

Praveen K Thallapally

List of Publications by Year in descending order

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all docs

189
docs citations

189
times ranked

12988
citing authors

#	ARTICLE	IF	CITATIONS
1	Progress in adsorption-based CO ₂ capture by metal-organic frameworks. Chemical Society Reviews, 2012, 41, 2308-2322.	38.1	1,205
2	Separation of rare gases and chiral molecules by selective binding in porous organic cages. Nature Materials, 2014, 13, 954-960.	27.5	532
3	Engineering void space in organic van der Waals crystals: calixarenes lead the way. Chemical Society Reviews, 2007, 36, 236.	38.1	452
4	Flexible (Breathing) Interpenetrated Metal-Organic Frameworks for CO ₂ Separation Applications. Journal of the American Chemical Society, 2008, 130, 16842-16843.	13.7	420
5	Covalent Organic Frameworks as a Decorating Platform for Utilization and Affinity Enhancement of Chelating Sites for Radionuclide Sequestration. Advanced Materials, 2018, 30, e1705479.	21.0	398
6	Introduction of π -Complexation into Porous Aromatic Framework for Highly Selective Adsorption of Ethylene over Ethane. Journal of the American Chemical Society, 2014, 136, 8654-8660.	13.7	383
7	Nanoparticles for biomedical imaging. Expert Opinion on Drug Delivery, 2009, 6, 1175-1194.	5.0	369
8	Potential of Metal-Organic Frameworks for Separation of Xenon and Krypton. Accounts of Chemical Research, 2015, 48, 211-219.	15.6	330
9	Metal-organic framework with optimally selective xenon adsorption and separation. Nature Communications, 2016, 7, ncomms11831.	12.8	325
10	In Situ One-Step Synthesis of Hierarchical Nitrogen-Doped Porous Carbon for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2014, 6, 7214-7222.	8.0	306
11	Highly Selective Carbon Dioxide Uptake by [Cu(bpy- <i>n</i>) ₂ (SiF ₆)] (bpy-1 =) Tj ETQq1 1 0.784314 rgBT /O 3663-3666.	13.7	303
12	Removal of TcO ₄ ⁻ ions from solution: materials and future outlook. Chemical Society Reviews, 2016, 45, 2724-2739.	38.1	232
13	Synthesis and properties of nano zeolitic imidazolate frameworks. Chemical Communications, 2010, 46, 4878.	4.1	226
14	Porous organic molecular materials. CrystEngComm, 2012, 14, 1909.	2.6	205
15	Gas-induced transformation and expansion of a non-porous organic solid. Nature Materials, 2008, 7, 146-150.	27.5	197
16	Xenon Gas Separation and Storage Using Metal-Organic Frameworks. Chem, 2018, 4, 466-494.	11.7	182
17	Direct Observation of Xe and Kr Adsorption in a Xe-Selective Microporous Metal-Organic Framework. Journal of the American Chemical Society, 2015, 137, 7007-7010.	13.7	179
18	Selective CO ₂ Capture from Flue Gas Using Metal-Organic Frameworks—A Fixed Bed Study. Journal of Physical Chemistry C, 2012, 116, 9575-9581.	3.1	176

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19	Flexibility in Metal-Organic Frameworks: A fundamental understanding. <i>Coordination Chemistry Reviews</i> , 2018, 358, 125-152.	18.8	175
20	Flexible metal-organic supramolecular isomers for gas separation. <i>Chemical Communications</i> , 2010, 46, 538-540.	4.1	173
21	Facile xenon capture and release at room temperature using a metal-organic framework: a comparison with activated charcoal. <i>Chemical Communications</i> , 2012, 48, 347-349.	4.1	172
22	Metal-Organic Frameworks for Removal of Xe and Kr from Nuclear Fuel Reprocessing Plants. <i>Langmuir</i> , 2012, 28, 11584-11589.	3.5	172
23	Switching Kr/Xe Selectivity with Temperature in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2012, 134, 9046-9049.	13.7	160
24	Enhanced noble gas adsorption in Ag@MOF-74Ni. <i>Chemical Communications</i> , 2014, 50, 466-468.	4.1	153
25	Zirconium-Based Metal-Organic Framework for Removal of Perhenate from Water. <i>Inorganic Chemistry</i> , 2016, 55, 8241-8243.	4.0	153
26	Gas-Induced Expansion and Contraction of a Fluorinated Metal-Organic Framework. <i>Crystal Growth and Design</i> , 2010, 10, 1037-1039.	3.0	152
27	Ultraporous, Water Stable, and Breathing Zirconium-Based Metal-Organic Frameworks with ftw Topology. <i>Journal of the American Chemical Society</i> , 2015, 137, 13183-13190.	13.7	149
28	Amorphous Molecular Organic Solids for Gas Adsorption. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 5492-5495.	13.8	146
29	Selective removal of cesium and strontium using porous frameworks from high level nuclear waste. <i>Chemical Communications</i> , 2016, 52, 5940-5942.	4.1	145
30	Iodine Adsorption in Metal Organic Frameworks in the Presence of Humidity. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 10622-10626.	8.0	144
31	Prussian Blue Analogues for CO ₂ and SO ₂ Capture and Separation Applications. <i>Inorganic Chemistry</i> , 2010, 49, 4909-4915.	4.0	138
32	Hybrid Ultra-Microporous Materials for Selective Xenon Adsorption and Separation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8285-8289.	13.8	137
33	A porous covalent porphyrin framework with exceptional uptake capacity of saturated hydrocarbons for oil spill cleanup. <i>Chemical Communications</i> , 2013, 49, 1533.	4.1	136
34	Radioactive Iodine and Krypton Control for Nuclear Fuel Reprocessing Facilities. <i>Science and Technology of Nuclear Installations</i> , 2013, 2013, 1-12.	0.8	134
35	High-rate synthesis of Cu-BTC metal-organic frameworks. <i>Chemical Communications</i> , 2013, 49, 11518.	4.1	127
36	Mechanism of Preferential Adsorption of SO ₂ into Two Microporous Paddle Wheel Frameworks M(bdc)(ted) _{0.5} . <i>Chemistry of Materials</i> , 2013, 25, 4653-4662.	6.7	127

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37	Carbon Dioxide Capture in a Self-Assembled Organic Nanochannels. <i>Chemistry of Materials</i> , 2007, 19, 3355-3357.	6.7	126
38	Polymorphism of 1,3,5-Trinitrobenzene Induced by a Trisindane Additive. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 1149-1155.	13.8	125
39	Optimizing radionuclide sequestration in anion nanotraps with record pertechnetate sorption. <i>Nature Communications</i> , 2019, 10, 1646.	12.8	122
40	Selective Metal Cation Capture by Soft Anionic Metal-Organic Frameworks via Drastic Single-Crystal-to-Single-Crystal Transformations. <i>Journal of the American Chemical Society</i> , 2012, 134, 9581-9584.	13.7	121
41	Ultralow Parasitic Energy for Postcombustion CO ₂ Capture Realized in a Nickel Isonicotinate Metal-Organic Framework with Excellent Moisture Stability. <i>Journal of the American Chemical Society</i> , 2017, 139, 1734-1737.	13.7	121
42	Effect of ring rotation upon gas adsorption in SIFSIX-3-M (M = Fe, Ni) pillared square grid networks. <i>Chemical Science</i> , 2017, 8, 2373-2380.	7.4	121
43	Acetylene Absorption and Binding in a Nonporous Crystal Lattice. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6506-6509.	13.8	118
44	Hydrogen-Bonded Supramolecular Assemblies as Robust Templates in the Synthesis of Large Metal-Coordinated Capsules. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 5733-5736.	13.8	117
45	Hydrophobic pillared square grids for selective removal of CO ₂ from simulated flue gas. <i>Chemical Communications</i> , 2015, 51, 15530-15533.	4.1	115
46	A crystalline organic substrate absorbs methane under STP conditions. <i>Chemical Communications</i> , 2005, , 51.	4.1	114
47	Removal of Pertechnetate-Related Oxyanions from Solution Using Functionalized Hierarchical Porous Frameworks. <i>Chemistry - A European Journal</i> , 2016, 22, 17581-17584.	3.3	107
48	Fluorocarbon adsorption in hierarchical porous frameworks. <i>Nature Communications</i> , 2014, 5, 4368.	12.8	104
49	Kr/Xe Separation over a Chabazite Zeolite Membrane. <i>Journal of the American Chemical Society</i> , 2016, 138, 9791-9794.	13.7	103
50	Cucurbit[7]uril: an amorphous molecular material for highly selective carbon dioxide uptake. <i>Chemical Communications</i> , 2011, 47, 7626.	4.1	99
51	A Cambridge Structural Database analysis of the C-H...Cl interaction: C-H...Cl and C-H...Cl-M often behave as hydrogen bonds but C-H...Cl-C is generally a van der Waals interaction. <i>CrystEngComm</i> , 2001, 3, 114-119.	2.6	93
52	Selective CO ₂ Adsorption in a Supramolecular Organic Framework. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 4523-4526.	13.8	90
53	pH-Dependent Assembly and Conversions of Six Cadmium(II)-Based Coordination Complexes. <i>Crystal Growth and Design</i> , 2010, 10, 3277-3284.	3.0	89
54	Crystal engineering of nonporous organic solids for methane sorption. <i>Chemical Communications</i> , 2005, , 4420.	4.1	86

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55	Diffusion of Water in a Nonporous Hydrophobic Crystal. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 3848-3851.	13.8	84
56	1:2 and 1:1 Ag(I)-Isonicotinamide Coordination Compounds: Five-Fold Interpenetrated CdSO ₄ Network and the First Example of (Pyridine)N ⁺ Ag ⁺ O(Amide) Bonds. <i>Crystal Growth and Design</i> , 2004, 4, 215-218.	3.0	82
57	Metal organic gels (MOGs): a new class of sorbents for CO ₂ separation applications. <i>Journal of Materials Chemistry</i> , 2010, 20, 7623.	6.7	80
58	Zeolitic Imidazolate Framework-8 (ZIF-8) Membranes for Kr/Xe Separation. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 1682-1686.	3.7	76
59	Organic crystals absorb hydrogen gas under mild conditions. <i>Chemical Communications</i> , 2005, , 5272.	4.1	75
60	Single-Crystal-to-Single-Crystal Transformation in a One-Dimensional Ag ⁺ Eu Helical System. <i>Inorganic Chemistry</i> , 2009, 48, 6341-6343.	4.0	74
61	Hexagonal Nanoporous Host Structures Based on 2,4,6-Tris-4-(halo-phenoxy)-1,3,5-triazines (Halo=Chloro, Bromo). <i>Tetrahedron</i> , 2000, 56, 6707-6719.	1.9	72
62	Frustrated Organic Solids Display Unexpected Gas Sorption. <i>Journal of the American Chemical Society</i> , 2006, 128, 15060-15061.	13.7	72
63	Micro and mesoporous metal-organic frameworks for catalysis applications. <i>Dalton Transactions</i> , 2010, 39, 1692-1694.	3.3	71
64	Hexameric C-alkylpyrogallol[4]arene molecular capsules sustained by metal-ion coordination and hydrogen bonds. <i>Chemical Communications</i> , 2006, , 2956.	4.1	70
65	An Electrically Switchable Metal-Organic Framework. <i>Scientific Reports</i> , 2014, 4, 6114.	3.3	70
66	Gas-liquid segmented flow microwave-assisted synthesis of MOF-74(Ni) under moderate pressures. <i>CrystEngComm</i> , 2015, 17, 5502-5510.	2.6	68
67	Advances in lymphatic imaging and drug delivery. <i>Advanced Drug Delivery Reviews</i> , 2011, 63, 876-885.	13.7	67
68	Conversion of nonporous helical cadmium organic framework to a porous form. <i>Chemical Communications</i> , 2010, 46, 5373.	4.1	66
69	Metal-organic heat carrier nanofluids. <i>Nano Energy</i> , 2013, 2, 845-855.	16.0	66
70	A Two-Column Method for the Separation of Kr and Xe from Process Off-Gases. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 12893-12899.	3.7	65
71	Free Transport of Water and CO ₂ in Nonporous Hydrophobic Clarithromycin Form II Crystals. <i>Journal of the American Chemical Society</i> , 2009, 131, 13216-13217.	13.7	64
72	1,3-Dibromo-2,4,6-trinitrobenzene (DBTNB). Crystal engineering and perfect polar alignment of two-dimensional hyperpolarizable chromophores. <i>Chemical Communications</i> , 2002, , 1052-1053.	4.1	63

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73	Topological Equivalences between Organic and Coordination Polymer Crystal Structures: An Organic Ladder Formed with Three-Connected Molecular and Supramolecular Synthons. <i>Organic Letters</i> , 2002, 4, 921-924.	4.6	61
74	Shape and Size Effects in the Crystal Structures of Complexes of 1,3,5-Trinitrobenzene with some Trigonal Donors: The Benzene-Thiophene Exchange Rule. <i>Tetrahedron</i> , 2000, 56, 6721-6728.	1.9	60
75	Iodine immobilization by materials through sorption and redox-driven processes: A literature review. <i>Science of the Total Environment</i> , 2020, 716, 132820.	8.0	59
76	Polymorphism of pure p-tert-butylcalix[4]arene: subtle thermally-induced modifications. <i>Chemical Communications</i> , 2004, , 922.	4.1	57
77	Construction of a Novel Zn ^{II} Ni Trinuclear Schiff Base and a Ni ²⁺ Chemosensor. <i>Inorganic Chemistry</i> , 2010, 49, 7241-7243.	4.0	57
78	Early stage structural development of prototypical zeolitic imidazolate framework (ZIF) in solution. <i>Nanoscale</i> , 2018, 10, 4291-4300.	5.6	56
79	Redox-Active Metal-Organic Composites for Highly Selective Oxygen Separation Applications. <i>Advanced Materials</i> , 2016, 28, 3572-3577.	21.0	55
80	Comparison of porous and nonporous materials for methane storage. <i>New Journal of Chemistry</i> , 2007, 31, 628-630.	2.8	54
81	Highly Permeable AlPO-18 Membranes for N ₂ /CH ₄ Separation. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 4113-4118.	3.7	54
82	Radiation-resistant metal-organic framework enables efficient separation of krypton fission gas from spent nuclear fuel. <i>Nature Communications</i> , 2020, 11, 3103.	12.8	54
83	Five New Pseudopolymorphs of sym-Trinitrobenzene. <i>Crystal Growth and Design</i> , 2003, 3, 1033-1040.	3.0	52
84	Hydrogen-Bonded Hexamers Self-Assemble as Spherical and Tubular Superstructures on the Sub-Micron Scale. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6221-6224.	13.8	48
85	Gas-induced solid state transformation of an organic lattice: from nonporous to nanoporous. <i>Chemical Communications</i> , 2011, 47, 701-703.	4.1	48
86	Noria: A Highly Xe-Selective Nanoporous Organic Solid. <i>Chemistry - A European Journal</i> , 2016, 22, 12618-12623.	3.3	48
87	Reduced Magnetism in Core-Shell Magnetite@MOF Composites. <i>Nano Letters</i> , 2017, 17, 6968-6973.	9.1	47
88	Self-Adjusting Metal-Organic Framework for Efficient Capture of Trace Xenon and Krypton. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	47
89	Coupling Octupoles in Crystals: The Case of the 1,3,5-Trinitrobenzene-Triphenylene 1:1 Molecular Co-Crystal. <i>Chemistry of Materials</i> , 2003, 15, 3063-3073.	6.7	44
90	Sorption of nitrogen oxides in a nonporous crystal. <i>Chemical Communications</i> , 2007, , 1521.	4.1	43

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91	Hyper-Cross-linked Porous Organic Frameworks with Ultramicropores for Selective Xenon Capture. ACS Applied Materials & Interfaces, 2019, 11, 13279-13284.	8.0	43
92	Xe adsorption and separation properties of a series of microporous metal-organic frameworks (MOFs) with V-shaped linkers. Journal of Materials Chemistry A, 2017, 5, 16611-16615.	10.3	42
93	Separation of polar compounds using a flexible metal-organic framework. Chemical Communications, 2015, 51, 8421-8424.	4.1	41
94	Selective CO ₂ Adsorption in a Supramolecular Organic Framework. Angewandte Chemie, 2016, 128, 4599-4602.	2.0	40
95	Microporous Crystalline Membranes for Kr/Xe Separation: Comparison Between AlPO-18, SAPO-34, and ZIF-8. ACS Applied Nano Materials, 2018, 1, 463-470.	5.0	39
96	Unusually long cooperative chain of seven hydrogen bonds. An alternative packing type for symmetrical phenols. Chemical Communications, 2002, , 344-345.	4.1	38
97	C-H...O hydrogen bonds in molecular complexes of 1,3,5-trinitrobenzene with some N-heterocycles. CrystEngComm, 2003, 5, 87-92.	2.6	38
98	Understanding the Adsorption Mechanism of Xe and Kr in a Metal-Organic Framework from X-ray Structural Analysis and First-Principles Calculations. Journal of Physical Chemistry Letters, 2015, 6, 1790-1794.	4.6	38
99	Hybrid Ultra-Microporous Materials for Selective Xenon Adsorption and Separation. Angewandte Chemie, 2016, 128, 8425-8429.	2.0	38
100	Xenon Recovery at Room Temperature using Metal-Organic Frameworks. Chemistry - A European Journal, 2017, 23, 10758-10762.	3.3	38
101	2,4,6-Tris(4-nitrophenoxy)-1,3,5-triazine: a hexagonal host framework stabilised by the NO ₂ -trimer supramolecular synthon. Chemical Communications, 2002, , 952-953.	4.1	37
102	Dehydrated Prussian blues for CO ₂ storage and separation applications. CrystEngComm, 2010, 12, 4003.	2.6	35
103	Investigating CO ₂ Sorption in SIFSIX-3-M (M = Fe, Co, Ni, Cu, Zn) through Computational Studies. Crystal Growth and Design, 2019, 19, 3732-3743.	3.0	35
104	Metal-Organic Frameworks with Achiral/Monochiral Nano-Channels. Crystal Growth and Design, 2011, 11, 2824-2828.	3.0	33
105	Metal-Organic Framework Isomers with Diamondoid Networks Constructed of a Semirigid Tetrahedral Linker. Crystal Growth and Design, 2010, 10, 5327-5333.	3.0	32
106	Identification of solid-state forms of cucurbit[6]uril for carbon dioxide capture. CrystEngComm, 2013, 15, 1528.	2.6	32
107	Extraction of rare earth elements using magnetite@MOF composites. Journal of Materials Chemistry A, 2018, 6, 18438-18443.	10.3	30
108	Separation of C ₂ Hydrocarbons by Porous Materials: Metal Organic Frameworks as Platform. Comments on Inorganic Chemistry, 2015, 35, 18-38.	5.2	29

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109	Evaluation of copper-1,3,5-benzenetricarboxylate metal-organic framework (Cu-MOF) as a selective sorbent for Lewis-base analytes. <i>Journal of Separation Science</i> , 2011, 34, 2418-2426.	2.5	28
110	Role of hydrocarbons in pore expansion and contraction of a flexible metal-organic framework. <i>Chemical Communications</i> , 2011, 47, 7077.	4.1	27
111	Diffusion of vaporous guests into a seemingly non-porous organic crystal. <i>Chemical Communications</i> , 2014, 50, 15509-15512.	4.1	26
112	Gas/Solvent-Induced Transformation and Expansion of a Nonporous Solid to 1:1 Host Guest Form. <i>Crystal Growth and Design</i> , 2008, 8, 2090-2092.	3.0	25
113	Auxiliary Ligand-Dependent Assembly of Several Ni/Ni ²⁺ /Cd Compounds with N ₂ O ₂ Donor Tetradentate Symmetrical Schiff Base Ligand. <i>Crystal Growth and Design</i> , 2010, 10, 4987-4994.	3.0	25
114	Chalcogenide Aerogels as Sorbents for Noble Gases (Xe, Kr). <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 33389-33394.	8.0	25
115	Metal-Organic Framework-Polyacrylonitrile Composite Beads for Xenon Capture. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 45342-45350.	8.0	25
116	Identification of Reaction Sites on Metal-Organic Framework-Based Asymmetric Catalysts for Carbonyl-Ene Reactions. <i>ACS Catalysis</i> , 2019, 9, 3969-3977.	11.2	24
117	Recovery of xenon from air over ZIF-8 membranes. <i>Chemical Communications</i> , 2018, 54, 8976-8979.	4.1	23
118	Synthesis of High-Quality Mg-MOF-74 Thin Films <i>via</i> Vapor-Assisted Crystallization. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 35223-35231.	8.0	23
119	Synthesis, Characterization, and Application of Metal Organic Framework Nanostructures. <i>Langmuir</i> , 2010, 26, 18591-18594.	3.5	22
120	Computational studies of adsorption in metal organic frameworks and interaction of nanoparticles in condensed phases. <i>Molecular Simulation</i> , 2014, 40, 571-584.	2.0	21
121	SAPO-34 membranes for xenon capture from air. <i>Journal of Membrane Science</i> , 2019, 573, 288-292.	8.2	21
122	Homochiral 3D metal-organic frameworks from chiral 1D rods: 6-way helical packing. <i>Chemical Communications</i> , 2011, 47, 9402.	4.1	20
123	Insights into the Temperature-Dependent "Breathing" of a Flexible Fluorinated Metal-Organic Framework. <i>ChemPhysChem</i> , 2012, 13, 3275-3281.	2.1	20
124	Postsynthetic Oxidation of the Coordination Site in a Heterometallic Metal-Organic Framework: Tuning Catalytic Behaviors. <i>Chemistry of Materials</i> , 2020, 32, 5192-5199.	6.7	20
125	Chiral environment of catalytic sites in the chiral metal-organic frameworks. <i>Dalton Transactions</i> , 2015, 44, 9349-9352.	3.3	19
126	Time Dependent Structural Evolution of Porous Organic Cage CC3. <i>Crystal Growth and Design</i> , 2018, 18, 921-927.	3.0	19

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127	Technetium immobilization by materials through sorption and redox-driven processes: A literature review. <i>Science of the Total Environment</i> , 2020, 716, 132849.	8.0	19
128	Simultaneous <i>in Situ</i> X-ray Diffraction and Calorimetric Studies as a Tool To Evaluate Gas Adsorption in Microporous Materials. <i>Journal of Physical Chemistry C</i> , 2016, 120, 360-369.	3.1	18
129	Advanced Porous Materials: Design, Synthesis, and Applications in Sustainability. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7997-7998.	6.7	18
130	Desulfurization Efficiency Preserved in a Heterometallic MOF: Synthesis and Thermodynamically Controlled Phase Transition. <i>Advanced Science</i> , 2019, 6, 1802056.	11.2	17
131	Generation of 2D and 3D (PtS, Adamantanoid) Nets with a Flexible Tetrahedral Building Block. <i>Crystal Growth and Design</i> , 2010, 10, 3843-3846.	3.0	16
132	Controlling Metal-Organic Framework/ZnO Heterostructure Kinetics through Selective Ligand Binding to ZnO Surface Steps. <i>Chemistry of Materials</i> , 2020, 32, 6666-6675.	6.7	16
133	Porous Covalent Organic Polymers for Efficient Fluorocarbon-Based Adsorption Cooling. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 18037-18043.	13.8	16
134	Effect of Produced HCl during the Catalysis on Micro- and Mesoporous MOFs. <i>Crystal Growth and Design</i> , 2010, 10, 4118-4122.	3.0	15
135	Isoreticular Expansion of Metal-Organic Frameworks via Pillaring of Metal Templated Tunable Building Layers: Hydrogen Storage and Selective CO ₂ Capture. <i>Chemistry - A European Journal</i> , 2019, 25, 14500-14505.	3.3	15
136	Direct Observation of Li ⁺ Ions Trapped in a Mg ²⁺ -Templated Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2019, 58, 8922-8926.	4.0	15
137	Adsorption Kinetics in Nanoscale Porous Coordination Polymers. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 21712-21716.	8.0	14
138	Coordination Covalent Frameworks: A New Route for Synthesis and Expansion of Functional Porous Materials. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 28424-28427.	8.0	14
139	Adsorption of CO ₂ on Coll ₃ [Coll(CN) ₆] ₂ using DRIFTS. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 74, 629-634.	3.9	13
140	Computational Study of Hydrocarbon Adsorption in Metal-Organic Framework Ni ₂ (dhtp). <i>Journal of Physical Chemistry B</i> , 2011, 115, 2842-2849.	2.6	13
141	Molecular Intermediate in the Directed Formation of a Zeolitic Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 17598-17606.	13.7	13
142	Free energies of CO ₂ +H ₂ capture by p-tert-butylcalix[4]arene: A molecular dynamics study. <i>Journal of Chemical Physics</i> , 2007, 127, 104703.	3.0	12
143	Matching of molecular and supramolecular symmetry. An exercise in crystal engineering. <i>CrystEngComm</i> , 2001, 3, 134.	2.6	11
144	Kinetics and Mechanisms of ZnO to ZIF-8 Transformations in Supercritical CO ₂ Revealed by <i>In Situ</i> X-ray Diffraction. <i>ChemSusChem</i> , 2020, 13, 2602-2612.	6.8	11

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145	Elucidating the mechanisms of Paraffin-Olefin separations using nanoporous adsorbents: An overview. <i>Science</i> , 2021, 24, 103042.	4.1	11
146	Molecular mechanism of hydrocarbons binding to the metal-organic framework. <i>Chemical Physics Letters</i> , 2011, 501, 455-460.	2.6	10
147	Understanding nanofluid stability through molecular simulation. <i>Chemical Physics Letters</i> , 2012, 551, 115-120.	2.6	10
148	An Ultra-Microporous Metal-Organic Framework with Exceptional Xe Capacity. <i>Chemistry - A European Journal</i> , 2020, 26, 12544-12548.	3.3	10
149	Metal Organic Frameworks for Xenon Storage Applications. , 2020, 2, 233-238.		10
150	Porous Organic Cages CC3 and CC2 as Adsorbents for the Separation of Carbon Dioxide from Nitrogen and Hydrogen. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 10547-10553.	3.7	9
151	Grand Canonical Monte Carlo Studies of CO ₂ and CH ₄ Adsorption in <i>p</i> -tert-Butylcalix[4]Arene. <i>Journal of Physical Chemistry B</i> , 2010, 114, 5764-5768.	2.6	8
152	Computational Studies of Load-Dependent Guest Dynamics and Free Energies of Inclusion for CO ₂ in Low-Density <i>p</i> -tert-Butylcalix[4]arene at Loadings up to 2:1. <i>Journal of Physical Chemistry A</i> , 2009, 113, 3369-3374.	2.5	7
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