Mircea Dinca

List of Publications by Year in Descending Order

173 papers	28,685 citations	77 h-index	169 g-index
197 ext. papers	32,340 ext. citations	13.9 avg, IF	7.91 L-index

#	Paper	IF	Citations
173	Isolation of a Side-On V(III)-(□O) through the Intermediacy of a Low-Valent V(II) in a Metal-Organic Framework. *Inorganic Chemistry*, **2021**, 60, 18205-18210	5.1	1
172	Ultrathin, High-Aspect Ratio, and Free-Standing Magnetic Nanowires by Exfoliation of Ferromagnetic Quasi-One-Dimensional van der Waals Lattices. *Journal of the American Chemical Society*, **2021**, 143, 19551-19558	16.4	2
171	Spectroscopic Evidence of Hyponitrite Radical Intermediate in NO Disproportionation at a MOF-Supported Mononuclear Copper Site. *Angewandte Chemie*, **2021**, 133, 7924-7929	3.6	0
170	Accelerated Synthesis of a Ni2Cl2(BTDD) Metal□Organic Framework in a Continuous Flow Reactor for Atmospheric Water Capture. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 3996-4003	8.3	11
169	MOF-Derived RuCo Catalyzes the Formation of a Plasticizer Alcohol from Renewable Precursors. *ACS Catalysis*, **2021**, 11, 8521-8526	13.1	1
168	Ammonia Capture via an Unconventional Reversible Guest-Induced Metal-Linker Bond Dynamics in a Highly Stable Metal□Organic Framework. *Chemistry of Materials*, **2021**, 33, 6186-6192	9.6	10
167	Der derzeitige Stand von MOF- und COF-Anwendungen. *Angewandte Chemie*, **2021**, 133, 24174	3.6	4
166	Complexes of Platinum Group Metals with a Conformationally Locked Scorpionate in a Metal-Organic Framework: An Unusually Close Apical Interaction of Palladium(II). *Inorganic Chemistry*, **2021**, 60, 11764-11774	5.1	
165	Atomically precise single-crystal structures of electrically conducting 2D metal-organic frameworks. *Nature Materials*, **2021**, 20, 222-228	27	104
164	Large Single Crystals of Two-Dimensional □Conjugated Metal-Organic Frameworks via Biphasic Solution-Solid Growth. *ACS Central Science*, **2021**, 7, 104-109	16.8	16
163	Thermal Cycling of a MOF-Based NO Disproportionation Catalyst. *Journal of the American Chemical Society*, **2021**, 143, 681-686	16.4	18
162	High-Capacitance Pseudocapacitors from Li Ion Intercalation in Nonporous, Electrically Conductive 2D Coordination Polymers. *Journal of the American Chemical Society*, **2021**, 143, 2285-2292	16.4	31
161	Spectroscopic Evidence of Hyponitrite Radical Intermediate in NO Disproportionation at a MOF-Supported Mononuclear Copper Site. *Angewandte Chemie - International Edition*, **2021**, 60, 7845-7850	16.4	3
160	The Current Status of MOF and COF Applications. *Angewandte Chemie - International Edition*, **2021**, 60, 23975-24001	16.4	75
159	Low-Temperature H2S/CO2/CH4 Separation in Mixed-Matrix Membranes Containing MFU-4. *Chemistry of Materials*, **2021**, 33, 6825-6831	9.6	4
158	Redox Ladder of Ni3 Complexes with Closed-Shell, Mono-, and Diradical Triphenylene Units: Molecular Models for Conductive 2D MOFs. *Angewandte Chemie*, **2021**, 133, 23977	3.6	0
157	Redox Ladder of Ni Complexes with Closed-Shell, Mono-, and Diradical Triphenylene Units: Molecular Models for Conductive 2D MOFs. *Angewandte Chemie - International Edition*, **2021**, 60, 23784-23789	16.4	4

156	Divergent Adsorption Behavior Controlled by Primary Coordination Sphere Anions in the Metal-Organic Framework NiXBTDD. *Journal of the American Chemical Society*, **2021**, 143, 16343-16347	16.4	3
155	Dual-Ion Intercalation and High Volumetric Capacitance in a Two-Dimensional Non-Porous Coordination Polymer. *Angewandte Chemie - International Edition*, **2021**,	16.4	5
154	Colloidal nano-MOFs nucleate and stabilize ultra-small quantum dots of lead bromide perovskites. *Chemical Science*, **2021**, 12, 6129-6135	9.4	4
153	Why conductivity is not always king - physical properties governing the capacitance of 2D metal-organic framework-based EDLC supercapacitor electrodes: a Ni(HITP) case study. *Faraday Discussions*, **2021**, 231, 298-304	3.6	1
152	Radical PolyMOFs: A Role for Ligand Dispersity in Enabling Crystallinity. *Chemistry of Materials*, **2021**, 33, 9508-9514	9.6	0
151	Simultaneous interlayer and intralayer space control in two-dimensional metal-organic frameworks for acetylene/ethylene separation. *Nature Communications*, **2020**, 11, 6259	17.4	23
150	R□ktitelbild: Observation of Ion Electrosorption in Metall□rganic Framework Micropores with In Operando Small-Angle Neutron Scattering (Angew. Chem. 24/2020). *Angewandte Chemie*, **2020**, 132, 9868-9868	3.6	
149	Isoreticular Linker Substitution in Conductive Metall□rganic Frameworks with Through-Space Transport Pathways. *Angewandte Chemie*, **2020**, 132, 19791-19794	3.6	1
148	A Three-Dimensional Porous Organic Semiconductor Based on Fully sp -Hybridized Graphitic Polymer. *Angewandte Chemie - International Edition*, **2020**, 59, 15166-15170	16.4	14
147	A Three-Dimensional Porous Organic Semiconductor Based on Fully sp2-Hybridized Graphitic Polymer. *Angewandte Chemie*, **2020**, 132, 15278-15282	3.6	7
146	Continuous Electrical Conductivity Variation in M(Hexaiminotriphenylene) (M = Co, Ni, Cu) MOF Alloys. *Journal of the American Chemical Society*, **2020**, 142, 12367-12373	16.4	75
145	Cerium(IV) Enhances the Catalytic Oxidation Activity of Single-Site Cu Active Sites in MOFs. *ACS Catalysis*, **2020**, 10, 7820-7825	13.1	22
144	Observation of Ion Electrosorption in Metal-Organic Framework Micropores with In Operando Small-Angle Neutron Scattering. *Angewandte Chemie - International Edition*, **2020**, 59, 9773-9779	16.4	4
143	Electrical Conductivity in a Porous, Cubic Rare-Earth Catecholate. *Journal of the American Chemical Society*, **2020**, 142, 6920-6924	16.4	24
142	Observation of Ion Electrosorption in Metall□rganic Framework Micropores with In Operando Small-Angle Neutron Scattering. *Angewandte Chemie*, **2020**, 132, 9860-9866	3.6	4
141	Gas-Phase Ethylene Polymerization by Single-Site Cr Centers in a Metall□rganic Framework. *ACS Catalysis*, **2020**, 10, 3864-3870	13.1	8
140	Interdigitated conducting tetrathiafulvalene-based coordination networks. *Chemical Communications*, **2020**, 56, 2407-2410	5.8	8
139	Bioinspired chemistry at MOF secondary building units. *Chemical Science*, **2020**, 11, 1728-1737	9.4	39

138	Electrically Conductive Metal-Organic Frameworks. *Chemical Reviews*, **2020**, 120, 8536-8580	68.1	450
137	Isoreticular Linker Substitution in Conductive Metal-Organic Frameworks with Through-Space Transport Pathways. *Angewandte Chemie - International Edition*, **2020**, 59, 19623-19626	16.4	10
136	Molecular understanding of charge storage and charging dynamics in supercapacitors with MOF electrodes and ionic liquid electrolytes. *Nature Materials*, **2020**, 19, 552-558	27	208
135	Toward New 2D Zirconium-Based Metal□Organic Frameworks: Synthesis, Structures, and Electronic Properties. *Chemistry of Materials*, **2020**, 32, 97-104	9.6	25
134	Efficient and tunable one-dimensional charge transport in layered lanthanide metal-organic frameworks. *Nature Chemistry*, **2020**, 12, 131-136	17.6	120
133	Aperiodic metal-organic frameworks. *Chemical Science*, **2020**, 11, 11094-11103	9.4	5
132	Structural Characterization of a High-Nuclearity Niobium(V) Carboxylate Cluster Based on Pivalic Acid. *Helvetica Chimica Acta*, **2020**, 103, e2000186	2	1
131	Kinetic stability of metal□organic frameworks for corrosive and coordinating gas capture. *Nature Reviews Materials*, **2019**, 4, 708-725	73.3	133
130	Selective Oxidation of C-H Bonds through a Manganese(III) Hydroperoxo in Mn-Exchanged CFA-1. *Inorganic Chemistry*, **2019**, 58, 13221-13228	5.1	10
129	Waterproof molecular monolayers stabilize 2D materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 20844-20849	11.5	24
128	Organometallic Chemistry within Metal□Organic Frameworks. *Organometallics*, **2019**, 38, 3389-3391	3.8	5
127	Continuous Partial Oxidation of Methane to Methanol Catalyzed by Diffusion-Paired Copper Dimers in Copper-Exchanged Zeolites. *Journal of the American Chemical Society*, **2019**, 141, 11641-11650	16.4	97
126	Chemiresistive Sensing of Ambient CO by an Autogenously Hydrated Cu(hexaiminobenzene) Framework. *ACS Central Science*, **2019**, 5, 1425-1431	16.8	50
125	Triphenylene-Bridged Trinuclear Complexes of Cu: Models for Spin Interactions in Two-Dimensional Electrically Conductive Metal-Organic Frameworks. *Journal of the American Chemical Society*, **2019**, 141, 10475-10480	16.4	48
124	Metal- and covalent-organic frameworks as solid-state electrolytes for metal-ion batteries. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2019**, 377, 20180225	3	34
123	? Divergent coordination behavior of early-transition metals towards MOF-5. *Chemical Science*, **2019**, 10, 5906-5910	9.4	11
122	Highly Selective Heterogeneous Ethylene Dimerization with a Scalable and Chemically Robust MOF Catalyst. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 6654-6661	8.3	47
121	Record-Setting Sorbents for Reversible Water Uptake by Systematic Anion Exchanges in Metal-Organic Frameworks. *Journal of the American Chemical Society*, **2019**, 141, 13858-13866	16.4	67

120	Diverse π-stacking motifs modulate electrical conductivity in tetrathiafulvalene-based metal-organic frameworks. *Chemical Science*, **2019**, 10, 8558-8565	9.4	80
119	Hydrogen bonding structure of confined water templated by a metal-organic framework with open metal sites. *Nature Communications*, **2019**, 10, 4771	17.4	42
118	Computational Exploration of NO Single-Site Disproportionation on Fe-MOF-5. *Chemistry of Materials*, **2019**, 31, 8875-8885	9.6	11
117	Metal-Organic Framework-Derived Guerbet Catalyst Effectively Differentiates between Ethanol and Butanol. *Journal of the American Chemical Society*, **2019**, 141, 17477-17481	16.4	20
116	High Li and Mg Conductivity in a Cu-Azolate Metal-Organic Framework. *Journal of the American Chemical Society*, **2019**, 141, 4422-4427	16.4	74
115	Single Crystals of Electrically Conductive Two-Dimensional Metal-Organic Frameworks: Structural and Electrical Transport Properties. *ACS Central Science*, **2019**, 5, 1959-1964	16.8	105
114	Stabilized Vanadium Catalyst for Olefin Polymerization by Site Isolation in a Metal-Organic Framework. *Angewandte Chemie - International Edition*, **2018**, 57, 8135-8139	16.4	51
113	Stabilized Vanadium Catalyst for Olefin Polymerization by Site Isolation in a Metal□Organic Framework. *Angewandte Chemie*, **2018**, 130, 8267-8271	3.6	6
112	Selective Vapor Pressure Dependent Proton Transport in a Metal-Organic Framework with Two Distinct Hydrophilic Pores. *Journal of the American Chemical Society*, **2018**, 140, 2016-2019	16.4	51
111	Tricking Inert Metals into Water-Absorbing MOFs. *Joule*, **2018**, 2, 18-20	27.8	4
110	Controlled Gas Uptake in Metal-Organic Frameworks with Record Ammonia Sorption. *Journal of the American Chemical Society*, **2018**, 140, 3461-3466	16.4	176
109	Precise control of pore hydrophilicity enabled by post-synthetic cation exchange in metal-organic frameworks. *Chemical Science*, **2018**, 9, 3856-3859	9.4	46
108	Activation of Methyltrioxorhenium for Olefin Metathesis in a Zirconium-Based Metal-Organic Framework. *Journal of the American Chemical Society*, **2018**, 140, 6956-6960	16.4	27
107	Novel Topology in Semiconducting Tetrathiafulvalene Lanthanide Metal-Organic Frameworks. *Israel Journal of Chemistry*, **2018**, 58, 1119-1122	3.4	24
106	Viewpoint on the Partial Oxidation of Methane to Methanol Using Cu- and Fe-Exchanged Zeolites. *ACS Catalysis*, **2018**, 8, 8306-8313	13.1	91
105	Continuous-Flow Production of Succinic Anhydrides via Catalytic □-Lactone Carbonylation by Co(CO)?Cr-MIL-101. *Journal of the American Chemical Society*, **2018**, 140, 10669-10672	16.4	37
104	Selective Catalytic Olefin Epoxidation with MnII-Exchanged MOF-5. *ACS Catalysis*, **2018**, 8, 596-601	13.1	86
103	Tunable Metal-Organic Frameworks Enable High-Efficiency Cascaded Adsorption Heat Pumps. *Journal of the American Chemical Society*, **2018**, 140, 17591-17596	16.4	46

102	Reversible Metalation and Catalysis with a Scorpionate-like Metallo-ligand in a Metal-Organic Framework. *Journal of the American Chemical Society*, **2018**, 140, 17394-17398	16.4	34
101	Molecular Niobium Precursors in Various Oxidation States: An XAS Case Study. *Inorganic Chemistry*, **2018**, 57, 13998-14004	5.1	6
100	A Structural Mimic of Carbonic Anhydrase in a Metal-Organic Framework. *CheM*, **2018**, 4, 2894-2901	16.2	53
99	High electrical conductivity and carrier mobility in oCVD PEDOT thin films by engineered crystallization and acid treatment. *Science Advances*, **2018**, 4, eaat5780	14.3	113
98	Tunable Mixed-Valence Doping toward Record Electrical Conductivity in a Three-Dimensional Metal-Organic Framework. *Journal of the American Chemical Society*, **2018**, 140, 7411-7414	16.4	152
97	Coordination-induced reversible electrical conductivity variation in the MOF-74 analogue Fe(DSBDC). *Dalton Transactions*, **2018**, 47, 11739-11743	4.3	16
96	Modular O electroreduction activity in triphenylene-based metal-organic frameworks. *Chemical Science*, **2018**, 9, 6286-6291	9.4	79
95	Dynamic structural flexibility of Fe-MOF-5 evidenced by 57Fe Mssbauer spectroscopy. *Inorganic Chemistry Frontiers*, **2017**, 4, 782-788	6.8	9
94	2D Conductive Iron-Quinoid Magnets Ordering up to T = 105 K via Heterogenous Redox Chemistry. *Journal of the American Chemical Society*, **2017**, 139, 4175-4184	16.4	148
93	The Organic Secondary Building Unit: Strong Intermolecular Interactions Define Topology in MIT-25, a Mesoporous MOF with Proton-Replete Channels. *Journal of the American Chemical Society* , **2017**, 139, 3619-3622	16.4	59
92	High temperature ferromagnetism in conjugated two-dimensional metal-organic frameworks. *Chemical Science*, **2017**, 8, 2859-2867	9.4	61
91	Pt Electrodes Enable the Formation of O Centers in MOF-5 from Multiple Oxygen Sources. *ACS Applied Materials & Interfaces*, **2017**, 9, 33528-33532	9.5	9
90	Is iron unique in promoting electrical conductivity in MOFs?. *Chemical Science*, **2017**, 8, 4450-4457	9.4	106
89	Rapid and precise determination of zero-field splittings by terahertz time-domain electron paramagnetic resonance spectroscopy. *Chemical Science*, **2017**, 8, 7312-7323	9.4	14
88	Selective Dimerization of Propylene with Ni-MFU-4l. *Organometallics*, **2017**, 36, 1681-1683	3.8	45
87	Grand Challenges and Future Opportunities for Metal-Organic Frameworks. *ACS Central Science*, **2017**, 3, 554-563	16.8	236
86	Record Atmospheric Fresh Water Capture and Heat Transfer with a Material Operating at the Water Uptake Reversibility Limit. *ACS Central Science*, **2017**, 3, 668-672	16.8	178
85	Moisture Farming with Metal-Organic Frameworks. *CheM*, **2017**, 2, 757-759	16.2	4

84	Heterogeneous Epoxide Carbonylation by Cooperative Ion-Pair Catalysis in Co(CO)-Incorporated Cr-MIL-101. *ACS Central Science*, **2017**, 3, 444-448	16.8	38
83	Reversible Capture and Release of Cl and Br with a Redox-Active Metal-Organic Framework. *Journal of the American Chemical Society*, **2017**, 139, 5992-5997	16.4	82
82	Mechanism of Single-Site Molecule-Like Catalytic Ethylene Dimerization in Ni-MFU-4l. *Journal of the American Chemical Society*, **2017**, 139, 757-762	16.4	94
81	Mechanistic Evidence for Ligand-Centered Electrocatalytic Oxygen Reduction with the Conductive MOF Ni3(hexaiminotriphenylene)2. *ACS Catalysis*, **2017**, 7, 7726-7731	13.1	115
80	New directions in gas sorption and separation with MOFs: general discussion. *Faraday Discussions*, **2017**, 201, 175-194	3.6	6
79	Catalysis in MOFs: general discussion. *Faraday Discussions*, **2017**, 201, 369-394	3.6	12
78	A Microporous and Naturally Nanostructured Thermoelectric Metal-Organic Framework with Ultralow Thermal Conductivity. *Joule*, **2017**, 1, 168-177	27.8	112
77	Signature of Metallic Behavior in the Metal-Organic Frameworks M(hexaiminobenzene) (M = Ni, Cu). *Journal of the American Chemical Society*, **2017**, 139, 13608-13611	16.4	214
76	Single-Ion Li, Na, and Mg Solid Electrolytes Supported by a Mesoporous Anionic Cu-Azolate Metal-Organic Framework. *Journal of the American Chemical Society*, **2017**, 139, 13260-13263	16.4	156
75	Highly Stereoselective Heterogeneous Diene Polymerization by Co-MFU-4l: A Single-Site Catalyst Prepared by Cation Exchange. *Journal of the American Chemical Society*, **2017**, 139, 12664-12669	16.4	57
74	Conetronics in 2D metal-organic frameworks: double/half Dirac cones and quantum anomalous Hall effect. *2D Materials*, **2017**, 4, 015015	5.9	31
73	Conductive MOF electrodes for stable supercapacitors with high areal capacitance. *Nature Materials*, **2017**, 16, 220-224	27	1287
72	Metal-Organic Frameworks as Active Materials in Electronic Sensor Devices. *Sensors*, **2017**, 17,	3.8	166
71	First-principles design of a half-filled flat band of the kagome lattice in two-dimensional metal-organic frameworks. *Physical Review B*, **2016**, 94,	3.3	44
70	Photon energy storage materials with high energy densities based on diacetylene□azobenzene derivatives. *Journal of Materials Chemistry A*, **2016**, 4, 16157-16165	13	62
69	Single-Site Heterogeneous Catalysts for Olefin Polymerization Enabled by Cation Exchange in a Metal-Organic Framework. *Journal of the American Chemical Society*, **2016**, 138, 10232-7	16.4	132
68	High and Reversible Ammonia Uptake in Mesoporous Azolate Metal-Organic Frameworks with Open Mn, Co, and Ni Sites. *Journal of the American Chemical Society*, **2016**, 138, 9401-4	16.4	166
67	Electrochemical oxygen reduction catalysed by Ni3(hexaiminotriphenylene)2. *Nature Communications*, **2016**, 7, 10942	17.4	443

66	Measuring and Reporting Electrical Conductivity in Metal-Organic Frameworks: Cd(TTFTB) as a Case Study. *Journal of the American Chemical Society*, **2016**, 138, 14772-14782	16.4	152
65	Elektrisch leitfähige poröse Metall-organische Gerüstverbindungen. *Angewandte Chemie*, **2016**, 128, 3628-3642	3.6	152
64	Frontier Orbital Engineering of Metal-Organic Frameworks with Extended Inorganic Connectivity: Porous Alkaline-Earth Oxides. *Inorganic Chemistry*, **2016**, 55, 7265-9	5.1	11
63	Electrically Conductive Porous Metal-Organic Frameworks. *Angewandte Chemie - International Edition*, **2016**, 55, 3566-79	16.4	1104
62	Selective Dimerization of Ethylene to 1-Butene with a Porous Catalyst. *ACS Central Science*, **2016**, 2, 148-153	13.8	160
61	On the electrochemical deposition of metal-organic frameworks. *Journal of Materials Chemistry A*, **2016**, 4, 3914-3925	13	88
60	Thermodynamics of solvent interaction with the metal-organic framework MOF-5. *Physical Chemistry Chemical Physics*, **2016**, 18, 1158-62	3.6	26
59	Metal-organic frameworks for electronics and photonics. *MRS Bulletin*, **2016**, 41, 854-857	3.2	27
58	Solid-State Redox Switching of Magnetic Exchange and Electronic Conductivity in a Benzoquinoid-Bridged Mn(II) Chain Compound. *Journal of the American Chemical Society*, **2016**, 138, 6583-90	16.4	42
57	Transparent-to-Dark Electrochromic Behavior in Naphthalene-Diimide-Based Mesoporous MOF-74 Analogs. *CheM*, **2016**, 1, 264-272	16.2	106
56	Dynamic DMF Binding in MOF-5 Enables the Formation of Metastable Cobalt-Substituted MOF-5 Analogues. *ACS Central Science*, **2015**, 1, 252-60	16.8	99
55	Synthesis and Electrical Properties of Covalent Organic Frameworks with Heavy Chalcogens. *Chemistry of Materials*, **2015**, 27, 5487-5490	9.6	77
54	Thermodynamic parameters of cation exchange in MOF-5 and MFU-4l. *Chemical Communications*, **2015**, 51, 11780-2	5.8	24
53	Million-Fold Electrical Conductivity Enhancement in Fe2(DEBDC) versus Mn2(DEBDC) (E = S, O). *Journal of the American Chemical Society*, **2015**, 137, 6164-7	16.4	222
52	When the Solvent Locks the Cage: Theoretical Insight into the Transmetalation of MOF-5 Lattices and Its Kinetic Limitations. *Chemistry of Materials*, **2015**, 27, 3422-3429	9.6	18
51	On the Mechanism of MOF-5 Formation under Cathodic Bias. *Chemistry of Materials*, **2015**, 27, 3203-3206	9.6	50
50	Chemiresistive Sensor Arrays from Conductive 2D Metal-Organic Frameworks. *Journal of the American Chemical Society*, **2015**, 137, 13780-3	16.4	491
49	Cu3(hexaiminotriphenylene)2: An Electrically Conductive 2D Metal-Organic Framework for Chemiresistive Sensing. *Angewandte Chemie*, **2015**, 127, 4423-4426	3.6	102

48	NO disproportionation at a mononuclear site-isolated Fe(2+) center in Fe(2+)-MOF-5. *Journal of the American Chemical Society*, **2015**, 137, 7495-501	16.4	82
47	Cu(hexaiminotriphenylene), an electrically conductive 2D metal-organic framework for chemiresistive sensing. *Angewandte Chemie - International Edition*, **2015**, 54, 4349-52	16.4	596
46	Cation-dependent intrinsic electrical conductivity in isostructural tetrathiafulvalene-based microporous metal-organic frameworks. *Journal of the American Chemical Society*, **2015**, 137, 1774-7	16.4	282
45	Solvent-dependent cation exchange in metal-organic frameworks. *Chemistry - A European Journal*, **2014**, 20, 6871-4	4.8	60
44	High electrical conductivity in Ni(2,3,6,7,10,11-hexaiminotriphenylene), a semiconducting metal-organic graphene analogue. *Journal of the American Chemical Society*, **2014**, 136, 8859-62	16.4	691
43	Cation exchange at the secondary building units of metal-organic frameworks. *Chemical Society Reviews*, **2014**, 43, 5456-67	58.5	399
42	Ligand redox non-innocence in the stoichiometric oxidation of Mn2(2,5-dioxidoterephthalate) (Mn-MOF-74). *Journal of the American Chemical Society*, **2014**, 136, 3334-7	16.4	69
41	Selective formation of biphasic thin films of metal-organic frameworks by potential-controlled cathodic electrodeposition. *Chemical Science*, **2014**, 5, 107-111	9.4	126
40	Ti(3+)-, V(2+/3+)-, Cr(2+/3+)-, Mn(2+)-, and Fe(2+)-substituted MOF-5 and redox reactivity in Cr- and Fe-MOF-5. *Journal of the American Chemical Society*, **2013**, 135, 12886-91	16.4	329
39	Selective turn-on ammonia sensing enabled by high-temperature fluorescence in metal-organic frameworks with open metal sites. *Journal of the American Chemical Society*, **2013**, 135, 13326-9	16.4	368
38	Quantification of Site-Specific Cation Exchange in Metal-Organic Frameworks Using Multi-Wavelength Anomalous X-ray Dispersion. *Chemistry of Materials*, **2013**, 25, 2998-3002	9.6	40
37	Facile Deposition of Multicolored Electrochromic Metal-Organic Framework Thin Films. *Angewandte Chemie*, **2013**, 125, 13619-13623	3.6	42
36	Thiophene-based covalent organic frameworks. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 4923-8	11.5	265
35	Charge Transfer or J-Coupling? Assignment of an Unexpected Red-Shifted Absorption Band in a Naphthalenediimide-Based Metal-Organic Framework. *Journal of Physical Chemistry Letters*, **2013**, 4, 453-8	6.4	55
34	Impact of metal and anion substitutions on the hydrogen storage properties of M-BTT metal-organic frameworks. *Journal of the American Chemical Society*, **2013**, 135, 1083-91	16.4	128
33	Mn2(2,5-disulfhydrylbenzene-1,4-dicarboxylate): a microporous metal-organic framework with infinite (-Mn-S-) chains and high intrinsic charge mobility. *Journal of the American Chemical Society*, **2013**, 135, 8185-8	16.4	234
32	Postsynthetic tuning of hydrophilicity in pyrazolate MOFs to modulate water adsorption properties. *Energy and Environmental Science*, **2013**, 6, 2172	35.4	106
31	Facile deposition of multicolored electrochromic metal-organic framework thin films. *Angewandte Chemie - International Edition*, **2013**, 52, 13377-81	16.4	219

30	Conformational locking by design: relating strain energy with luminescence and stability in rigid metal-organic frameworks. *Journal of the American Chemical Society*, **2012**, 134, 19596-9	16.4	154
29	Phenyl ring dynamics in a tetraphenylethylene-bridged metal-organic framework: implications for the mechanism of aggregation-induced emission. *Journal of the American Chemical Society*, **2012**, 134, 15061-70	16.4	327
28	High charge mobility in a tetrathiafulvalene-based microporous metal-organic framework. *Journal of the American Chemical Society*, **2012**, 134, 12932-5	16.4	360
27	Lattice-imposed geometry in metal□organic frameworks: lacunary Zn4O clusters in MOF-5 serve as tripodal chelating ligands for Ni2+. *Chemical Science*, **2012**, 3, 2110	9.4	138
26	Investigation of the synthesis, activation, and isosteric heats of CO2 adsorption of the isostructural series of metal-organic frameworks M3(BTC)2 (M = Cr, Fe, Ni, Cu, Mo, Ru). *Dalton Transactions*, **2012**, 41, 7931-8	4.3	165
25	Neutron Scattering and Spectroscopic Studies of Hydrogen Adsorption in Cr3(BTC)2□A Metal□Organic Framework with Exposed Cr2+ Sites. *Journal of Physical Chemistry C*, **2011**, 115, 8414-8421	3.8	43
24	Reductive electrosynthesis of crystalline metal-organic frameworks. *Journal of the American Chemical Society*, **2011**, 133, 12926-9	16.4	184
23	Turn-on fluorescence in tetraphenylethylene-based metal-organic frameworks: an alternative to aggregation-induced emission. *Journal of the American Chemical Society*, **2011**, 133, 20126-9	16.4	533
22	Highly-selective and reversible O2 binding in Cr3(1,3,5-benzenetricarboxylate)2. *Journal of the American Chemical Society*, **2010**, 132, 7856-7	16.4	266
21	Nickel-borate oxygen-evolving catalyst that functions under benign conditions. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 10337-41	11.5	651
20	Hydrogen storage in water-stable metal□organic frameworks incorporating 1,3- and 1,4-benzenedipyrazolate. *Energy and Environmental Science*, **2010**, 3, 117-123	35.4	158
19	EPR evidence for Co(IV) species produced during water oxidation at neutral pH. *Journal of the American Chemical Society*, **2010**, 132, 6882-3	16.4	443
18	Structure and valency of a cobalt-phosphate water oxidation catalyst determined by in situ X-ray spectroscopy. *Journal of the American Chemical Society*, **2010**, 132, 13692-701	16.4	585
17	Hydrogen storage in metal-organic frameworks. *Chemical Society Reviews*, **2009**, 38, 1294-314	58.5	3846
16	Electrolyte-dependent electrosynthesis and activity of cobalt-based water oxidation catalysts. *Journal of the American Chemical Society*, **2009**, 131, 2615-20	16.4	532
15	Expanded sodalite-type metal-organic frameworks: increased stability and H(2) adsorption through ligand-directed catenation. *Inorganic Chemistry*, **2008**, 47, 11-3	5.1	181
14	Size-selective Lewis acid catalysis in a microporous metal-organic framework with exposed Mn2+ coordination sites. *Journal of the American Chemical Society*, **2008**, 130, 5854-5	16.4	753
13	Broadly hysteretic H2 adsorption in the microporous metal-organic framework Co(1,4-benzenedipyrazolate). *Journal of the American Chemical Society*, **2008**, 130, 7848-50	16.4	368

12	Structure and charge control in metal-organic frameworks based on the tetrahedral ligand tetrakis(4-tetrazolylphenyl)methane. *Chemistry - A European Journal*, **2008**, 14, 10280-5	4.8	100
11	Hydrogen storage in microporous metal-organic frameworks with exposed metal sites. *Angewandte Chemie - International Edition*, **2008**, 47, 6766-79	16.4	1019
10	Wasserstoffspeicherung in mikroporösen metall-organischen Gerüsten mit koordinativ ungesättigten Metallzentren. *Angewandte Chemie*, **2008**, 120, 6870-6884	3.6	132
9	Synthesis and characterization of the cubic coordination cluster (H3IBT=4,5-bis(tetrazol-5-yl)imidazole). *Journal of Molecular Structure*, **2008**, 890, 139-143	3.4	23
8	High-enthalpy hydrogen adsorption in cation-exchanged variants of the microporous metal-organic framework Mn3[(Mn4Cl)3(BTT)8(CH3OH)10]2. *Journal of the American Chemical Society*, **2007**, 129, 11172-6	16.4	433
7	Observation of Cu2+-H2 interactions in a fully desolvated sodalite-type metal-organic framework. *Angewandte Chemie - International Edition*, **2007**, 46, 1419-22	16.4	384
6	Observation of Cu2+H2 Interactions in a Fully Desolvated Sodalite-Type Metal□Organic Framework. *Angewandte Chemie*, **2007**, 119, 1441-1444	3.6	51
5	Microporous metal-organic frameworks incorporating 1,4-benzeneditetrazolate: syntheses, structures, and hydrogen storage properties. *Journal of the American Chemical Society*, **2006**, 128, 8904-13	16.4	586
4	Hydrogen storage in a microporous metal-organic framework with exposed Mn2+ coordination sites. *Journal of the American Chemical Society*, **2006**, 128, 16876-83	16.4	1014
3	Strong H(2) binding and selective gas adsorption within the microporous coordination solid Mg(3)(O(2)C-C(10)H(6)-CO(2))(3). *Journal of the American Chemical Society*, **2005**, 127, 9376-7	16.4	684
2	Efficient and Tunable One-Dimensional Charge Transport in Layered Lanthanide Metal-Organic Frameworks		2
1	How Reproducible are Surface Areas Calculated from the BET Equation?. *Advanced Materials*,2201502	24	12