22	127
1733	Metal-organic frameworks for efficient enrichment of peptides with simultaneous exclusion of proteins from complex biological samples. 2011 , 47, 4787-9	186
1732	New functionalized flexible Al-MIL-53-X (X = -Cl, -Br, -CH ₃ , -NO ₂ , -(OH) ₂) solids: syntheses, characterization, sorption, and breathing behavior. 2011 , 50, 9518-26	224
1731	Optimisation of the synthesis of MOF nanoparticles made of flexible porous iron fumarate MIL-88A. 2011 , 21, 2220-2227	197
1730	Recent Advances in s-Block Metal Carboxylate Networks. 2011 , 11, 4704-4720	172
1729	A divalent cadmium coordination polymer featuring a complex tetranodal 3-D topology and hexadecameric water clusters. 2011 , 14, 711-714	3
1728	. 2011 ,	235
1727	Preparation of Porous Cobalt(II) 1,3,5-Benzenetricarboxylates: Product Dependence on the Reaction Solvent and Additive. 2011 , 40, 656-657	5
1726	One-pot Solvothermal Crystallization of Two Three-dimensional Manganese 2,6-Naphthalenedicarboxylates: Secondary Ligand-induced Pseudopolymorphism. 2011 , 40, 886-887	5
1725	Three-dimensional copper-adeninate complexes with microchannels tailored by aliphatic acids. 2011 , 67, C396-C397	
1724	Protecting group and switchable pore-discriminating adsorption properties of a hydrophilic-hydrophobic metal-organic framework. 2011 , 3, 304-10	131
1723	Interfacial synthesis of hollow metal-organic framework capsules demonstrating selective permeability. 2011 , 3, 382-7	421
1722	Bottom-up realization of a porous metal-organic nanotubular assembly. 2011 , 10, 291-5	162
1721	Crystal structure of metal-organic coordination polymers [Cu(bpy) ₂ (H ₂ O) ₂](NO ₃) ₂ ·4.5C ₂ H ₅ OH and [Cu ₂ (bpy)(H ₂ O)(L-pha) ₂](NO ₃) ₂ ·H ₂ O. 2011 , 52, 365-370	1
1720	Recent advances of inorganic fillers in mixed matrix membrane for gas separation. 2011 , 81, 243-264	466

1719	Molecular architecture based on manganese triangles: Monomer, dimer, and one-dimensional polymer. 2011 , 30, 3265-3271	12
1718	A series of metal-organic frameworks based on 9,10-bis(imidazol-1-ylmethyl)anthracene and structurally related aromatic dicarboxylates: Syntheses, structures, and photoluminescence. 2011 , 30, 2106-2113	31
1717	Surfactant-assisted facile synthesis of fluorescent zinc benzenedicarboxylate metal-organic framework nanorods with enhanced nitrobenzene explosives detection. 2011 , 131, 358-361	32
1716	In situ formation of an unprecedented 3D microporous CuCN coordination polymer based on a semirigid tetrahedral linker. 2011 , 14, 1644-1644	8
1715	A three-dimensional porous metal-organic framework of unusual rob topology based on a novel fluorinated bis(imidazole) ligand. 2011 , 14, 1819-1822	15
1714	The structural transformation from 2D layers to 3D nets by solvent-mediated cation-exchange reaction. 2011 , 14, 1823-1826	6
1713	A new eight-connected CsCl-type topological net based on trinuclear Co(II) clusters as nodes. 2011 , 14, 1940-1943	3
1712	Synthesis, crystal structure, and luminescent property of a three-dimensional (3day) microporous Cd(II) metal-organic framework (MOF) based on mixed ligands. 2011 , 14, 1952-1956	13
1711	Zinc and cadmium flexible-arm ortho-dicarboxylate bis(pyridyl)piperazine coordination polymers with rare two- and three-dimensional topologies. 2011 , 375, 280-289	14
1710	Effect of anions on cadmium(II) complexes with ligand 2-(pyrazin-2-yl)-1H-benzimidazole. 2011 , 376, 492-499	17
1709	Synthesis and characterization of new oligomeric and polymeric complexes based on the [CuII(bpca)] ⁺ unit [Hbpca = bis(2-pyridylcarbonyl)amine]. 2011 , 376, 538-548	13
1708	Simple layered or complex self-penetrated networks in cadmium homophthalate coordination polymers containing 1,3-bis(4-pyridyl)propane. 2011 , 376, 590-597	
1707	New pyridine-monoacylhydrazidate-coordinated transition-metal complexes. 2011 , 378, 72-80	19
1706	Substituent dependent dimensionalities in cobalt isophthalate supramolecular complexes and coordination polymers containing dipyridylamine ligands. 2011 , 378, 269-279	14
1705	Interaction of H ₂ with fragments of MOF-5 and its implications for the design and development of new MOFs: A computational study. 2011 , 36, 10737-10747	15
1704	Synthesis of isostructural metal-organic frameworks, CPO-27s, with ultrasound, microwave, and conventional heating: Effect of synthesis methods and metal ions. 2011 , 173, 866-872	74
1703	Synthesis of phase-pure interpenetrated MOF-5 and its gas sorption properties. 2011 , 50, 3691-6	101
1702	Hydroxyl group recognition by hydrogen-bonding donor and acceptor sites embedded in a layered metal-organic framework. 2011 , 133, 11050-3	79

1701	Influence of the Oxidation State of the Metal Center on the Flexibility and Adsorption Properties of a Porous Metal Organic Framework: MIL-47(V). 2011 , 115, 19828-19840		72
1700	Two Novel Zinc(II) Metal Organic Frameworks Based on Triazole-Carboxylate Shared Paddle-Wheel Units: Synthesis, Structure, and Gas Adsorption. 2011 , 11, 2811-2816		37
1699	Different structural destinations: comparing reactions of [CuBr ₂ (3-Brpy) ₂] crystals with HBr and HCl gas. 2011 , 13, 4400		21
1698	Investigation of porous Ni-based metal-organic frameworks containing paddle-wheel type inorganic building units via high-throughput methods. 2011 , 50, 5085-97		172
1697	MOF thin films: existing and future applications. <i>Chemical Society Reviews</i> , 2011 , 40, 1081-106	58.5	1048
1696	Reconciling the discrepancies between crystallographic porosity and guest access as exemplified by Zn-HKUST-1. 2011 , 133, 18257-63		167
1695	Analysis of the Development of Membrane Technology for Gas Separation and CO ₂ Capture. 2011 , 7-26		6
1694	Understanding the preferential adsorption of CO ₂ over N ₂ in a flexible metal-organic framework. 2011 , 133, 12849-57		86
1693	High thermal and chemical stability in pyrazolate-bridged metal-organic frameworks with exposed metal sites. 2011 , 2, 1311		420
1692	Three-dimensional porous Cd(II) coordination polymer with large one-dimensional hexagonal channels: high pressure CH ₄ and H ₂ adsorption studies. 2011 , 50, 539-44		69
1691	A sixfold interpenetrated microporous MOF constructed from heterometallic tetranuclear cluster exhibiting selective gas adsorption. 2011 , 40, 10319-21		27
1690	Soft porous crystal meets TCNQ: charge transfer-type porous coordination polymers. 2011 , 21, 5537		53
1689	Dynamic microporous indium(III)-4,4'-oxybis(benzoate) framework with high selectivity for the adsorption of CO ₂ over N ₂ . 2011 , 47, 770-2		85
1688	Postsynthetic modification of metal-organic frameworks--a progress report. <i>Chemical Society Reviews</i> , 2011 , 40, 498-519	58.5	936
1687	[Cu ₃ (BTC) ₂]: A Metal Organic Framework Catalyst for the Friedländer Reaction. 2011 , 3, 157-159		129
1686	Porous cobalt(II)-imidazolate supramolecular isomeric frameworks with selective gas sorption property. 2011 , 47, 4902-4		174
1685	Soft secondary building unit: dynamic bond rearrangement on multinuclear core of porous coordination polymers in gas media. 2011 , 133, 9005-13		160
1684	Selective binding of O ₂ over N ₂ in a redox-active metal-organic framework with open iron(II) coordination sites. 2011 , 133, 14814-22		404

1683	Two metal-organic frameworks based on a double azolium derivative: post-modification and catalytic activity. 2011 , 47, 11005-7	65
1682	Nanoscale metal-organic frameworks for biomedical imaging and drug delivery. 2011 , 44, 957-68	1666
1681	Phosphonate monoesters as carboxylate-like linkers for metal organic frameworks. 2011 , 133, 20048-51	81
1680	Syntheses and characterization of two 1D Cu(II) coordination polymers with 2,2':6',2''-terpyridine ligand. 2011 , 37, 600-605	2
1679	Solvothermal synthesis and crystal structure of a 1d coordination polymer: [Ni(1,4-BDC)(N-MIM) ₂] _n (1,4-BDC = 1,4-benzenedicarboxylic acid, N-MIM = N-methylimidazole). 2011 , 37, 926-930	4
1678	Post-synthesis modification of a metal-organic framework to form metallosalen-containing MOF materials. 2011 , 133, 13252-5	219
1677	Isomerism in Metal-Organic Frameworks: Framework Isomers 2011 , 2, 1682-1689	123
1676	Disclosing the Complex Structure of UiO-66 Metal Organic Framework: A Synergic Combination of Experiment and Theory. 2011 , 23, 1700-1718	1079
1675	Complete Series of Monohalogenated Isoreticular Metal-Organic Frameworks: Synthesis and the Importance of Activation Method. 2011 , 11, 4309-4312	47
1674	Precise control and consecutive modulation of spin transition temperature using chemical migration in porous coordination polymers. 2011 , 133, 8600-5	167
1673	Active-site-accessible, porphyrinic metal-organic framework materials. 2011 , 133, 5652-5	378
1672	Selective surface and near-surface modification of a noncatenated, catalytically active metal-organic framework material based on Mn(salen) struts. 2011 , 50, 3174-6	105
1671	Asymmetric catalytic reactions by NbO-type chiral metal-organic frameworks. 2011 , 2, 877	191
1670	Synthesis and Characterization of an Amino Functionalized MIL-101(Al): Separation and Catalytic Properties. 2011 , 23, 2565-2572	423
1669	A highly porous flexible Metal-Organic Framework with corundum topology. 2011 , 47, 490-2	49
1668	Structural and Spectroscopic Study of Cu(II) Pyridine-2,6-dicarboxylate Complex with 2-Ethylimidazole. 2011 , 41, 322-327	17
1667	Syntheses and Crystal Structures of Two New Cadmium(II) and Nickel(II) Complexes with 1,4-Phenylenediacetate and 2,2'-Bipyridyl-Like Ligands. 2011 , 41, 664-669	2
1666	Synthesis and Crystal Structure of a 3D Er(III) Coordination Polymer Based on Tripodal Flexible Ligand. 2011 , 41, 727-731	0

1665	A New Lanthanide Coordination Polymer with 4,4'-Oxybis (Benzoic Acid) Ligand: Hydrothermal Synthesis, Crystal Structure and Photoluminescence. 2011 , 41, 757-761	9
1664	Synthesis and Crystal Structure of an Expanded Square Grid Metal Organic Material, [Cu(L1)(DMF)] _n [2.64 DMF]. 2011 , 41, 1834-1838	1
1663	Synthesis, Crystal Structure and Thermal Property of a Novel Mn(II) Coordination Polymer Bridged by Imazapyr. 2011 , 41, 1839-1843	4
1662	Solvothermal Synthesis, Crystal Structure and Magnetic Properties of a Novel 3D 2-Fold Interpenetrated Coordination Polymer [Co ₂ (hfipbb) ₂ (dps) (H ₂ O)] _n . 2011 , 21, 595-601	2
1661	Amorphization of Metal-Organic Framework MOF-5 by Electrical Discharge. 2011 , 31, 499-506	17
1660	Determination of heat capacities and thermodynamic properties of two structurally unrelated but isotopic calcium and manganese(II) 2,6-naphthalene dicarboxylate-based MOFs. 2011 , 103, 1095-1103	17
1659	Carbon dioxide capture under ambient conditions using 2-chloroethylamine. 2011 , 9, 535-537	7
1658	Modeling gas separation in metal-organic frameworks. 2011 , 17, 255-264	19
1657	Liquid-phase adsorption on metal-organic frameworks. 2011 , 17, 219-226	33
1656	Binding energy of gas molecule with two pyrazine molecules as organic linker in metal-organic framework: its theoretical evaluation and understanding of determining factors. 2011 , 130, 475-482	9
1655	Adsorptive removal of methyl orange and methylene blue from aqueous solution with a metal-organic framework material, iron terephthalate (MOF-235). 2011 , 185, 507-11	788
1654	Investigating the potential of MgMOF-74 membranes for CO ₂ capture. 2011 , 377, 249-260	72
1653	Luminescent cadmium phenylenedipropionate coordination polymers with long-spanning dipyridine ligands. 2011 , 998, 62-68	10
1652	Molecular mechanism of hydrocarbons binding to the metal-organic framework. 2011 , 501, 455-460	10
1651	Substituent dependent topologies in cobalt isophthalate coordination polymers with bis(pyridylmethyl)piperazine coligands. 2011 , 371, 71-78	10
1650	Structure and properties of cobalt ortho-phenylenediacetate coordination polymers with rigid dipyridyl ligands. 2011 , 373, 201-210	7
1649	Molecular simulation studies of separation of CH ₄ /H ₂ mixture in metal-organic frameworks with interpenetration and mixed-ligand. 2011 , 66, 3012-3019	26
1648	Hydrothermal synthesis, structure, fluorescence property of a novel 3D metal-organic framework with high thermal stability. 2011 , 54, 1441-1445	6

1647	Porous zinc(II)-organic framework with potential open metal sites: Synthesis, structure and property. 2011 , 54, 1436-1440	13
1646	Recent advance in porous coordination polymers from the viewpoint of crystalline-state transformation. 2011 , 54, 1371-1394	31
1645	Synthesis, structure and photoluminescence of two porous metal-organoboron frameworks with rtl topology. 2011 , 54, 1430-1435	1
1644	Syntheses, Structures, and Luminescent Properties of Two Novel Coordination Polymers with Dipicolinate and Diimidazole Ligands. 2011 , 637, 148-153	18
1643	Three New cpt-Metal Complexes Displaying 0D, 1D, and 3D Topology Structures. 2011 , 637, 589-595	7
1642	Synthesis, Structure, and Photoluminescence of a 3D Zinc(II) Coordination Polymer with Tris(2-carboxyethyl)isocyanurate and 1,2,4-Triazole Ligands. 2011 , 637, 2153-2156	1
1641	Poly[(β -adamantane-1,3-dicarboxylato- β O1:O1':O3,O3':O3')(β -adamantane-1,3-dicarboxylato- β O1,O1':O3,O3':O3')dimag a layered coordination polymer. 2011 , 67, m335-7	4
1640	Separation of chemical reaction intermediates by metal-organic frameworks. 2011 , 7, 2356-64	40
1639	MOF Processing by Electrospinning for Functional Textiles. 2011 , 13, 356-360	96
1638	Synthesis, Characterization, and Ammonia Adsorption Properties of Mesoporous Metal-Organic Framework (MIL(Fe)) Γ Graphite Oxide Composites: Exploring the Limits of Materials Fabrication. 2011 , 21, 2108-2117	262
1637	The Effect of Methyl Functionalization on Microporous Metal-Organic Frameworks' Capacity and Binding Energy for Carbon Dioxide Adsorption. 2011 , 21, 4754-4762	98
1636	Metal-organic frameworks: a rapidly growing class of versatile nanoporous materials. 2011 , 23, 249-67	1104
1635	Dynamic control of MOF-5 crystal positioning using a magnetic field. 2011 , 23, 3901-6	59
1634	Fabrication of metal-organic framework-containing silica-colloidal crystals for vapor sensing. 2011 , 23, 4449-52	148
1633	Superior CO ₂ Adsorption Capacity on N-doped, High-Surface-Area, Microporous Carbons Templated from Zeolite. 2011 , 1, 678-683	297
1632	Efficiency of hydrogen recovery from reformat with a polymer electrolyte hydrogen pump. 2011 , 57, 1767-1779	30
1631	Crystal Structures and Physical Properties of Three New Manganese-Based Coordination Polymers with p-Biphenyldicarboxylic Acid Linkers. 2011 , 2011, 549-555	5
1630	Water Adsorption Characteristics of MIL-101 for Heat-Transformation Applications of MOFs. 2011 , 2011, 471-474	240

1629	Au@MOF-5 and Au/MOx@MOF-5 (M = Zn, Ti; x = 1, 2): Preparation and Microstructural Characterisation. 2011 , 2011, 1876-1887	92
1628	Synthesis, Structures, and Adsorption Properties of Two New LaIII/MgII Heterometallic Polymers. 2011 , 2011, 5299-5304	9
1627	A New Metal Carboxylate Framework Based on Porphyrin with Extended π Conjugation. 2011 , 2011, 4550-4557	30
1626	Thermodynamic methods and models to study flexible metal-organic frameworks. 2011 , 12, 247-58	100
1625	Phosphotungstic acid encapsulated in metal-organic framework as catalysts for carbohydrate dehydration to 5-hydroxymethylfurfural. 2011 , 4, 59-64	196
1624	Oberflächenchemie Metall-organischer Gerete an der Flusig-fest-Grenzflache. 2011 , 123, 184-208	43
1623	Eine Salicylbisimin-Kugerverbindung mit groer spezifischer Oberflache und selektiver CO2/CH4-Adsorption. 2011 , 123, 1078-1083	114
1622	Hybrid Zeolitic Imidazolate Frameworks with Catalytically Active TO4 Building Blocks. 2011 , 123, 470-473	17
1621	On/Off Porosity Switching in a Molecular Organic Solid. 2011 , 123, 775-779	61
1620	Double Switching of a Magnetic Coordination Framework through Intraskelatal Molecular Rearrangement. 2011 , 123, 4059-4063	10
1619	Funktionelle Gemischtmetall-organische Gerete mit Metalloliganden. 2011 , 123, 10696-10707	71
1618	Kinetic Control of Metal/Organic Framework Crystallization Investigated by Time-Resolved In Situ X-Ray Scattering. 2011 , 123, 9798-9802	34
1617	Pore Materialien zur CO2-Abtrennung und -Abscheidung Entwicklung und Bewertung. 2011 , 123, 11790-11801	88
1616	Selective Adsorption of CO2 from Light Gas Mixtures by Using a Structurally Dynamic Porous Coordination Polymer. 2011 , 123, 11080-11084	4
1615	An Organophilic Pervaporation Membrane Derived from Metal/Organic Framework Nanoparticles for Efficient Recovery of Bio-Alcohols. 2011 , 123, 10824-10827	38
1614	Metal/Organic Framework Regioisomers Based on Bifunctional Ligands. 2011 , 123, 12401-12404	6
1613	Surface chemistry of metal-organic frameworks at the liquid-solid interface. 2011 , 50, 176-99	276
1612	A salicylbisimine cage compound with high surface area and selective CO2/CH4 adsorption. 2011 , 50, 1046-51	330

1611	Hybrid zeolitic imidazolate frameworks with catalytically active TO4 building blocks. 2011 , 50, 450-3	320
1610	On-off porosity switching in a molecular organic solid. 2011 , 50, 749-53	153
1609	Double switching of a magnetic coordination framework through intraskeletal molecular rearrangement. 2011 , 50, 3973-7	71
1608	Functional mixed metal-organic frameworks with metalloligands. 2011 , 50, 10510-20	351
1607	Kinetic control of metal-organic framework crystallization investigated by time-resolved in situ X-ray scattering. 2011 , 50, 9624-8	159
1606	Development and evaluation of porous materials for carbon dioxide separation and capture. 2011 , 50, 11586-96	907
1605	Selective adsorption of CO ₂ from light gas mixtures by using a structurally dynamic porous coordination polymer. 2011 , 50, 10888-92	49
1604	An organophilic pervaporation membrane derived from metal-organic framework nanoparticles for efficient recovery of bio-alcohols. 2011 , 50, 10636-9	276
1603	Metal-organic framework regioisomers based on bifunctional ligands. 2011 , 50, 12193-6	52
1602	Enhancing gas adsorption and separation capacity through ligand functionalization of microporous metal-organic framework structures. 2011 , 17, 5101-9	158
1601	Heterometallic coordination polymer gels based on a rigid, bifunctional ligand. 2011 , 17, 2369-72	25
1600	Cobalt imidazolate framework as precursor for oxygen reduction reaction electrocatalysts. 2011 , 17, 2063-7	342
1599	Pyrazolate-based cobalt(II)-containing metal-organic frameworks in heterogeneous catalytic oxidation reactions: elucidating the role of entatic states for biomimetic oxidation processes. 2011 , 17, 8671-95	127
1598	A highly porous metal-organic framework: structural transformations of a guest-free MOF depending on activation method and temperature. 2011 , 17, 7251-60	117
1597	Uptake of liquid alcohols by the flexible Fe(III) metal-organic framework MIL-53 observed by time-resolved in situ X-ray diffraction. 2011 , 17, 7069-79	38
1596	Selective CO ₂ adsorption by a triazacyclononane-bridged microporous metal-organic framework. 2011 , 17, 6689-95	37
1595	Nanoconfinement and catalytic dehydrogenation of ammonia borane by magnesium-metal-organic-framework-74. 2011 , 17, 6043-7	80
1594	Chemical and thermal stability of isotopic metal-organic frameworks: effect of metal ions. 2011 , 17, 6437-42	214

1593	B-N Chemistry@ZIF-8: dehydrocoupling of dimethylamine borane at room temperature by size-confinement effects. 2011 , 17, 6594-7	31
1592	Understanding the anomalous alkane selectivity of ZIF-7 in the separation of light alkane/alkene mixtures. 2011 , 17, 8832-40	243
1591	Synthesis of isorecticular zinc(II)-phosphonocarboxylate frameworks and their application in the Friedel-Crafts benzylation reaction. 2011 , 17, 10323-8	34
1590	Modifying cage structures in metal-organic polyhedral frameworks for H ₂ storage. 2011 , 17, 11162-70	68
1589	A roadmap to implementing metal-organic frameworks in electronic devices: challenges and critical directions. 2011 , 17, 11372-88	356
1588	Palladium nanoparticles encapsulated in a metal-organic framework as efficient heterogeneous catalysts for direct C ₂ arylation of indoles. 2011 , 17, 12706-12	170
1587	Palladium-catalyzed C-H bond functionalization of a metal-organic framework (MOF): mild, selective, and efficient. 2011 , 17, 11974-7	28
1586	Guest-responsive covalent frameworks by the cross-linking of liquid-crystalline salts: tuning of lattice flexibility by the design of polymerizable units. 2011 , 17, 14752-62	22
1585	Adsorption and Diffusion Basis for Molecular Understanding of Permeation through Molecular Sieve Membranes. 2011 , 83, 104-112	33
1584	A novel addition complex composed of single and double chains constructed from btb and SO ₄ units (btb=1,4-bis(1,2,4-triazol-1-yl)butane). 2011 , 14, 52-55	3
1583	A new 3D fluorescent lanthanide-organic framework containing helical chains and zigzag layers from mixed carboxylate ligands. 2011 , 14, 68-71	13
1582	An unusual 3D pillared-layer cobalt(II) coordination polymer containing helical motifs and novel topology constructed from mixed ligands. 2011 , 14, 805-808	5
1581	Synthesis and characterization of porous Al(III) metal-organic framework nanoparticles as a new precursor for preparation of Al ₂ O ₃ Nanoparticles. 2011 , 14, 645-648	29
1580	A new lanthanide metal-organic framework with (3,6)-connected topology based on novel tricarboxylate ligand. 2011 , 14, 978-981	29
1579	A luminescent cadmium itaconate coordination polymer with rare 658 layer topology from in situ hydrothermal decarboxylation of trans-aconitic acid. 2011 , 14, 1111-1114	5
1578	Two new coordination frameworks based on rod-shaped secondary building blocks with five-nodal (3, 4, 5, 6)-connected and (3, 5, 6)-connected network topologies. 2011 , 14, 1156-1160	7
1577	A self-penetrated chiral cobalt camphorate coordination polymer with antiferromagnetically coupled paddlewheel clusters. 2011 , 14, 1250-1253	12
1576	Three novel microporous 3D heterometallic 3d ^{df} coordination polymers: Synthesis, crystal structures and photoluminescence properties. 2011 , 14, 1396-1399	26

1575	Carbon dioxide capture-related gas adsorption and separation in metal-organic frameworks. 2011 , 255, 1791-1823	1614
1574	Facile synthesis of nano-sized metal-organic frameworks, chromium-benzenedicarboxylate, MIL-101. 2011 , 166, 1152-1157	124
1573	Simulations of model metal-organic frameworks for the separation of carbon dioxide. 2011 , 4, 568-575	5
1572	One-dimensional zinc(II) polymers with 4,6-dimethyl-1,2,3-triazolo[4,5-d]pyrimidin-5,7-dionato built by bipyridyl-based ligands acting as spacers both in the first and in the second sphere. 2011 , 365, 371-376	3
1571	Luminescent cadmium and zinc diphenate coordination polymers containing pyridyl-piperazine type ligands: Grids, diamondoid lattices, and a rare 4-connected net. 2011 , 368, 84-95	21
1570	Layered and self-penetrated cadmium isophthalate and 5-methylisophthalate coordination polymers containing bis(4-pyridylformyl)piperazine or bis(4-pyridylmethyl)homopiperazine ligands. 2011 , 370, 449-455	12
1569	From 1D homoleptic to 2D heteroleptic pillared coordination polymers containing oxonato bridges. 2011 , 371, 79-87	6
1568	Layered copper bromide coordination polymers from bis(pyridyl)piperazine-type precursors: Ligand dependent valence tuning and in situ hydrothermal reaction chemistry. 2011 , 373, 295-300	7
1567	A simplified procedure for estimation of mixture permeances from unary permeation data. 2011 , 367, 204-210	12
1566	Thermodynamic analysis of the breathing of amino-functionalized MIL-53(Al) upon CO ₂ adsorption. 2011 , 140, 108-113	72
1565	Enhancement of CO ₂ /CH ₄ selectivity in metal-organic frameworks containing lithium cations. 2011 , 141, 231-235	117
1564	Zeolitic imidazolate frameworks for separation of binary mixtures of CO ₂ , CH ₄ , N ₂ and H ₂ : A computer simulation investigation. 2011 , 143, 46-53	119
1563	Metal-organic coordination polymers based on dicarboxylate and a flexible bispyridyl ligand: Synthesis, structures, and photoluminescence. 2011 , 995, 91-96	11
1562	A novel 2D (3,5)-connected coordination framework with Zn ₂ (COO) ₃ SBU. 2011 , 1000, 58-61	7
1561	New 4,5-dichlorophthalhydrazidate-bridged chained coordination polymers. 2011 , 184, 667-674	30
1560	Ethene/ethane separation by the MOF membrane ZIF-8: Molecular correlation of permeation, adsorption, diffusion. 2011 , 369, 284-289	334
1559	Porous zinc(II) frameworks with 5-(isonicotinamido)isophthalate: Syntheses, structures and properties. 2011 , 139, 25-30	28
1558	New photocatalysts based on MIL-53 metal-organic frameworks for the decolorization of methylene blue dye. 2011 , 190, 945-51	336

1557	Adsorption of CO ₂ and CH ₄ on a magnesium-based metal organic framework. 2011 , 353, 549-56	357
1556	Kinetic separation of carbon dioxide and methane on a copper metal-organic framework. 2011 , 357, 504-9	89
1555	A comparison of the coordination preference of Cd, Zn, Cu(II) with flexible homophthalic acid and rigid bipyridine ligands. 2011 , 30, 1487-1493	23
1554	Crystal engineering rescues a solution organic synthesis in a cocrystallization that confirms the configuration of a molecular ladder. 2011 , 108, 10974-9	27
1553	Expanded austenites studied by PXRD and EXAFS. 2011 , 67, C679-C680	
1552	Poly[[hexa-kis-(Benzene-1,4-dicarboxyl-ato)octa-kis-(N,N-dimethyl-acetamide)-hexa-manganese(II)] monohydrate]. 2011 , 67, m843-4	2
1551	Raman Spectroscopy for Probing guest-host interactions in Metal Organic Frameworks. 2011 , 1334, 60601	1
1550	Chiral rings from BINOL dicarboxylic acids and alkane ditiin(IV) linkers. 2012 , 35,	
1549	Ni(II) and Cu(II) Complexes of Pyridyl-Pyrazole Ligands: Syntheses, Crystal Structures and Influence of Metal Ion. 2012 , 36, 680-682	3
1548	Hydrogen storage and selective carbon dioxide capture in a new chromium(III)-based infinite coordination polymer. 2012 , 2, 2939	6
1547	Syntheses, Crystal Structures, and Thermal Behaviour of Two Solvent-Regulated Nickel(II) Coordination Polymers with Tetraiodoterephthalate. 2012 , 36, 516-519	
1546	Synthesis, structures, and properties of lead(II) and cobalt(II) metal-organic frameworks based on a flexible benzophenone-2,4?-dicarboxylic acid (H ₂ bpdc). 2012 , 65, 2893-2902	5
1545	Synthesis, crystal structures, and infrared spectroscopy of a series of lanthanide phosphonoacetate coordination polymers. 2012 , 65, 3274-3286	8
1544	Syntheses and crystal structures of four new fpa-metal complexes through in situ ligand reaction. 2012 , 65, 4375-4388	2
1543	Syntheses, structures, and photoluminescence of three cadmium(II) coordination polymers with flexible bis(benzimidazole) ligands. 2012 , 65, 2852-2861	26
1542	Zeolitic imidazolate framework-7 as an ultra-selective nanofilter for H ₂ purification: atomistic simulation study. 2012 , 38, 830-837	3
1541	CO ₂ Adsorption of Metal Organic Framework Material Cu-BTC via Different Preparation Routes. 2012 , 244-251	1
1540	A Metal-Organic Framework Constructed of 1,2-Di(pyridin-4-yl)ethyne, Terephthalic Acid, and Zinc(II) Nitrate. 2012 , 67, 103-106	1

1539	Synthesis, Characterization, and Magnetic Properties of Two New Co(II) Coordination Polymers with a Carboxylate- and Benzimidazolyl-containing Ligand. 2012 , 67, 1255-1262	3
1538	Hetero Bi-Paddle-Wheel Coordination Networks: A New Synthetic Route to Rh-Containing Metal-Organic Frameworks. 2012 , 85, 433-438	15
1537	Highly Selective Sorption of Small Polar Molecules by a Nonporous Ionic Crystal of a Lacunary Keggin-type Heteropoly Anion and Alkali Metal Cations. 2012 , 41, 331-333	4
1536	Techniques for the Measurement of Gas Adsorption by Carbon Nanostructures. 2012 , 1-38	1
1535	Introduction of functionalized mesopores to metal-organic frameworks via metal-ligand-fragment coassembly. 2012 , 134, 20110-6	191
1534	Homoleptic lanthanide 1,2,3-triazolates ($[Ln(Tz^*)_3]$) and their diversified photoluminescence properties. 2012 , 51, 13204-13	47
1533	Assembly and post-modification of a metal-organic nanotube for highly efficient catalysis. 2012 , 134, 19851-7	214
1532	A heterobimetallic metal-organic framework with tunable reactive metal sites: synthesis, characterization, and reactivity. 2012 , 41, 7855-8	26
1531	Thermodynamics of Pore Filling Metal Clusters in Metal Organic Frameworks: Pd in UiO-66. 2012 , 3, 3702-6	25
1530	Cluster-Organic Framework Materials as Heterogeneous Catalysts for High Efficient Addition Reaction of Diethylzinc to Aromatic Aldehydes. 2012 , 24, 4711-4716	111
1529	Autonomous motors of a metal-organic framework powered by reorganization of self-assembled peptides at interfaces. 2012 , 11, 1081-5	169
1528	High proton conductivity by a metal-organic framework incorporating ZnO clusters with aligned imidazolium groups decorating the channels. 2012 , 134, 19432-7	246
1527	Adjusting the stability of metal-organic frameworks under humid conditions by ligand functionalization. 2012 , 28, 16874-80	143
1526	Novel (3,4,6)-connected metal-organic framework with high stability and gas-uptake capability. 2012 , 51, 8402-8	47
1525	Multifunctional amino-decorated metal-organic frameworks: nonlinear-optic, ferroelectric, fluorescence sensing and photocatalytic properties. 2012 , 22, 22603	136
1524	Molecular braids in metal-organic frameworks. <i>Chemical Society Reviews</i> , 2012 , 41, 6992-7000	58.5 154
1523	Amino substituted Cu ₃ (btc) ₂ : a new metal-organic framework with a versatile functionality. 2012 , 48, 11196-8	54
1522	Microporous metal-organic framework containing cages with adjustable portal dimensions for adsorptive CO ₂ separation. 2012 , 2, 11566	4

1521	Dynamic porous metal-organic frameworks: synthesis, structure and sorption property. 2012 , 14, 8569	31
1520	Fine-tuning the balance between crystallization and gelation and enhancement of CO ₂ uptake on functionalized calcium based MOFs and metallogels. 2012 , 22, 14951	68
1519	Van der Waals forces in the perfluorinated metal-organic framework zinc 1,2-bis(4-pyridyl)ethane tetrafluoroterephthalate. 2012 , 14, 7059-64	16
1518	Uncoordinated carbonyl groups of MOFs as anchoring sites for the preparation of highly active Pd nano-catalysts. 2012 , 22, 10834	63
1517	Unusual Zn ₅ (OH) ₂ (COO) ₈ secondary building units for the construction of a metal-organic framework. 2012 , 25, 92-95	2
1516	An efficient multi-scale lattice model approach to screening nano-porous adsorbents. 2012 , 137, 244102	9
1515	Behavior of Binary Guests in a Porous Coordination Polymer. 2012 , 24, 4744-4749	26
1514	Post-Combustion CO ₂ Capture Using Solid Sorbents: A Review. 2012 , 51, 1438-1463	1288
1513	Microporous Cyanate Resins: Synthesis, Porous Structure, and Correlations with Gas and Vapor Adsorptions. 2012 , 45, 5140-5150	85
1512	Influence of sterically non-hindering methyl groups on adsorption properties of two classical zinc and copper MOF types. 2012 , 15, 866-877	14
1511	Structural diversity in imidazole and carboxylate-containing metal complexes dependent on the alkaline reagents. 2012 , 14, 3708	39
1510	3-Fold-interpenetrated uranium-organic frameworks: new strategy for rationally constructing three-dimensional uranyl organic materials. 2012 , 51, 3103-7	73
1509	Variable architectures of Zinc coordination polymers modeled by tetra-pyridine ligands with different anions. 2012 , 14, 6770	9
1508	Role of Structure and Chemistry in Controlling Separations of CO ₂ /CH ₄ and CO ₂ /CH ₄ /CO Mixtures over Honeycomb MOFs with Coordinatively Unsaturated Metal Sites. 2012 , 116, 26636-26648	57
1507	Dimensionality transformation through paddlewheel reconfiguration in a flexible and porous Zn-based metal-organic framework. 2012 , 134, 20466-78	73
1506	Synthesis of quinolines via Friedländer reaction catalyzed by CuBTC metal-organic-framework. 2012 , 41, 4036-44	114
1505	Structure Modulation in Zn(II)-4-Bis(imidazol-1-yl)benzene Frameworks by Varying Dicarboxylate Anions. 2012 , 12, 189-196	157
1504	"Click" post-synthetic modification of metal-organic frameworks with chiral functional adduct for heterogeneous asymmetric catalysis. 2012 , 41, 3072-7	60

1503	Two Zn(II) metal-organic frameworks with coordinatively unsaturated metal sites: structures, adsorption, and catalysis. 2012 , 7, 2796-804	93
1502	The removal of CO ₂ and N ₂ from natural gas: A review of conventional and emerging process technologies. 2012 , 94-95, 123-154	382
1501	CO ₂ adsorption in mono-, di- and trivalent cation-exchanged metal-organic frameworks: a molecular simulation study. 2012 , 28, 3903-10	36
1500	Hydro-ionothermal syntheses, crystal structures, and properties of five new divalent metal iminophosphonates. 2012 , 41, 3995-4006	14
1499	Enhanced Stability in Rigid Peptide-Based Porous Materials. 2012 , 124, 11206-11210	12
1498	Enhanced stability in rigid peptide-based porous materials. 2012 , 51, 11044-8	73
1497	Reversible phase transformation and luminescence of cadmium(II)-dipyridylamide-based coordination frameworks. 2012 , 18, 16443-9	13
1496	Trypsin-Immobilized Metal-Organic Framework as a Biocatalyst In Proteomics Analysis. 2012 , 77, 982-986	124
1495	Facile Synthesis of MIL-68(In) Films with Controllable Morphology. 2012 , 2012, 0-0	
1494	Synthesis, Crystal Structure, Thermal and Luminescent Characterization of Two New 3D Cadmium Carboxylate Frameworks. 2012 , 22, 963-972	4
1493	One-pot synthesis of nitroalkenes via the Henry reaction over amino-functionalized MIL-101 catalysts. 2012 , 29, 101-104	30
1492	Hydrothermal synthesis, crystal structure, thermal and photoluminescent properties of Zn(II) and Cd(II) coordination polymers with 3-methyl-5-(pyridin-4-yl)benzoic acid. 2012 , 24, 195-199	12
1491	Degradation of sulfur mustard and 2-chloroethyl ethyl sulfide on CuBTC metal organic framework. 2012 , 162, 207-212	50
1490	Coordination Polymers. 2012 ,	2
1489	Gas Storage and Separation in Supramolecular Materials. 2012 ,	
1488	Porous metal-organic framework based on a macrocyclic tetracarboxylate ligand exhibiting selective CO ₂ uptake. 2012 , 14, 6115	43
1487	Facile xenon capture and release at room temperature using a metal-organic framework: a comparison with activated charcoal. 2012 , 48, 347-9	138
1486	Two novel entangled metal-organic networks constructed from 4,4'-bis(2-methylimidazol-1-ylmethyl)biphenyl and dicarboxylates: From polycatenated 2D + 2D -e 3D framework to polyrotaxane-like 2D + 2D -e 2D layer. 2012 , 14, 7856	42

1485	Tailored construction of novel Nickel (II) and Manganese (II) coordination polymers based on tris(p-carboxylphenyl)phosphine oxide. 2012 , 392, 396-403	10
1484	Window effect on CO ₂ /N ₂ selectivity in metal organic framework materials. 2012 , 552, 136-140	4
1483	Controlled modification of the inorganic and organic bricks in an Al-based MOF by direct and post-synthetic synthesis routes. 2012 , 14, 4126	45
1482	Effect of ionic radius on the assemblies of first row transition metal-tert-butylisophthalates(2,2'-bipyridine or phenanthroline) coordination compounds. 2012 , 14, 1301-1316	27
1481	A series of chiral coordination polymers containing helicals assembled from a new chiral (R)-2-(4'-(4''-carboxybenzyloxy)phenoxy)propanoic acid: syntheses, structures and photoluminescent properties. 2012 , 41, 9737-47	43
1480	Charge-distribution-related regioisomerism of photoresponsive metal-organic polymeric chains. 2012 , 41, 13441-6	43
1479	Sononanoengineered magnesium-polypyrrole hybrid capsules with synergetic trigger release. 2012 , 22, 13841	25
1478	Quantum sieving: feasibility and challenges for the separation of hydrogen isotopes in nanoporous materials. 2012 , 2, 8579	70
1477	Assembly between various molecular-building-blocks for network diversity of zinc-3,5-benzenetricarboxylate frameworks. 2012 , 14, 8684	12
1476	Design and construction of coordination polymers based on 2,2'-dinitro-4,4'-biphenyldicarboxylate and semi-rigid N-donor ligands: diverse structures and magnetic properties. 2012 , 41, 2677-84	29
1475	A novel 1D independent metal-organic nanotube based on cyclotrimeratrylene ligand. 2012 , 14, 112-115	28
1474	Structural diversity of transition-metal complexes derived from N-propionic acid functionalized 1,4,7-triazacyclononane: From enchanting cluster motifs to unprecedented homometallic polymeric networks. 2012 , 14, 1354-1363	12
1473	Reversible water uptake by a stable imine-based porous organic cage. 2012 , 48, 4689-91	84
1472	The multifunctional roles of the ionic liquid [Bmim][BF ₄] in the creation of cadmium metal-organic frameworks. 2012 , 14, 4894	26
1471	Syntheses and magnetic properties of three Mn(II) coordination polymers based on a tripodal flexible ligand. 2012 , 14, 1568-1574	34
1470	Aza-heterocyclic ligand assisted assembly of new cobalt MOFs with pcu and graphite related structures. 2012 , 41, 4135-45	34
1469	Auxiliary ligand-directed structural variation from 2D-3D polythreaded net to 3-fold interpenetrating 3D pillar-layered framework: syntheses, crystal structures and magnetic properties. 2012 , 41, 2560-3	110
1468	Guest-dependent host structures and host-induced guest assemblies. 2012 , 14, 2748	15

1467	Control over multifarious entangled Co(II) metal-organic frameworks: role of steric bulk and molar ratio of organic ligands. 2012 , 14, 2906	57
1466	Guest-induced expanding and shrinking porous modulation based on interdigitated metal-organic frameworks constructed by 4,4'-sulfonyldibenzoate and barium ions. 2012 , 14, 2849	33
1465	Cu ₆ Jahn-Teller centers in coordination frameworks comprising fully condensed Kuratowski-type secondary building units: phase transitions and magneto-structural correlations. 2012 , 41, 4239-48	15
1464	Spectroscopic and adsorptive studies of a thermally robust pyrazolato-based PCP. 2012 , 41, 4012-9	24
1463	In situ formation of new organic ligands to construct two novel self-charge-transfer Pb(II)-based frameworks. 2012 , 14, 75-78	22
1462	A microporous indium-organic framework with high capacity and selectivity for CO ₂ or organosulfurs. 2012 , 41, 2873-6	20
1461	New monoacylhydrazidate-coordinated Mn ²⁺ and Pb ²⁺ compounds. 2012 , 41, 6137-47	25
1460	A series of coordination polymers based on a multidentate N-donor ligand and different polycarboxylate anions: syntheses, structures and photoluminescent properties. 2012 , 14, 6271	46
1459	One-dimensional confinement of a nanosized metal organic framework in carbon nanofibers for improved gas adsorption. 2012 , 48, 2009-11	79
1458	Novel electrorheological properties of a metal-organic framework Cu ₃ (BTC) ₂ . 2012 , 48, 5635-7	17
1457	New metal complexes with di(mono)acylhydrazidate molecules. 2012 , 41, 10267-75	18
1456	A porous metal-organic framework (MOF) with unusual 2D-3D polycatenation based on honeycomb layers. 2012 , 41, 1928-30	54
1455	A series of five divalent zinc and cadmium coordination polymers based on a new bifunctional ligand: syntheses, crystal structures, and properties. 2012 , 14, 3951	15
1454	Microwave synthesis and gas sorption of calcium and strontium metal-organic frameworks with high thermal stability. 2012 , 14, 1219	59
1453	Two 3D metal-organic frameworks with different topologies, thermal stabilities and magnetic properties. 2012 , 14, 5905	30
1452	Organic-inorganic hybrid tinphosphonate material with mesoscopic void spaces: an excellent catalyst for the radical polymerization of styrene. 2012 , 2, 613	29
1451	Thermodynamics and kinetics of NaAlH ₄ nanocluster decomposition. 2012 , 14, 8160-9	34
1450	Facile fabrication and adsorption property of a nano/microporous coordination polymer with controllable size and morphology. 2012 , 48, 8814-6	102

- 1449 Phase transfer catalyst supported, room-temperature biphasic synthesis: a facile approach to the synthesis of coordination polymers. **2012**, 41, 4320-3 7
- 1448 Interpenetrated and polycatenated nets of Cd(II) coordination networks from mixed N,N'-dipyridyladipoamide and dicarboxylate ligands. **2012**, 14, 5505 87
- 1447 Divalent metal coordination polymers assembled from dual linkers 2-meririgid carboxyphenylpropionate and dipyridyl type molecule. **2012**, 14, 951-960 40
- 1446 Novel iso-reticular Zn(II) metal-organic frameworks constructed by trinuclear-triangular and paddle-wheel units: synthesis, structure and gas adsorption. **2012**, 41, 4007-11 24
- 1445 Effects of thermodynamic ensembles and mineral surfaces on interfacial water structure. **2012**, 14, 1728-34 15
- 1444 Charge effect of foreign metal ions and the crystal growth process in hybridized metal-organic frameworks. **2012**, 48, 10847-9 27
- 1443 Synthesis, structural characterization and photoluminescence property of four di(mono)acylhydrazidate-coordinated Cd²⁺ and Zn²⁺ compounds. **2012**, 14, 8162 19
- 1442 Exploring Ag⁺/HB interactions in coordination polymers: silver-alkanedinitrile networks with cobalt carbaborane anions. **2012**, 14, 3367 12
- 1441 Organic molecules induced crystal transformation from a two dimensional coordination polymer to chain-like structures. **2012**, 14, 663-669 8
- 1440 Selective CO₂ adsorption in a metal-organic framework constructed from an organic ligand with flexible joints. **2012**, 48, 9168-70 54
- 1439 Dynamic porous coordination polymer based on 2D stacked layers exhibiting high sorption selectivity for CO₂. **2012**, 41, 3209-13 24
- 1438 Inorganic-organic hybrid compounds based on novel lanthanide-antimony oxohalide nanoclusters. **2012**, 41, 9879-81 10
- 1437 Systematic mechanochemical preparation of a series of coordination pillared layer frameworks. **2012**, 41, 3956-61 69
- 1436 Construction of 0D to 3D cadmium complexes from different pyridyl diimide ligands. **2012**, 41, 4626-33 44
- 1435 New photoluminescence acylhydrazidate-coordinated complexes. **2012**, 41, 2382-92 35
- 1434 Solvent influences structural variation from a 3D 4-fold interpenetrated framework to a 2D layer-type porous coordination polymer: Structure analysis and highly selective gas adsorption properties. **2012**, 14, 2954 20
- 1433 Utilizing a copper MOF as a reagent in a solvent mediated reaction to form a topologically distinct MOF. **2012**, 41, 7839-41 10
- 1432 Self assembly of a tren-derivative hydrogenated Schiff base with transition metal ions: syntheses, crystal structures and photoluminescent properties. **2012**, 14, 2879 13

1431	Extending the family of Zn-based MOFs: synthetic approaches to chiral framework structures and MOFs with large pores and channels. 2012 , 48, 3638-40	17
1430	Four 3D metal-organic frameworks derived from barium(II) and isoflavonesulfonate ligands. 2012 , 14, 5042	14
1429	Acetylene and argon adsorption in a supramolecular organic zeolite. 2012 , 14, 311-7	20
1428	Two solvent-dependent zinc(II) supramolecular isomers: structure analysis, reversible and nonreversible crystal-to-crystal transformation, highly selective CO ₂ gas adsorption, and photoluminescence behaviors. 2012 , 14, 6246	41
1427	Structural diversity and properties of coordination polymers built from a semi-rigid tetradentate carboxylic acid. 2012 , 14, 824-831	21
1426	Zinc-1,4-benzenedicarboxylate-bipyridine frameworks linker functionalization impacts network topology during solvothermal synthesis. 2012 , 22, 909-918	40
1425	Hierarchical modeling of ammonia adsorption in functionalized metal-organic frameworks. 2012 , 41, 3962-73	36
1424	Selective hydrogen purification through graphdiyne under ambient temperature and pressure. 2012 , 4, 4587-93	167
1423	NMR studies of carbon dioxide and methane self-diffusion in ZIF-8 at elevated gas pressures. 2012 , 18, 359-366	53
1422	Independent 1D nanosized metal-organic tube: anion exchange, separation, and anion-responsive luminescence. 2012 , 51, 3923-5	55
1421	Microporous zinc tris[(4-carboxyl)phenyliduryl]amine framework with an unusual topological net for gas storage and separation. 2012 , 51, 1995-7	56
1420	Solvent-Controlled Syntheses, Structure, and Magnetic Properties of Trinuclear Mn(II)-Based Metal-Organic Frameworks. 2012 , 12, 5693-5700	37
1419	Theoretical Insight into the Second-Order NLO Response of the Bis{4-[2-(4-pyridyl)ethenyl]benzoato}-zinc(II) Metal-Organic Framework. 2012 , 116, 21973-21981	21
1418	Synthesis and characterization of [Cu(SiF ₆)(4,4'-bpy) ₂] with its H ₂ and CO ₂ adsorption. 2012 , 65, 1645-1654	3
1417	Metal-Organic Frameworks Based on Flexible V-Shaped Polycarboxylate Acids: Hydrogen Bondings, Non-Interpenetrated and Polycatenated. 2012 , 12, 4072-4082	65
1416	Porous organic cage nanocrystals by solution mixing. 2012 , 134, 588-98	211
1415	Effect of cationic surfactants on structure and morphology of mesostructured MOFs. 2012 , 2, 5424	21
1414	Copper phosphonatoethanesulfonates: temperature dependent in situ energy dispersive X-ray diffraction study and influence of the pH on the crystal structures. 2012 , 51, 12540-7	29

1413	Ten new coordination polymers based on 3-carboxy-1-(4?-carboxybenzyl)-2-oxidopyridinium and different N-donor ligands: syntheses, structures, and photoluminescent properties. 2012 , 14, 8173	29
1412	Synthesis, Crystal Structure, and Properties of a Cd(II) Coordination Polymer Based on 2-((Benzoimidazol-yl)methyl)-1H-Tetrazole and 1,3-Benzenedicarboxylate Ligands. 2012 , 42, 260-265	2
1411	Microcalorimetric insight into the analysis of the reactive adsorption of ammonia on Cu-MOF and its composite with graphite oxide. 2012 , 22, 21443	24
1410	Cu-TDPAT, an rht-Type Dual-Functional Metal-Organic Framework Offering Significant Potential for Use in H ₂ and Natural Gas Purification Processes Operating at High Pressures. 2012 , 116, 16609-16618	64
1409	Solvent- and Vapor-Mediated Solid-State Transformations in 1,3,5-Benzenetricarboxylate Metal-Organic Frameworks. 2012 , 12, 1999-2003	24
1408	Quantum Sieving in Metal-Organic Frameworks: A Computational Study. 2012 , 51, 434-442	29
1407	Time-resolved indirect nanoplasmonic sensing spectroscopy of dye molecule interactions with dense and mesoporous TiO ₂ films. 2012 , 12, 2397-403	21
1406	Reversible alteration of CO ₂ adsorption upon photochemical or thermal treatment in a metal-organic framework. 2012 , 134, 99-102	360
1405	A New 10-Connected Coordination Network with Pentanuclear Zinc Clusters as Secondary Building Units. 2012 , 12, 1064-1068	84
1404	Formation and Shrinkage of Necks in Microporous Silica Molecular Sieve with Ordered Mesoporous Structure. 2012 , 116, 3702-3706	4
1403	Syntheses, crystal structures, and luminescence of two main-group metal complexes based on 3,4-pyrazoledicarboxylic acid. 2012 , 65, 923-933	31
1402	Dense coordination network capable of selective CO ₂ capture from C ₁ and C ₂ hydrocarbons. 2012 , 134, 9852-5	76
1401	Structural Diversity for a Series of Metal(II) Complexes Based on Flexible 1,2-Phenylenediacetate and Dipyridyl-type Coligand. 2012 , 12, 147-157	85
1400	Flexible and dynamic thermal behavior of self-catenated $[\{Ni_3(H_2O)_3(Bpa)_4\}(V_6O_{18})] \cdot 3H_2O$ constructed from 10-c heterometallic inorganic-organic clusters. 2012 , 51, 2130-9	22
1399	A homochiral luminescent 2D porous coordination polymer with collagen-type triple helices showing selective guest inclusion. 2012 , 51, 4644-9	28
1398	Toward understanding the influence of ethylbenzene in p-xylene selectivity of the porous titanium amino terephthalate MIL-125(Ti): adsorption equilibrium and separation of xylene isomers. 2012 , 28, 3494-502	48
1397	A Calcium Coordination Framework Having Permanent Porosity and High CO ₂ /N ₂ Selectivity. 2012 , 12, 2162-2165	116
1396	Role of Temperature on Framework Dimensionality: Supramolecular Isomers of Zn ₃ (RCOO) ₈ Based Metal Organic Frameworks. 2012 , 12, 572-576	74

1395	Polynuclear complexes constructed by lanthanides and pyridine-3,5-dicarboxylate ligand: Structures, thermal and luminescent properties. 2012 , 41, 7-19		42
1394	Structural diversity of cobalt(II) coordination compounds involving bent imidazole ligand: A route from 0D dimer to 3D coordination polymer. 2012 , 44, 179-186		24
1393	Synthesis, structure, and photoluminescence of ZnII and CdII coordination complexes constructed by structurally related 5,6-substituted pyrazine-2,3-dicarboxylate ligands. 2012 , 14, 1117-1125		15
1392	Metal-organic framework materials with ultrahigh surface areas: is the sky the limit?. 2012 , 134, 15016-21		1210
1391	CO ₂ dynamics in a metal-organic framework with open metal sites. 2012 , 134, 14341-4		232
1390	Robust Metal-Organic Framework with An Octatopic Ligand for Gas Adsorption and Separation: Combined Characterization by Experiments and Molecular Simulation. 2012 , 24, 18-25		74
1389	Functional heterometallic coordination polymers with metalloligands as tunable luminescent crystalline materials. 2012 , 22, 19673		26
1388	Photoactive chiral metal-organic frameworks for light-driven asymmetric α -alkylation of aldehydes. 2012 , 134, 14991-9		373
1387	Diverse Topologies in Chiral Divalent Metal Camphorate Coordination Polymers Containing 4,4'-Dipyridylamine. 2012 , 12, 5125-5137		24
1386	Progress in adsorption-based CO ₂ capture by metal-organic frameworks. <i>Chemical Society Reviews</i> , 2012 , 41, 2308-22	58,5	1080
1385	In situ formed white-light-emitting lanthanide-zinc-organic frameworks. 2012 , 51, 1201-3		113
1384	Facile synthesis of metal-organic framework films via in situ seeding of nanoparticles. 2012 , 48, 4965-7		25
1383	Enhancing water stability of metal-organic frameworks via phosphonate monoester linkers. 2012 , 134, 14338-40		186
1382	Near-critical water, a cleaner solvent for the synthesis of a metal-organic framework. 2012 , 14, 117-122		43
1381	Single-walled polytetrazolate metal-organic channels with high density of open nitrogen-donor sites and gas uptake. 2012 , 134, 784-7		165
1380	Discovery, development, and functionalization of Zr(IV)-based metal-organic frameworks. 2012 , 14, 4096-4104		253
1379	Design strategies for shape-persistent covalent organic polyhedrons (COPs) through imine condensation/metathesis. 2012 , 77, 7392-400		37
1378	Unprecedented crystal dynamics: reversible cascades of single-crystal-to-single-crystal transformations. 2012 , 48, 10249-51		41

1377	Structure-property relationship of homochiral and achiral supramolecular isomers obtained by one-pot synthesis. 2012 , 48, 10757-9	42
1376	Grand Canonical Monte Carlo Simulation of Low-Pressure Methane Adsorption in Nanoporous Framework Materials for Sensing Applications. 2012 , 116, 3492-3502	28
1375	Modification of the Mg/DOBDC MOF with Amines to Enhance CO ₂ Adsorption from Ultradilute Gases. 2012 , 3, 1136-41	221
1374	Synthesis, Crystal Structure, and Properties of a Novel Coordination Complex: [Cd(C ₁₀ H ₈ O ₄)(H ₂ O) ₂]. 2012 , 42, 1001-1006	1
1373	Investigation of post-grafted groups of a porous coordination polymer and its proton conduction behavior. 2012 , 41, 13261-3	28
1372	Adsorption and Separation of Xylene Isomers: CPO-27-Ni vs HKUST-1 vs NaY. 2012 , 116, 21844-21855	64
1371	Hierarchically mesostructured MIL-101 metal-organic frameworks: supramolecular template-directed synthesis and accelerated adsorption kinetics for dye removal. 2012 , 14, 1613-1617	149
1370	Catalysis by a Zinc-Porphyrin-Based Metal-Organic Framework: From Theory to Computational Design. 2012 , 116, 23494-23502	29
1369	A microporous, moisture-stable, and amine-functionalized metal-organic framework for highly selective separation of CO ₂ from CH ₄ . 2012 , 48, 1135-7	70
1368	Tuning Cobalt Coordination Architectures by Bis(1,2,4-triazol-1-ylmethyl)benzene Position Isomers and 5-Nitroisophthalate. 2012 , 12, 3992-3997	70
1367	Instant MOFs: continuous synthesis of metal-organic frameworks by rapid solvent mixing. 2012 , 48, 10642-4	84
1366	Systematic structural control of multichromic platinum(II)-diimine complexes ranging from ionic solid to coordination polymer. 2012 , 41, 1878-88	22
1365	Accelerating applications of metal-organic frameworks for gas adsorption and separation by computational screening of materials. 2012 , 28, 14114-28	178
1364	Inclusion and dielectric properties of a vinylidene fluoride oligomer in coordination nanochannels. 2012 , 41, 4195-8	16
1363	Significant gas uptake enhancement by post-exchange of zinc(II) with copper(II) within a metal-organic framework. 2012 , 48, 10286-8	102
1362	Synthesis and characterization of monodisperse porous γ -Al ₂ O ₃ nanoparticles. 2012 , 258, 5712-5715	23
1361	Pilot-scale production of mesoporous silica-based adsorbent for CO ₂ capture. 2012 , 258, 6943-6951	13
1360	Adsorption CO ₂ , CH ₄ and N ₂ on two different spacing flexible layer MOFs. 2012 , 161, 154-159	29

- 1359 Methane on Zn(bdc)(ted)_{0.5} metal-organic framework: Evidence for adsorption on distinct sites. **2012**, 161, 134-138 4
- 1358 Imaging of intact MOF-5 nanocrystals by advanced TEM at liquid nitrogen temperature. **2012**, 162, 131-135 51
- 1357 Cobalt 5-bromoisophthalate coordination polymers containing bis(pyridyl)piperazine-type long spanning ligands and water molecule aggregations. **2012**, 1028, 126-133 9
- 1356 Synthesis of 2D metal-organic coordination polymers with large internal cavities and their magnetic properties. **2012**, 21, 137-141 3
- 1355 Construction of cobalt-imidazole-based dicarboxylate complexes with topological diversity: From metal-organic square to one-dimensional coordination polymer. **2012**, 22, 170-173 9
- 1354 A chiral qtz-type metal-organic framework based on 4-coordinate Cd(II) centers. **2012**, 23, 95-97 4
- 1353 A novel Co₃ +-based asymmetrical building block: Heterobimetallic metallacycles versus coordination networks. **2012**, 23, 103-108 21
- 1352 H₂ storage in isostructural UiO-67 and UiO-66 MOFs. **2012**, 14, 1614-26 339
- 1351 Construction and adsorption properties of microporous tetrazine-based organic frameworks. **2012**, 2, 408-410 42
- 1350 Metal organic frameworks for electrochemical applications. **2012**, 5, 9269 668
- 1349 Metal [Zn(II), Cd(II)], 1,10-Phenanthroline Containing Coordination Polymers Constructed on the Skeleton of Polycarboxylates: Synthesis, Characterization, Microstructural, and CO₂ Gas Adsorption Studies. **2012**, 12, 5311-5319 37
- 1348 Chemoselective nanoporous membranes via chemically directed assembly of nanoparticles and dendrimers. **2012**, 24, 5862-6 25
- 1347 Unconventional nucleation and oriented growth of ZIF-8 crystals on non-polar surface. **2012**, 24, 5954-8 43
- 1346 Solution-processable molecular cage micropores for hierarchically porous materials. **2012**, 24, 5732-7 76
- 1345 Hypercrosslinked aromatic heterocyclic microporous polymers: a new class of highly selective CO₂ capturing materials. **2012**, 24, 5703-7 377
- 1344 Homochiral Crystallization of Metal-Organic Silver Frameworks: Asymmetric [3+2] Cycloaddition of an Azomethine Ylide. **2012**, 124, 10274-10278 13
- 1343 Nano- and Microsized Cubic Gel Particles from Cyclodextrin Metal-Organic Frameworks. **2012**, 124, 10718-10721 14
- 1342 Crystal Engineering of a Microporous, Catalytically Active fcu Topology MOF Using a Custom-Designed Metalloporphyrin Linker. **2012**, 124, 10229-10232 27

1341	Homochiral crystallization of metal-organic silver frameworks: asymmetric [3+2] cycloaddition of an azomethine ylide. 2012 , 51, 10127-31	101
1340	Nano- and micro-sized cubic gel particles from cyclodextrin metal-organic frameworks. 2012 , 51, 10566-9	150
1339	Crystal engineering of a microporous, catalytically active fcu topology MOF using a custom-designed metalloporphyrin linker. 2012 , 51, 10082-5	141
1338	Exceptional crystallization diversity and solid-state conversions of Cd(II) coordination frameworks with 5-bromonicotinate directed by solvent media. 2012 , 18, 12437-45	57
1337	Discovering the active sites for C3 separation in MIL-100(Fe) by using operando IR spectroscopy. 2012 , 18, 11959-67	77
1336	On the mechanism behind the instability of isoreticular metal-organic frameworks (IRMOFs) in humid environments. 2012 , 18, 12260-6	55
1335	Microporous Porphyrin-Based Metal Carboxylate Frameworks with Various Accessible Metal Sites: [Cu ₂ (MDDCPP)] [M = Zn ²⁺ , Ni ²⁺ , Pd ²⁺ , Mn ³⁺ (NO ₃), Ru ²⁺ (CO)]. 2012 , 2012, 4885-4897	24
1334	Structure and characterization of a 1d double chain copper(II) complex {[Cu(BIX) ₂ (H ₂ O) ₂](PhCOO) ₂ } _n . 2012 , 53, 509-513	
1333	Crystal structure of a new mononuclear complex of Mn(II) with a bbbi ligand (bbbi = 1,4-bis(benzimidazol-1-yl)-2-butene). 2012 , 53, 598-602	4
1332	Cooperative effect of temperature and linker functionality on CO ₂ capture from industrial gas mixtures in metal-organic frameworks: a combined experimental and molecular simulation study. 2012 , 14, 2317-25	68
1331	Cooperative template-directed assembly of mesoporous metal-organic frameworks. 2012 , 134, 126-9	274
1330	Metal-organic framework MIL-100(Fe) for the adsorption of malachite green from aqueous solution. 2012 , 22, 7449	407
1329	Functional porphyrinic metal-organic frameworks: crystal engineering and applications. 2012 , 41, 3879-88	104
1328	Two pillared-layer metal-organic frameworks constructed with Co(II), 1,2,4,5-benzenetetracarboxylate, and 4,4'-bipyridine: syntheses, crystal structures, and gas adsorption properties. 2012 , 14, 2296	21
1327	Structures and properties of lanthanide metal-organic frameworks based on a 1,2,3-triazole-containing tetracarboxylate ligand. 2012 , 41, 12790-6	44
1326	Modeling adsorption in metal-organic frameworks with open metal sites: propane/propylene separations. 2012 , 28, 8537-49	64
1325	Metal-organic frameworks and related materials for hydrogen purification: Interplay of pore size and pore wall polarity. 2012 , 2, 4382	35
1324	Guest-to-host transmission of structural changes for stimuli-responsive adsorption property. 2012 , 134, 4501-4	276

1323	{[Co ₂ (ndc) ₂ (bpee) ₂](bpee)}: a 3D multifunctional MOF. 2012 , 14, 4980	18
1322	Two novel Cd(II) complexes with unprecedented four- and six-fold interpenetration. 2012 , 14, 5198	34
1321	Metal-organic frameworks in mixed-matrix membranes for gas separation. 2012 , 41, 14003-27	391
1320	Methane storage in advanced porous materials. <i>Chemical Society Reviews</i> , 2012 , 41, 7761-79	58.5 643
1319	Selective adsorption of carbon dioxide by carbonized porous aromatic framework (PAF). 2012 , 5, 8370	200
1318	Single-site photocatalysts with a porous structure. 2012 , 468, 2099-2112	16
1317	Feasibility of zeolitic imidazolate framework membranes for clean energy applications. 2012 , 5, 7637	137
1316	A series of three-dimensional (3D) chiral lanthanide coordination polymers generated by spontaneous resolution. 2012 , 14, 8083	20
1315	Rational synthesis of graphene-metal coordination polymer composite nanosheet as enhanced materials for electrochemical biosensing. 2012 , 22, 13166	42
1314	Systematic investigations on magneto-structural correlations of copper(II) coordination polymers based on organic ligands with mixed carboxylic and nitrogen-based moieties. 2012 , 41, 4207-16	32
1313	Methane and carbon dioxide adsorption on edge-functionalized graphene: a comparative DFT study. 2012 , 137, 054702	89
1312	Time-dependent CO ₂ sorption hysteresis in a one-dimensional microporous octahedral molecular sieve. 2012 , 134, 7944-51	65
1311	Chemical looping processes for CO ₂ capture and carbonaceous fuel conversion: prospect and opportunity. 2012 , 5, 7254	263
1310	Enhanced hydrostability in Ni-doped MOF-5. 2012 , 51, 9200-7	177
1309	Luminescent properties of metal-organic framework MOF-5: relativistic time-dependent density functional theory investigations. 2012 , 51, 12389-94	93
1308	Metal-adeninate vertices for the construction of an exceptionally porous metal-organic framework. 2012 , 3, 604	312
1307	Highly selective carbon dioxide uptake by [Cu(bpy-n) ₂ (SiF ₆)] (bpy-1 = 4,4'-bipyridine; bpy-2 = 1,2-bis(4-pyridyl)ethene). 2012 , 134, 3663-6	263
1306	Fuel purification, Lewis acid and aerobic oxidation catalysis performed by a microporous Co-BTT (BTT ³⁻ = 1,3,5-benzenetristetrazolate) framework having coordinatively unsaturated sites. 2012 , 22, 10200	53

1305	Synthetic routes toward MOF nanomorphologies. 2012 , 22, 10119	153
1304	Designing higher surface area metal-organic frameworks: are triple bonds better than phenyls?. 2012 , 134, 9860-3	170
1303	Selective carbon dioxide uptake and crystal-to-crystal transformation: porous 3D framework to 1D chain triggered by conformational change of the spacer. 2012 , 14, 684-690	33
1302	Ion Exchange in Metal-Organic Framework for Water Purification: Insight from Molecular Simulation. 2012 , 116, 6925-6931	61
1301	Selective CO ₂ adsorption in a robust and water-stable porous coordination polymer with new network topology. 2012 , 51, 572-6	91
1300	Syntheses, Structures, and Photoluminescences of Four Cd(II) Coordination Architectures Based on 1-(4-Pyridylmethyl)-2-methylimidazole and Aromatic Carboxylates: From One-Dimensional Chain to Three-Dimensional Coordination Architecture. 2012 , 12, 2004-2012	45
1299	Chiral nanoporous metal-metallosalen frameworks for hydrolytic kinetic resolution of epoxides. 2012 , 134, 8058-61	227
1298	Metal complexes as templates: syntheses, structures, and luminescent properties of two zinc phosphonocarboxylates with ABW-zeolite topology. 2012 , 41, 4079-83	22
1297	Highly Selective Sorption and Separation of CO ₂ from a Gas Mixture of CO ₂ and CH ₄ at Room Temperature by a Zeolitic Organic-Inorganic Ionic Crystal and Investigation of the Interaction with CO ₂ . 2012 , 116, 16105-16110	33
1296	Impact of water coadsorption for carbon dioxide capture in microporous polymer sorbents. 2012 , 134, 10741-4	230
1295	Metal Organic Frameworks (MOFs). 2012 , 729-767	
1294	Selective separation of water, methanol, and ethanol by a porous coordination polymer built with a flexible tetrahedral ligand. 2012 , 134, 13145-7	127
1293	Nanosponges for hydrogen storage. 2012 , 22, 10134	56
1292	Highly selective CO ₂ capture of an agw-type metal-organic framework with inserted amides: experimental and theoretical studies. 2012 , 48, 3058-60	154
1291	Lanthanide coordination polymer nanoparticles for sensing of mercury(II) by photoinduced electron transfer. 2012 , 6, 10505-11	204
1290	Amine-functionalized MIL-53(Al) for CO ₂ /N ₂ separation: Effect of textural properties. 2012 , 102, 574-579	46
1289	CsHSO ₄ Proton conduction in a crystalline metal-organic framework. 2012 , 225, 420-423	35
1288	Synthesis, characterization and thermal decomposition kinetics as well as evaluation of luminescent properties of several 3D lanthanide coordination polymers as selective luminescent probes of metal ions. 2012 , 162, 1775-1788	9

1287	Single crystal electron paramagnetic resonance spectra of Cu(II) ions in Cu(tyrosine)(2): a study of weak exchange interactions mediated by resonance assisted hydrogen bonds (RAHB). 2012 , 114, 75-81	8
1286	CO ₂ Capture with PEG. 2012 , 41-53	2
1285	A Review of CO ₂ Capture by Absorption and Adsorption. 2012 , 12, 745-769	1017
1284	Self-assembly, crystal structures, and properties of metal-2-sulfoterephthalate frameworks based on [M ₄ (B-OH) ₂] ₆ ⁺ clusters (M = Co, Mn, Zn and Cd). 2012 , 41, 2639-47	29
1283	A porous metal-organic framework with helical chain building units exhibiting facile transition from micro- to meso-porosity. 2012 , 48, 883-5	45
1282	Porous Metal-Organic Framework Materials: Microwave Assisted Synthesis and Oxidative Catalytic Tests. 2012 , 730-732, 1024-1029	0
1281	Synthesis, crystal structures, and luminescence properties of carboxylate based rare-earth coordination polymers. 2012 , 51, 11623-34	160
1280	Ligand-Directed Construction of Zn(II) Complexes from Zero-Dimensional Metallomacrocycle to One-, Two-, and Three-Dimensional Coordination Polymers Based on N-Donor and β -Diketone Bifunctional Ligands. 2012 , 12, 99-108	27
1279	Cross-linked Polymers with Exceptionally High Ru(bipy) ₃ ²⁺ Loadings for Efficient Heterogeneous Photocatalysis. 2012 , 2, 417-424	76
1278	A series of coordination polymers based on 5,5'-(ethane-1,2-diyl)-bis(oxy)diisophthalic acid and structurally related N-donor ligands: syntheses, structures and properties. 2012 , 14, 286-299	32
1277	Homochiral lanthanoid(III) mesoxalate metal-organic frameworks: synthesis, crystal growth, chirality, magnetic and luminescent properties. 2012 , 14, 2635	71
1276	Chiral recognition in metal-organic frameworks studied by solid-state NMR spectroscopy using chiral solvating agents. 2012 , 48, 10484-6	33
1275	Fe ₃ O ₄ @MOF core-shell magnetic microspheres with a designable metal-organic framework shell. 2012 , 22, 9497	257
1274	Stepwise adsorption in a mesoporous metal-organic framework: experimental and computational analysis. 2012 , 48, 3297-9	50
1273	Crystal Engineering. 2012 ,	1
1272	Enhanced stability and CO ₂ affinity of a UiO-66 type metal-organic framework decorated with dimethyl groups. 2012 , 41, 9283-5	149
1271	Porous double-walled metal triazolate framework based upon a bifunctional ligand and a pentanuclear zinc cluster exhibiting selective CO ₂ uptake. 2012 , 51, 4423-5	47
1270	Construction of Lanthanide-Organic Frameworks from 2-(pyridine-3-yl)-1H-4,5-imidazoledicarboxylate and Oxalate. 2012 , 12, 4225-4229	20

1269	Single-Layer [Cu ₂ Br(IN) ₂] _n Coordination Polymer (CP): Electronic and Magnetic Properties, and Implication for Molecular Sensors. 2012 , 116, 4119-4125	26
1268	Zeolitic imidazolate framework (ZIF-8) based polymer nanocomposite membranes for gas separation. 2012 , 5, 8359	535
1267	High proton conductivity in a flexible, cross-linked, ultramicroporous magnesium tetrakisphosphate hybrid framework. 2012 , 51, 7689-98	110
1266	Understanding nanofluid stability through molecular simulation. 2012 , 551, 115-120	9
1265	Early stages in the degradation of metal-organic frameworks in liquid water from first-principles molecular dynamics. 2012 , 14, 7240-5	44
1264	REMOVED: Performance of MOF Mixed-Matrix Membranes at Elevated Pressures. 2012 , 44, 2068-2070	
1263	Pore size-controlled gases and alcohols separation within ultramicroporous homochiral lanthanide-organic frameworks. 2012 , 22, 7813	48
1262	A method for increasing permeability in O ₂ /N ₂ separation with mixed-matrix membranes made of water-stable MIL-101 and polysulfone. 2012 , 48, 2140-2	117
1261	Water Stable Metal-Organic Framework Evolutionally Formed from a Flexible Multidentate Ligand with Acylamide Groups for Selective CO ₂ Adsorption. 2012 , 12, 1081-1084	66
1260	Rational Design and Synthesis of a New Organometallic Ligand, 1-Ferrocenyl-3-(5-bromopyridyl)-prop-3-enol-1-one and Its Heteronuclear Coordination Polymer, {Cu[1-ferrocenyl-3-(5-bromopyridyl)prop-1,3-dionate] ₂] _n . 2012 , 12, 49-53	12
1259	Four Cobaltic Coordination Polymers Based on 5-Iodo-Isophthalic Acid: Halogen-Related Interaction and Solvent Effect. 2012 , 12, 1239-1246	86
1258	Capture and Utilization of Carbon Dioxide with Polyethylene Glycol. 2012 ,	11
1257	Zeolite imidazolate frameworks 8 as sorbent and its application to sonication-assisted emulsification microextraction combined with vortex-assisted porous membrane-protected micro-solid-phase extraction for fast analysis of acidic drugs in environmental water samples. 2012 , 1257, 19-24	85
1256	Aqueous Molecular Sieving and Strong Gas Adsorption in Highly Porous MOFs with a Facile Synthesis. 2012 , 24, 4647-4652	42
1255	Effects of Polarizability on the Adsorption of Noble Gases at Low Pressures in Monohalogenated Isorecticular Metal-Organic Frameworks. 2012 , 116, 19765-19772	77
1254	Understanding Carbon Monoxide Capture Using Metal-Organic Frameworks. 2012 , 116, 6655-6663	51
1253	Ultrasensitive humidity detection using metal-organic framework-coated microsensors. 2012 , 84, 7043-51	101
1252	Highly selective acetone fluorescent sensors based on microporous Cd(II) metal-organic frameworks. 2012 , 22, 23201	131

1251	Insights into Adsorption of NH ₃ on HKUST-1 Metal-Organic Framework: A Multitechnique Approach. 2012 , 116, 19839-19850	149
1250	Three-dimensional metal-organic framework with highly polar pore surface: H ₂ and CO ₂ storage characteristics. 2012 , 51, 7103-11	62
1249	Triple framework interpenetration and immobilization of open metal sites within a microporous mixed metal-organic framework for highly selective gas adsorption. 2012 , 51, 4947-53	74
1248	Exploring reverse shape selectivity and molecular sieving effect of metal-organic framework UiO-66 coated capillary column for gas chromatographic separation. 2012 , 1257, 116-24	114
1247	High-performance liquid chromatographic separation of position isomers using metal-organic framework MIL-53(Al) as the stationary phase. 2012 , 137, 133-9	106
1246	Highly selective CO ₂ uptake in uninodal 6-connected "mmo" nets based upon MO ₄ (2-) (M = Cr, Mo) pillars. 2012 , 134, 19556-9	99
1245	Metal-organic frameworks for removal of Xe and Kr from nuclear fuel reprocessing plants. 2012 , 28, 11584-9	143
1244	Understanding Gas-Induced Structural Deformation of ZIF-8. 2012 , 3, 1159-64	117
1243	Iodine Confinement into Metal-Organic Frameworks (MOFs): Low-Temperature Sintering Glasses To Form Novel Glass Composite Material (GCM) Alternative Waste Forms. 2012 , 51, 614-620	122
1242	Effect of Ligand Structural Isomerism in Formation of Calcium Coordination Networks. 2012 , 12, 2460-2467	54
1241	1-D and 2-D coordination polymers of cerium(III) with pyridine-2,4,6-tricarboxylic acid: synthesis and structural, spectroscopic, and thermal properties. 2012 , 65, 1892-1904	15
1240	Functional tolerance in an isoreticular series of highly porous metal-organic frameworks. 2012 , 41, 6277-82	17
1239	Two Large-Pore Metal-Organic Frameworks Derived from a Single Polytopic Strut. 2012 , 12, 1075-1080	31
1238	Metal-organic frameworks with potential for energy-efficient adsorptive separation of light hydrocarbons. 2012 , 5, 9107	517
1237	Tuning Fluorescent Molecules by Inclusion in a Metal-Organic Framework: An Experimental and Computational Study. 2012 , 77, 1112-1118	64
1236	New homochiral ferroelectric supramolecular networks of complexes constructed by chiral S-naproxen ligand. 2012 , 14, 3802	26
1235	Structural determination of a highly stable metal-organic framework with possible application to interim radioactive waste scavenging: Hf-UiO-66. 2012 , 86,	165
1234	Synthesis, Crystal Structure and Luminescent Property of a 1D Chain Hg(II) Coordination Polymer Based on 4-Cyanopyridine. 2012 , 42, 947-951	1

1233	Synthesis and Magnetic Properties of Two New Cobalt Complexes Constructed by Semirigid V-shaped 5-(4-Carboxyphenoxy)-pyridine-2-carboxylic Acid. 2012 , 638, 201-206	5
1232	Ionothermal Synthesis of a NaCl-type Topological Network Based on Trinuclear Cobalt(II) Clusters as Nodes. 2012 , 638, 423-426	7
1231	Poly[di-aqua- μ_2 -bis(pyridin-4-yl)ethene- μ_2 N:N'-tetrakis(4-iodobenzoato- μ_2 O,O')]dicadmium]. 2012 , 68, m21-3	2
1230	Highly luminescent metal-organic frameworks through quantum dot doping. 2012 , 8, 80-8	119
1229	A rational self-sacrificing template route to metal-organic framework nanotubes and reversible vapor-phase detection of nitroaromatic explosives. 2012 , 8, 225-30	89
1228	Synthesis, Structure, and Magnetic Properties of a 3D Cobalt(II) Coordination Polymer with Tris(2-carboxyethyl)isocyanurate and 1, 2-Bis(4-pyridyl)ethylene. 2012 , 638, 675-678	4
1227	Two 2D Metal-organic Networks Based on a Rigid Imidazolate/Sulfonate Functionalized Ligand \square Effect of the Coordination Modes of the Ligand on Crystal Structures. 2012 , 638, 1006-1011	1
1226	Metal-organic framework thin films: from fundamentals to applications. 2012 , 112, 1055-83	928
1225	Postsynthetic methods for the functionalization of metal-organic frameworks. 2012 , 112, 970-1000	1744
1224	Cu(II)-and Co(II)-containing metal-organic frameworks (MOFs) as catalysts for cyclohexene oxidation with oxygen under solvent-free conditions. 2012 , 2, 3309	80
1223	Cavity-induced enantioselectivity reversal in a chiral metal-organic framework Brønsted acid catalyst. 2012 , 3, 2623	104
1222	Metal-organic framework growth at functional interfaces: thin films and composites for diverse applications. <i>Chemical Society Reviews</i> , 2012 , 41, 2344-81	58.5 493
1221	Hybrid Zeolitic Imidazolate Frameworks: Controlling Framework Porosity and Functionality by Mixed-Linker Synthesis. 2012 , 24, 1930-1936	164
1220	Chromium(III) Terephthalate Metal Organic Framework (MIL-101): HF-Free Synthesis, Structure, Polyoxometalate Composites, and Catalytic Properties. 2012 , 24, 1664-1675	308
1219	Bifunctional Metal Organic Framework Catalysts for Multistep Reactions: MOF-Cu(BTC)-[Pd] Catalyst for One-Pot Heteroannulation of Acetylenic Compounds. 2012 , 354, 1347-1355	88
1218	Single-atom ligand changes affect breathing in an extended metal-organic framework. 2012 , 51, 5671-6	54
1217	Metal-organic frameworks for analytical chemistry: from sample collection to chromatographic separation. 2012 , 45, 734-45	564
1216	Current Status of Metal-Organic Framework Membranes for Gas Separations: Promises and Challenges. 2012 , 51, 2179-2199	405

1215	Novel coordination frameworks incorporating the 4,4'-bipyrazolyl ditopic ligand. 2012 , 51, 5235-45	55
1214	Metal-organic frameworks for separations. 2012 , 112, 869-932	5033
1213	Carbon dioxide capture in metal-organic frameworks. 2012 , 112, 724-81	5017
1212	One-dimensional metal-organic framework photonic crystals used as platforms for vapor sorption. 2012 , 22, 10356	123
1211	Luminescent functional metal-organic frameworks. 2012 , 112, 1126-62	4620
1210	Metal-organic framework-based devices: separation and sensors. 2012 , 22, 10094	156
1209	Fast and high yield post-synthetic modification of metal-organic frameworks by vapor diffusion. 2012 , 48, 1904-6	57
1208	Ionothermal syntheses, crystal structures and properties of three-dimensional rare earth metal-organic frameworks with 1,4-naphthalenedicarboxylic acid. 2012 , 41, 10576-84	39
1207	Ligand design for functional metal-organic frameworks. <i>Chemical Society Reviews</i> , 2012 , 41, 1088-110	58.5 659
1206	Growth of preferential orientation of MIL-53(Al) film as nano-assembler. 2012 , 14, 5487	24
1205	N-rich zeolite-like metal-organic framework with sodalite topology: high CO ₂ uptake, selective gas adsorption and efficient drug delivery. 2012 , 3, 2114	252
1204	Structure and mobility of metal clusters in MOFs: Au, Pd, and AuPd clusters in MOF-74. 2012 , 134, 12807-16	109
1203	Amplified luminescence quenching of phosphorescent metal-organic frameworks. 2012 , 134, 3991-4	200
1202	Selective CO ₂ uptake and inverse CO ₂ /C ₂ H ₂ selectivity in a dynamic bifunctional metal-organic framework. 2012 , 3, 2993	104
1201	Syntheses, structures and physical properties of transition metal-organic frameworks assembled from trigonal heterofunctional ligands. 2012 , 41, 10412-21	53
1200	Hydrocarbon separations in a metal-organic framework with open iron(II) coordination sites. 2012 , 335, 1606-10	1349
1199	Post-modification of a MOF through a fluorescent-labeling technology for the selective sensing and adsorption of Ag ⁺ in aqueous solution. 2012 , 41, 10153-5	41
1198	Promotion of low-humidity proton conduction by controlling hydrophilicity in layered metal-organic frameworks. 2012 , 134, 5472-5	259

1197	Highly monodisperse M(III)-based soc-MOFs (M = In and Ga) with cubic and truncated cubic morphologies. 2012 , 134, 13176-9	122
1196	Tunability of band gaps in metal-organic frameworks. 2012 , 51, 9039-44	123
1195	Capture of carbon dioxide from air and flue gas in the alkylamine-appended metal-organic framework mmen-Mg ₂ (dobpdc). 2012 , 134, 7056-65	844
1194	A high connectivity metal-organic framework with exceptional hydrogen and methane uptake capacities. 2012 , 3, 3032	71
1193	Two- and Three-Dimensional Divalent Metal Coordination Polymers Constructed from a New Tricarboxylate Linker and Dipyridyl Ligands. 2012 , 12, 4649-4657	33
1192	Electrochemical Synthesis of Some Archetypical Zn ²⁺ , Cu ²⁺ , and Al ³⁺ -Metal Organic Frameworks. 2012 , 12, 3489-3498	309
1191	Microporous Metal-Organic Framework Based on Mixing Nanosized Tris((4-carboxyl)-phenylduryl)amine and 4,4'-Bipyridine Ligands for Gas Storage and Separation. 2012 , 12, 2468-2471	37
1190	Structural Diversity of Four Metal-Organic Frameworks Based on Linear Homo/Heterotrimeric Nodes with Furan-2,5-dicarboxylic Acid: Crystal Structures and Luminescent and Magnetic Properties. 2012 , 12, 2602-2612	56
1189	Sulfate-Incorporated Co(II) Coordination Frameworks with Bis-imidazole Bridging Ligands Constructed by Covalent and Noncovalent Interactions. 2012 , 12, 2691-2698	23
1188	Design and Synthesis of Mixed Valent Coordination Networks Containing Pyridine Appended Terpyridyl, Halide, and Dicarboxylates. 2012 , 12, 4264-4274	21
1187	Coordination-chemistry control of proton conductivity in the iconic metal-organic framework material HKUST-1. 2012 , 134, 51-4	328
1186	Construction of 1D and 2D Zinc Coordination Polymers Based on Organic Carboxylate Anions and Flexible Imidazole-Containing Ligand. 2012 , 59, 704-709	10
1185	MOFs for Use in Adsorption Heat Pump Processes. 2012 , 2012, 2625-2634	243
1184	Vanadium Analogues of Nonfunctionalized and Amino-Functionalized MOFs with MIL-101 Topology: Synthesis, Characterization, and Gas Sorption Properties. 2012 , 2012, 2481-2486	41
1183	A Porous Metal-Organic Framework Based on Triazoledicarboxylate Ligands: Synthesis, Structure, and Gas-Sorption Studies. 2012 , 2012, 3562-3568	16
1182	Recent advances in carbon dioxide capture with metal-organic frameworks. 2012 , 2, 239-259	268
1181	Mn(II)-based porous metal-organic framework showing metamagnetic properties and high hydrogen adsorption at low pressure. 2012 , 51, 674-9	72
1180	A robust microporous metal-organic framework constructed from a flexible organic linker for highly selective sorption of methanol over ethanol and water. 2012 , 22, 10352	18

1179	Synthesis and Characterization of Metal Complexes with Mixed 4-Imidazole-Containing Tripodal Ligand and Varied Dicarboxylic Acid. 2012 , 12, 2315-2326	50
1178	High hopes: can molecular electronics realise its potential?. <i>Chemical Society Reviews</i> , 2012 , 41, 4827-59	58.5 258
1177	Functional porous organic polymers for heterogeneous catalysis. <i>Chemical Society Reviews</i> , 2012 , 41, 2083-94	58.5 720
1176	A Series of Highly Connected Metal-Organic Frameworks Based on Triangular Ligands and d10 Metals: Syntheses, Structures, Photoluminescence, and Photocatalysis. 2012 , 12, 2288-2298	247
1175	A catalytically active vanadyl(catecholate)-decorated metal organic framework via post-synthesis modifications. 2012 , 14, 4115	53
1174	Conversion of azide to primary amine via Staudinger reaction in metal-organic frameworks. 2012 , 14, 4137	18
1173	Highly rigid and stable porous Cu(I) metal-organic framework with reversible single-crystal-to-single-crystal structural transformation. 2012 , 14, 4153	15
1172	Recovery and reuse of heteropolyacid catalyst in liquid reaction medium through reversible encapsulation in Cu ₃ (BTC) ₂ metal-organic framework. 2012 , 3, 1847	38
1171	Finding MOFs for highly selective CO ₂ /N ₂ adsorption using materials screening based on efficient assignment of atomic point charges. 2012 , 134, 4313-23	165
1170	Commensurate adsorption of hydrocarbons and alcohols in microporous metal organic frameworks. 2012 , 112, 836-68	929
1169	Metal-organic framework materials as chemical sensors. 2012 , 112, 1105-25	5438
1168	Novel Metal-Organic Framework Based on Cubic and Trisoctahedral Supermolecular Building Blocks: Topological Analysis and Photoluminescent Property. 2012 , 12, 2736-2739	90
1167	A Series of Chiral Metal-Organic Frameworks Based on Oxalyl Retro-Peptides: Synthesis, Characterization, Dichroism Spectra, and Gas Adsorption. 2012 , 12, 3304-3311	41
1166	Intrinsic broad-band white-light emission by a tuned, corrugated metal-organic framework. 2012 , 134, 3983-6	299
1165	Superbase route to supertetrahedral chalcogenide clusters. 2012 , 134, 3619-22	70
1164	A solid solution approach to 2D coordination polymers for CH ₄ /CO ₂ and CH ₄ /C ₂ H ₆ gas separation: equilibrium and kinetic studies. 2012 , 3, 116-120	126
1163	Postsynthetic ligand exchange as a route to functionalization of inert metal-organic frameworks. 2012 , 3, 126-130	357
1162	Tuning the Formations of Metal-Organic Frameworks by Modification of Ratio of Reactant, Acidity of Reaction System, and Use of a Secondary Ligand. 2012 , 12, 281-288	72

1161	Well-studied Cu-BTC still serves surprises: evidence for facile Cu ²⁺ /Cu ⁺ interchange. 2012 , 14, 4383-90	71
1160	An unprecedented (4,10)-connected porous metal-organic framework containing two rare large secondary building units (SBUs). 2012 , 14, 1538	14
1159	N-Heterocyclic Carbene-Like Catalysis by a Metal-Organic Framework Material. 2012 , 2, 1550-1554	100
1158	Solvent-controlled Cd(II) metal-organic frameworks constructed from a tetrapodal silicon-based linker. 2012 , 2, 5543	30
1157	Porous organic molecular materials. 2012 , 14, 1909	188
1156	A pillared metal-organic framework incorporated with 1,2,3-triazole moieties exhibiting remarkable enhancement of CO ₂ uptake. 2012 , 48, 8898-900	73
1155	Patterning techniques for metal organic frameworks. 2012 , 24, 3153-68	102
1154	Engineering ZIF-8 thin films for hybrid MOF-based devices. 2012 , 24, 3970-4	185
1153	Large-scale computational screening of metal-organic frameworks for CH ₄ /H ₂ separation. 2012 , 58, 2078-2084	73
1152	Technico-economical assessment of MFI-type zeolite membranes for CO ₂ capture from postcombustion flue gases. 2012 , 58, 3183-3194	25
1151	Remarkable Adsorption Capacity of CuCl ₂ -Loaded Porous Vanadium Benzenedicarboxylate for Benzothiophene. 2012 , 124, 1224-1227	41
1150	Enhanced Binding Affinity, Remarkable Selectivity, and High Capacity of CO ₂ by Dual Functionalization of a rht-Type Metal-Organic Framework. 2012 , 124, 1441-1444	38
1149	A Highly Porous and Robust (3,3,4)-Connected Metal-Organic Framework Assembled with a 90° Bridging-Angle Embedded Octacarboxylate Ligand. 2012 , 124, 1612-1616	17
1148	High Propene/Propane Selectivity in Isostructural Metal-Organic Frameworks with High Densities of Open Metal Sites. 2012 , 124, 1893-1896	59
1147	Inverse and High CO ₂ /C ₂ H ₂ Sorption Selectivity in Flexible Organic-Inorganic Ionic Crystals. 2012 , 124, 1667-1671	18
1146	Oriented CoSAPO-5 Membranes by Microwave-Enhanced Growth on TiO ₂ -Coated Porous Alumina. 2012 , 124, 2520-2523	2
1145	An Amine-Functionalized Titanium Metal-Organic Framework Photocatalyst with Visible-Light-Induced Activity for CO ₂ Reduction. 2012 , 124, 3420-3423	300
1144	Transport into Metal-Organic Frameworks from Solution Is Not Purely Diffusive. 2012 , 124, 2716-2720	9

1143	Electronic Effects of Linker Substitution on Lewis Acid Catalysis with Metal-Organic Frameworks. 2012 , 124, 4971-4974	41
1142	Solid-Vapor Sorption of Xylenes: Prioritized Selectivity as a Means of Separating All Three Isomers Using a Single Substrate. 2012 , 124, 3994-3997	17
1141	In Situ X-ray Structural Studies of a Flexible Host Responding to Incremental Gas Loading. 2012 , 124, 4997-5000	19
1140	Polyamine-Tethered Porous Polymer Networks for Carbon Dioxide Capture from Flue Gas. 2012 , 124, 7598-7602	53
1139	Nanoparticle Core/Shell Architectures within MOF Crystals Synthesized by Reaction Diffusion. 2012 , 124, 7553-7557	14
1138	Two Zeolite-Type Frameworks in One Metal-Organic Framework with Zn ₂₄ @Zn ₁₀₄ Cube-in-Sodalite Architecture. 2012 , 124, 8666-8669	8
1137	Design of Flexible Lewis Acidic Sites in Porous Coordination Polymers by using the Viologen Moiety. 2012 , 124, 8494-8497	20
1136	An amine-functionalized titanium metal-organic framework photocatalyst with visible-light-induced activity for CO ₂ reduction. 2012 , 51, 3364-7	1100
1135	Transport into metal-organic frameworks from solution is not purely diffusive. 2012 , 51, 2662-6	33
1134	Electronic effects of linker substitution on Lewis acid catalysis with metal-organic frameworks. 2012 , 51, 4887-90	324
1133	Solid-vapor sorption of xylenes: prioritized selectivity as a means of separating all three isomers using a single substrate. 2012 , 51, 3928-31	92
1132	In situ X-ray structural studies of a flexible host responding to incremental gas loading. 2012 , 51, 4913-6	59
1131	Polyamine-tethered porous polymer networks for carbon dioxide capture from flue gas. 2012 , 51, 7480-4	476
1130	Nanoparticle core/shell architectures within MOF crystals synthesized by reaction diffusion. 2012 , 51, 7435-9	122
1129	Two zeolite-type frameworks in one metal-organic framework with Zn ₂₄ @Zn ₁₀₄ cube-in-sodalite architecture. 2012 , 51, 8538-41	56
1128	Design of flexible Lewis acidic sites in porous coordination polymers by using the viologen moiety. 2012 , 51, 8369-72	67
1127	Charge matching on designing neutral cadmium-lanthanide-organic open frameworks for luminescence sensing. 2012 , 7, 1069-73	89
1126	Microwave Synthesis of the CPM-5 Metal Organic Framework. 2012 , 35, 1085-1092	36

1125	Reversible phase transformation and mechanochromic luminescence of Zn(II)-dipyridylamide-based coordination frameworks. 2012 , 18, 5105-12	38
1124	A robust porous metal-organic framework with a new topology that demonstrates pronounced porosity and high-efficiency sorption/selectivity properties of small molecules. 2012 , 18, 5715-23	43
1123	A guest-dependent approach to retain permanent pores in flexible metal-organic frameworks by cation exchange. 2012 , 18, 7896-902	64
1122	Controlling state of breathing of two isorecticular microporous metal-organic frameworks with triazole homologues. 2012 , 18, 10525-9	28
1121	Control of interpenetration and gas-sorption properties of metal-organic frameworks by a simple change in ligand design. 2012 , 18, 8673-80	124
1120	Temperature Induced Interpenetration Suppression of a Couple of Azo-based Isomers with a Flexible Second Ligand. 2012 , 30, 791-797	7
1119	How can a hydrophobic MOF be water-unstable? Insight into the hydration mechanism of IRMOFs. 2012 , 13, 3497-503	99
1118	Quantifying large effects of framework flexibility on diffusion in MOFs: CH ₄ and CO ₂ in ZIF-8. 2012 , 13, 3449-52	164
1117	Adsorption and separation of light gases on an amino-functionalized metal-organic framework: an adsorption and in situ XRD study. 2012 , 5, 740-50	100
1116	Porous metalloporphyrinic frameworks constructed from metal 5,10,15,20-tetrakis(3,5-biscarboxylphenyl)porphyrin for highly efficient and selective catalytic oxidation of alkylbenzenes. 2012 , 134, 10638-45	244
1115	Investigation of the synthesis, activation, and isosteric heats of CO ₂ adsorption of the isostructural series of metal-organic frameworks M ₃ (BTC) ₂ (M = Cr, Fe, Ni, Cu, Mo, Ru). 2012 , 41, 7931-8	165
1114	Photoresponse Characteristics of Archetypal Metal-Organic Frameworks. 2012 , 116, 3112-3121	29
1113	Great expectations: can artificial molecular machines deliver on their promise?. <i>Chemical Society Reviews</i> , 2012 , 41, 19-30	58.5 723
1112	2D CdI ₂ topological layer architecture constructed by Zn(II) and flexible tricarboxylate ligand. 2012 , 38, 315-318	0
1111	Structural isomerism of an anionic nanoporous In-MOF with interpenetrated diamond-like topology. 2012 , 14, 1819	34
1110	Vertex-directed self-assembly of a high symmetry supermolecular building block using a custom-designed porphyrin. 2012 , 3, 2823	86
1109	Effect of Water Adsorption on Retention of Structure and Surface Area of Metal-Organic Frameworks. 2012 , 51, 6513-6519	393
1108	Homochiral metal-organic frameworks for asymmetric heterogeneous catalysis. 2012 , 112, 1196-231	2556

1107	Kinetics and mechanism of metal-organic framework thin film growth: systematic investigation of HKUST-1 deposition on QCM electrodes. 2012 , 3, 1531	145
1106	Imparting functionality to a metal-organic framework material by controlled nanoparticle encapsulation. 2012 , 4, 310-6	1549
1105	Carbon dioxide utilization with C-N bond formation: carbon dioxide capture and subsequent conversion. 2012 , 5, 6602	400
1104	Neutral mononuclear, dinuclear, tetranuclear d7/d10 metal complexes containing bis-pyrazole/pyridine ligands supported by 2,6-bis(3-pyrazolyl)pyridine: synthesis, structure, spectra, and catalytic activity. 2012 , 51, 6517-28	47
1103	Large-scale screening of hypothetical metal-organic frameworks. 2011 , 4, 83-9	882
1102	Effect of the organic functionalization of flexible MOFs on the adsorption of CO ₂ . 2012 , 22, 10266	116
1101	Magnetic Modulation and Cation-Exchange in a Series of Isostructural (4,8)-Connected Metal-Organic Frameworks with Butterfly-like [M ₄ (OH) ₂ (RCO ₂) ₈] Building Units. 2012 , 24, 303-310	61
1100	Synthesis and Adsorption/Catalytic Properties of the Metal Organic Framework CuBTC. 2012 , 16, 106-119	46
1099	One-Dimensional Polymers Constructed with Paddle-Wheel Dinuclear Copper(II) Bridged by 4,4'-Bipyridine. 2012 , 42, 313-317	8
1098	Two New 2-Benzoylbenzoate Metal Complexes with Bapen: Synthesis, Spectroscopic and Crystal Structures. 2012 , 42, 464-471	5
1097	Syntheses, Structure and Properties of Barium(II) Complex with 2,3-Pyrazinedicarboxylic Acid. 2012 , 42, 680-684	4
1096	New Organotin/CuCN/Quinazoline 3D-Supramolecular Coordination Polymers Having Catalytic and Luminescence Activities. 2012 , 22, 780-790	16
1095	Direct Synthesis of CdO Nanoparticles from a Novel Nano-Rods Cadmium(II) 4,4-Difluoro-1-phenyl-1,3-butanedionate Nano Coordination Compound. 2012 , 22, 923-928	10
1094	Hydrothermal synthesis, thermal and luminescent investigations of lanthanide(III) coordination polymers based on the 4,4'-oxybis(benzoate) ligand. 2012 , 108, 1101-1110	31
1093	MIL-101 metal-organic framework: A highly efficient heterogeneous catalyst for oxidative cleavage of alkenes with H ₂ O ₂ . 2012 , 17, 18-22	49
1092	Structure-activity relationships of simple molecules adsorbed on CPO-27-Ni metal-organic framework: In situ experiments vs. theory. 2012 , 182, 67-79	65
1091	Generation of covalently functionalized hierarchical IRMOF-3 by post-synthetic modification. 2012 , 181-182, 740-745	30
1090	Regeneration of Na-ETS-10 using microwave and conductive heating. 2012 , 75, 282-288	14

1089	Coordination polymers based on trinuclear heterometallic pivalates and polypyridines: Synthesis, structure, sorption and magnetic properties. 2012 , 380, 201-210	26
1088	Four novel alkaline-earth metal coordination polymers with networks controlled by the diverse coordination modes of amino-sulfonate ligand: Synthesis, crystal structures and luminescent properties. 2012 , 384, 117-124	11
1087	New two-dimensional metal-organic frameworks constructed from 1H-benzimidazole-5,6-dicarboxylic acid with luminescent studies. 2012 , 384, 105-110	10
1086	Two new 3-D photoluminescence metal-organic frameworks based on cubane Cu ₄ I ₄ clusters as tetrahedral nodes. 2012 , 384, 287-292	13
1085	Cadmium(II) and lanthanum(III) coordination architectures with anthracene-9,10-dicarboxylate: Crystal structures and photoluminescent properties. 2012 , 385, 58-64	7
1084	Amino-acid based coordination polymers. 2012 , 389, 183-190	30
1083	Effect of aliphatic dicarboxylate tether on topology in luminescent cadmium coordination polymers containing bis(4-pyridylformyl)piperazine. 2012 , 389, 191-201	13
1082	Zn-MOF assisted dehydrogenation of ammonia borane: Enhanced kinetics and clean hydrogen generation. 2012 , 37, 3633-3638	56
1081	MOF-5 composites exhibiting improved thermal conductivity. 2012 , 37, 6109-6117	109
1080	Effects of structural modifications on the hydrogen storage capacity of MOF-5. 2012 , 37, 5777-5783	22
1079	Syntheses, structures, and luminescent properties of three novel two-dimensional lanthanide coordination polymers with mixed aromatic carboxylate ligands. 2012 , 16, 100-103	17
1078	Facile synthesis of highly luminescent nanowires of a terbium-based metal-organic framework by an ultrasonic-assisted method and their application as a luminescent probe for selective sensing of organoamines. 2012 , 17, 147-150	43
1077	An unusual self-penetrated metal-organic framework from mixed ligands: Synthesis, structure and magnetism. 2012 , 19, 27-30	25
1076	A cadmium phenylenediacetate isonicotinate network coordination polymer with new topology via in situ amide cleavage. 2012 , 19, 31-35	12
1075	Unusual Cd ₂ (COO) ₄ Cl ₂ building blocks for the construction of a dia or ths-type metal-organic framework. 2012 , 20, 30-32	1
1074	Novel semiconducting metal-organic framework: Synthesis, structural characterisation and electrical conductivity studies of manganese based two dimensional coordination polymer. 2012 , 20, 269-272	15
1073	DFT investigation of hydroperoxide decomposition over copper and cobalt sites within metal-organic frameworks. 2012 , 286, 95-102	20
1072	Adsorption of CH ₄ and CO ₂ on Zr-metal organic frameworks. 2012 , 366, 120-124	82

1071	Epitaxially grown metal-organic frameworks. 2012 , 15, 110-116	106
1070	Two coordination polymers of manganese(II) isophthalate and their preparation, structures, and magnetic properties. 2012 , 185, 37-41	7
1069	Hydrothermal synthesis of zeolitic imidazolate framework-67 (ZIF-67) nanocrystals. 2012 , 82, 220-223	397
1068	A quantitative structure activity relationship approach to probe the influence of the functionalization on the drug encapsulation of porous metal-organic frameworks. 2012 , 157, 124-130	68
1067	CO ₂ /CH ₄ , CH ₄ /H ₂ and CO ₂ /CH ₄ /H ₂ separations at high pressures using Mg ₂ (dobdc). 2012 , 151, 481-487	103
1066	Fabrication of a CO ₂ -selective membrane by stepwise liquid-phase deposition of an alkylether functionalized pillared-layered metal-organic framework [Cu ₂ L ₂ P] _n on a macroporous support. 2012 , 150, 76-82	85
1065	Reactive adsorption of acidic gases on MOF/graphite oxide composites. 2012 , 154, 107-112	165
1064	Phase-selective synthesis and phase-conversion of porous aluminum-benzenetricarboxylates with microwave irradiation. 2012 , 152, 235-239	44
1063	MIL-100(V) [A mesoporous vanadium metal organic framework with accessible metal sites. 2012 , 157, 18-23	76
1062	Large scale fluorine-free synthesis of hierarchically porous iron(III) trimesate MIL-100(Fe) with a zeolite MTN topology. 2012 , 157, 137-145	240
1061	Reprint of: CO ₂ /CH ₄ , CH ₄ /H ₂ and CO ₂ /CH ₄ /H ₂ separations at high pressures using Mg ₂ (dobdc). 2012 , 157, 94-100	34
1060	Anions behaviors for the dimensionalities of coordination polymers based on poly(imidazole) ligands. 2012 , 1011, 134-139	7
1059	Metal- and anion-directed assemblies of CuII, CoII, NiII, and ZnII coordination polymers based on a bent dipyrindyl ligand 4-amino-3,5-bis(3-pyridyl)-1,2,4-triazole and malonic acid. 2012 , 1017, 65-71	5
1058	MOF @ MEMS: Design optimization for high sensitivity chemical detection. 2012 , 168, 256-262	44
1057	Structural assemblies of four Cd(II) coordination polymers based on 5-methylisophthalic acid. 2012 , 14, 335-340	6
1056	Synthesis, characterization, and luminescence properties of magnesium coordination networks synthesized using an isophthalate linker. 2012 , 37, 42-47	6
1055	Adsorptive removal of naproxen and clofibrac acid from water using metal-organic frameworks. 2012 , 209-210, 151-7	324
1054	A metal-organic framework with highly polar pore surfaces: selective CO ₂ adsorption and guest-dependent on/off emission properties. 2012 , 18, 237-44	61

1053	Fluorinated metal-organic frameworks: advantageous for higher H ₂ and CO ₂ adsorption or not?. 2012 , 18, 688-94	86
1052	A microporous metal-organic framework for highly selective separation of acetylene, ethylene, and ethane from methane at room temperature. 2012 , 18, 613-9	188
1051	Energy-efficient dehumidification over hierarchically porous metal-organic frameworks as advanced water adsorbents. 2012 , 24, 806-10	237
1050	Digital microfluidic high-throughput printing of single metal-organic framework crystals. 2012 , 24, 1316-20	79
1049	Remarkable adsorption capacity of CuCl ₂ -loaded porous vanadium benzenedicarboxylate for benzothiophene. 2012 , 51, 1198-201	162
1048	Enhanced binding affinity, remarkable selectivity, and high capacity of CO ₂ by dual functionalization of a rht-type metal-organic framework. 2012 , 51, 1412-5	398
1047	A highly porous and robust (3,3,4)-connected metal-organic framework assembled with a 90° bridging-angle embedded octacarboxylate ligand. 2012 , 51, 1580-4	101
1046	High propene/propane selectivity in isostructural metal-organic frameworks with high densities of open metal sites. 2012 , 51, 1857-60	348
1045	Inverse and high CO ₂ /C ₂ H ₂ sorption selectivity in flexible organic-inorganic ionic crystals. 2012 , 51, 1635-9	86
1044	Oriented CoSAPO-5 membranes by microwave-enhanced growth on TiO ₂ -coated porous alumina. 2012 , 51, 2470-3	24
1043	Functionalization of silicon nanowire surfaces with metal-organic frameworks. 2012 , 5, 109-116	55
1042	Synthesis, crystal structures and catalytic properties of two 1D cobalt(II) coordination polymers. 2012 , 37, 17-23	19
1041	Synthesis, Crystal Structures, Thermal and Luminescent Properties of Rare Earth Metal Complexes with 1,2,4,5-Benzenetetracarboxylic Acid. 2012 , 42, 192-198	10
1040	Zinc(II), Cadmium(II) and Copper(II) Complexes of a Pyridine Containing Tetrazole Ligand: Synthesis, Crystal Structures and Spectral Properties. 2013 , 43, 266-274	0
1039	Solvents influence on sizes of channels in three fry topological Mn(II)-MOFs based on metal-carboxylate chains: syntheses, structures and magnetic properties. 2013 , 15, 8125	63
1038	Two New Coordination Polymers of Manganese(II) with O/O- and N/O-Donor Ligands: Synthesis, Structure, Luminescence Study and Thermal Behavior. 2013 , 23, 736-742	5
1037	Polycatenated Bilayer Structure Containing Honeycomb-like 63 Layers. 2013 , 23, 766-770	
1036	Crystal structure of cobalt(II) 1,12-dodecanedioate trihydrate: A new layered coordination network. 2013 , 54, 474-478	3

1035	pH controlled supramolecular structures of new silver(I) complexes based on 2-sulfoterephthalic acid and 4,4'-bipyridine. 2013 , 407, 216-222	6
1034	Atom-Economic Synthesis of Optically Active Warfarin Anticoagulant over a Chiral MOF Organocatalyst. 2013 , 355, 2538-2543	28
1033	Porous chromatographic materials as substrates for preparing synthetic nuclear explosion debris particles. 2013 , 298, 1885-1898	7
1032	A robust molecular porous material with high CO ₂ uptake and selectivity. 2013 , 135, 10950-3	192
1031	CO ₂ /CH ₄ Separation in Ion-Exchanged Zeolite-like Metal Organic Frameworks with Sodalite Topology (sod-ZMOFs). 2013 , 117, 15647-15658	18
1030	Two Series of Luminescent Flexible Polycarboxylate Lanthanide Coordination Complexes with Double Layer and Rectangle Metallomacrocyclic Structures. 2013 , 13, 3374-3380	26
1029	Synthesis, structure and luminescent recognition properties of cerium(IV) coordination polymers based on pyridine-2,6-dicarboxylic acid. 2013 , 99, 257-267	17
1028	Adsorption of hydrogen sulphide on Metal-Organic Frameworks. 2013 , 3, 14737	40
1027	One-Pot Multifunctional Catalysis with NNN-Pincer Zr-MOF: Zr Base Catalyzed Condensation with Rh-Catalyzed Hydrogenation. 2013 , 5, 3092-3100	50
1026	pH-Dependent cobalt(II) frameworks with mixed 3,3',5,5'-tetra(1H-imidazol-1-yl)-1,1'-biphenyl and 1,3,5-benzenetricarboxylate ligands: synthesis, structure and sorption property. 2013 , 15, 9537	41
1025	Solvothermal Synthesis, Structural Diversity, and Properties of Alkali Metal Organic Frameworks Based on V-shaped Ligand. 2013 , 13, 3785-3793	23
1024	CdS-decorated UiO-66(NH ₂) nanocomposites fabricated by a facile photodeposition process: an efficient and stable visible-light-driven photocatalyst for selective oxidation of alcohols. 2013 , 1, 11473	229
1023	Determination of tetracycline in milk by using nucleotide/lanthanide coordination polymer-based ternary complex. 2013 , 50, 447-52	105
1022	A combined experimental and quantum chemical study of CO ₂ adsorption in the metal-organic framework CPO-27 with different metals. 2013 , 4, 3544	142
1021	Tris(2-pyridylborate) (Tpyb) metal complexes: synthesis, characterization, and formation of extrinsically porous materials with large cylindrical channels. 2013 , 52, 9440-8	20
1020	A Designed Three-Dimensional Porous Hydrogen-Bonding Network Based on a Metal-Organic Polyhedron. 2013 , 13, 3843-3846	13
1019	Carborane-Based Metal-Organic Framework with High Methane and Hydrogen Storage Capacities. 2013 , 25, 3539-3543	98
1018	Fluid bed adsorption of carbon dioxide on immobilized polyethylenimine (PEI): Kinetic analysis and breakthrough behavior. 2013 , 223, 795-805	50

1017	A Highly Chemical and Thermal Stable Porous Metal-Organic Framework with Unusual 5-Connected zfy Topology. 2013 , 13, 3271-3274	14
1016	A hybrid zeolitic imidazolate framework membrane by mixed-linker synthesis for efficient CO ₂ capture. 2013 , 49, 600-2	78
1015	Two homochiral organocatalytic metal organic materials with nanoscopic channels. 2013 , 49, 7693-5	47
1014	Engineering the optical response of the titanium-MIL-125 metal-organic framework through ligand functionalization. 2013 , 135, 10942-5	535
1013	A metal-organic framework stabilizes an occluded photocatalyst. 2013 , 19, 11194-8	57
1012	A Cu(I) metal-organic framework with 4-fold helical channels for sensing anions. 2013 , 4, 3678	244
1011	Synthesis and integration of Fe-soc-MOF cubes into colloidosomes via a single-step emulsion-based approach. 2013 , 135, 10234-7	228
1010	Tuning structural topologies of four Ni(II) coordination polymers through modifying the substitute group of organic ligand. 2013 , 15, 6191	61
1009	Structure-directing roles of auxiliary polycarboxylate ligands in the formation of Zn(II) and Cd(II) coordination polymers based on a flexible N,N'-di(3-pyridyl)dodecanediamide. 2013 , 15, 6264	25
1008	Porous ionic crystals modified by post-synthesis of K ₂ [Cr ₃ O(OOCH) ₆ (etpy) ₃] ₂ [SiW ₁₂ O ₄₀] ₃ ·8H ₂ O through single-crystal-to-single-crystal transformation. 2013 , 52, 9320-6	23
1007	A flexible Eu(III)-based metal-organic framework: turn-off luminescent sensor for the detection of Fe(III) and picric acid. 2013 , 42, 12403-9	291
1006	Chemical reactions catalyzed by metalloporphyrin-based metal-organic frameworks. 2013 , 18, 7279-308	79
1005	Laminated adsorbents with very rapid CO ₂ uptake by freeze-casting of zeolites. 2013 , 5, 2669-76	57
1004	Sorption of benzene vapors to flexible metal-organic framework [Zn ₂ (bdc) ₂ (dabco)]. 2013 , 77, 205-211	6
1003	Adsorption and diffusion in thin films of nanoporous metal-organic frameworks: ferrocene in SURMOF Cu ₂ (ndc) ₂ (dabco). 2013 , 15, 9295-9	53
1002	Solvent Influence on Sizes of Channels in Three New Co(II) Complexes, Exhibiting an Active Replaceable Coordinated Site. 2013 , 13, 66-73	50
1001	Design of microporous mixed zinc-nickel triazolate metal-organic frameworks with functional ligands. 2013 , 15, 9336	10
1000	From (3,6)-Connected kgd, chiral anh to (3,8)-connected tfz-d Nets in Low Nuclear Metal Cluster-Based Networks with Triangular Pyridinedicarboxylate Ligand. 2013 , 13, 1618-1625	33

999	One-pot synthesis of metal-organic framework@SiO ₂ core-shell nanoparticles with enhanced visible-light photoactivity. 2013 , 42, 13948-54	53
998	Mathematical modeling and experimental breakthrough curves of carbon dioxide adsorption on metal organic framework CPM-5. 2013 , 47, 9372-80	25
997	Theoretical Limits of Hydrogen Storage in Metal-Organic Frameworks: Opportunities and Trade-Offs. 2013 , 25, 3373-3382	177
996	Bio-inspired ultrasound assisted construction of synthetic sponges. 2013 , 1, 7547	17
995	Solid-state covalent capture of CO ₂ by using N-heterocyclic carbenes. 2013 , 19, 11134-8	27
994	CO ₂ Adsorption in Porous Materials. 2013 , 535-558	1
993	Origins of CH ₄ /CO ₂ Adsorption Selectivity in Zeolitic Imidazolate Frameworks: A van der Waals Density Functional Study. 2013 , 117, 14642-14651	14
992	A Water and Thermally Stable Metal-Organic Framework Featuring Selective CO ₂ Adsorption. 2013 , 13, 4125-4130	45
991	Bifunctional pyrazolate-carboxylate ligands for isorecticular cobalt and zinc MOF-5 analogs with magnetic analysis of the {Co ₄ (μ ₃ -O)} node. 2013 , 15, 9757	82
990	Synthesis of metal-organic frameworks: A mini review. 2013 , 30, 1667-1680	320
989	Facile preparation of porous polybenzimidazole networks and adsorption behavior of CO ₂ gas, organic and water vapors. 2013 , 4, 961-968	64
988	Crystal structure, thermal decomposition, photoluminescence and magnetic studies of a new two dimensional metal-organic framework constructed from infinite chains of edge-sharing CeO ₆ (H ₂ O) ₂ (NO ₃) polyhedron with bullet shaped channels. 2013 , 35, 140-143	10
987	Aminated graphite oxides and their composites with copper-based metal-organic framework: in search for efficient media for CO ₂ sequestration. 2013 , 3, 9932	52
986	Design and characterization of liquidlike POSS-based hybrid nanomaterials synthesized via ionic bonding and their interactions with CO ₂ . 2013 , 29, 12234-42	40
985	Metal-organic frameworks as a tunable platform for designing functional molecular materials. 2013 , 135, 13222-34	693
984	Syntheses, structures, luminescent sensor, and magnetism of a series of coordination polymers constructed by 3-carboxy-1-(4?-carboxy-benzyl)-2-oxidopyridinium. 2013 , 15, 7360	19
983	Using hinged ligands to target structurally flexible copper(II) MOFs. 2013 , 15, 9663	22
982	Hydrothermal synthesis and structural characterization of a new one-dimensional ladder-shaped metal-organic framework Zn(H ₃ Tci)(4,4?-bipy) _{0.5} · H ₂ O (H ₃ Tci = tri(2-carboxyethyl)isocyanurate, 4,4?-bipy = 4,4?-bipyridine). 2013 , 39, 316-320	1

- 981 Hydrothermal synthesis, crystal structural, and thermal properties of a 1D zinc coordination polymer based on benzoate and flexible bis(benzimidazole) ligands. **2013**, 39, 222-224
- 980 Two dinuclear copper(II) complexes based on 5,6-dimethylbenzimidazole ligands: synthesis, crystal structures, and catalytic properties. **2013**, 38, 85-91 27
- 979 Formation of 0D M5L2 helicate cage and 1D loop-and-chain complexes: stepwise assembly and catalytic activity. **2013**, 15, 7106 21
- 978 Recent advances in metal-organic framework-based mixed matrix membranes. **2013**, 8, 1692-704 83
- 977 Syntheses, structures, fluorescence and magnetism of six lanthanide metal-organic frameworks based on silicon-centered tetrahedral ligand. **2013**, 29, 196-200 6
- 976 Effect of catenation and basicity of pillared ligands on the water stability of MOFs. **2013**, 42, 15421-6 96
- 975 A porous metal-organic framework constructed from carboxylate-pyrazolate shared heptanuclear zinc clusters: synthesis, gas adsorption, and guest-dependent luminescent properties. **2013**, 52, 10368-74 75
- 974 Porous and robust lanthanide metal-organoboron frameworks as water tolerant Lewis acid catalysts. **2013**, 52, 10286-91 74
- 973 Interfacial growth of large-area single-layer metal-organic framework nanosheets. **2013**, 3, 2506 89
- 972 Carbon dioxide adsorption in microwave-synthesized metal organic framework CPM-5: Equilibrium and kinetics study. **2013**, 175, 85-91 58
- 971 Efficient solvent regeneration of Basolite C300 used in the liquid-phase adsorption of dibenzothiophene. **2013**, 113, 216-220 15
- 970 Fundamentals, Principles, and Concepts of Molecular Magnetism and Spintronics. **2013**, 131-189 6
- 969 Near-infrared emitters based on post-synthetic modified Ln(3+)-IRMOF-3. **2013**, 49, 5019-21 48
- 968 Toluene-assisted synthesis of RHO-type zeolitic imidazolate frameworks: synthesis and formation mechanism of ZIF-11 and ZIF-12. **2013**, 42, 16608-13 84
- 967 Production of Formic Acid via Hydrogenation of CO₂ over a Copper-Alkoxide-Functionalized MOF: A Mechanistic Study. **2013**, 117, 17650-17658 82
- 966 Self-assembled hybrid tinphosphonate nanoparticles with bimodal porosity: an insight towards the efficient and selective catalytic process for the synthesis of bioactive 1,4-dihydropyridines under solvent-free conditions. **2013**, 1, 11210 32
- 965 Microscopic Origins of Enhanced Gas Adsorption and Selectivity in Mixed-Linker Metal-Organic Frameworks. **2013**, 117, 17131-17142 18
- 964 Thermodynamic study of sorption processes of gaseous benzene and water on metal-organic framework [Zn₄(dmf)(ur)₂(ndc)₄]. **2013**, 67, 128-133 8

963	A trigonal prismatic ligand in the metal-mediated self-assembly of one- and two-dimensional metallosupramolecular polymers. 2013 , 52, 9309-19	18
962	Two-step crystal engineering of porous nets from [Cr ₃ (β-O)(RCO ₂) ₆] and [Cu ₃ (β-Cl)(RNH ₂) ₆ Cl ₆] molecular building blocks. 2013 , 49, 8154-6	38
961	A highly porous interpenetrated MOF-5-type network based on bipyrazolate linkers. 2013 , 15, 9352	9
960	Parallel chain polyrotaxane, layer, and diamondoid divalent metal coordination polymers containing para aromatic dicarboxylate and bis(4-pyridylmethyl)piperazine ligands. 2013 , 406, 65-72	10
959	Fine tuning of the coordination environments and magnetic properties of first row transition metal ions with 5-methylisophthalate and 2,2'-bipyridine/phenanthroline. 2013 , 50, 219-228	7
958	Syntheses, structures and luminescence of a series of 4d ⁸ f heterometallic coordination polymers constructed by 4,4'-oxybis(benzoic acid). 2013 , 35, 217-220	2
957	Structural diversity and properties of four complexes with 4-acyl pyrazolone derivative. 2013 , 55, 209-215	14
956	Adsorptive removal of nitrogen-containing compounds from fuel by metal-organic frameworks. 2013 , 22, 869-875	26
955	Complexation of different metals with a novel N-donor bridging receptor and Hirshfeld surfaces analysis. 2013 , 397, 1-9	51
954	Naphthalene-Based Microporous Polyimides: Adsorption Behavior of CO ₂ and Toxic Organic Vapors and Their Separation from Other Gases. 2013 , 117, 24428-24437	51
953	Adsorption of Acetone Vapor by Cu-BTC: An Experimental and Computational Study. 2013 , 117, 26156-26165	26
952	Application of Metal-Organic Frameworks in Sample Pretreatment. 2013 , 41, 1297-1300	33
951	Dipyridylamide isomer influenced dimensionality in luminescent cadmium phthalate coordination polymers with similar tetranuclear clusters and ribbon motifs. 2013 , 404, 97-104	13
950	Metal-organic frameworks for upgrading biogas via CO ₂ adsorption to biogas green energy. <i>Chemical Society Reviews</i> , 2013 , 42, 9304-32	58.5 295
949	Two photoluminescent metal-organic frameworks with highly-connected topological nets. 2013 , 15, 10563	9
948	Carbon-Based Nanoporous Networks as Media for the Separation of CO ₂ /CH ₄ Mixtures: A Molecular Dynamics Approach. 2013 , 117, 19373-19381	21
947	High-surface area ceramic-derived boron-nitride and its hydrogen uptake properties. 2013 , 1, 1014-1017	23
946	Molecular Mechanisms of Water-Mediated Proton Transport in MIL-53 Metal-Organic Frameworks. 2013 , 117, 19508-19516	41

945	Microwave synthesis and characterization of MOF-74 (M=Ni, Mg) for gas separation. 2013 , 180, 114-122	164
944	Metal Organic Frameworks for Natural Gas Storage in Vehicles. 2013 , 85, 1726-1733	18
943	Synthesis, Crystal Structure and Magnetic Characterization of a Series of CuII LnIII Heterometallic [Ln = La, Ce, Pr, Nd and Sm) Metal Organic Compounds with an Unusual Single Crystal to Single Crystal Phase Transition. 2013 , 13, 4735-4745	16
942	Silver salt facilitated transport membranes for olefin/paraffin separations: Carrier instability and a novel regeneration method. 2013 , 447, 177-189	70
941	Characterization of the Thermodynamic Stability of Solvated Metal Organic Framework Polymorphs Using Molecular Simulations. 2013 , 117, 20636-20642	25
940	A flexible porous Cu(II) bis-imidazolate framework with ultrahigh concentration of active sites for efficient and recyclable CO2 capture. 2013 , 49, 11728-30	50
939	Grafting of hydrophilic ethylene glycols or ethylenediamine on coordinatively unsaturated metal sites in MIL-100(Cr) for improved water adsorption characteristics. 2013 , 407, 145-152	58
938	MOF-76: from a luminescent probe to highly efficient U(VI) sorption material. 2013 , 49, 10415-7	214
937	Synthesis, crystal structure and magnetic properties of a novel copper(II) complex with sulfoisophthalic acid. 2013 , 1054-1055, 134-142	4
936	Synthesis and Structural Characterization of a Series of Novel Zn(II)-based MOFs with Pyridine-2,5-dicarboxylate Linkers. 2013 , 13, 5305-5315	30
935	Synthesis and gas sorption properties of halogen-doped mesoporous chromium(iii) terephthalate. 2013 , 62, 157-162	6
934	Stacking Faults and Mechanical Behavior beyond the Elastic Limit of an Imidazole-Based Metal Organic Framework: ZIF-8. 2013 , 4, 3377-81	19
933	High-rate synthesis of Cu-BTC metal-organic frameworks. 2013 , 49, 11518-20	102
932	Encapsulation of polyoxometalates within layered metal organic frameworks with topological and pore control. 2013 , 15, 9340	6
931	Vapor phase detection of nitroaromatic and nitroaliphatic explosives by fluorescence active metal organic frameworks. 2013 , 15, 9745	87
930	Efficient and tunable white-light emission of metal-organic frameworks by iridium-complex encapsulation. 2013 , 4, 2717	454
929	Synthesis, crystal structures and properties of transition metal coordination polymers based on a rigid triazole dicarboxylic acid. 2013 , 3, 25175	16
928	A systematic study of fluorescence-based detection of nitroexplosives and other aromatics in the vapor phase by microporous metal-organic frameworks. 2013 , 19, 15964-71	179

927	Insight in the activity and diastereoselectivity of various Lewis acid catalysts for the citronellal cyclization. 2013 , 305, 118-129	45
926	Cooperative effect of unsheltered amide groups on CO ₂ adsorption inside open-ended channels of a zinc(II)-organic framework. 2013 , 52, 3962-8	71
925	Metal-organic frameworks in fuel cell technologies. 2013 , 8, 577-597	122
924	Post-synthetic modification of metal-organic framework thin films using click chemistry: the importance of strained C-C triple bonds. 2013 , 29, 15958-64	70
923	Molecularly designed architectures--the metalloligand way. <i>Chemical Society Reviews</i> , 2013 , 42, 9403-53 58.5	189
922	Adsorption of C ₁ -4 Alcohols in Zeolitic Imidazolate Framework-8: Effects of Force Fields, Atomic Charges, and Framework Flexibility. 2013 , 117, 25628-25635	60
921	A Highly Symmetric Metal-Organic Framework Based on a Propeller-Like Ru-Organic Metalloligand for Photocatalysis and Explosives Detection. 2013 , 13, 5466-5472	97
920	CHAPTER 1:Introduction. 1-5	1
919	CO ₂ /N ₂ separations with mixed-matrix membranes containing Mg ₂ (dobdc) nanocrystals. 2013 , 6, 3565	164
918	Bio-inspired polydopamine: a versatile and powerful platform for covalent synthesis of molecular sieve membranes. 2013 , 135, 17679-82	359
917	Effect of auxiliary ligands on cobalt(II) coordination polymers with 5-(imidazol-1-ylmethyl)isophthalate. 2013 , 52, 1268-1275	18
916	Lanthanide metal-organic frameworks constructed by asymmetric 2-nitrobiphenyl-4,4'-dicarboxylate ligand: syntheses, structures, luminescence and magnetic investigations. 2013 , 15, 9020	15
915	Metal-organic framework thin films for protective coating of Pd-based optical hydrogen sensors. 2013 , 1, 8146	42
914	New Functionalized Metal-Organic Frameworks MIL-47-X (X = Cl, Br, CH ₃ , CF ₃ , OH, OCH ₃): Synthesis, Characterization, and CO ₂ Adsorption Properties. 2013 , 117, 22784-22796	72
913	Tetraphenyladamantane-based microporous polyimide for adsorption of carbon dioxide, hydrogen, organic and water vapors. 2013 , 49, 3321-3	69
912	Silica SOS@HKUST-1 composite microspheres as easily packed stationary phases for fast separation. 2013 , 1, 3276	125
911	Connection between thermodynamics and dynamics of simple fluids in highly attractive pores. 2013 , 29, 14527-35	13
910	High-Capacity Gas Storage by a Microporous Oxalamide-Functionalized NbO-Type Metal-Organic Framework. 2013 , 13, 5001-5006	64

909	High xenon/krypton selectivity in a metal-organic framework with small pores and strong adsorption sites. 2013 , 169, 176-179	80
908	Construction of Cu(II) coordination polymers based on semi-rigid tetrahedral pyridine ligands. 2013 , 3, 25065	12
907	Computational screening of porous carbons, zeolites, and metal organic frameworks for desulfurization and decarburization of biogas, natural gas, and flue gas. 2013 , 59, 2928-2942	62
906	Assembly of a unique octa-nuclear copper cluster-based metal-organic framework with highly selective CO ₂ adsorption over N ₂ and CH ₄ . 2013 , 49, 11433-5	41
905	Dynamic desorption of CO ₂ and CH ₄ from amino-MIL-53(Al) adsorbent. 2013 , 19, 1235-1244	24
904	Effect of pillar modules and their stoichiometry in 3D porous frameworks of Zn(II) with [Fe(CN) ₆] ³⁻ : high CO ₂ /N ₂ and CO ₂ /CH ₄ selectivity. 2013 , 52, 11385-97	22
903	Tuning the Moisture and Thermal Stability of Metal-Organic Frameworks through Incorporation of Pendant Hydrophobic Groups. 2013 , 13, 4760-4768	83
902	Syntheses, structural diversities and magnetic properties of four new Co(II) coordination polymers with phthalic acid derivatives. 2013 , 51, 283-291	12
901	Aromatizing olefin metathesis by ligand isolation inside a metal-organic framework. 2013 , 135, 14916-9	58
900	Intercalation of chiral molecules into layered metal-organic frameworks: a strategy to synthesize homochiral MOFs. 2013 , 49, 10644-6	28
899	Synthesis of Structured Porous Polymers with Acid and Basic Sites and Their Catalytic Application in Cascade-Type Reactions. 2013 , 25, 981-988	125
898	Lanthanide coordination polymers with hexa-carboxylate ligands derived from cyclotriphosphazene as bridging linkers: synthesis, thermal and luminescent properties. 2013 , 15, 7732	20
897	New highly ordered hydrophobic siloxane-based coordination polymers. 2013 , 54, 6096-6104	18
896	A novel magnetic recyclable photocatalyst based on a core-shell metal-organic framework Fe ₃ O ₄ @MIL-100(Fe) for the decolorization of methylene blue dye. 2013 , 1, 14329	307
895	Application of Metal-Organic Frameworks in Fine Chemical Synthesis. 2013 , 293-331	2
894	Fabrication of homochiral metal-organic framework membrane for enantioseparation of racemic diols. 2013 , 59, 4364-4372	58
893	Wings waving: coordinating solvent-induced structural diversity of new Cu(II) flexible MOFs with crystal to crystal transformation and gas sorption capability. 2013 , 15, 9513	16
892	Construction of porous Mn(II)-based metal-organic frameworks by flexible hexacarboxylic acid and rigid coligands. 2013 , 15, 8320	26

891	Realization of both high hydrogen selectivity and capacity in a guest responsive metal-organic framework. 2013 , 1, 13502	7
890	A facile synthesis of UiO-66, UiO-67 and their derivatives. 2013 , 49, 9449-51	1013
889	Effect of ligand geometry on selective gas-adsorption: the case of a microporous cadmium metal organic framework with a V-shaped linker. 2013 , 49, 7055-7	30
888	Remarkable CO ₂ /CH ₄ selectivity and CO ₂ adsorption capacity exhibited by polyamine-decorated metal-organic framework adsorbents. 2013 , 49, 6873-5	106
887	A highly porous 4,4-paddlewheel-connected NbO-type metal-organic framework with a large gas-uptake capacity. 2013 , 42, 11304-11	31
886	Cubic Cesium Hydrogen Silicododecatungstate with Anisotropic Morphology and Polyoxometalate Vacancies Exhibiting Selective Water Sorption and Cation-Exchange Properties. 2013 , 25, 905-911	33
885	Building multiple adsorption sites in porous polymer networks for carbon capture applications. 2013 , 6, 3559	115
884	Azide-functionalized lanthanide-based metal-organic frameworks showing selective CO ₂ gas adsorption and postsynthetic cavity expansion. 2013 , 52, 3588-90	27
883	Fast and Accurate Electrostatics in Metal Organic Frameworks with a Robust Charge Equilibration Parameterization for High-Throughput Virtual Screening of Gas Adsorption. 2013 , 4, 3056-3061	72
882	Sorption and breathing properties of difluorinated MIL-47 and Al-MIL-53 frameworks. 2013 , 181, 175-181	28
881	Highly dispersed Au nanoparticles immobilized on Zr-based metal-organic frameworks as heterostructured catalyst for CO oxidation. 2013 , 1, 14294	75
880	Thiadiazole-functional porous metal-organic framework as luminescent probe for Cd ²⁺ . 2013 , 15, 8883	32
879	Tuning the formation of MOFs by pH influence: X-ray structural variations and Hirshfeld surface analyses of 2-amino-5-nitropyridine with cadmium chloride. 2013 , 15, 1772	172
878	Metal organic framework-organic polymer monolith stationary phases for capillary electrochromatography and nano-liquid chromatography. 2013 , 779, 96-103	111
877	Highly sensitive and selective fluoride detection in water through fluorophore release from a metal-organic framework. 2013 , 3, 2562	91
876	Synthesis, structure, and properties of a new layered coordination polymer based on zinc(II) carboxylate. 2013 , 39, 549-552	8
875	Hydrothermal synthesis, crystal structure of three novel complexes based on thiabendazole and 1,4-benzenedicarboxylate ligands. 2013 , 39, 641-649	1
874	Controllable syntheses of porous metal-organic frameworks: encapsulation of Ln(III) cations for tunable luminescence and small drug molecules for efficient delivery. 2013 , 19, 14591-9	122

873	An alternative pathway for the synthesis of isocyanato- and urea-functionalised metal-organic frameworks. 2013 , 42, 8249-58	12
872	Functionalized metal-organic framework MIL-101 for CO ₂ capture: multi-scale modeling from ab initio calculation and molecular simulation to breakthrough prediction. 2013 , 15, 10358	25
871	Two isostructural amine-functionalized 3D self-penetrating microporous MOFs exhibiting high sorption selectivity for CO ₂ . 2013 , 15, 2057	27
870	Chiral porous metal-organic frameworks from chiral building units with different metrics. 2013 , 15, 10161	6
869	A hollow ceramic fiber supported ZIF-8 membrane with enhanced gas separation performance prepared by hot dip-coating seeding. 2013 , 1, 13046	51
868	Synthesis, topology and energy analysis of crystalline resorcinol-based oligophenylene molecules with various symmetries. 2013 , 15, 6845	5
867	One-dimensional channel-structured Eu-MOF for sensing small organic molecules and Cu ²⁺ ion. 2013 , 1, 11043	304
866	Two rare indium-based porous metal-metalloporphyrin frameworks exhibiting interesting CO ₂ uptake. 2013 , 15, 9320	43
865	Fe ²⁺ -based layered porous coordination polymers and soft encapsulation of guests via redox activity. 2013 , 1, 3675	29
864	Dye encapsulation and release by a zinc-porphyrin pincer system through morphological transformations. 2013 , 3, 3815	7
863	Thermal stability and crystallochemical analysis for CoII-based coordination polymers with TPP and TPPS porphyrins. 2013 , 15, 4181	30
862	Highly selective sorption and unique packing geometries of unsaturated hydrocarbons and CO ₂ in a fluorine-substituted organic-inorganic ionic crystal. 2013 , 42, 16209-15	16
861	Fabrication of new metal phosphonates from tritopic trisphosphonic acid containing methyl groups and auxiliary ligands: syntheses, structures and gas adsorption properties. 2013 , 15, 1860	34
860	Luminescent Properties and Applications of Metal-Organic Frameworks. 2013 , 27-88	16
859	Guest responsivity of a two-dimensional coordination polymer incorporating a cholesterol-based co-ligand. 2013 , 42, 15893-7	4
858	Temperature-controlled synthesis and luminescent properties of two novel coordination polymers modeled by hexa-carboxylate ligand derived from cyclotriphosphazene. 2013 , 42, 2588-93	29
857	A magnesium-based multifunctional metal-organic framework: synthesis, thermally induced structural variation, selective gas adsorption, photoluminescence and heterogeneous catalytic study. 2013 , 42, 13912-22	38
856	Nanoporous metal formates for krypton/xenon separation. 2013 , 49, 10959-61	37

855	Two cadmium(II) coordination polymers constructed by carboxylate and pyridine mixed ligands: synthesis, structure and luminescent properties. 2013 , 15, 9738	38
854	Pillar substitution modulates CO ₂ affinity in "mmo" topology networks. 2013 , 49, 9809-11	39
853	Various crystal structures based on 4,4'-(diethynylanthracene-9,10-diyl) dibenzoic acid: from 0D dimer to 3D net framework. 2013 , 15, 8273	14
852	Significant improvement of surface area and CO ₂ adsorption of CuBTC via solvent exchange activation. 2013 , 3, 17065	66
851	A mixed dicarboxylate strut approach to enhancing catalytic activity of a de novo urea derivative of metal-organic framework UiO-67. 2013 , 49, 10920-2	81
850	A chiral porous cobalt-organic framework based on reinforced sinusoidal-like SBUs involving in situ-generated formate. 2013 , 37, 2473	16
849	Long range structural and textural changes in [Zn(bdc)(ted) _{0.5}] upon spontaneous dispersion of LiCl and hysteretic adsorption and desorption of carbon dioxide and hydrogen. 2013 , 1, 2343	10
848	Oxalate-extended Cd ²⁺ -ethylhydrazidate coordination polymers: synthesis, structure and fluorescence property. 2013 , 15, 5919	19
847	"Single nickel source" in situ fabrication of a stable homochiral MOF membrane with chiral resolution properties. 2013 , 49, 10569-71	84
846	A photoluminescent microporous metal organic anionic framework for nitroaromatic explosive sensing. 2013 , 1, 4525	113
845	Monitoring the Activation of a Flexible Metal-Organic Framework Using Structurally Sensitive Spectroscopy Techniques. 2013 , 117, 20068-20077	15
844	Enhancing CO ₂ adsorption of a Zn-phosphonocarboxylate framework by pore space partitions. 2013 , 49, 78-80	50
843	Thermodynamic screening of metal-substituted MOFs for carbon capture. 2013 , 15, 4573-81	52
842	Quantum cryo-sieving for hydrogen isotope separation in microporous frameworks: an experimental study on the correlation between effective quantum sieving and pore size. 2013 , 1, 3244	43
841	Inorganic topochemistry. Vapor-induced solid state transformations of luminescent, three-coordinate gold(I) complexes. 2013 , 4, 311-318	76
840	Siloxane D ₄ capture by hydrophobic microporous materials. 2013 , 1, 7885	23
839	Coordination modulation induced and ultrasonic-assisted synthesis of size-controlled microporous metal-imidazolate framework crystals with enhanced adsorption performance. 2013 , 15, 8250	15
838	Positioning an individual metal-organic framework particle using a magnetic field. 2013 , 1, 42-45	42

- 837 Discrepant gas adsorption in isostructural heterometallic coordination polymers: strong dependence of metal identity. **2013**, 15, 78-85 32
- 836 Metal dependent dimensionality in sulfate coordination polymers containing 3-pyridylisonicotinamide. **2013**, 15, 860-866 11
- 835 Porous carbon nanosheets with precisely tunable thickness and selective CO₂ adsorption properties. **2013**, 6, 3740 151
- 834 New Cd²⁺, Pb²⁺ complexes with acylhydrazidate molecules from in situ acylation reactions. **2013**, 42, 8771-80 23
- 833 An unprecedented dynamic porous metal-organic framework assembled from fivefold interlocked closed nanotubes with selective gas adsorption behaviors. **2013**, 49, 1820-2 43
- 832 Synthesis and magnetic properties of a 3-D nickel hydroxide capped by succinate. **2013**, 1, 1099-1104 2
- 831 Multifunctional NH₂-mediated zirconium metal-organic framework as an efficient visible-light-driven photocatalyst for selective oxidation of alcohols and reduction of aqueous Cr(VI). **2013**, 42, 13649-57 299
- 830 A 3D chiral Co(II) coordination polymer featuring unique self-interpenetrating topology. **2013**, 27, 76-78 7
- 829 Bifunctional iridium-(2-aminoterephthalate)Zr-MOF chemoselective catalyst for the synthesis of secondary amines by one-pot three-step cascade reaction. **2013**, 299, 137-145 136
- 828 Adsorption and Diffusion of Small Alcohols in Zeolitic Imidazolate Frameworks ZIF-8 and ZIF-90. **2013**, 117, 3169-3176 111
- 827 Synthesis and self-assembly of monodispersed metal-organic framework microcrystals. **2013**, 8, 69-72 98
- 826 Design and construction of coordination polymers with mixed-ligand synthetic strategy. **2013**, 257, 1282-1305 648
- 825 Mn(II) metal-organic frameworks based on Mn₃ clusters: from 2D layer to 3D framework by the pillaring approach. **2013**, 15, 1613 57
- 824 Auxiliary ligand-directed and counter anion-templated effects on coordination networks based on semirigid 2-aminodiacetic terephthalic acid ligand. **2013**, 15, 911-921 29
- 823 Thermally Enhancing the Surface Areas of Yamamoto-Derived Porous Organic Polymers. **2013**, 25, 12-16 49
- 822 Construction of metal-organic coordination polymers derived from 4-substituted tetrazole-benzoate ligands: synthesis, structure, luminescence, and magnetic behaviors. **2013**, 15, 3402 33
- 821 Four 3D Cd(II)-Based Metal Organic Hybrids with Different N,N'-Donor Spacers: Syntheses, Characterizations, and Selective Gas Adsorption Properties. **2013**, 13, 731-739 51
- 820 Kinetic water stability of an isostructural family of zinc-based pillared metal-organic frameworks. **2013**, 29, 633-42 138

819	Adsorptive removal of hazardous materials using metal-organic frameworks (MOFs): a review. 2013 , 244-245, 444-56	938
818	A luminescent metal-organic framework as a turn-on sensor for DMF vapor. 2013 , 52, 710-3	313
817	A rhombus channel metal-organic framework comprised of Sr ²⁺ and thiophene-2, 5-dicarboxylic acid exhibiting novel dielectric bistability. 2013 , 15, 1264	41
816	Molecular dynamics simulations of metal-organic frameworks as membranes for gas mixtures separation. 2013 , 428, 241-250	32
815	Fine-tuning pore size by shifting coordination sites of ligands and surface polarization of metal-organic frameworks to sharply enhance the selectivity for CO ₂ . 2013 , 135, 562-5	291
814	Control of interpenetration in S-containing metal-organic frameworks for selective separation of transition metal ions. 2013 , 49, 1088-90	63
813	Mechanochemical synthesis of a fluorenone-based metal organic framework with polarized fluorescence: an experimental and computational study. 2013 , 1, 997-1004	52
812	Energy transfer from quantum dots to metal-organic frameworks for enhanced light harvesting. 2013 , 135, 955-8	294
811	Efficient electrosynthesis of highly active Cu ₃ (BTC) ₂ -MOF and its catalytic application to chemical reduction. 2013 , 168, 57-64	151
810	Diffusion of small molecules in metal organic framework materials. 2013 , 110, 026102	89
809	Applications of Nanomaterial-Based Membranes in Pollution Control. 2013 , 43, 2389-2438	18
808	Heat capacities and thermodynamic properties of Ni ₉ (btz) ₁₂ (DMA) ₆ (NO ₃) ₆ . 2013 , 111, 1603-1608	2
807	Adsorption study of CO ₂ , CH ₄ , N ₂ , and H ₂ O on an interwoven copper carboxylate metal-organic framework (MOF-14). 2013 , 392, 331-336	50
806	Enhanced selectivity of CO ₂ over CH ₄ in sulphonate-, carboxylate- and iodo-functionalized UiO-66 frameworks. 2013 , 42, 4730-7	143
805	Partially fluorinated MIL-47 and Al-MIL-53 frameworks: influence of functionalization on sorption and breathing properties. 2013 , 15, 3552-61	56
804	Crystalline structural intermediates of a breathing metal-organic framework that functions as a luminescent sensor and gas reservoir. 2013 , 19, 1891-5	73
803	Electric field-induced assembly of monodisperse polyhedral metal-organic framework crystals. 2013 , 135, 34-7	126
802	A rare alb-4,8-Cmce metal-coordination network based on tetrazolate and phosphonate functionalized 1,3,5,7-tetraphenyladamantane. 2013 , 15, 1235	37

801	Wet-lithographic processing of coordination compounds. 2013 , 257, 2456-2467	17
800	Structures, Sorption Characteristics, and Nonlinear Optical Properties of a New Series of Highly Stable Aluminum MOFs. 2013 , 25, 17-26	227
799	Tuning zinc(II) coordination polymers based on bis(1,2,4-triazol-1-yl)ethane and 5-substituted 1,3-benzenedicarboxylates: syntheses, structures and properties. 2013 , 15, 471-481	50
798	Construction and Properties of Six Metal-Organic Frameworks Based on the Newly Designed 2-(p-Bromophenyl)-Imidazole Dicarboxylate Ligand. 2013 , 13, 367-376	70
797	Three cobalt(II) coordination polymers based on V-shaped aromatic polycarboxylates and rigid bis(imidazole) ligand: syntheses, crystal structures, physical properties and theoretical studies. 2013 , 15, 1377	46
796	A New 6-Connected Ni(II) Complex With 5-methylisophthalic Acid: Synthesis, Crystal Structure, and Properties. 2013 , 43, 279-282	
795	Oxidation and Reduction of Various Substrates Over a Pd(II) Containing Post-Synthesis Metal Organic Framework. 2013 , 143, 122-125	6
794	Mechanism of Alcohol-Water Separation in Metal-Organic Frameworks. 2013 , 117, 4124-4130	28
793	Work function based gas sensing with Cu-BTC metal-organic framework for selective aldehyde detection. 2013 , 187, 142-146	53
792	Synthesis, Characterization, and Adsorption Studies of Nickel(II), Zinc(II), and Magnesium(II) Coordination Frameworks of BTTB. 2013 , 13, 1075-1081	39
791	Scalable room-temperature conversion of copper(II) hydroxide into HKUST-1 (Cu ₃ (btc) ₂). 2013 , 25, 1052-7	167
790	Nanostructured Zeolitic Imidazolate Frameworks Derived from Nanosized Zinc Oxide Precursors. 2013 , 13, 1002-1005	47
789	Metal-organic framework thin films: crystallite orientation dependent adsorption. 2013 , 52, 3402-5	81
788	Evaluation of cation-exchanged zeolite adsorbents for post-combustion carbon dioxide capture. 2013 , 6, 128-138	276
787	A Luminescent Metal-Organic Framework as a Turn-On Sensor for DMF Vapor. 2013 , 125, 738-741	99
786	Designed Synthesis of Functionalized Two-Dimensional Metal-Organic Frameworks with Preferential CO ₂ Capture. 2013 , 78, 86-91	45
785	A Series of 1D, 2D, and 3D Coordination Polymers Based on Flexible 3-Carboxy-1-Carboxymethyl-2-Oxidopyridinium and Different N-Donor Ligands: Syntheses, Structures, and Luminescent Properties. 2013 , 2013, 280-292	26
784	Effect of Spin-Crossover-Induced Pore Contraction on CO ₂ Host Interactions in the Porous Coordination Polymers [Fe(pyrazine)M(CN) ₄] (M = Ni, Pt). 2013 , 2013, 511-519	10

783	Impact of Reaction Conditions on the Structures of Nickel(II) Complexes Based on 3-(4-Carboxyphenyl)propionic Acid. 2013 , 639, 129-133	3
782	Solvent-regulated assemblies of silver(I) and cadmium(II) supramolecular complexes with versatile tripyridyltriazole multidentate ligands. 2013 , 395, 212-217	8
781	Four cadmium coordination polymers modulated by bis(triazol-1-yl)propane and inorganic anions: Syntheses, structures and properties. 2013 , 52, 1009-1015	9
780	Cadmium and zinc chain and cluster-based layered coordination polymers prepared from flexible-arm aromatic ortho-dicarboxylic acids and 4-pyridylnicotinamide. 2013 , 1038, 86-94	7
779	Syntheses and characterization of four 2D metal-organic networks based on rigid imidazolate/carboxylate functionalized ligand Effect of the torsion of the ligands on crystal structures and properties. 2013 , 394, 117-126	3
778	Polycatenation and photoluminescence of two zinc coordination polymers based on arched and linear mixed ligands. 2013 , 37, 206-210	4
777	Unique (3,8)-connected lanthanide arenesulfonate metal-organic frameworks containing benzimidazole-5,6-dicarboxylic acid co-ligand: Syntheses, structures and luminescence. 2013 , 206, 85-90	9
776	UiO-66-NH-(AO) MOFs with a New Ligand BDC-NH-(CN) for Efficient Extraction of Uranium from Seawater. 2021 , 13, 57831-57840	4
775	Effect of Activation Process on the Performance of ZIF-8 Membrane for Propylene/Propane Separation. 2022 , 94, 166	1
774	Energy efficient ethylene purification in a commercially viable ethane-selective MOF. 2021 , 282, 120126	1
773	Linker Contribution toward Stability of Metal-Organic Frameworks under Ionizing Radiation.	4
772	Proton-Conducting Hydrogen-Bonded Organic Frameworks. 4431-4453	16
771	Three-in-One C ₂ H ₂ -Selectivity-Guided Adsorptive Separation across an Isoreticular Family of Cationic Square-Lattice MOFs. 2022 , 134, e202114132	
770	Understanding the Effects of Binders in Gas Sorption and Acidity of Aluminium Fumarate Extrudates. 2021 ,	1
769	Underlying solvent-based factors that influence permanent porosity in porous liquids. 1	2
768	Research progress on porous low dielectric constant materials. 2021 , 139, 106320	1
767	Metal-Organic Frameworks. 2022 , 637-666	0
766	On the virial expansion of model adsorptive systems.	

765	Methane separation and capture from nitrogen rich gases by selective adsorption in microporous Materials: A review. 2021 , 283, 120206	0
764	Membrane Separation of Gaseous Hydrocarbons by Semicrystalline Multiblock Copolymers: Role of Cohesive Energy Density and Crystallites of the Polyether Block. 2021 , 13,	0
763	Hierarchical Porous Zeolitic Imidazolate Frameworks: Microporous to Macroporous Regime. 2022 , 431-447	1
762	MOF-inorganic nanocomposites: Bridging a gap with inorganic materials. 2021 , 26, 101283	1
761	Interface-confined multi-layered reaction centers between Ce-MOFs and Fe ₃ O ₄ @C for heterogeneous electro-Fenton at wide pH 3-9: Mediation of Ce ³⁺ /Ce ⁴⁺ and oxygen vacancy. 2021 , 433, 133597	2
760	Phase engineering of metal-organic frameworks. e145	2
759	Self-supported 2D Fe-doped Ni-MOF nanosheets as highly efficient and stable electrocatalysts for benzylamine oxidation. 2021 , 578, 152065	2
758	UiO-66 metal-organic frameworks in water treatment: A critical review. 2021 , 125, 100904	13
757	Three-in-One C ₂ H ₂ -Selectivity-Guided Adsorptive Separation across an Isoreticular Family of Cationic Square-Lattice MOFs. 2021 ,	2
756	Pyrazine-interior-embodied MOF-74 for selective CO ₂ adsorption. e17528	0
755	Synthesis of Graphene Oxide Membrane for Separation of p-Xylene and o-Xylene by Pervaporation.	0
754	A robust ethane-selective metal-organic framework with nonpolar pore surface for efficient C ₂ H ₆ /C ₂ H ₄ separation. 2021 , 133786	3
753	Metal-organic framework-derived Mn ₃ O ₄ nanostructure on reduced graphene oxide as high-performance supercapacitor electrodes. 2021 , 897, 162640	1
752	Two-dimensional zinc(II) and copper(I) coordination polymers for photoluminescence. 2021 , 132031	0
751	Modeling Multicomponent Gas Adsorption in Nanoporous Materials with Two Versions of Nonlocal Classical Density Functional Theory. 2021 , 60, 17016-17025	
750	Highly efficient absorption of methyl tert-butyl ether with ionic liquids. 2021 , 282, 120108	1
749	Water Modulated Framework Flexibility in NH ₂ -MIL-125: Highlights from ¹³ C Nuclear Magnetic Resonance. 1-11	0
748	Synchrotron-based infrared microspectroscopy under high pressure: An introduction. 2021 , 6, 068202	6

747	Extraction of parabens by melamine sponge with determination by high-performance liquid chromatography. 2021 ,	2
746	Multi-interactive Coordination Network Featuring a Ligand with Topologically Isolated p Orbitals. 2021 , 60, 17858-17864	0
745	Ultrasonic-Assisted Synthesis of Fe-BTC-PEG Metal-Organic Complex: An Effective and Safety Nanocarrier for Anticancer Drug Delivery.. 2021 , 6, 33419-33427	1
744	Designed synthesis of porous carbons for the separation of light hydrocarbons. 2021 , 42, 130-130	2
743	Interaction of TFSI-Imidazole and TFSI-Pyridinium ILs with MOFs from Molecular Docking Simulation. 2021 , 185-194	
742	Investigation on a Zr-based metal-organic framework (MOF-801) for the high-performance separation of light alkanes. 2021 , 57, 13008-13011	0
741	Advanced microporous membranes for H ₂ /CH ₄ separation: Challenges and perspectives. 2021 , 1, 100011	4
740	Chapter 6: Mixed Matrix Membranes (MMMs) for Gas Separation. 2021 , 137-158	
739	Structural resolution and mechanistic insight into hydrogen adsorption in flexible ZIF-7.. 2021 , 12, 15620-15631	4
738	Low-dose electron microscopy of nanoporous materials. 2021 ,	
737	Recent advances in structures and applications of coordination polymers based on cyclohexanepolycarboxylate ligands.. 2022 ,	3
736	Molecule in Soft-Crystal at Ground and Excited States: Theoretical Approach. 2022 , 51, 100482	1
735	Hydrogen-Bonded Metal-Nucleobase Frameworks for Efficient Separation of Xenon and Krypton.. 2022 ,	1
734	Enhancement of Carbon Dioxide Adsorption Over Alkali-cations Borosilicate ZSM-5 Zeolite. 1	
733	The First Sulfate-Pillared Hybrid Ultramicroporous Material, SOFOUR-1-Zn, and Its Acetylene Capture Properties. 2022 , 134, e202116145	
732	The First Sulfate-Pillared Hybrid Ultramicroporous Material, SOFOUR-1-Zn, and its Acetylene Capture Properties.. 2021 ,	3
731	Robust Nickel-Based Metal-Organic Framework for Highly Efficient Methane Purification and Capture.. 2022 ,	0
730	Shell-like Xenon Nano-Traps within Angular Anion-Pillared Layered Porous Materials for Boosting Xe/Kr Separation.	2

729	Hydrogen-Bonded Metal-Nucleobase Frameworks for Efficient Separation of Xenon and Krypton.	0
728	Efficient adsorption separation of xylene isomers in zeolitic imidazolate framework-67@MCF hybrid materials. 2022 , 307, 122819	0
727	Linking theoretical and simulation approaches to study fluids in nanoporous media: Molecular dynamics and classical density functional theory. 2022 , 250, 117383	0
726	Syntheses of two copper metal-organic frameworks with tri(1,2,4-triazole) and biscalboxylate and graphene oxide composites for decomposition of dye by visible-light driven and ultrasonic assisted. 2022 , 307, 122864	1
725	Synthesis and applications of metal-organic frameworks and graphene-based composites: A review. 2022 , 214, 115645	3
724	Carbon Dioxide Emissions, Capture, Storage and Utilization: Review of Materials, Processes and Technologies. 2022 , 89, 100965	26
723	Collaborative pore partition and pore surface fluorination within a metal-organic framework for high-performance C ₂ H ₂ /CO ₂ separation. 2022 , 432, 134433	6
722	Maximizing acetylene packing density for highly efficient C ₂ H ₂ /CO ₂ separation through immobilization of amine sites within a prototype MOF. 2022 , 431, 134184	7
721	Low temperature heat capacity and thermodynamic functions of Al-MIL-53-X metal-organic frameworks. 2022 , 5, 100027	1
720	Effects of different alkali metal cations in FAU zeolites on the separation performance of CO ₂ /N ₂ O. 2022 , 431, 134257	3
719	Mixed-Linker Metal-Organic frameworks for carbon and hydrocarbons capture under moist conditions. 2022 , 433, 134447	0
718	Taming structure and modulating carbon dioxide (CO) adsorption isosteric heat of nickel-based metal organic framework (MOF-74(Ni)) for remarkable CO capture.. 2021 , 612, 132-145	3
717	Gas adsorption in the topologically disordered Fe-BTC framework. 2021 , 9, 27019-27027	2
716	Ethylene and Ethane Transport Properties of Hydrogen-Stable Ag ⁺ -Based Facilitated Transport Membranes.	
715	Crystalline Rearranged CD-MOF Particles Obtained via Spray-Drying Synthesis Applied to Inhalable Formulations with High Drug Loading. 2022 , 22, 1143-1154	0
714	Two transition complexes based on 1H-benzimidazole-5,6-dicarboxylic acid: Synthesis, structure and photocatalytic degradation of dyes. 2021 , 1-15	
713	A robust ethane-selective hypercrosslinked porous organic adsorbent with high ethane capacity.	3
712	Photoresponsive Metal-Organic Frameworks: Tailorable Platforms of Photoswitches for Advanced Functions.	1

711	Modulating the porosity of carbons for improved adsorption of hydrogen, carbon dioxide, and methane: a review.		1
710	Porous Assembly of Metallo-Supramolecule and Polyoxometalate via Ionic Complexation with Vapor Sorption Properties.		0
709	Zeolite-Catalyzed Carbonylation of Dimethyl Ether. 2022 , 763-791		0
708	A facile method to enhance the output performance of triboelectric nanogenerators based on coordination polymers by modulating terminal coordination groups. 2021 , 24, 192-198		2
707	Investigation on the catalytic behavior of a novel thulium-organic framework with a planar tetranuclear {Tm} cluster as the active center for chemical CO fixation.. 2021 ,		1
706	Development of a Metal-Organic Framework/Textile Composite for the Rapid Degradation and Sensitive Detection of the Nerve Agent VX. 2022 , 34, 1269-1277		5
705	Effective functionalization of porous polymer fillers to enhance CO ₂ /N ₂ separation performance of mixed-matrix membranes. 2022 , 647, 120309		2
704	AIE-active macromolecules: designs, performances, and applications. 2021 , 13, 8-43		1
703	Supramolecular assemblies of organo-functionalised hybrid polyoxometalates: from functional building blocks to hierarchical nanomaterials. <i>Chemical Society Reviews</i> , 2021 ,	58.5	14
702	Patterned microfluidic devices for rapid screening of metal-organic frameworks yield insights into polymorphism and non-monotonic growth.. 2022 ,		0
701	Recent advances in nanostructured nonoxide materials Borides, borates, chalcogenides, phosphides, phosphates, nitrides, carbides, alloys, and metal-organic frameworks. 2022 , 329-368		1
700	Embedding in-plane aligned MOF nanoflakes in silk fibroin for highly enhanced output performance of triboelectric nanogenerators. 2022 , 10, 799-807		5
699	A Microporous Metal-Organic Framework with Channels Constructed from Nonpolar Aromatic Rings for the Selective Separation of Ethane/Ethylene Mixtures.. 2021 , e202100482		1
698	Metal-Organic Frameworks for NO Adsorption and Their Applications in Separation, Sensing, Catalysis, and Biology.. 2022 , e2105484		3
697	Synthesis and structural analysis of beta cobalt hydroxide (βCoOH) nanosheets derived from ZIF 67 metal-organic framework. 2022 , 9, 025002		
696	Machine Learning Prediction of Metal-Organic Framework Guest Accessibility from Linker and Metal Chemistry. 2021 ,		5
695	Shell-like Xenon Nano-Traps within Angular Anion-Pillared Layered Porous Materials for Boosting Xe/Kr Separation.. 2022 ,		4
694	Which factors govern the adsorption of peptides to Zr(IV)-based metal-organic frameworks?.		0

693	Metal-organic frameworks for active food packaging. A review.. 2022 , 20, 1-17	4
692	Nonthermal plasma catalysis enhances simultaneous removal of toluene and ozone over TiO ₂ @ZIF-8. 2022 , 332, 130107	0
691	Tuning the switching pressure in square lattice coordination networks by metal cation substitution. 2022 , 3, 1240-1247	0
690	Superhydrophobic zeolitic imidazolate framework with suitable SOD cage for effective CH ₄ / N ₂ adsorptive separation in humid environments.	0
689	Enhanced activity and sulfur resistance of Cu- and Fe-modified activated carbon for the reduction of NO by CO from regeneration gas. 2022 , 12, 737-749	
688	Phase equilibrium and dissociation enthalpies of CO ₂ /cyclopentane hydrates in presence of salts for water treatment and CO ₂ capture: New experimental data and modeling. 2022 , 556, 113410	1
687	Organophosphorus chemical security from a peaceful perspective: sustainable practices in its synthesis, decontamination and detection. 2022 , 24, 585-613	4
686	Molecular simulation of adsorption and diffusion of H ₂ /CO ₂ /CO /MeOH /EtOH mixture into the zeolitic imidazolate framework ZIF-8. 2022 , 333, 111723	0
685	Porous composite membrane based on organic substrate for molecular sieving: Current status, opportunities and challenges. 2022 , 2, 100027	0
684	Energy Storage Application. 2022 , 49-62	
683	Nitrogen-doped porous carbon derived from bimetallic zeolitic imidazolate frameworks for electrochemical Li ⁺ /Na ⁺ storage. 2022 , 26, 683-693	0
682	Membrane-based air dehumidification: A comparative review on membrane contactors, separative membranes and adsorptive membranes. 2022 , 41, 121-144	0
681	Gating effect for gas adsorption in microporous materials-mechanisms and applications.. <i>Chemical Society Reviews</i> , 2022 ,	58.5 5
680	Machine-Learning Prediction of Metal-Organic Framework Guest Accessibility from Linker and Metal Chemistry.	
679	Inducing Structural Diversity in Anionic Metal-Tetraoxolene Coordination Polymers Using Templating Methyl Viologen Counteranions. 2022 , 22, 1319-1332	0
678	Binary Solvent System Composed of Polar Protic and Polar Aprotic Solvents for Controlling the Dimensionality of MOFs in the Solvothermal Synthesis. 2022 , 22, 1276-1282	3
677	Decisive Role of Spin-States and Spin-Coupling in Dictating Selective O ₂ Adsorption in Chromium(II) MOF.. 2022 ,	0
676	Quasi Solid-Liquid Reaction Strategy to In Situ Synthesize the Conductive MOF Film with Ordered Submicron Macropores for Gas Sensing. 2101908	1

675	Immobilization of Lewis Basic Sites into a Stable Ethane-Selective MOF Enabling One-Step Separation of Ethylene from a Ternary Mixture.. 2022 ,	11
674	Construction of crystalline cadmium complex based on 1,4,5,8-naphthalene diimide derivative and photocatalytic degradation about organic dyes.	2
673	Proton Conductive Lanthanide-Based Metal-Organic Frameworks: Synthesis Strategies, Structural Features, and Recent Progress.. 2022 , 380, 9	2
672	1D/2D/3D Reversible Dimensional Transformation in Cu(II) Coordination Polymer.. 2022 ,	0
671	Vanadium-based metal-organic frameworks and their derivatives for electrochemical energy conversion and storage.	6
670	1D/2D/3D Reversible Dimensional Transformation in Cu(II) Coordination Polymer.	
669	Sensitive humidity sensors based on ionically conductive metal-organic frameworks for breath monitoring and non-contact sensing. 2022 , 26, 101391	3
668	An anion-functionalized zinc-organic framework for efficient C ₂ H ₂ /C ₂ H ₄ separation. 2022 , 137, 109198	0
667	MOF Membranes for CO ₂ Capture: Past, Present and Future. 2022 , 2, 100026	6
666	Preparation of an electrochemical sensor based on a HKUST-1/CoFe ₂ O ₄ /SiO ₂ -modified carbon paste electrode for determination of azaperone. 2022 , 175, 107199	2
665	Ethylene and ethane transport properties of hydrogen-stable Ag ⁺ -based facilitated transport membranes. 2022 , 647, 120300	2
664	Selective sensing of NH ₃ and CH ₂ O molecules by novel 2D porous hexagonal boron oxide (B ₃ O ₃) monolayer: A DFT approach. 2022 , 29, 101767	0
663	Preparation of hollow mesoporous prussian blue coated with mesoporous silica shell nanocubes for photothermal therapy and drug carrier. 2022 , 312, 131697	0
662	Enhanced 2-D MOFs nanosheets/PIM-PMDA-OH mixed matrix membrane for efficient CO ₂ separation. 2022 , 10, 107274	3
661	Gas sensing based on metal-organic frameworks: Concepts, functions, and developments.. 2022 , 429, 128321	3
660	A review of lithium-O ₂ /CO ₂ and lithium-CO ₂ batteries: Advanced electrodes/materials/electrolytes and functional mechanisms. 2022 , 95, 106964	5
659	Facile synthesis of Fe-BTC and electrochemical enhancement effect for sunset yellow determination. 2022 , 5, 100084	2
658	Evaluating diabetic ketoacidosis a MOF sensor for fluorescence imaging of phosphate and pH.. 2022 ,	3

657	Fe-Based metal-organic frameworks as functional materials for battery applications.	1
656	Robust and Radiation-Resistant Hofmann-Type Metal-Organic Frameworks for Record Xenon/Krypton Separation.. 2022 ,	11
655	Atomic-Level Structure of Mesoporous Hexagonal Boron Nitride Determined by High-Resolution Solid-State Multinuclear Magnetic Resonance Spectroscopy and Density Functional Theory Calculations.	3
654	Redox-Hopping-Based Charge Transport Mediated by Ru(II)-Polypyridyl Species Immobilized in a Mesoporous Metal-Organic Framework. 2022 , 3,	
653	Recent Advancement of the Current Aspects of g-C ₃ N ₄ for its Photocatalytic Applications in Sustainable Energy System.. 2022 , e202100310	3
652	Recent Advances in Mixed-Matrix Membranes for Light Hydrocarbon (C-C) Separation.. 2022 , 12,	0
651	Nanoporous Ce-Based Metal-Organic Framework Nanoparticles for NO Sensing.	0
650	Construction of Pyrazine-Appended 1D and 3D Cobalt(II) Succinate Coordination Polymers: Influence of Solvent on Architectures and Applications in Gas Adsorption and NAC Detection.. 2022 , 7, 5698-5712	1
649	Tin-Cobalt Bimetals in 2D Leaf-Like MOF-Derived Carbon for Advanced Lithium Storage Applications. 2022 , 410, 140036	2
648	Constructing fluorine-doped Zr-MOF films on titanium for antibacteria, anti-inflammation, and osteogenesis.. 2022 , 112699	1
647	Active subsets as a tool for structural characterisation and selection of metal-organic frameworks. 2022 , 179, 424-434	
646	Finite phosphorene derived partial reduction of metal organic framework nanofoams for enhanced lithium storage capability. 2022 , 525, 231025	
645	Synthesis and characterization of nano-sized magnesium 1,4-benzenedicarboxylate metal organic framework via electrochemical method. 2022 , 309, 122970	
644	Advances, challenges, and perspectives of biogas cleaning, upgrading, and utilisation. 2022 , 317, 123085	5
643	Optimizing Host-Guest Selectivity for Ethylbenzene Capture Toward Superior Styrene Purification. 2022 , 34, 197-202	0
642	Flexible Cu ₃ (HHTP) ₂ MOF Membranes for Gas Sensing Application at Room Temperature.	
641	Chemical sensors based on ionically conductive metal-organic frameworks for selective cadaverine detection. 2022 , 10, 5497-5504	
640	CO ₂ Uptake Prediction of Metal-Organic Frameworks Using Quasi-SMILES and Monte Carlo Optimization.	2

- 639 Angstrom-scale ion channels towards single-ion selectivity.. *Chemical Society Reviews*, **2022**, 58.5 11
- 638 General pore features for one-step CH production from a C2 hydrocarbon mixture.. **2022**, 2
- 637 Pd(Fe₃O₄)-on-ZIFs: nanoparticle deposition on (nano-)MOFs from ionic liquids. 1
- 636 Assembly of a coordination polymer with sulphate-capped pentamolybdate units and copper: synthesis, structure, magnetic and catalytic studies.. **2022**, 0
- 635 Electrocataytic water oxidation from a mixed linker MOF based on NU-1000 with an integrated ruthenium-based metallo-linker.
- 634 Electrochemical activation of CO₂ by MOF-(Fe, Ni, Mn) derivatives of 5-aminoisophthalic acid and the thiazole group influence on its catalytic activity. **2022**, 46, 6060-6067 0
- 633 Enrichment of low concentration methane: an overview of ventilation air methane. **2022**, 10, 6397-6413 1
- 632 Preferential adsorption sites for propane/propylene separation on ZIF-8 as revealed by solid-state NMR spectroscopy.. **2022**, 0
- 631 Controllable Synthesis of Hollow ZIF-8 Microspheres Via Interface Reaction with Enhanced CO₂ Adsorption.
- 630 Novel Amine-Functionalized Zinc-Based Metal-Organic Framework for Low-Temperature Chemiresistive Hydrogen Sensing.
- 629 Synergistic Effect of Metal Oxidation States and Surface Acidity Enhanced the Trace Ethylene Adsorption of Ag/ZSM-5.
- 628 Metal-Organic Frameworks as Promising Catalysts for CO₂ Capture and Fixation. **2022**, 207-236 0
- 627 Metal-Organic Framework as a Photocatalyst: Recent Growth in Environmental Applications. **2022**, 595-644
- 626 Strategies for the application of metal-organic frameworks in catalytic reactions.. **2022**, 12, 10114-10125 2
- 625 Pillar[3]triamines: deeper cavity triangular macrocycles for selective hexene isomer separation.. **2022**, 13, 3244-3248 0
- 624 Acoustotemplating: rapid synthesis of freestanding quasi-2D MOF/graphene oxide heterostructures for supercapacitor applications. **2022**, 10, 7058-7072 3
- 623 High-Efficiency Radon Adsorption by Nickel Nanoparticles Supported on Activated Carbon. 1
- 622 Applications of Metal-Organic Framework Materials. **2022**, 2194, 012014

621	Separation of SO and NO with the Zeolite Membrane: Molecular Simulation Insights into the Advantageous NO Dimerization Effect.. 2022 , 38, 2751-2762	0
620	Synthesis of Porous Carbon for Acetone Adsorption: Specific Surface Area, Porous Structure and Oxygen Functional Groups. 2022 , 7,	
619	High- ϵ Polyimide-Based Dielectrics by Introducing a Functionalized Metal-Organic Framework.. 2022 ,	0
618	Graph entropies, enumeration of circuits, walks and topological properties of three classes of isorecticular metal organic frameworks. 2022 , 60, 695-732	2
617	Design and degradation of permanently porous vitamin C and zinc-based metal-organic framework. 2022 , 5,	1
616	Preferential Adsorption Performance of Ethane in a Robust Nickel-Based Metal-Organic Framework for Separating Ethane from Ethylene.. 2022 , 7, 7648-7654	2
615	State of the Art and Prospects in Metal-Organic Framework-Derived Microwave Absorption Materials.. 2022 , 14, 68	7
614	Emerging Separation Applications of Surface Superwettability.. 2022 , 12,	2
613	A Stable Cu(II)-Based Ultramicroporous NKMOF-8-Br with High CH ₄ Uptake for Efficient Separation of CH ₄ /N ₂ Mixtures.	0
612	A Stable Y(III)-Based Amide-Functionalized Metal-Organic Framework for Propane/Methane Separation and Knoevenagel Condensation.. 2022 ,	9
611	Synthetic nanoprobes for biological hydrogen sulfide detection and imaging. 20210008	3
610	Mixed-matrix gas separation membranes for sustainable future: A mini review.	1
609	Creating Optimal Pockets in a Clathrochelate-Based Metal-Organic Framework for Gas Adsorption and Separation: Experimental and Computational Studies.. 2022 ,	9
608	Computational Screening of Metal-Organic Frameworks for Ethylene Purification from Ethane/Ethylene/Acetylene Mixture.. 2022 , 12,	
607	Construction of nanorod structure confined Pt@CeO ₂ catalyst by in-situ encapsulation strategy for low temperature catalytic oxidation of toluene.. 2022 ,	0
606	Metal organic frameworks as versatile platforms for wastewater remediation. 2022 ,	0
605	Metal-organic framework-derived phosphide nanomaterials for electrochemical applications. 2022 , 4, 246-281	5
604	Functional Groups Assisted Tunable Dielectric Permittivity of Guest-Free Zn-Based Coordination Polymers for Gate Dielectrics.. 2022 ,	0

603	UTSA -280 metal-organic framework incorporated 6FDA -polyimide mixed-matrix membranes for ethylene/ethane separation.	1
602	Recent developments in MIL-101 metal organic framework for heterogeneous catalysis. 2022,	0
601	Bromine Vapor Induced Continuous p- to n-Type Conversion of a Semiconductive Metal-Organic Framework Cu[Cu(pdt)].. 2022,	0
600	Highly Selective Mixed Potential Methanol Gas Sensor Based on a CeGdO Solid Electrolyte and Au Sensing Electrode.. 2022,	1
599	Stable Zinc-Based Metal-Organic Framework Photocatalyst for Effective Visible-Light-Driven Hydrogen Production.. 2022, 27,	1
598	Chiral Metal-Organic Frameworks.. 2022,	15
597	Importance of Crystalline and Microporous Structures of MOFs for Application to Petrochemical and Related Processes. 2022, 65, 37-49	
596	Best Practices in the Characterization of MOF@MSN Composites.. 2022,	1
595	Environmentally Benign Biosynthesis of Hierarchical MOF/Bacterial Cellulose Composite Sponge for Nerve Agent Protection.. 2022,	4
594	Zeolites for separation: Fundamental and application. 2022,	3
593	Tailoring Inorganic Halide Perovskite Photocatalysts toward Carbon Dioxide Reduction. 2101058	4
592	The Versatile and Tunable Metal-Organic Framework MOF for Condensate Decontamination. 2022,	
591	Environmentally Benign Biosynthesis of Hierarchical MOF/Bacterial Cellulose Composite Sponge for Nerve Agent Protection.	
590	Flexible Cu(HHTP) MOF Membranes for Gas Sensing Application at Room Temperature.. 2022, 12,	2
589	Current Progress and Scalable Approach toward the Synthesis of 2D Metal-Organic Frameworks. 2102560	1
588	Impact of an Incompatible Atomic Nickel-Incorporated Metal-Organic Framework on Phase Evolution and Electrocatalytic Activity of Ni-Doped Cobalt Phosphide for the Hydrogen Evolution Reaction. 2022, 5, 2975-2992	1
587	Confined and synergistic effects between protonated amines and gases in the frameworks of lanthanum 1,3-propanediaminetetraacetates. 2022, 335, 111813	0
586	Nanoconfinement of an Otherwise Useless Fluorophore in Metal-Organic Frameworks to Elicit and Tune Emission.	0

585	SO/NO Separation Driven by NO Dimerization on SSZ-13 Zeolite Membrane.. 2022 ,	1
584	Chiral membranes for enantiomer separation: a comprehensive review. 2022 , 121034	1
583	The Influence of UiO-66 Metal-Organic Framework Structural Defects on Adsorption and Separation of Hexane Isomers.. 2022 ,	0
582	Enhanced 2-D MOFs nanosheets/PES-g-PEG mixed matrix membrane for efficient CO ₂ separation. 2022 , 180, 79-89	1
581	The structural arrangement of the ligand-metal complex with centered zinc and nickel atoms and their optical features. 2022 , 133010	3
580	Hydrogen crossover through microporous anion exchange membranes for fuel cells. 2022 , 527, 231143	0
579	Ultra-permeable high-selective SAPO-34 membranes for efficient CO ₂ capture. 2022 , 650, 120420	1
578	Electrospun UiO-66-F4/polyacrylonitrile nanofibers for efficient extraction of perfluoroalkyl and polyfluoroalkyl substances in environmental media. 2022 , 430, 128494	2
577	Controllable synthesis of hollow ZIF-8 microspheres via interface reaction with enhanced CO ₂ adsorption. 2022 , 309, 123017	1
576	Machine learning aided high-throughput prediction of ionic liquid@MOF composites for membrane-based CO ₂ capture. 2022 , 650, 120399	1
575	Synthesis of Cu-MOF/CeO ₂ nanocomposite and their evaluation of hydrogen production and cytotoxic activity. 2022 , 18, 1732-1745	1
574	Microporous carbon derived from cotton stalk crop-residue across diverse geographical locations as efficient and regenerable CO ₂ adsorbent with selectivity. 2022 , 60, 101975	1
573	Carbonaceous materials as adsorbents for CO ₂ capture: synthesis and modification. 2022 , 3, 100039	4
572	Fabrication of metal-organic framework-mixed matrix membranes with abundant open metal sites through dual-induction mechanism. 2022 , 290, 120850	2
571	Introduction of MWCNT for enhancing sensitivity of room-temperature mixed-potential type NO sensor attached with Ni-MOF sensing electrode. 2022 , 361, 131736	2
570	Synthesis, characterization and exploration of supramolecular interactions of a Cu(II) based 1D zig-zag coordination polymer: X-ray structure determination and DFT study. 2022 , 536, 120894	0
569	ZnO/ZnSe heterojunction nanocomposites with oxygen vacancies for acetone sensing. 2022 , 906, 164316	1
568	Fabrication of metal-organic framework architectures with macroscopic size: A review. 2022 , 462, 214520	2

567	Controllable synthesis of nickel doped hierarchical zinc MOF with tunable morphologies for enhanced supercapability.. 2022 , 618, 375-385	2
566	Synergistic effect of niobium oxide and cobalt on electromagnetic properties of dodecahedron-carbon composites. 2022 , 311, 123122	
565	Precise regulation of CO ₂ packing pattern in s-block metal doped single-layer covalent organic frameworks for high-performance CO ₂ capture and separation. 2022 , 441, 135903	1
564	Enhancement of bioelectrochemical dioxygen reduction with oxygen-enriching materials. 2022 , 34, 100966	2
563	A strongly hydrophobic ethane-selective metal-organic framework for efficient ethane/ethylene separation. 2022 , 442, 136152	2
562	A three dimensional cobalt-mixed ligands framework with selective adsorption of carbon dioxide. 1-6	0
561	Efficiently Regulating the Electrical Properties of Flexible Fabric-Based Cu ₃ (BTC) ₂ Thin Film by Introducing Various Guest Molecules. 2022 , 9, 2101810	0
560	Impregnation of 1-n-Butyl-3-methylimidazolium Dicyanide [BMIM][DCA] into ZIF-8 as a Versatile Sorbent for Efficient and Selective Separation of CO ₂ . 2022 , 61, 706-715	1
559	Combined Layer-by-Layer/Hydrothermal Synthesis of FeO@MIL-100(Fe) for Ofloxacin Adsorption from Environmental Waters.. 2021 , 11,	1
558	K-Chabazite Zeolite Nanocrystal Aggregates for Highly Efficient Methane Separation.. 2021 , e202116850	0
557	Pore-Space Partition through an Embedding Metal-Carboxylate Chain-Induced Topology Upgrade Strategy for the Separation of Acetylene/Ethylene. 2021 ,	1
556	Self-assembly of 3p-Block Metal-based Metal-Organic Frameworks from Structural Perspective. 2022 , 38, 31-44	0
555	Triggered and controlled release of active gaseous/volatile compounds for active packaging applications of agri-food products: A review.. 2021 ,	2
554	Metal-Organic Framework Based Hydrogen-Bonding Nanotrap for Efficient Acetylene Storage and Separation.. 2021 ,	25
553	Metal-Organic Framework Based Gas Sensors.. 2021 , e2104374	18
552	Boosting Dimethylamine Formation Selectivity in a Membrane Reactor by In Situ Water Removal. 2022 , 61, 307-316	1
551	Comparative Study on the Flame Retardancy and Retarding Mechanism of Rare Earth (La, Ce, and Y)-Based Organic Frameworks on Epoxy Resin.. 2021 , 6, 35548-35558	1
550	SYNTHESIS AND STRUCTURAL CHARACTERIZATION OF ZINC AND CADMIUM COORDINATION POLYMERS CONSTRUCTED BY 2-PHENYLBUTANEDIOIC ACID AND BIS(4-(1H-IMIDAZOL-1-YL)PHENYL) METHANONE LIGANDS. 2021 , 62, S1-S7	

- 549 An Electrically Conductive Tetrathiafulvalene-Based Hydrogen-Bonded Organic Framework. **2022**, 4, 128-135 3
- 548 References. **2021**, 317-358
- 547 Plant Bioelectronics and Biohybrids: The Growing Contribution of Organic Electronic and Carbon-Based Materials.. **2021**, 9
- 546 Utilisation of CO₂ as "Structure Modifier" of Inorganic Solids. **2021**,
- 545 A new yttrium-based metal-organic framework for molecular sieving of propane from propylene with high propylene capacity. **2022**, 68, 2
- 544 Water- and Acid-Sensitive CuO@Cu-MOF Nano Sustained-Release Capsules with Superior Antifouling Behaviors.. **2021**, 2
- 543 Produced Water Treatment with Conventional Adsorbents and MOF as an Alternative: A Review.. **2021**, 14, 3
- 542 Efficient Splitting of Trans-/Cis-Olefins Using an Anion-Pillared Ultramicroporous Metal-Organic Framework with Guest-Adaptive Pore Channels. **2021**, 1
- 541 Zirconium-Based Metal Organic Frameworks for the Capture of Carbon Dioxide and Ethanol Vapour. A Comparative Study.. **2021**, 26, 0
- 540 K-Chabazite Zeolite Nanocrystal Aggregates for Highly Efficient Methane Separation. **2022**, 134,
- 539 Mixed-Ligand Uranyl Squarate Coordination Polymers: Structure Regulation and Redox Activity.. **2021**, 1
- 538 Substituent-Induced Electron-Transfer Strategy for Selective Adsorption of N in MIL-101(Cr)-X Metal-Organic Frameworks.. **2021**, 3
- 537 Metal-organic frameworks in pursuit of size: the development of macroscopic single crystals.. **2022**, 0
- 536 Kinetic Separation of C₂H₆/C₂H₄ in A Cage-Interconnected Metal-Organic Framework: An Interaction-Screening Mechanism. 1
- 535 A neural network potential for the IRMOF series and its application for thermal and mechanical behaviors.. **2022**, 0
- 534 Porous Liquids: Computational Design for Targeted Gas Adsorption.. **2022**, 0
- 533 Single crystal structure features of a new tri-hetero metallic polymer, a catalyst for mild homogeneous peroxidative oxidation of cyclohexane. **2022**, 123123
- 532 Novel Granular Biomass-Based Carbons with Excellent C₂H₆/CH₄ Selectivity for Recovering Light Hydrocarbons from Natural Gas. 0

531	Controlled methylamine synthesis in a membrane reactor featuring a highly steam selective K ⁺ -LTA membrane. 2022 , 111920	
530	Melt polymerization synthesis of a class of robust self-shaped olefin-linked COF foams as high-efficiency separators. 1	7
529	Adsorption in Reversed Order of C2 Hydrocarbons on an Ultramicroporous Fluorinated Metal-Organic Framework.. 2022 ,	4
528	2D Cd(II)-MOF of Pyridyl-Imidazoquinazoline: Structure, Luminescence, and Selective Detection of TNP and Fabrication of Semiconducting Devices.	1
527	Pervaporation as a Successful Tool in the Treatment of Industrial Liquid Mixtures.. 2022 , 14,	0
526	Adsorption in Reversed Order of C2 Hydrocarbons on an Ultramicroporous Fluorinated Metal-Organic Framework.	1
525	Preparation and corrosion resistance of ZnO@ZIF-8-SA film on carbon steel surface. 2022 , 129017	
524	Modulated self-assembly of an interpenetrated MIL-53 Sc metal-organic framework with excellent volumetric H ₂ storage and working capacity. 2022 , 24, 100887	
523	Separation of perfluorinated electron specialty gases on microporous carbon adsorbents with record selectivity. 2022 , 292, 121059	2
522	Effective defluoridation of water using nanosized UiO-66-NH encapsulated within macroreticular polystyrene anion exchanger.. 2022 , 134584	0
521	CHAPTER 8. Photocatalysis: Past Achievements and Future Trends. 227-269	
520	Data_Sheet_1.PDF. 2019 ,	
519	DataSheet1.DOCX. 2018 ,	
518	Data_Sheet_1.pdf. 2020 ,	
517	Data_Sheet_1.docx. 2020 ,	
516	Table_1.DOCX. 2019 ,	
515	A Microporous Hydrogen-Bonded Organic Framework for Efficient Xe/Kr Separation.. 2022 ,	4
514	Chitosan Containing Nano Zn-Organic Framework: Synthesis, Characterization and Biological Activity.. 2022 , 14,	1

513	CH capture and separation in a MOF based on Ni trigonal-prismatic units.. 2022,	3
512	Structural Transformations in Cobalt(II) Coordination Polymers Constructed from Flexible N,N-Bis(3-pyridylmethyl)sebacamide and benzene-1,3,5-tricarboxylic acid.	0
511	Molecular recognition of catechol on crystal-like surface of periodic mesoporous organosilica containing pyridinylethynylpyridine.	1
510	Recent advancement in bimetallic metal organic frameworks (MMOFs): Synthetic challenges and applications.	1
509	Phenanthrene[2]arene: synthesis and application as nonporous adaptive crystals in the separation of benzene from cyclohexane.	3
508	Catalysts in photochemical vapor generation. 2022, 265-281	
507	Acyl amide-Functionalized and Water-Stable Iron-Based MOF For Rapid and Selective Dye Removal.	0
506	Research on the mechanism and application of rigid and flexible metal-organic frameworks in selective adsorption. 2022, 2254, 012028	
505	Synthesis, X-ray, Hirshfeld, and AIM Studies on Zn(II) and Cd(II) Complexes with Pyridine Ligands. 2022, 12, 590	
504	Seed-aided green synthesis of metal-organic frameworks in water. 2022,	0
503	High-Performance Selective CO Capture on a Stable and Flexible Metal-Organic Framework via Discriminatory Gate-Opening Effect.. 2022,	0
502	A copper-based metal-organic framework for upgrading natural gas through the recovery of C ₂ H ₆ and C ₃ H ₈ . 2022,	1
501	Underlying Polar and Nonpolar Modification MOF-Based Factors that Influence Permanent Porosity in Porous Liquids.. 2022,	1
500	Hydrogen-bonded metal-nucleobase frameworks for highly selective capture of ethane/propane from methane and methane/nitrogen separation.	1
499	Progress on 3D-Printed Metal-Organic Frameworks with Hierarchical Structures. 2200023	2
498	Self-sacrifice MOFs for heterogeneous catalysis: Synthesis mechanisms and future perspectives. 2022,	6
497	Porous Organic Salts: Diversifying Void Structures and Environments.	
496	Caffeine Encapsulation in Metal Organic Framework MIL-53(Al) at Pilot Plant Scale for Preparation of Polyamide Textile Fibers with Cosmetic Properties.. 2022,	0

495	Probing the SO ₂ Adsorption Mechanism in Hofmann Clathrates via Inelastic Neutron Scattering and Density Functional Theory Calculations. 2022 , 126, 8090-8099	2
494	Synergistic effects of nanosized supramolecular complex inlaid with silver nanoparticles: Catalysis, sensors, and biological activities.	
493	Rational Design of Coordination Bond Connected Metal Organic Frameworks/MXene Hybrids for Efficient Solar Water Splitting. 2202571	6
492	One-step C ₂ H ₄ Purification from Ternary C ₂ H ₆ /C ₂ H ₄ /C ₂ H ₂ Mixtures by a Robust Metal-Organic Framework with Customized Pore Environment.. 2022 ,	5
491	Self-diffusion of mixed xylene isomers in ZIF-71 crystals dispersed in a polymer to form a hybrid membrane. 2022 , 111960	
490	Machine-Learning-Assisted High-Throughput Computational Screening of Metal-Organic Framework Membranes for Hydrogen Separation. 2022 , 136783	1
489	Shedding Light on the Lewis Acid Catalysis in Organic Transformations Using a Zn-MOF Microflower and Its ZnO Nanorod. 1	3
488	A theoretical insight into diffusion mechanism of benzene-methanol alkylation reaction in ZSM-5 zeolite. 2022 , 337, 111926	1
487	One-Step C ₂ H ₄ Purification from Ternary C ₂ H ₆ /C ₂ H ₄ /C ₂ H ₂ Mixtures by a Robust Metal-Organic Framework with Customized Pore Environment.	
486	Porous Organic Salts: Diversifying Void Structures and Environments.. 2022 , e202202597	1
485	Microwave-Assisted Synthesis of the Flexible Iron-based MIL-88B Metal-Organic Framework for Advanced Energetic Systems.	1
484	A Dihydropyridazine-Functionalized Metal-Organic Framework as a Highly Selective Luminescent Host-Guest Sensor for Detection of 2,4,6-Trinitrophenol.. 2022 ,	1
483	An interesting 3D energetic metal - framework based Ag(I) ions and 3,4-diaminofurazan. 1-13	0
482	Synthesis, structures and properties of two lead halide coordination polymers based on pyridinedicarboxylate ligand. 2022 , 312, 123161	
481	Ultra-thin zeolite CHA and FAU membranes for desalination by pervaporation. 2022 , 294, 121177	0
480	Competitive adsorption of methane and ethane on organic-rich shale at pressure up to 30 MPa: Experimental results and geological implications. 2022 , 444, 136617	0
479	Dynamics of Topology-dependent Water Purification by Siliceous Zeolite Membranes. 2022 , 359, 119250	0
478	Micrometer-sized MOF particles incorporated mixed-matrix membranes driven by interfacial interactions for improved gas separation. 2022 , 121258	0

- 477 Utilization of cationic microporous metal-organic framework for efficient Xe/Kr separation. 2
- 476 Boosting C₂H₆ / C₂H₄ separation in scalable metal-organic frameworks through pore engineering. 0
- 475 Ru(N₂)₃-Metalloligand Pillared Zr₆MOF Organic Layers for Aerobic Photooxidation. 0
- 474 Universal Strategy to Efficiently Coat Zeolitic Imidazolate Frameworks onto Diverse Substrates. 0
- 473 Tailoring Robust Al-MOF for Trapping C₂H₆ and C₂H₂ towards Efficient C₂H₄ Purification from Quaternary Mixtures. 2
- 472 A Water-Resistant Hydrogen-Bonded Organic Framework for Ethane/Ethylene Separation in Humid Environments. 1227-1232 3
- 471 Fluorescent dendrimer-based probes for cell membrane imaging: Zebrafish epidermal labeling-based toxicity evaluation. 2022, 114403 2
- 470 On the adsorption properties and applications of mixed-linker MOFs based on HKUST-1. 2022, 123260 0
- 469 Double-Accessible Open Metal Sites in Metal-Organic Frameworks with Suitable Pore Size for Efficient Xe/Kr Separation. 1
- 468 Cascade adsorptive separation of light hydrocarbons by commercial zeolites. 2022, 114403 0
- 467 Cooperative control of intralayer and interlayer space in MOFs enables selective capture of intermediate-sized molecules. 2022, 100903 1
- 466 Nanoscale metal organic frameworks and their applications in disease diagnosis and therapy. 2022, 180, 107595 1
- 465 Cupric Porphyrin Frameworks on Multi-junction Silicon Photocathode to Expedite the Kinetics of CO₂ Turnover. 1
- 464 Enhancing CH₄ Capture from Coalbed Methane through Tuning van der Waals Affinity within Isorecticular Al-Based Metal-Organic Frameworks. 5
- 463 Investigation of methane adsorption onto metal-organic frameworks under subcritical condition employing adsorption isotherm models. 2022, 45, 114403 0
- 462 One-Pot Synthesis of Rubber Seed Shell-Derived N-Doped Ultramicroporous Carbons for Efficient CO₂ Adsorption. 2022, 12, 1889 0
- 461 Microporous Metal-Organic Framework with Cage-within-Cage Structures for Xenon/Krypton Separation. 2022, 61, 7397-7402 1
- 460 Effect of Synthesis Temperature on Water Adsorption in UiO-66 Derivatives: Experiment, DFT+D Modeling, and Monte Carlo Simulations. 2022, 126, 9185-9194 0

- 459 A Scandium-based Microporous Metal-Organic Framework for Ethane-Selective Separation. 1
- 458 Preparation of electrospun polyacrylonitrile/ β -cyclodextrin metal-organic framework nanofibers for extraction of multi-classes herbicides from cereal samples before HPLC-UV analysis. **2022**, 133350 0
- 457 One-step removal of alkynes and propadiene from cracking gases using a multi-functional molecular separator. **2022**, 13, 0
- 456 Defect-engineered metal-organic framework with enhanced photoreduction activity toward uranium extraction from seawater. **2022**, 3, 100892 1
- 455 Surface Modification Strategy for Enhanced NO₂ Capture in Metal-Organic Frameworks. **2022**, 27, 3448 2
- 454 Structure Evolution of Chemically Degraded ZIF-8. 0
- 453 Nanocomposites of functionalized Metal-Organic frameworks and magnetic graphene oxide for selective adsorption and efficient determination of Lead(II). **2022**, 123300 2
- 452 Single-Crystal Capacitive Sensors with Micropatterned Electrodes via Space-Confined Growth of the Metal-Organic Framework HKUST-1. 2204065 0
- 451 Configuration-Dependent Bimetallic Metal-Organic Frameworks Nanorods for Efficient Electrocatalytic Water Oxidation. 0
- 450 Selective adsorption of ethane over ethylene through a metal-organic framework bearing dense alkyl groups. **2022**, 295, 121330 1
- 449 Sulfate-functionalized hafnium-organic frameworks as a highly effective chemiresistive sensor for low-temperature detection of hazardous NH₃ gas. **2022**, 367, 132094 0
- 448 State-of-the-art progress of metal-organic framework-based electrochemical and optical sensing platforms for determination of bisphenol A as an endocrine disruptor. **2022**, 212, 113536 0
- 447 Reverse-selective metal-organic framework materials for the efficient separation and purification of light hydrocarbons. **2022**, 468, 214628 3
- 446 Novel amine-functionalized zinc-based metal-organic framework for low-temperature chemiresistive hydrogen sensing. **2022**, 368, 132120 0
- 445 MOF based electrochemical sensors for the detection of physiologically relevant biomolecules: An overview. **2022**, 468, 214627 3
- 444 Metal-Organic Frameworks as Sensors. 125-154 0
- 443 Applications of Metal-Organic Frameworks in Wastewater Treatment and Gas Separation and Purification. 271-337 0
- 442 Recent Advances and Challenges in Selective Environmental Applications of Metal-Organic Frameworks. 223-245 0

441	Environmental Applications of Metal-Organic Frameworks. 247-255	
440	Emerging Applications of Metal-Organic Frameworks for Environmental Remediation. 1-23	1
439	Application of transfer learning to predict diffusion properties in metal-organic frameworks.	0
438	Cationic metal-organic frameworks constructed from a trigonal imidazole-containing ligand for the removal of Cr ₂ O ₇ ²⁻ in water.	0
437	Cellulose Acetate Mixed-Matrix Membranes Doped with High CO ₂ Affinity Zeolitic Tetrazolate-Imidazolate Framework Additives.	
436	Cooperative catalysis in a metal-organic framework via post-synthetic immobilisation. 2022 , 51, 9229-9232	0
435	High-throughput computational screening of nanoporous materials in targeted applications.	2
434	Efficient Xe selective separation from Xe/Kr/N ₂ mixtures over a microporous CALF-20 framework. 2022 , 12, 18224-18231	
433	METAL-ORGANIC FRAMEWORKS IN RUSSIA: FROM THE SYNTHESIS AND STRUCTURE TO FUNCTIONAL PROPERTIES AND MATERIALS. 2022 , 63, 671-843	1
432	Substituent Dependence on Series of Cationic Gyroidal MOFs in utc-c Topology with High CO ₂ Affinity and Ultrahigh Anionic Dye Adsorption Capacity.	1
431	Recent Advances in Carbon-Based Adsorbents for Adsorptive Separation of Light Hydrocarbons. 2022 , 2022, 1-21	0
430	A spin-crossover framework endowed with pore-adjustable behavior by slow structural dynamics. 2022 , 13,	2
429	A Review of Preconcentrator Materials, Flow Regimes and Detection Technologies for Gas Adsorption and Sensing. 2200632	1
428	Hydrogen isotope separation using a metal-organic cage built from macrocycles.	
427	Chiral Motifs in Highly Interpenetrated Metal-Organic Frameworks Formed from Achiral Tetrahedral Ligands.	
426	Hydrogen isotope separation using a metal-organic cage built from macrocycles.	1
425	MoloVol: an easy-to-use program for analyzing cavities, volumes and surface areas of chemical structures. 2022 , 55,	5
424	Molecular Sieving of Propylene from Propane in Metal-Organic Framework-Derived Ultramicroporous Carbon Adsorbents.	4

- 423 A Microporous Potassium-Organic Framework for Efficient C₂H₂/CO₂ Separation. **2022**, 7,
- 422 Efficient Nitroaromatic sensor via highly luminescent Zn-based Metal-organic Frameworks. **2022**, 100348 1
- 421 Design Rules of Hydrogen-Bonded Organic Frameworks with High Chemical and Thermal Stabilities. **2022**, 144, 10663-10687 16
- 420 Metal-Organic Frameworks on Palladium Nanoparticle-Functionalized Carbon Nanotubes for Monitoring Hydrogen Storage. 1
- 419 Double Z-scheme Co₃O₄/Bi₄O₇/Bi₂O₃ composite activated peroxymonosulfate to efficiently degrade tetracycline under visible light. 0
- 418 A Two-Dimensional Stacked Metal-Organic Framework for Ultra Highly-Efficient CO₂ Sieving. **2022**, 137768 0
- 417 Porous liquids for gas capture, separation, and conversion: Narrowing the knowing-doing gap. **2022**, 297, 121456 0
- 416 Pd and Ni NPs@Eu-MOF, an economically advantageous nanocatalyst for C(sp²)-C(sp²) cross-coupling reactions. Key role of Ni and of the metal nanoparticles. **2022**, 223, 115950 1
- 415 Synthesis of core-shell ZIF-8@Fe₂O₃ nanorods and improvement of selectivity for ammonia gas. **2022**, 367, 132134 0
- 414 NLDFT adsorption models for zeolite porosity analysis with particular focus on ultra-microporous zeolites using O₂ and H₂. **2022**, 625, 178-186
- 413 Accessing accelerated molecular diffusion by nanopore alignment in a MOF thin film. 0
- 412 Preparation of an interpenetrating bimetal metal-organic framework via metal metathesis used for promoting gas adsorption.
- 411 Pervaporation Separation of C₆ Alkane Isomers by Al-Bttotb Membrane.
- 410 Recent advances in bimetallic metal-organic frameworks (BMOFs): synthesis, applications and challenges. 5
- 409 Metal-organic frameworks (MOFs), rare earth MOFs, and rare earth functionalized MOF hybrid materials. **2022**, 3-40
- 408 Applications of metal-organic framework based membranes in energy storage and conversion. **2022**, 259-272
- 407 Influence of reaction temperature and stoichiometry on the coordination mode of a multidentate pyridylpyrazole ligand in Co(II) complexes: from a 0D mononuclear structure to 3D frameworks.
- 406 Acetylenedicarboxylate as linker in the engineering of coordination polymers and metal-organic frameworks: challenges and potential. 0

- 405 A Coordination Network Featuring Two Distinct Copper(II) Coordination Environments for Highly Selective Acetylene Adsorption. 0
- 404 Boosting SO₂ Capture within Nitrogen-Doped Microporous Biocarbon Nanosheets. **2022**, 61, 9785-9794
- 403 Designing of robust and sensitive assay via encapsulation of highly emissive and stable blue copper nanocluster into zeolitic imidazole framework (ZIF-8) with quantitative detection of tetracycline. **2022**, 13, 2
- 402 Dynamic Variation of Responsive Metal-Organic Frameworks toward Specific Stimuli. **2022**, 79, 50-57
- 401 Porous Adsorption Materials for Carbon Dioxide Capture in Industrial Flue Gas. 10, 1
- 400 Tailored Inorganic-Organic Architectures via Metalloligands. 0
- 399 Topological Aspects of Certain Covalent Organic Frameworks and Metal Organic Frameworks. **2022**, 2022, 1-9
- 398 Synergistic binding sites in a hybrid ultramicroporous material for one-step ethylene purification from ternary C₂ hydrocarbon mixtures. **2022**, 8, 6
- 397 Lead(II)-Azido Metal-Organic Coordination Polymers: Synthesis, Structure and Application in PbO Nanomaterials Preparation. **2022**, 12, 2257
- 396 Two Robust Isorecticular Metal-Organic Frameworks with Different Interpenetration Degrees Exhibiting Disparate Breathing Behaviors. **2022**, 61, 10957-10964 1
- 395 Synthesis, spectral, structural characterization and Hirshfeld surface analysis of bis(4-hydroxypyridinium) hexachlorostannate(IV) hybrid. 1-15
- 394 Improving CH₄ uptake and CH₄ / N₂ separation in pillar-layered metal-organic frameworks using a regulating strategy of interlayer channels. 0
- 393 Molecular and Artificial Neural Networks Modeling of Sorption and Diffusion of Small Alkanes, Alkenes and Their Ternary Mixtures in ZIF-8 at Different Temperatures.
- 392 Two-Dimensional Metal-Organic Framework with Ultrahigh Water Stability for Separation of Acetylene from Carbon Dioxide and Ethylene. 3
- 391 Nitro-Decorated Microporous Covalent Organic Framework (TpPa-NO₂) for Selective Separation of C₂H₄ from a C₂H₂/C₂H₄/CO₂ Mixture and CO₂ Capture. 2
- 390 Investigation on crystal structure, spectral FT-IR analysis, DFT and molecular docking studies of a novel complex with the N⁺-(pyridin-2-ylmethylene)nicotinohydrazide. **2022**, 133741 0
- 389 Discrimination of xylene isomers in a stacked coordination polymer. **2022**, 377, 335-339 7
- 388 One-pot Economic Synthesis to the Functional Copper Mixed-triazolate MOF Materials Towards an Enhanced Adsorptive Removal of Diclofenac Sodium. **2022**, 7,

- 387 Molecular fluorescence significantly enhanced by gold nanoparticles@zeolitic imidazolate framework-8.
- 386 Tailoring Lewis Acid Properties of Metal-Organic Framework Nodes via Anion Post-Replacement for Gas Adsorption and Separation. 0
- 385 Polyhedral Co₃O₄@ZnO nanostructures as proficient photocatalysts for vitiation of organic dyes from waste water. **2022**, 362, 119765 1
- 384 Metal-Organic Framework: An Emergent Catalyst in C-N Cross-Coupling Reactions. **2022**, 469, 214667 4
- 383 Iron-containing metal-organic framework thin film as a drug delivery system. **2022**, 650, 129611 1
- 382 Molecular simulation study on the stability of methane hydrate confined in slit-shaped pores. **2022**, 257, 124738 0
- 381 Multi-dimensional metal-organic frameworks based on mixed linkers: Interplay between structural flexibility and functionality. **2022**, 469, 214645 5
- 380 Adsorption and diffusion of the H₂/CO₂/CO/MeOH/EtOH mixture into the ZIF-7 using molecular simulation. **2022**, 116, 108275 0
- 379 Self-luminescent europium based metal organic frameworks nanorods as a novel electrochemiluminescence chromophore for sensitive ulinastatin detection in biological samples. **2022**, 250, 123726 0
- 378 How to Design Porous Organic Polymers as Gas Capture?. 1-4
- 377 Metal-Organic Frameworks for Wastewater Decontamination: Discovering Intellectual Structure and Research Trends. **2022**, 15, 5053 1
- 376 Combination of metal-organic frameworks (MOFs) and covalent organic frameworks (COFs): Recent advances in synthesis and analytical applications of MOF/COF composites. **2022**, 116741 4
- 375 Analysis of CH₄ Adsorption Isotherms onto MIL-101 (Cr) Metal-Organic Framework and Its Derivatives with Alkali Ion Dopants.
- 374 pH-Stable Luminescent Metal-Organic Frameworks for the Selective Detection of Aqueous-Phase Fe^{III} and Cr^{VI} Ions. 2
- 373 N₂-selective adsorbents and membranes for natural gas purification. **2022**, 121808 0
- 372 Folic acid-modified disulfiram/Zn-IRMOF3 nanoparticles for oral cancer therapy by inhibiting ALDH1A1+ cancer stem cells. **2022**, 139, 213038 0
- 371 Nanoconfined synthesis of conjugated ladder polymers.
- 370 Correlation between Structure and Dynamics of Co₂ Confined in Mg-Mof-74 and the Role of Inter-Crystalline Space: A Molecular Dynamics Simulation Study.

- 369 Recent advances in microporous metal-organic frameworks as promising adsorbents for gas separation. 2
- 368 An Elastic Mof/Graphene Aerogel with High Photothermal Efficiency for Rapid Removal of Crude Oil.
- 367 Selective adsorption of butenes over butanes on isorecticular Ni-IRMOF-74-I and Ni-IRMOF-74-II. **2022**, 12, 20599-20602 1
- 366 The Impact of Polymer Electrolyte Properties on Lithium-Ion Batteries. **2022**, 14, 3101
- 365 RhB@MOF-5 Composite Film as a Fluorescence Sensor for Detection of Chilled Pork Freshness. **2022**, 12, 544 0
- 364 Copper-Based Catalysts for Electrochemical Carbon Dioxide Reduction to Multicarbon Products. **2022**, 5, 1
- 363 On Some Topological Indices of Metal-Organic Frameworks. 1-22
- 362 Recent Advances in Ethylene Gas Detection. **2022**, 15, 5813 1
- 361 Facile Preparation of Triphenylamine-Based Nanoporous Organic Polymers for Adsorption/Separation of C₁₋₃ Hydrocarbons and CO₂ in Natural Gas. **2022**, 4, 5449-5456 1
- 360 Engineering Anion-Pillared Metal-Organic Frameworks for Record Acetylene/Methane Separation. 0
- 359 Kinetic-Sieving of Carbon Dioxide from Acetylene through a Novel Sulfonic Ultramicroporous Material. 2
- 358 2D Metal-Organic Framework Based on the Functionalized Anthracene Derivative as A Dual-Functional Luminescent Probe for Fe³⁺ and Ascorbic Acid. **2022**, 7,
- 357 Selective CO₂-to-Formate Conversion Driven by Visible Light over a Precious-Metal-Free Nonporous Coordination Polymer. **2022**, 12, 10172-10178 1
- 356 Carbon-Doped TiO₂/ZIF-8 Composite for Solar Light Harvested Degradation of Methylene Blue.
- 355 Tailor-made iron-organic molecular cage embedded polydimethylsiloxane membranes via emulsion casting technique for efficient VOCs removal.
- 354 Multi-scale dynamical cross-talk in zeolite-catalyzed methanol and dimethyl ether conversions. 2
- 353 Two zinc and cadmium coordination polymers constructed with bis(4-(1H-imidazol-1-yl)phenyl)methanone and naphthalene-1,4-dicarboxylate ligands: synthesis and structural characterization. **2022**,
- 352 Antimicrobial and Gas Adsorption Properties of Electrospun Ferrocene-Polyurethane-Based Nanofibers Containing Silver Nitrate.

351	Metal-Organic Framework Accelerated One-Step Capture and Reduction of Palladium to Catalytically Active Nanoparticles.	1
350	Fabrication and analysis of barium-based metal organic framework characteristic properties.	
349	Engineering Supramolecular Binding Sites in a Chemically Stable Metal-Organic Framework for Simultaneous High C ₂ H ₂ Storage and Separation.	
348	Engineering Supramolecular Binding Sites in a Chemically Stable Metal-Organic Framework for Simultaneous High C ₂ H ₂ Storage and Separation.	6
347	Metal-Organic Frameworks for CO ₂ Separation from Flue and Biogas Mixtures. 2207197	3
346	Multifunctional Lanthanide-Based Metal-Organic Frameworks Derived from 3-Amino-4-hydroxybenzoate: Single-Molecule Magnet Behavior, Luminescent Properties for Thermometry, and CO ₂ Adsorptive Capacity. 2022 , 61, 12977-12990	1
345	Noble-metal free Suzuki-Miyaura reaction catalyzed by magnetically recyclable MOF composites.	0
344	Single-layer 2D Ni-BDC MOF Obtained in Supercritical CO ₂ -assisted Aqueous Solution.	
343	Kinetic-Sieving of Carbon Dioxide from Acetylene through a Novel Sulfonic Ultramicroporous Material.	2
342	Amino-Functionalized Microporous MOFs for Capturing Greenhouse Gases CF ₄ and NF ₃ with Record Selectivity.	0
341	Metal-organic frameworks in separations: A review. 2022 , 340208	0
340	Prospects for Simultaneously Capturing Carbon Dioxide and Harvesting Water from Air. 2204277	3
339	Design of Gas Separation Processes Using Type II Porous Liquids as Physical Solvents. 2022 , 61, 11908-11921	0
338	Survey on Adsorption of Low Molecular Weight Compounds in Cu-BTC Metal-Organic Framework: Experimental Results and Thermodynamic Modeling. 2022 , 23, 9406	
337	Catalytic synthesis of new pyrazolo [3,4-b] pyridine via a cooperative vinyllogous anomeric-based oxidation. 2022 , 12,	2
336	Sensitive Detection of Alcohol Isomers by Ionically Conductive Metal-Organic Frameworks. 2200542	
335	A review of synthesis, fabrication, and emerging biomedical applications of metal-organic frameworks. 2022 , 140, 213049	0
334	Enhancing the natural gas upgrading and acetylene extraction performance of stable zirconium-organic frameworks PCN-605 by ligand functionalization. 2022 , 10, 108383	

- 333 Design of carbonized melamine sponge@MOFs composites bearing diverse acid-base properties for boosting thermal and solar-driven CO₂ cycloaddition. **2022**, 64, 102158 ○
- 332 Fabrication of Ce-doped MIL-100(Fe), its adsorption performance, and the mechanisms to adsorb phosphate from water. **2022**, 28, 102847 ○
- 331 Pervaporation separation of C₆ alkane isomers by Al-bttotb membrane. **2022**, 661, 120916
- 330 Efficient CO₂/CO separation through channel confinements in an amino-coordinated metal-organic framework. **2022**, 327, 133064 ○
- 329 Plasmonic coated spindle-shaped MIL-88A(Fe) ternary composites heterojunction for photocatalytic degradation of tetracycline: Mechanism studies and theoretical calculation. **2022**, 603, 154429
- 328 New mixed ligand complexes of alkaline earth metal cations containing nicotinamide and diphenic acid. Synthesis and structural properties. **2022**, 1270, 133893
- 327 A stable turn-off fluorescence sensor for nitroaromatic explosives and Fe³⁺ detection based on a 3D strontium coordination polymer. **2022**, 1270, 133944
- 326 Porous 3D carbon-based materials: An emerging platform for efficient hydrogen production. 2
- 325 Two-dimensional Zn(II) coordination polymer and hydrogen bond-mediated two-dimensional Cu(II) network based on trans-2-aminocyclopentanecarboxylate. ○
- 324 Pillar[n]arene-Mimicking/Assisted/Participated Carbon Nanotube Materials. **2022**, 15, 6119 ○
- 323 Investigation of catalytic activity of vanadyl sulphate immobilized on prepared UiO-66 modified with urea and melamine as allyl alcohol epoxidation catalysts. ○
- 322 Friedel-Crafts Synthesis of Carbazole-Based Hierarchical Nanoporous Organic Polymers for Adsorption of Ethane, Carbon Dioxide, and Methane. **2022**, 61, 13453-13460 ○
- 321 Recent developments on carbon-carbon cross-coupling reactions using rare-earth metals-derived coordination polymers as efficient and selective Pd catalytic systems. **2022**, ○
- 320 SiO₂ Deposition to Regulate Surface Barriers and Its Impact on ZSM-5 Catalyzed Reactions with Distinct Molecular Sizes. ○
- 319 Potential of novel porous materials for capture of toluene traces in air under humid conditions. **2022**, 344, 112204 1
- 318 An ethane-trapping Zn(II) cluster-based metal-organic framework with suitable pockets for efficient ethane/ethylene separation. **2022**, 301, 122011 1
- 317 Multifunctional drug delivery nanoparticles based on MIL-100 (Fe) for photoacoustic imaging-guided synergistic chemodynamic/chemo/photothermal breast cancer therapy. **2022**, 223, 111132 ○
- 316 CO₂ capture from wet flue gas using transition metal inserted porphyrin-based metal-organic frameworks as efficient adsorbents. **2022**, 301, 122058 ○

315	Two-dimensional metal-organic frameworks: From synthesis to biomedical, environmental, and energy conversion applications. 2022 , 473, 214817	1
314	Facile synthesis of dptz-CuGeF6 at room temperature and its adsorption performance for separation of CO2, CH4 and N2. 2022 , 302, 122054	0
313	Finding the optimal CO2 adsorption material: Prediction of multi-properties of metal-organic frameworks (MOFs) based on DeepFM. 2022 , 302, 122111	0
312	Discovery of highly radon-selective metal-organic frameworks through high-throughput computational screening and experimental validation. 2023 , 452, 139189	0
311	Metal-organic-framework composite-based rapid self-detoxifying smart textile filters for chemical warfare agents. 2023 , 33-79	0
310	Dual functionality of novel Porous-Osmium(IV)-MOFs. 2023 , 1271, 134150	0
309	A charge-decorated porous framework with polar pores and open O donor sites for CO2/CH4 and C2H2/C2H4 separations. 2022 , 51, 13419-13425	0
308	A facile one-pot preparation of porphyrin-based microporous organic polymers for adsorption of carbon dioxide, ethane, and methane.	0
307	A self-arranged metal-organic polyhedron/fullerene asymmetric structure improves the performance of inverted perovskite solar cells.	0
306	Application of Metal-Organic Frameworks in Gas Pre-concentration, Pre-separation and Detection. 2022 , 80, 1183	0
305	Recent advances in the applications of porous organic cages.	4
304	MOF and its application in electrochemistry. 2022 , 219-253	0
303	Boosting C2H2/CO2 separation of metal-organic frameworks via anion exchange and temperature elevation.	0
302	Preparation of new microporous europium silicate molecular sieve by selective leaching of alkali metal cations from europium silicate Eu-AV-9.	0
301	Supramolecular modification of a metal-organic framework increases sorption switching: insights into reversible structural deformation of ZIF-8.	0
300	Multivariate zeolitic imidazolate frameworks with an inverting trend in flexibility.	1
299	Immobilization of a trimeric ruthenium cluster in mesoporous chromium terephthalate and its catalytic application. 2022 , 51, 13189-13194	1
298	Zn(ii) and Co(ii) coordination polymers based on semi-rigid bis-pyridyl-bis-amide and angular dicarboxylate ligands: synthesis, structures and properties. 2022 , 24, 6076-6086	1

- 297 Enhanced Xe/Kr separation via the pore size confinement effect of a microporous thorium-based metal-organic framework. 0
- 296 Data-Mining Based Assembly of Promising Metal-Organic Frameworks on Xe/Kr Separation. 0
- 295 Metal-organic frameworks as O₂-selective adsorbents for air separations. **2022**, 13, 10216-10237 0
- 294 Nanoparticle/metal-organic framework hybrid catalysts: elucidating the role of the MOF. **2022**, 58, 10757-10767 1
- 293 Robust metal-organic framework with abundant large electronegative sites for removal of CO₂ from a ternary C₂H₂/C₂H₄/CO₂ mixture. **2022**, 9, 5064-5071 3
- 292 Nanoconfinement amplified, Förster resonance energy transfer in Nile red borne mesoporous silica for ultrasensitive, multiplex assay of triphenylmethane dyes in aqueous milieu. 0
- 291 Rational synthesis of a pyridyl-imidazoquinazoline based multifunctional 3D Zn(ii)-MOF: structure, luminescence, selective and sensitive detection of Al³⁺ and TNP, and its semiconducting device application. **2022**, 51, 13749-13761 1
- 290 The Role of the Bridge in Single-Ion Magnet Behaviour: Reinvestigation of Cobalt(II) Succinate and Fumarate Coordination Polymers with Nicotinamide. **2022**, 10, 128 0
- 289 Adsorption Interface-Induced H₂/F Charge Transfer in Ultramicroporous Metal-Organic Frameworks for Perfluorinated Gas Separation. **2022**, 61, 13603-13611 0
- 288 On the Role of Flexibility for Adsorptive Separation. 1
- 287 Tuning Metal-Dihydrogen Interaction in Metal-Organic Frameworks for Hydrogen Storage. **2022**, 13, 9129-9133 1
- 286 Growth of Nanostructured Antibacterial Zeolitic Imidazolate Framework Coatings on Porous Surfaces. 0
- 285 Demonstration of High-Throughput Building Block and Composition Analysis of Metal-Organic Frameworks. 0
- 284 Th-MOF showing six-fold imide-sealed pockets for middle-size-separation of propane from natural gas. 1
- 283 Bottom-Up De Novo Synthesis of Porous Organic Polymers with Enone Functionalities as Supports for Pd and Cu Nanoparticles for Catalytic Tandem Synthesis. 1
- 282 A comprehensive overview of carbon dioxide capture: From materials, methods to industrial status. **2022**, 11, 17033-17040 1
- 281 Probing the origin and stability of bivalency in copper based porous coordination network and its application for H₂S gas capture. **2022**, 12, 17033-17040 0
- 280 Ultramicroporous Hydrogen-Bonded Organic Framework Material with a Thermoregulatory Gating Effect for Record Propylene Separation. **2022**, 144, 17033-17040 4

- 279 High-Performance Adsorbent for Ethane/Ethylene Separation Selected through the Computational Screening of Aluminum-Based Metal-Organic Frameworks. **2022**, 14, 43637-43645 0
- 278 Metal-Organic Framework with Structural Flexibility Responding Specifically to Acetylene and Its Adsorption Behavior. 0
- 277 Catalytic activity of C60 fullerene nanowhisker/zeolitic imidazolate framework-67 composite for reduction of 4-nitrophenol. 1-7 0
- 276 Pervaporation Polyvinyl Alcohol Membranes Modified with Zr-Based Metal Organic Frameworks for Isopropanol Dehydration. **2022**, 12, 908 1
- 275 Fe₃O₄@Glutamate MOF Functionalized with Co Nanoparticles Anchored Dicyandiamide: as a Capable Heterogeneous and Reusable Nanocatalyst in C-P Cross-Coupling Reaction. 0
- 274 MIL-101-Cr/Fe/Fe-NH₂ for Efficient Separation of CH₄ and C₃H₈ from Simulated Natural Gas. 0
- 273 A Porous Polyaromatic Solid for Vapor Adsorption of Xylene with High Efficiency, Selectivity, and Reusability. 0
- 272 Guest-molecule-induced self-adaptive pore engineering facilitates purification of ethylene from ternary mixture. **2022**, 3
- 271 Energetic Systematics of Metal-Organic Frameworks: A Case Study of Al(III)-Trimesate MOF Isomers. **2022**, 61, 15152-15165 0
- 270 A Critical Review on New and Efficient 2D Materials for Catalysis. 2200771 0
- 269 Mechanistic Principles for Engineering Hierarchical Porous Metal-Organic Frameworks. **2022**, 16, 13573-13594 1
- 268 Unique Fluorescence Turn-On and Turn-Off/On Responses to Acids by a Carbazole-Based Metal-Organic Framework and Theoretical Studies. **2022**, 144, 17054-17063 2
- 267 Construction of Halogen-Bonded Organic Frameworks (XOFs) as Novel Efficient Iodinating Agents. **2022**, 14, 43621-43627 0
- 266 Manipulation strategies for improving gas separation performance on metal-organic frameworks membranes. **2022**, 15, 100609 0
- 265 Co- and Ni-Based Electroactive Metal-Organic Frameworks for Stable Lithium Storage: Electrochemical and Charge-Storage Behavior in Response to Different Metal Centers. **2022**, 22, 5872-5882 0
- 264 Desolvation-Degree-Induced Structural Dynamics in a Rigid Cerium-Organic Framework Exhibiting Tandem Purification of Ethylene from Acetylene and Ethane. **2022**, 14, 44460-44469 1
- 263 Molecularly Homogenized Composite Membranes Containing Solvent-Soluble Metallocavitands for CO₂/CH₄ Separation. 0
- 262 Fast hydrogen purification through graphitic carbon nitride nanosheet membranes. **2022**, 13, 0

261	Hierarchical Metal-Organic Aerogel as a Highly Selective and Sustainable CO ₂ Adsorbent.	0
260	Boosting Ethane/Ethylene Separation by MOFs through the Amino-Functionalization of Pores.	7
259	Purification of borneol from its isomeric mixture by using metal-organic frameworks. 2022 , 122213	0
258	Boosting Ethane/Ethylene Separation by MOFs through the Amino-Functionalization of Pores.	0
257	Stacked conductive metal-organic framework nanorods for high-performance vacuum electronic devices. 2022 , 48, 34092-34097	0
256	Fabrication of mixed matrix membranes with regulated MOF fillers via incorporating guest molecules for optimizing light hydrocarbon separation performance.	0
255	Cu ²⁺ -encapsulated ZIF-8 as a facile catalyst for the synthesis of kojic acid derivatives in aqueous medium: A green approach. 2022 , 4, 100604	0
254	Directed molecular structure design of coordination polymers with different ligands for regulating output performance of triboelectric nanogenerators. 2022 , 12, 30051-30055	0
253	A novel trigonal bipyramidal cage-based Zn(II)-MOF featuring two types of trinuclear clusters with high gas sorption properties.	0
252	Spatial disposition of square-planar mononuclear nodes in metal-organic frameworks for C ₂ H ₂ /CO ₂ separation.	4
251	Hydrophobic paraffin-selective pillared-layer MOFs for olefin purification.	0
250	Effect of flexible chain length of the dimetal subunit on the formation of 1D coordination polymer to molecular rectangle.	0
249	Selective Separation of Gases by Metal Organic Framework Materials (Mofs). 2022 , 2194, 012005	0
248	Recent reports on vanadium based coordination polymers and MOFs. 2022 ,	0
247	Creating hierarchical pores in metal-organic frameworks via postsynthetic reactions.	4
246	Reversibly Phase-Transformative Zeolitic Imidazolate Framework-108 and the Membrane Separation Utility. 2022 , 61, 17342-17352	0
245	Electrically regulating nonlinear optical limiting of metal-organic framework film. 2022 , 13,	4
244	Crystallographic Mapping and Tuning of Water Adsorption in Metal-Organic Frameworks Featuring Distinct Open Metal Sites. 2022 , 144, 19567-19575	1

243	Influence of Pore Size on Hydrocarbon Transport in Isostructural Metal-Organic Framework Crystallites. 2022 , 14, 47222-47229	1
242	Shining a Light on Photoresponsive Type III Porous Liquids.	0
241	Stimulus Response Lanthanide MOF Materials Encapsulated with Viologen Derivatives: Characterization, Photophysical Properties and Sensing on Nitrophenols.	0
240	Fine Tuning the Pore Surface in Zirconium Metal-Organic Frameworks for Selective Ethane/Ethylene Separation.	0
239	Computational study of the effect of grain boundary and nano-porosity on xenon behavior in UO ₂ . 2022 , 132, 155101	0
238	Zeolites in Adsorption Processes: State of the Art and Future Prospects.	6
237	The Complexity of Comparative Adsorption of C ₆ Hydrocarbons (Benzene, Cyclohexane, n-Hexane) at Metal-Organic Frameworks. 2022 , 12, 3614	0
236	A sensitive and selective electrochemical aptasensor based on gold nanoflower/polyethyleneimine (PEI)-functionalized metal organic framework nanocomposites for label-free determination of streptomycin in milk samples.	0
235	A novel approach based on the ultrasonic-assisted microwave method for the efficient synthesis of Sc-MOF@SiO ₂ core/shell nanostructures for H ₂ S gas adsorption: A controllable systematic study for a green future. 10,	0
234	Toward Ideal Metal-Organic Framework Thin-Film Growth via Automated Layer-by-Layer Deposition: Examples Based on Perylene Diimide Linkers.	1
233	Bifunctional Self-Penetrating Co(II)-Based 3D MOF for High-Performance Environmental and Energy Storage Applications.	2
232	A Targeted Review of Current Progress, Challenges and Future Perspective of g-C ₃ N ₄ based Hybrid Photocatalyst Toward Multidimensional Applications.	0
231	Vapor-Assisted Powder Synthesis and Oriented MOF-CVD Thin Films of the Metal-Organic Framework HKUST-1.	0
230	Potential of a pH-Stable Microporous MOF for C ₂ H ₂ /C ₂ H ₄ and C ₂ H ₂ /CO ₂ Gas Separations under Ambient Conditions.	1
229	Green and efficient removal of sulfides using oxo-peroxo tungsten(VI)-MIL-101(Cr) nanoreactor as heterogeneous recyclable catalyst. 2022 , 121274	0
228	Novel CdS/MIL-88A heterojunction coupled with H ₂ O ₂ /air-nanobubbles for enhanced visible-light driven photocatalytic performance. 2022 , 135007	0
227	Multifunctional nanocellulose-based composites for potential environmental applications.	0
226	Photocatalytic properties of two new isostructural cobalt(II) and nickel(II) complexes having terphenyl-3,3',4,4'-tetracarboxylic acid. 2022 , 228, 116158	0

- 225 Effective adsorbent for the removal of bisphenol A from water: MOF-derived carbon. **2022**, 346, 112285 ○
- 224 Metal-organic frameworks-based broad-spectrum sensor for total tetracycline antibiotics assay. **2022**, 208, 110887 ○
- 223 A review of waste management approaches to maximise sustainable value of waste from the oil and gas industry and potential for the State of Qatar. **2023**, 332, 126220 ○
- 222 A review on metal-organic frameworks for the removal of hazardous environmental contaminants. **2023**, 305, 122416 ○
- 221 Molecular insights into the role of O₂ in reversed C₂H₆/C₂H₄ separation on metal-organic frameworks. **2023**, 304, 122332 ○
- 220 Data-mining based assembly of promising metal-organic frameworks on Xe/Kr separation. **2023**, 304, 122357 ○
- 219 Thermodynamic and kinetic synergetic separation of CO₂/C₂H₂ in an ultramicroporous metal-organic framework. **2023**, 304, 122318 2
- 218 Progress reports of mineralized membranes: Engineering strategies and multifunctional applications. **2023**, 304, 122379 5
- 217 MOFs meet electrospinning: New opportunities for water treatment. **2023**, 453, 139669 2
- 216 Water-reservoir properties dependent on packing modes of [Ni(II)3L6] cages. ○
- 215 Construction of a dual-cage-based MOF with uncoordinated nitrogen sites for CO₂ adsorption and fixation. **2023**, 317, 123699 ○
- 214 Multiblock copolymers containing polyether segments for separation of C₄ hydrocarbons. **2023**, 666, 121176 ○
- 213 Effect of temperature on metal-organic frameworks chemical sensors detection properties. **2023**, 184, 108156 ○
- 212 An elastic MOF/graphene aerogel with high photothermal efficiency for rapid removal of crude oil. **2023**, 443, 130339 ○
- 211 Exceptionally Water-Stable In(III)-Based Framework with Conjugated Rhombohedral Cavities for Efficiently Separating Humid Flue Gas. ○
- 210 Enhancement of Propadiene/Propylene Separation Performance of Metal-Organic Frameworks by an Amine-Functionalized Strategy. ○
- 209 Microscale Determination of Binary Gas Adsorption Isotherms in MOFs. **2022**, 144, 20939-20946 ○
- 208 Vapor sorption behavior in heptazine-based MOF featuring a brick-shaped framework. **2022**, 123735 ○

- 207 A novel C₂H₂-selective microporous Cd-MOF for C₂H₂/C₂H₄ and C₂H₂/CO₂ separation. **2022**, 122678 0
- 206 Metal-organic framework nanofilm enhances serum metabolic profiles for diagnosis and subtype of cardiovascular disease. **2022**, 107992 2
- 205 Two-Dimensional Transition Metal-Hexaaminobenzene Monolayer Single-Atom Catalyst for Electrocatalytic Carbon Dioxide Reduction. **2022**, 12, 4005 0
- 204 Enhanced Photocatalytic CO₂ Reduction by Novel Designed Porphyrin-Based MOFs: From Accurate QSPR Model to Experimental Exploration. **2022**, 7, 40869-40881 0
- 203 Metal-Organic Frameworks for Catalytic Construction of C-B Bond and Related Reactions. 0
- 202 trans-[Ni(pdm)₂]₂⁺ (pdm = 2-pyridinemethanol) as a reliable synthon for isoreticular metal-organic frameworks of linear dicarboxylates. **2022**, 123721 1
- 201 Highly Efficient Separation of C₈ Aromatic Isomers by Rationally Designed Nonaromatic Metal-Organic Frameworks. 4
- 200 Bis(Vinylenedithio)-Tetrathiafulvalene-Based Coordination Networks. 0
- 199 Formation of a Polar Flow Channel with Embedded Gas Recognition Pockets in a Yttrium-Based MOF for Enhanced C₂H₂/C₂H₄ and CO₂ Selective Adsorptions. 0
- 198 Incorporation of metal-organic framework MOFs-5 into the polymer monolith via the surface covalent immobilization method for enhanced capillary liquid chromatographic separation of benzene homologues. **2022**, 100199 0
- 197 Polymorphism from a 1:1 Ln:BTB Reaction Pot: Solvothermal versus Sonochemical Synthesis of Ln-MOFs. **2022**, 121299 0
- 196 Porous metal-organic framework nanoscale carriers as a potential platform for drug delivery. **2023**, 153-176 0
- 195 High proton conductivity modulated by active protons in 1D ultra-stable metal-organic coordination polymers: a new insight into coordination interaction/ability of metal ion. 0
- 194 Condensability sieving porous coordination polymer membranes for preferential permeation of C₁₋₄ alkanes over H₂. **2022**, 2, 100044 0
- 193 Cellulose acetate mixed-matrix membranes doped with high CO₂ affinity zeolitic tetrazolate-imidazolate framework additives. **2023**, 182, 105463 0
- 192 ALPO-18 membranes for CO₂/CH₄ and N₂/CH₄ separations. **2023**, 348, 112416 0
- 191 Dative B<-N bonds based crystalline organic framework with permanent porosity for acetylene storage and separation. 1
- 190 Adsorbate-dependent phase switching in the square lattice topology coordination network [Ni(4,4'-bipyridine)₂(NCS)₂]_n. 0

- 189 Emerging applications of metal-organic frameworks and derivatives in solar cells: Recent advances and challenges. **2023**, 152, 100714 1
- 188 A prediction model to predict the thermodynamic conditions of gas hydrates. **2023**, 313, 137550 0
- 187 Separation of trans-1, 3-butadiene from C hydrocarbons mixtures by metal organic framework: A molecular dynamics simulation investigation. **2023**, 566, 111790 0
- 186 Recent advance of macroscopic metal-organic frameworks for water treatment: A review. **2023**, 36, 102564 2
- 185 Synthesis, characterization, and gas adsorption performance of an efficient hierarchical ZIF-11@ZIF-8 core-shell metal-organic framework (MOF). **2023**, 307, 122679 0
- 184 Computational insight into spatial and electronic structure of bis-diketonate cobalt complexes with triphenodioxazine ligands. **2023**, 813, 140286 0
- 183 Influence of flue gas components on the mercury adsorption/oxidation by mechanochemical S₂Cl₂-modified sawdust coke. **2023**, 336, 127154 1
- 182 Correlation between structure and dynamics of CO₂ confined in Mg-MOF-74 and the role of inter-crystalline space: A molecular dynamics simulation study. **2023**, 612, 155909 0
- 181 Carbon-dots-referenced metal-organic frameworks for chemical sensing of tumor/mood biomarker 5-hydroxyindoleacetic acid in human urine: Covalent grafting blue-emitting carbon dots onto red-emitting MOF. **2023**, 290, 122244 1
- 180 Insights into the adsorption performance and separation mechanisms for CO₂ and CO on NaX and CaA zeolites by experiments and simulation. **2023**, 337, 127179 1
- 179 Breaking trade-off effect of Xe/Kr separation on microporous and heteroatoms-rich carbon adsorbents. **2023**, 308, 122942 0
- 178 Bimetal NiCo-MOF-74 for highly selective NO capture from flue gas under ambient conditions. **2022**, 12, 33716-33724 0
- 177 Metal-organic frameworks incorporating azobenzene-based ligands as a heterogeneous Lewis-acid catalyst for cyanosilylation of imines. **2022**, 12, 35461-35468 1
- 176 A New Photoactive Cd(II) MOF: Dye Degradation and Nursing Values on Postpartum Infection by Inhibiting the Staphylococcus aureus Growth. **2022**, 14, 1277-1283 0
- 175 Cd-Based Coordination Polymer Using a Bioinspired Ligand: Studies Toward Turn-On Luminescence-Based Sensing and Schottky Diode Behavior through Device Fabrication. **2022**, 22, 7050-7061 0
- 174 Untangling Framework Confinements: A Dynamical Study on Bulky Aromatic Molecules in MFI Zeolites. **2022**, 12, 15288-15297 0
- 173 Synthesis and Structure of a Copper-Based Functional Network for Efficient Organic Dye Adsorption. **2022**, 61, 19764-19772 0
- 172 N-donating and water-resistant Zn-carboxylate frameworks for humid carbon dioxide capture from flue gas. **2022**, 126793 0

- 171 Selective and rapid extraction of trace amount of gold from complex liquids with silver(I)-organic frameworks. **2022**, 13, 2
- 170 Chiral Carbon Quantum Dots Encapsulated in ZIF-8 Nanoparticles for Turn-On Recognition of Chiral Folic Acid and Nitrofurazone and Applications as Fluorescent Inks. 0
- 169 Nitrous Oxide Is No Laughing Matter: A Historical Review of Nitrous Oxide Gas-Sensing Capabilities Highlighting the Need for Further Exploration. **2022**, 7, 3598-3610 1
- 168 Substituent Engineering-Enabled Structural Rigidification and Performance Improvement for C₂/CO₂ Separation in Three Isorecticular Coordination Frameworks. **2022**, 61, 21076-21086 0
- 167 Biocompatible ammonium-based ionic liquids/ZIF-8 composites for CO₂/CH₄ and CO₂/N₂ separations. **2022**, e00558 0
- 166 Metal-Organic Frameworks as Photocatalysts for Solar-Driven Overall Water Splitting. 3
- 165 Targeted in vitro gene silencing of E2 and nsP1 genes of chikungunya virus by biocompatible zeolitic imidazolate framework. 10, 0
- 164 Composites Filled with Metal Organic Frameworks and Their Derivatives: Recent Developments in Flame Retardants. **2022**, 14, 5279 0
- 163 Stable and Uniform Extraframework Cations in Faujasite Zeolites. **2022**, 13, 11419-11429 0
- 162 A new perchlorate-based hybrid ultramicroporous material with rich bare oxygen atoms for high C₂H₂/CO₂ separation. **2022**, 108039 0
- 161 Metal-Organic Framework-Based Biosensing Platforms for the Sensitive Determination of Trace Elements and Heavy Metals: A Comprehensive Review. 0
- 160 Preferential CO₂ adsorption over cadmium-based Porous Metal-organic Framework. 0
- 159 Morphology evolution of zeolite MFI nanosheet fragments during secondary growths. **2022**, 112424 0
- 158 Optimizing iodine capture performance by metal-organic framework containing with bipyridine units. 1
- 157 Dual-Ligand Ti-MOFs with PushPull Effect for Photocatalytic H₂ Production. 0
- 156 Flexibility of Mixed Ligand Zeolitic Imidazolate Frameworks (ZIF-7B) under CO₂ Pressure: An Investigation Using Positron Annihilation Lifetime Spectroscopy. **2022**, 38, 15694-15702 0
- 155 Truly combining the advantages of polymeric and zeolite membranes for gas separations. **2022**, 378, 1189-1194 2
- 154 Ultra-Thin Zr-MOF/PVA/Melamine Composites with Remarkable Sound Attenuation Effects. 0

- 153 Carbon Dioxide Capture in Metal-Organic Frameworks. 21, 50-56 0
- 152 An Amine-Functionalized Ultramicroporous Metal-Organic Framework for Postcombustion CO₂ Capture. 0
- 151 Real-Space Imaging of the Node-Linker Coordination on the Interfaces between Self-Assembled Metal-Organic Frameworks. 1
- 150 MOF-Based Sorbents Used for the Removal of Hg²⁺ from Aqueous Solutions via a Sorption-Assisted Microfiltration. **2022**, 12, 1280 0
- 149 Removal of Toxic Dyes and Paraquat by a Dual-Functional Metal-Organic Framework. **2022**, 7, 0
- 148 A Robust Molecular Porous Material for C₂H₂/CO₂ Separation. 2206945 0
- 147 Multiple Dimensional Engineering of MOF-Related Materials in Separators for Lithium-Sulfur Batteries: A Review. **2022**, 169, 120519 0
- 146 Role of the Number of Adsorption Sites and Adsorption Dynamics of Diffusing Particles in a Confined Liquid with Langmuir Kinetics. **2023**, 3, 1-12 0
- 145 Fabrication of Porous Fe-Based Metal-Organic Complex for the Enhanced Delivery of 5-Fluorouracil in In Vitro Treatment of Cancer Cells. **2022**, 7, 46674-46681 0
- 144 Recent Advances on Multivariate MOFs for Photocatalytic CO₂ Reduction and H₂ Evolution. 2200394 0
- 143 A review of research and application of polylactic acid composites. 1
- 142 The Properties of Microwave-Assisted Synthesis of Metal-Organic Frameworks and Their Applications. **2023**, 13, 352 2
- 141 Cyclodextrin Metal-Organic Framework as a Broad-Spectrum Potential Delivery Vehicle for the Gasotransmitters. **2023**, 28, 852 0
- 140 Fluorido-bridged robust metal-organic frameworks for efficient C₂H₂/CO₂ separation under moist conditions. 0
- 139 One-step purification of ethylene from acetylene and carbon dioxide by ultramicroporous carbons. 1
- 138 The Dual Effect of 3D-Printed Biological Scaffolds Composed of Diverse Biomaterials in the Treatment of Bone Tumors. Volume 18, 293-305 0
- 137 Enhanced One-Step Purification of C₂H₄ from C₂H₂/C₂H₄/. 0
- 136 Helium separation performance of crown ether-graphane membranes: a theoretical study. **2023**, 0 0

135	Reaction-Diffusion Problems. 2023 , 273-315	0
134	Effect of Metal Atom in Zeolitic Imidazolate Frameworks (ZIF-8 & 67) for Removal of Dyes and Antibiotics from Wastewater: A Review. 2023 , 13, 155	3
133	Aryl- and Superaryl-Extended Calix[4]pyrroles: From Syntheses to Potential Applications. 2023 , 381,	1
132	How Does Molecular Diameter Correlate with the Penetration Barrier of Small Gas Molecules on Porous Carbon-Based Monolayer Membranes?. 2023 , 127, 517-526	0
131	Metal Organic Polygons and Polyhedra: Instabilities and Remedies. 2023 , 11, 36	0
130	Synergetic Thermodynamic/Kinetic Separation of C ₃ H ₈ / CH ₃ F on Carbon Adsorbents for Ultrapure Fluoromethane Electronic Gas.	0
129	A new honeycomb MOF for C ₂ H ₄ purification and C ₃ H ₆ enrichment by separating methanol to olefin products.	0
128	Combination of Low-Polar and Polar Binding Sites in Aliphatic MOFs for the Efficient C ₂ H ₆ /C ₂ H ₄ Separation. 2023 , 15, 3387-3394	0
127	Pore Environment Optimization of Microporous Metal-Organic Frameworks with Huddled Pyrazine Pillars for C ₂ H ₂ /CO ₂ Separation.	0
126	Trend in biodegradable porous nanomaterials for anticancer drug delivery.	0
125	Toxic gas removal with kaolinite, metakaolinite, radiolarite, and diatomite. 2023 , 314, 137707	0
124	Adsorptive removal of Uranium (VI) using zeolitic imidazole framework (ZIF)-67 from alkaline leach liquor. 2023 , 310, 123137	0
123	Estimation of Adsorbed Amounts in Organoclay by Machine Learning. 2023 , 8, 1146-1153	0
122	A THREE-DIMENSIONAL CADMIUM MIXED LIGANDS COORDINATION POLYMER WITH CO ₂ ADSORPTION ABILITY. 2022 , 63, 2045-2053	0
121	Tuning Size and Properties of Zinc Ascorbate Metal-Organic Framework via Acid Modulation. 2023 , 28, 253	0
120	Revisiting Competitive Adsorption of Small Molecules in the Metal-Organic Framework Ni-MOF-74. 2023 , 62, 950-956	0
119	Boosting xenon adsorption with record capacity in microporous carbon molecular sieves.	1
118	Construction of Fluorinated Propane-Trap in Metal-Organic Frameworks for Record Polymer-grade Propylene Production under High Humidity Conditions. 2207955	0

- 117 Strengthening Intraframework Interaction within Flexible MOFs Demonstrates Simultaneous Sieving Acetylene from Ethylene and Carbon Dioxide. 2207127 0
- 116 Highly Robust Microporous Metal-Organic Frameworks for Efficient Ethylene Purification under Dry and Humid Conditions. **2023**, 135, 0
- 115 Metal-Organic Framework Materials for Production and Distribution of Ammonia. **2023**, 145, 1998-2012 0
- 114 Photocatalytic water splitting and reduction of CO₂. **2023**, 111-155 0
- 113 Al-based Isorecticular Metal-Organic Frameworks with MIL-53 Topology as Effective Adsorbents in Methane Purification. **2023**, 8, 0
- 112 Highly Robust Microporous Metal-Organic Frameworks for Efficient Ethylene Purification under Dry and Humid Conditions. **2023**, 62, 0
- 111 New reticular chemistry of pillared rare-earth kgd supermolecular building layer frameworks with ethane-trapping property. 0
- 110 Synergistic C-TiO₂/ZIF-8 type II heterojunction photocatalyst for enhanced photocatalytic degradation of methylene blue. 0
- 109 Metal Organic Frameworks as an Efficient Method for Carbon dioxide capture. **2023**, 211-230 0
- 108 Rigid-Flexible Hybrid Porous Molecular Crystals with Guest-Induced Reversible Crystallinity. 1
- 107 Rigid-Flexible Hybrid Porous Molecular Crystals with Guest-Induced Reversible Crystallinity. 0
- 106 MOFs-based advanced materials for gaseous adsorption: Sustainable environmental remediation. **2023**, 185-205 0
- 105 Programmed Polarizability Engineering in a Cyclen-Based Cubic Zr(IV) Metal-Organic Framework to Boost Xe/Kr Separation. **2023**, 145, 2679-2689 1
- 104 High-throughput screening of hypothetical metal-organic frameworks for thermal conductivity. **2023**, 9, 0
- 103 Low-concentration CO₂ capture using metal-organic frameworks Current status and future perspectives. 1
- 102 Improving curcumin bactericidal potential against multi-drug resistant bacteria via its loading in polydopamine coated zinc-based metal-organic frameworks. **2023**, 30, 0
- 101 H₂/D₂ Separation Using UTSA-16@CAU-10-H@EAOOH Composites as the Stationary Phase in Gas Chromatography via the Additive Effects of Kinetic Sieving and Chemical Affinity Quantum Sieving. **2023**, 62, 1591-1601 0
- 100 Porous functional metal-organic frameworks (MOFs) constructed from different N-heterocyclic carboxylic ligands for gas adsorption/separation. **2023**, 25, 896-908 0

- 99 A functional cobalt-organic framework constructed by triphenylamine tricarboxylate: Detect nitroaromatics by fluorescence sensing and UV-shielding. **2023**, 256, 124319 ○
- 98 A functionalized Hf(IV)-organic framework introducing an efficient, recyclable, and size-selective heterogeneous catalyst for MPV reduction. **2023**, 47, 5347-5355 ○
- 97 Engineering pore nanospaces by introducing aromatic effects in UiO-66 for efficient separation of light hydrocarbons. ○
- 96 Direct generation of polypyrrole-coated palladium nanoparticles inside a metal-organic framework for a semihydrogenation catalyst. **2023**, 13, 7464-7467 ○
- 95 Industrialization of MOFs. **2023**, 307-325 ○
- 94 Ecofriendly Synthesis and Characterization of Magnesium based Metal - Organic Frame Work. 203-209 ○
- 93 Ir-doped Co-BDC MOF as efficient bifunctional catalyst for overall electrochemical water splitting. ○
- 92 Covalent Triazine Framework C6N6 as an Electrochemical Sensor for Hydrogen-Containing Industrial Pollutants. A DFT Study. **2023**, 13, 1121 ○
- 91 Highly efficient separation of C1-C3 alkanes and CO2 in carbazole-based nanoporous organic polymers. **2023**, 311, 123205 ○
- 90 Revealing acetylene separation performances of anion-pillared MOFs by combining molecular simulations and machine learning. **2023**, 464, 142731 ○
- 89 Functional nanomaterials for selective uranium recovery from seawater: Material design, extraction properties and mechanisms. **2023**, 483, 215097 ○
- 88 Cyclodextrin-scaffolded crosslinked poly(ionic liquid)s for ultrafast removal of multiple pollutants: Insight into adsorption performance and mechanism. **2023**, 464, 142526 ○
- 87 Recent progress in mixed rare earth metal-organic frameworks: From synthesis to application. **2023**, 485, 215121 ○
- 86 Chiral metal-organic frameworks materials for racemate resolution. **2023**, 484, 215120 ○
- 85 Construction of new multi-cage-based MOFs using flexible triangular ligands for efficient gas adsorption and separation. **2023**, 322, 123994 ○
- 84 Expanding nonpolar pore surfaces in stable ethane-selective MOF to boost ethane/ethylene separation performance. **2023**, 315, 123642 ○
- 83 Designed metal-organic frameworks with potential for multi-component hydrocarbon separation. **2023**, 484, 215111 ○
- 82 Efficient removal and sensing of copper(II) ions by alkaline earth metal-based metal-organic frameworks. **2023**, 322, 123936 ○

- 81 L-Cysteine anchored Co-MOF derived cobalt-nitrogen-carbon hierarchical architecture as an efficient sensor for the electrochemical detection of catecholamine. **2023**, 190, 108748 ○
- 80 PEG-templated synthesis of ultramicroporous n-ZIF-67 nanoparticles with high selectivity for the adsorption and uptake of CO₂ over CH₄ and N₂. **2023**, 316, 123755 ○
- 79 A stable metal-organic framework with oxygen site for efficiently trapping acetylene from acetylene-containing mixtures. **2023**, 316, 123751 ○
- 78 Construction of a thermally stable ZIF-8 membrane embedded inside a porous support for H₂/CO₂ separation: Close interlocking between membrane grains and porous support grains. **2023**, 677, 121654 ○
- 77 Potential of metal-organic frameworks to adsorb ethylene for fresh produce active packaging applications. **2023**, 35, 101034 ○
- 76 Two-photon 3D-nanostructuring in metal-organic frameworks. **2023**, ○
- 75 A Novel Aluminum-Based Metal-Organic Framework with Uniform Micropores for Trace BTEX Adsorption. **2023**, 135, ○
- 74 A Novel Aluminum-Based Metal-Organic Framework with Uniform Micropores for Trace BTEX Adsorption. **2023**, 62, ○
- 73 MIL-125(Ti) derived Ag doped tablet-like TiO₂@carbon composites as efficient photocatalyst for degradation of rhodamine B. **2023**, 320, 123862 ○
- 72 Progress on fundamentals of adsorption transport of metal-organic frameworks materials and sustainable applications for water harvesting and carbon capture. **2023**, 393, 136253 ○
- 71 Exploring the Potential of a Highly Scalable Metal-Organic Framework CALF-20 for Selective Gas Adsorption at Low Pressure. **2023**, 15, 760 ○
- 70 Boosting Xe/Kr separation by a Mixed-linker strategy in Radiation-Resistant Aluminum-Based Metal-Organic frameworks. **2023**, 311, 123335 ○
- 69 A rapid self-healing glassy polymer/metal-organic-framework hybrid membrane at room temperature. **2023**, 52, 3148-3157 ○
- 68 Toward MOF@Polymer Core-Shell Particles: Design Principles and Potential Applications. **2023**, 56, 462-474 ○
- 67 Application of covalent organic frameworks and metal-organic frameworks nanomaterials in organic/inorganic pollutants removal from solutions through sorption-catalysis strategies. **2023**, 2, ○
- 66 Highly scalable acid-base resistant Cu-Prussian blue metal-organic framework for C₂H₂/C₂H₄, biogas, and flue gas separations. **2023**, 460, 141795 ○
- 65 Applications of Organometallic Compounds for Carbon Dioxide Fixation, Reduction, Gas Adsorption, and Gas Purification. **2023**, 335-356 ○
- 64 The Methylene Spacer Matters: The Structural and Luminescent Effects of Positional Isomerism of n-Methylpyridyltriazole Carboxylate Semi-Rigid Ligands in the Structure of Zn(II) Based Coordination Polymers. **2023**, 15, 888 ○

63	Carbon Dioxide (CO ₂) Gas Storage and Utilization. 2023 , 209-248	o
62	CD-MOF-1 for CO ₂ Uptake: Remote and Hybrid Green Chemistry Synthesis of a Framework Material with Environmentally Conscious Applications. 2023 , 100, 1289-1295	o
61	Electrochemical Conversion of Cu Nanowire Arrays into Metal-Organic Frameworks HKUST-1. 2023 , 170, 022506	o
60	Effects of Structure and Composition of Adsorbents on Competitive Adsorption of Gaseous Emissions: Experiment and Modeling. 2023 , 13, 724	o
59	Advances in metal-organic frameworks for efficient separation and purification of natural gas. 2023 , 42, 100034	o
58	Metal-organic frameworks (MOF)-based sensors for detection of toxic gases: A review of current status and future prospects. 2023 , 299, 127512	1
57	Metal-Organic Frameworks for C ₆ Alkane Separation.	o
56	Metal-Organic Frameworks for C ₆ Alkane Separation.	o
55	Nanoporous semi-cycloaliphatic polyaminal networks for capture of SO ₂ , NH ₃ , and I ₂ . 2023 , 11, 6329-6335	o
54	Granular nitrogen-doped carbons with ultra-high C ₂ H ₂ /CO ₂ adsorption selectivity for C ₂ H ₂ purification. 2023 , 461, 141980	o
53	Chromium and cobalt bimetallic MOF material as an effective and stable catalyst for the decomposition of cyclohexyl hydrogen peroxide. 2023 , 352, 112497	o
52	Topologically Porous Heterostructures for Photo/Photothermal Catalysis of Clean Energy Conversion. 2023 , 7,	o
51	Design of Olefin-Phobic Zeolites for Efficient Ethane and Ethylene Separation. 2023 , 35, 2078-2087	o
50	Engineering Pore Environments of Sulfate-Pillared Metal-Organic Framework for Efficient C ₂ H ₂ /CO ₂ Separation with Record Selectivity.	o
49	Highly Selective Separation of C ₂ H ₂ /CO ₂ and C ₂ H ₂ /C ₂ H ₄ in an N-Rich Cage-Based Microporous Metal-Organic Framework. 2023 , 2023, 1-9	o
48	Application of isotherms models and error functions in activated carbon CO ₂ sorption processes. 2023 , 354, 112513	o
47	Boosting Catalytic Performance of MOF-808(Zr) by Direct Generation of Rich Defective Zr Nodes via a Solvent-Free Approach. 2023 , 62, 4248-4259	o
46	Localization of nuclear wave functions of lithium in [Li+@C ₆₀]PF ₆ molecular insights into two-site disorder order transition. 2023 , 25, 8446-8462	o

- 45 MOFs for desulfurization of fuel oil: Recent advances and future insights. ○
- 44 An ultramicroporous pillar-layer metal-organic framework for high sieving separation of ethylene from ethane. **2023**, 354, 112532 ○
- 43 Switching of Guest Selectivity for the Inclusion of Regioisomers of Monosubstituted Phenols with Crystals of p-tert-Butylcalix[4]arene. ○
- 42 High selectivity and response H₂ sensors based on ZnO@ZIF-71@Ag nanorod arrays. **2023**, ○
- 41 Machine learning accelerates the investigation of targeted MOFs: Performance prediction, rational design and intelligent synthesis. **2023**, 49, 101802 ○
- 40 Highly Efficient Separation of CH₄/C₂H₆/C₃H₈ from Natural Gas on a Novel Copper-Based Metal-Organic Framework. **2023**, 62, 5252-5261 1
- 39 Impact of Ligands on the Properties of Lanthanide Metal-Organic Frameworks. **2023**, 649, ○
- 38 Palladium Schiff base complex-modified Cu(BDC-NH₂) metal-organic frameworks for C-N coupling. **2023**, 13, 8114-8129 ○
- 37 Applications of Polyacetylene Derivatives in Gas and Liquid Separation. **2023**, 28, 2748 ○
- 36 A Microporous Metal-Organic Framework with Unique Aromatic Pore Surfaces for High Performance C₂H₆/C₂H₄ Separation. ○
- 35 A Microporous Metal-Organic Framework with Unique Aromatic Pore Surfaces for High Performance C₂H₆/C₂H₄ Separation. ○
- 34 Erasable Photopatterning of Stilbene-Based Metal-Organic Framework Films. 2201231 ○
- 33 The introduction of a base component to porous organic salts and their CO₂ storage capability. **2023**, 25, 2321-2325 ○
- 32 Rapid Design of Top-Performing Metal-Organic Frameworks with Qualitative Representations of Building Blocks. ○
- 31 Methods for Detecting Picric Acid: A Review of Recent Progress. **2023**, 13, 3991 ○
- 30 Eco-Friendly Synthesis of TiO₂/ZIF-8 Composites: Characterization and Application for the Removal of Imidacloprid from Wastewater. **2023**, 11, 963 ○
- 29 Cd(II) complexes derived from thiazoline, hydrazide and carbodithioate ligands: synthesis, crystal structures and electrochemical sensing of uric acid. **2023**, 37, ○
- 28 Fundamentals of MOF Mechanics & Structure-Mechanical Property Relationships. **2023**, 1-64 ○

- 27 Cage-Like Sodalite-Type Porous Organic Salts Enabling Luminescent Molecule's Incorporation and Room-temperature Phosphorescence Induction in Air. ○
- 26 Prospects of low-temperature solid sorbents in industrial CO₂ capture: A focus on biomass residues as precursor material. **2023**, 13, 245-284 ○
- 25 CO and CO₂ adsorption mechanism in Fe(pz)[Pt(CN)₄] probed by neutron scattering and density-functional theory calculations. ○
- 24 Permanent Porosity in the Room-Temperature Magnet and Magnonic Material V(TCNE)₂. ○
- 23 Pyrene based Schiff base ligand: A highly selective fluorescence chemosensor for the detection of Cu²⁺ ions. **2023**, 100, 100985 ○
- 22 Reticular Chemistry in Pore Engineering of a Y-Based Metal-Organic Framework for Xenon/Krypton Separation. **2023**, 15, 18229-18235 ○
- 21 ZIF-8 thin films by a vapor-phase process: limits to growth. **2023**, 15, 7115-7125 ○
- 20 Epitaxial Single-Domain Cu-BTC Metal-Organic Framework Thin Films and Foils by Electrochemical Conversion of Cuprous Oxide. **2023**, 15, 18440-18449 ○
- 19 Pore-in-Pore Engineering in a Covalent Organic Framework Membrane for Gas Separation. ○
- 18 A Bipyridyl Covalent Organic Framework with Coordinated Cu(I) for Membrane C₃H₆/C₃H₈ Separation. ○
- 17 Composite Eu-MOF@CQDs as a ratiometric luminescent probe for highly sensitive chiral detection of L-lysine and 2-methoxybenzaldehyde. **2023**, 108426 ○
- 16 Assessment of Adsorbate Backbonding in Copper(I) Metal-Organic Frameworks via Multinuclear NMR Spectroscopy and Density Functional Theory Calculations. **2023**, 127, 7513-7519 ○
- 15 Covalent organic framework atropisomers with multiple gas-triggered structural flexibilities. ○
- 14 Quinoid-Based Three-Dimensional Metal-Organic Framework Fe₂(dhbq)₃: Porosity, Electrical Conductivity, and Solid-State Redox Properties. ○
- 13 MOF based CO₂ capture: Adsorption and membrane separation. **2023**, 152, 110722 ○
- 12 Fabrication of Polyelectrolyte Sheets of Unimolecular Thickness via MOF-Templated Polymerization. ○
- 11 Direct Synthesis of Dimethyl Carbonate from Carbon Dioxide and Methanol over Ce-BTC-derived CeO₂. **2023**, 118760 ○
- 10 Recent Progress in the Application of Metal Organic Frameworks in Surface-Enhanced Raman Scattering Detection. **2023**, 13, 479 ○

- 9 Effective Combination of the Metal Centers in MOF-Based Materials toward Sustainable Oxidation Catalysts. **2023**, 16, 3133 ○
- 8 Chemically routed inter pore molecular diffusion in metal-organic framework thin films. **2023**, 14, ○
- 7 A stable N-containing heterocyclic carboxylic acid ligand Co-MOF for photoelectric performance and anionic dyes adsorption. **2023**, 104878 ○
- 6 Carbon monoxide separation: past, present and future. ○
- 5 Fluorescent metal-organic frameworks for analytical applications. **2023**, 339-374 ○
- 4 Heterogenization of molybdenum complexes: techniques and catalytic applications. **2023**, 119227 ○
- 3 Ortho Effects of Tricarboxylate Linkers in Regulating Topologies of Rare-Earth Metal Organic Frameworks. **2023**, 3, 1337-1347 ○
- 2 Synthetic, spectral, structural and catalytic activities of 3-D metal format/acetate framework materials for CO₂ conversion. ○
- 1 Delaminated or Multi-layer Ti₃C₂TX-MXene-incorporated polydimethylsiloxane mixed matrix membrane for enhancing CO₂ /N₂ separation. **2023**, 100410 ○