

# Mircea Dinca

## List of Publications by Year in descending order

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184  
papers

36,386  
citations

4942

84  
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3312

184  
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197  
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197  
docs citations

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times ranked

25106  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogen storage in metal-organic frameworks. <i>Chemical Society Reviews</i> , 2009, 38, 1294.	18.7	4,136
2	Conductive MOF electrodes for stable supercapacitors with high areal capacitance. <i>Nature Materials</i> , 2017, 16, 220-224.	13.3	1,805
3	Electrically Conductive Porous Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3566-3579.	7.2	1,444
4	Hydrogen Storage in Microporous Metal-Organic Frameworks with Exposed Metal Sites. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 6766-6779.	7.2	1,086
5	Hydrogen Storage in a Microporous Metal-Organic Framework with Exposed Mn <sup>2+</sup> -Coordination Sites. <i>Journal of the American Chemical Society</i> , 2006, 128, 16876-16883.	6.6	1,081
6	Electrically Conductive Metal-Organic Frameworks. <i>Chemical Reviews</i> , 2020, 120, 8536-8580.	23.0	989
7	High Electrical Conductivity in Ni <sub>3</sub> (2,3,6,7,10,11-hexaiminotriphenylene) <sub>2</sub> , a Semiconducting Metal-Organic Graphene Analogue. <i>Journal of the American Chemical Society</i> , 2014, 136, 8859-8862.	6.6	893
8	Size-Selective Lewis Acid Catalysis in a Microporous Metal-Organic Framework with Exposed Mn <sup>2+</sup> Coordination Sites. <i>Journal of the American Chemical Society</i> , 2008, 130, 5854-5855.	6.6	804
9	Cu <sub>3</sub> (hexaiminotriphenylene) <sub>2</sub> : An Electrically Conductive 2D Metal-Organic Framework for Chemiresistive Sensing. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4349-4352.	7.2	765
10	Strong H <sub>2</sub> Binding and Selective Gas Adsorption within the Microporous Coordination Solid Mg <sub>3</sub> (O <sub>2</sub> C-C <sub>10</sub> H <sub>6</sub> -CO <sub>2</sub> ) <sub>3</sub> . <i>Journal of the American Chemical Society</i> , 2005, 127, 9376-9377.	6.6	727
11	Nickel-borate oxygen-evolving catalyst that functions under benign conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 10337-10341.	3.3	709
12	Structure and Valency of a Cobalt-Phosphate Water Oxidation Catalyst Determined by in Situ X-ray Spectroscopy. <i>Journal of the American Chemical Society</i> , 2010, 132, 13692-13701.	6.6	649
13	Turn-On Fluorescence in Tetraphenylethylene-Based Metal-Organic Frameworks: An Alternative to Aggregation-Induced Emission. <i>Journal of the American Chemical Society</i> , 2011, 133, 20126-20129.	6.6	623
14	Chemiresistive Sensor Arrays from Conductive 2D Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2015, 137, 13780-13783.	6.6	615
15	Microporous Metal-Organic Frameworks Incorporating 1,4-Benzeneditetrazolate: Syntheses, Structures, and Hydrogen Storage Properties. <i>Journal of the American Chemical Society</i> , 2006, 128, 8904-8913.	6.6	613
16	Electrolyte-Dependent Electrosynthesis and Activity of Cobalt-Based Water Oxidation Catalysts. <i>Journal of the American Chemical Society</i> , 2009, 131, 2615-2620.	6.6	590
17	Electrochemical oxygen reduction catalysed by Ni <sub>3</sub> (hexaiminotriphenylene) <sub>2</sub> . <i>Nature Communications</i> , 2016, 7, 10942.	5.8	577
18	EPR Evidence for Co(IV) Species Produced During Water Oxidation at Neutral pH. <i>Journal of the American Chemical Society</i> , 2010, 132, 6882-6883.	6.6	488

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19	High-Enthalpy Hydrogen Adsorption in Cation-Exchanged Variants of the Microporous Metal-Organic Framework $Mn_3[(Mn_4Cl)_3(BTT)_8(CH_3OH)_{10}]_2$ . Journal of the American Chemical Society, 2007, 129, 11172-11176.	6.6	470
20	Cation exchange at the secondary building units of metal-organic frameworks. Chemical Society Reviews, 2014, 43, 5456-5467.	18.7	462
21	The Current Status of MOF and COF Applications. Angewandte Chemie - International Edition, 2021, 60, 23975-24001.	7.2	450
22	High Charge Mobility in a Tetrathiafulvalene-Based Microporous Metal-Organic Framework. Journal of the American Chemical Society, 2012, 134, 12932-12935.	6.6	436
23	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, 13326-13329.	6.6	409
24	Molecular understanding of charge storage and charging dynamics in supercapacitors with MOF electrodes and ionic liquid electrolytes. Nature Materials, 2020, 19, 552-558.	13.3	405
25	Broadly Hysteretic $H_2$ Adsorption in the Microporous Metal-Organic Framework $Co(1,4\text{-benzenedipyrzolate})$ . Journal of the American Chemical Society, 2008, 130, 7848-7850.	6.6	396
26	Observation of $Cu_2-H_2$ Interactions in a Fully Desolvated Sodalite-Type Metal-Organic Framework. Angewandte Chemie - International Edition, 2007, 46, 1419-1422.	7.2	395
27	$Ti^{3+}$ , $V^{2+/3+}$ , $Cr^{2+/3+}$ , $Mn^{2+}$ , and $Fe^{2+}$ -Substituted MOF-5 and Redox Reactivity in Cr- and Fe-MOF-5. Journal of the American Chemical Society, 2013, 135, 12886-12891.	6.6	374
28	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, 15061-15070.	6.6	368
29	Cation-Dependent Intrinsic Electrical Conductivity in Isostructural Tetrathiafulvalene-Based Microporous Metal-Organic Frameworks. Journal of the American Chemical Society, 2015, 137, 1774-1777.	6.6	360
30	Signature of Metallic Behavior in the Metal-Organic Frameworks $M_3(\text{hexaiminobenzene})_2$ ( $M = Ni, Cu$ ). Journal of the American Chemical Society, 2017, 139, 13608-13611.	6.6	324
31	Grand Challenges and Future Opportunities for Metal-Organic Frameworks. ACS Central Science, 2017, 3, 554-563.	5.3	311
32	Highly-Selective and Reversible $O_2$ Binding in $Cr_3(1,3,5\text{-benzenetricarboxylate})_2$ . Journal of the American Chemical Society, 2010, 132, 7856-7857.	6.6	307
33	Thiophene-based covalent organic frameworks. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4923-4928.	3.3	291
34	$Mn_2(2,5\text{-disulfhydrylbenzene-1,4-dicarboxylate})$ : A Microporous Metal-Organic Framework with Infinite $(Mn-S)$ Chains and High Intrinsic Charge Mobility. Journal of the American Chemical Society, 2013, 135, 8185-8188.	6.6	291
35	Million-Fold Electrical Conductivity Enhancement in $Fe_2(EBDC)$ versus $Mn_2(EBDC)$ ( $E = S, O$ ). Journal of the American Chemical Society, 2015, 137, 6164-6167.	6.6	291
36	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.	5.3	275

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37	Facile Deposition of Multicolored Electrochromic Metal-Organic Framework Thin Films. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13377-13381.	7.2	266
38	Controlled Gas Uptake in Metal-Organic Frameworks with Record Ammonia Sorption. <i>Journal of the American Chemical Society</i> , 2018, 140, 3461-3466.	6.6	250
39	Single-Ion Li <sup>+</sup> , Na <sup>+</sup> , and Mg <sup>2+</sup> Solid Electrolytes Supported by a Mesoporous Anionic Cu-Azolate Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2017, 139, 13260-13263.	6.6	239
40	Atomically precise single-crystal structures of electrically conducting 2D metal-organic frameworks. <i>Nature Materials</i> , 2021, 20, 222-228.	13.3	239
41	Reductive Electrosynthesis of Crystalline Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2011, 133, 12926-12929.	6.6	230
42	High and Reversible Ammonia Uptake in Mesoporous Azolate Metal-Organic Frameworks with Open Mn, Co, and Ni Sites. <i>Journal of the American Chemical Society</i> , 2016, 138, 9401-9404.	6.6	229
43	Measuring and Reporting Electrical Conductivity in Metal-Organic Frameworks: Cd <sub>2</sub> (TTFTB) as a Case Study. <i>Journal of the American Chemical Society</i> , 2016, 138, 14772-14782.	6.6	221
44	Kinetic stability of metal-organic frameworks for corrosive and coordinating gas capture. <i>Nature Reviews Materials</i> , 2019, 4, 708-725.	23.3	214
45	Efficient and tunable one-dimensional charge transport in layered lanthanide metal-organic frameworks. <i>Nature Chemistry</i> , 2020, 12, 131-136.	6.6	214
46	Metal-Organic Frameworks as Active Materials in Electronic Sensor Devices. <i>Sensors</i> , 2017, 17, 1108.	2.1	212
47	Single Crystals of Electrically Conductive Two-Dimensional Metal-Organic Frameworks: Structural and Electrical Transport Properties. <i>ACS Central Science</i> , 2019, 5, 1959-1964.	5.3	211
48	Tunable Mixed-Valence Doping toward Record Electrical Conductivity in a Three-Dimensional Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2018, 140, 7411-7414.	6.6	204
49	2D Conductive Iron-Quinoid Magnets Ordering up to $T_c = 105$ K via Heterogeneous Redox Chemistry. <i>Journal of the American Chemical Society</i> , 2017, 139, 4175-4184.	6.6	196
50	Expanded Sodalite-Type Metal-Organic Frameworks: Increased Stability and H <sub>2</sub> Adsorption through Ligand-Directed Catenation. <i>Inorganic Chemistry</i> , 2008, 47, 11-13.	1.9	192
51	Continuous Partial Oxidation of Methane to Methanol Catalyzed by Diffusion-Paired Copper Dimers in Copper-Exchanged Zeolites. <i>Journal of the American Chemical Society</i> , 2019, 141, 11641-11650.	6.6	191
52	Investigation of the synthesis, activation, and isosteric heats of CO <sub>2</sub> adsorption of the isostructural series of metal-organic frameworks M <sub>3</sub> (BTC) <sub>2</sub> (M = Cr, Fe, Ni, Cu, Mo, Ru). <i>Dalton Transactions</i> , 2012, 41, 7931.	1.6	184
53	Hydrogen storage in water-stable metal-organic frameworks incorporating 1,3- and 1,4-benzenedipyrzolate. <i>Energy and Environmental Science</i> , 2010, 3, 117-123.	15.6	182
54	Elektrisch leitfähige poröse Metall-organische Gerüstverbindungen. <i>Angewandte Chemie</i> , 2016, 128, 3628-3642.	1.6	180

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55	Selective Dimerization of Ethylene to 1-Butene with a Porous Catalyst. ACS Central Science, 2016, 2, 148-153.	5.3	180
56	Conformational Locking by Design: Relating Strain Energy with Luminescence and Stability in Rigid Metal-Organic Frameworks. Journal of the American Chemical Society, 2012, 134, 19596-19599.	6.6	176
57	Is iron unique in promoting electrical conductivity in MOFs?. Chemical Science, 2017, 8, 4450-4457.	3.7	176
58	Continuous Electrical Conductivity Variation in M <sub>3</sub> (Hexaiminotriphenylene) <sub>2</sub> (M = Co, Ni, Cu) MOF Alloys. Journal of the American Chemical Society, 2020, 142, 12367-12373.	6.6	169
59	High electrical conductivity and carrier mobility in oCVD PEDOT thin films by engineered crystallization and acid treatment. Science Advances, 2018, 4, eaat5780.	4.7	167
60	Mechanistic Evidence for Ligand-Centered Electrocatalytic Oxygen Reduction with the Conductive MOF Ni <sub>3</sub> (hexaiminotriphenylene) <sub>2</sub> . ACS Catalysis, 2017, 7, 7726-7731.	5.5	164
61	A Microporous and Naturally Nanostructured Thermoelectric Metal-Organic Framework with Ultralow Thermal Conductivity. Joule, 2017, 1, 168-177.	11.7	159
62	Selective formation of biphasic thin films of metal-organic frameworks by potential-controlled cathodic electrodeposition. Chemical Science, 2014, 5, 107-111.	3.7	158
63	Single-Site Heterogeneous Catalysts for Olefin Polymerization Enabled by Cation Exchange in a Metal-Organic Framework. Journal of the American Chemical Society, 2016, 138, 10232-10237.	6.6	153
64	Lattice-imposed geometry in metal-organic frameworks: lacunary Zn <sub>4</sub> O clusters in MOF-5 serve as tripodal chelating ligands for Ni <sup>2+</sup> . Chemical Science, 2012, 3, 2110.	3.7	152
65	Transparent-to-Dark Electrochromic Behavior in Naphthalene-Diimide-Based Mesoporous MOF-74 Analogs. Chem, 2016, 1, 264-272.	5.8	145
66	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, 1083-1091.	6.6	139
67	High Li <sup>+</sup> and Mg <sup>2+</sup> Conductivity in a Cu-Azolate Metal-Organic Framework. Journal of the American Chemical Society, 2019, 141, 4422-4427.	6.6	139
68	Postsynthetic tuning of hydrophilicity in pyrazolate MOFs to modulate water adsorption properties. Energy and Environmental Science, 2013, 6, 2172.	15.6	138
69	On the electrochemical deposition of metal-organic frameworks. Journal of Materials Chemistry A, 2016, 4, 3914-3925.	5.2	138
70	Viewpoint on the Partial Oxidation of Methane to Methanol Using Cu- and Fe-Exchanged Zeolites. ACS Catalysis, 2018, 8, 8306-8313.	5.5	133
71	Diverse π-π stacking motifs modulate electrical conductivity in tetrathiafulvalene-based metal-organic frameworks. Chemical Science, 2019, 10, 8558-8565.	3.7	128
72	Dynamic DMF Binding in MOF-5 Enables the Formation of Metastable Cobalt-Substituted MOF-5 Analogues. ACS Central Science, 2015, 1, 252-260.	5.3	123

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73	Modular O <sub>2</sub> electroreduction activity in triphenylene-based metal-organic frameworks. <i>Chemical Science</i> , 2018, 9, 6286-6291.	3.7	123
74	Mechanism of Single-Site Molecule-Like Catalytic Ethylene Dimerization in Ni-MFU-4l. <i>Journal of the American Chemical Society</i> , 2017, 139, 757-762.	6.6	122
75	Record-Setting Sorbents for Reversible Water Uptake by Systematic Anion Exchanges in Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 13858-13866.	6.6	118
76	Structure and Charge Control in Metal-Organic Frameworks Based on the Tetrahedral Ligand Tetrakis(4-tetrazolylphenyl)methane. <i>Chemistry - A European Journal</i> , 2008, 14, 10280-10285.	1.7	106
77	Selective Catalytic Olefin Epoxidation with Mn <sup>II</sup> -Exchanged MOF-5. <i>ACS Catalysis</i> , 2018, 8, 596-601.	5.5	105
78	High-Capacitance Pseudocapacitors from Li <sup>+</sup> Ion Intercalation in Nonporous, Electrically Conductive 2D Coordination Polymers. <i>Journal of the American Chemical Society</i> , 2021, 143, 2285-2292.	6.6	99
79	NO Disproportionation at a Mononuclear Site-Isolated Fe <sup>2+</sup> Center in Fe <sup>2+</sup> -MOF-5. <i>Journal of the American Chemical Society</i> , 2015, 137, 7495-7501.	6.6	96
80	Reversible Capture and Release of Cl <sub>2</sub> and Br <sub>2</sub> with a Redox-Active Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2017, 139, 5992-5997.	6.6	95
81	Synthesis and Electrical Properties of Covalent Organic Frameworks with Heavy Chalcogens. <i>Chemistry of Materials</i> , 2015, 27, 5487-5490.	3.2	91
82	A Structural Mimic of Carbonic Anhydrase in a Metal-Organic Framework. <i>CheM</i> , 2018, 4, 2894-2901.	5.8	91
83	Ligand Redox Non-innocence in the Stoichiometric Oxidation of Mn <sub>2</sub> (2,5-dioxidoterephthalate) (Mn-MOF-74). <i>Journal of the American Chemical Society</i> , 2014, 136, 3334-3337.	6.6	87
84	Photon energy storage materials with high energy densities based on diacetylene-azobenzene derivatives. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16157-16165.	5.2	86
85	High temperature ferromagnetism in $\pi$ -conjugated two-dimensional metal-organic frameworks. <i>Chemical Science</i> , 2017, 8, 2859-2867.	3.7	86
86	Hydrogen bonding structure of confined water templated by a metal-organic framework with open metal sites. <i>Nature Communications</i> , 2019, 10, 4771.	5.8	86
87	Simultaneous interlayer and intralayer space control in two-dimensional metal-organic frameworks for acetylene/ethylene separation. <i>Nature Communications</i> , 2020, 11, 6259.	5.8	85
88	How Reproducible are Surface Areas Calculated from the BET Equation?. <i>Advanced Materials</i> , 2022, 34, .	11.1	82
89	Chemiresistive Sensing of Ambient CO <sub>2</sub> by an Autogenously Hydrated Cu <sub>3</sub> (hexaminobenzene) <sub>2</sub> Framework. <i>ACS Central Science</i> , 2019, 5, 1425-1431.	5.3	79
90	Tunable Metal-Organic Frameworks Enable High-Efficiency Cascaded Adsorption Heat Pumps. <i>Journal of the American Chemical Society</i> , 2018, 140, 17591-17596.	6.6	78

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91	Stabilized Vanadium Catalyst for Olefin Polymerization by Site Isolation in a Metal-Organic Framework. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8135-8139.	7.2	73
92	First-principles design of a half-filled flat band of the kagome lattice in two-dimensional metal-organic frameworks. <i>Physical Review B</i> , 2016, 94, .	1.1	72
93	The Organic Secondary Building Unit: Strong Intermolecular $\pi$ - $\pi$ Interactions Define Topology in MIT-25, a Mesoporous MOF with Proton-Replete Channels. <i>Journal of the American Chemical Society</i> , 2017, 139, 3619-3622.	6.6	72
94	Triphenylene-Bridged Trinuclear Complexes of Cu: Models for Spin Interactions in Two-Dimensional Electrically Conductive Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 10475-10480.	6.6	72
95	Precise control of pore hydrophilicity enabled by post-synthetic cation exchange in metal-organic frameworks. <i>Chemical Science</i> , 2018, 9, 3856-3859.	3.7	70
96	Solvent-Dependent Cation Exchange in Metal-Organic Frameworks. <i>Chemistry - A European Journal</i> , 2014, 20, 6871-6874.	1.7	66
97	Charge Transfer or J-Coupling? Assignment of an Unexpected Red-Shifted Absorption Band in a Naphthalenediimide-Based Metal-Organic Framework. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 453-458.	2.1	65
98	Introduction: Porous Framework Chemistry. <i>Chemical Reviews</i> , 2020, 120, 8037-8038.	23.0	65
99	On the Mechanism of MOF-5 Formation under Cathodic Bias. <i>Chemistry of Materials</i> , 2015, 27, 3203-3206.	3.2	64
100	Selective Vapor Pressure Dependent Proton Transport in a Metal-Organic Framework with Two Distinct Hydrophilic Pores. <i>Journal of the American Chemical Society</i> , 2018, 140, 2016-2019.	6.6	64
101	Metal-organic frameworks: Evolved oxygen evolution catalysts. <i>Nature Energy</i> , 2016, 1, .	19.8	63
102	Highly Stereoselective Heterogeneous Diene Polymerization by Co-MFU-4l: A Single-Site Catalyst Prepared by Cation Exchange. <i>Journal of the American Chemical Society</i> , 2017, 139, 12664-12669.	6.6	63
103	Bioinspired chemistry at MOF secondary building units. <i>Chemical Science</i> , 2020, 11, 1728-1737.	3.7	63
104	Highly Selective Heterogeneous Ethylene Dimerization with a Scalable and Chemically Robust MOF Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6654-6661.	3.2	62
105	Selective Dimerization of Propylene with Ni-MFU-4l. <i>Organometallics</i> , 2017, 36, 1681-1683.	1.1	55
106	Electrical Conductivity in a Porous, Cubic Rare-Earth Catecholate. <i>Journal of the American Chemical Society</i> , 2020, 142, 6920-6924.	6.6	53
107	Heterogeneous Epoxide Carbonylation by Cooperative Ion-Pair Catalysis in Co(CO) <sub>4</sub> -Incorporated Cr-MIL-101. <i>ACS Central Science</i> , 2017, 3, 444-448.	5.3	51
108	Metal- and covalent-organic frameworks as solid-state electrolytes for metal-ion batteries. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20180225.	1.6	51



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109	Neutron Scattering and Spectroscopic Studies of Hydrogen Adsorption in Cr <sub>3</sub> (BTC) <sub>2</sub> ·A Metal-Organic Framework with Exposed Cr <sup>2+</sup> Sites. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8414-8421.	1.5	50
110	Cerium(IV) Enhances the Catalytic Oxidation Activity of Single-Site Cu Active Sites in MOFs. <i>ACS Catalysis</i> , 2020, 10, 7820-7825.	5.5	50
111	Quantification of Site-Specific Cation Exchange in Metal-Organic Frameworks Using Multi-Wavelength Anomalous X-ray Dispersion. <i>Chemistry of Materials</i> , 2013, 25, 2998-3002.	3.2	49
112	Reversible Metalation and Catalysis with a Scorpionate-like Metallo-ligand in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2018, 140, 17394-17398.	6.6	48
113	Solid-State Redox Switching of Magnetic Exchange and Electronic Conductivity in a Benzoquinoid-Bridged Mn <sub>II</sub> Chain Compound. <i>Journal of the American Chemical Society</i> , 2016, 138, 6583-6590.	6.6	47
114	Continuous-Flow Production of Succinic Anhydrides via Catalytic $\beta$ -Lactone Carbonylation by Co(CO) <sub>4</sub> ·Cr-MIL-101. <i>Journal of the American Chemical Society</i> , 2018, 140, 10669-10672.	6.6	47
115	Conetronics in 2D metal-organic frameworks: double/half Dirac cones and quantum anomalous Hall effect. <i>2D Materials</i> , 2017, 4, 015015.	2.0	41
116	Large Single Crystals of Two-Dimensional $\pi$ -Conjugated Metal-Organic Frameworks via Biphasic Solution-Solid Growth. <i>ACS Central Science</i> , 2021, 7, 104-109.	5.3	40
117	Toward New 2D Zirconium-Based Metal-Organic Frameworks: Synthesis, Structures, and Electronic Properties. <i>Chemistry of Materials</i> , 2020, 32, 97-104.	3.2	37
118	Activation of Methyltrioxorhenium for Olefin Metathesis in a Zirconium-Based Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2018, 140, 6956-6960.	6.6	36
119	Novel Topology in Semiconducting Tetrathiafulvalene Lanthanide Metal-Organic Frameworks. <i>Israel Journal of Chemistry</i> , 2018, 58, 1119-1122.	1.0	34
120	Waterproof molecular monolayers stabilize 2D materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 20844-20849.	3.3	32
121	Thermal Cycling of a MOF-Based NO Disproportionation Catalyst. <i>Journal of the American Chemical Society</i> , 2021, 143, 681-686.	6.6	32
122	Thousand-fold increase in O <sub>2</sub> electroreduction rates with conductive MOFs. <i>ACS Central Science</i> , 2022, 8, 975-982.	5.3	32
123	Metal-Organic Framework-Derived Guerbet Catalyst Effectively Differentiates between Ethanol and Butanol. <i>Journal of the American Chemical Society</i> , 2019, 141, 17477-17481.	6.6	31
124	Thermodynamic parameters of cation exchange in MOF-5 and MFU-4l. <i>Chemical Communications</i> , 2015, 51, 11780-11782.	2.2	30
125	Metal-organic frameworks for electronics and photonics. <i>MRS Bulletin</i> , 2016, 41, 854-857.	1.7	30
126	Thermodynamics of solvent interaction with the metal-organic framework MOF-5. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1158-1162.	1.3	30



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127	A Three-dimensional Porous Organic Semiconductor Based on Fully sp <sup>2</sup> -Hybridized Graphitic Polymer. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15166-15170.	7.2	29
128	Coordination-induced reversible electrical conductivity variation in the MOF-74 analogue Fe <sub>2</sub> (DSBDC). <i>Dalton Transactions</i> , 2018, 47, 11739-11743.	1.6	27
129	Accelerated Synthesis of a Ni <sub>2</sub> Cl <sub>2</sub> (BTDD) Metal-Organic Framework in a Continuous Flow Reactor for Atmospheric Water Capture. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 3996-4003.	3.2	26
130	Ammonia Capture via an Unconventional Reversible Guest-Induced Metal-Linker Bond Dynamics in a Highly Stable Metal-Organic Framework. <i>Chemistry of Materials</i> , 2021, 33, 6186-6192.	3.2	26
131	Oxidative Dehydrogenation of Propane in the Realm of Metal-Organic Frameworks. <i>ACS Central Science</i> , 2017, 3, 10-12.	5.3	24
132	Dimensionality Modulates Electrical Conductivity in Compositionally Constant One-, Two-, and Three-Dimensional Frameworks. <i>Journal of the American Chemical Society</i> , 2022, 144, 5583-5593.	6.6	24
133	Synthesis and characterization of the cubic coordination cluster (H3IBT=4,5-bis(tetrazol-5-yl)imidazole). <i>Journal of Molecular Structure</i> , 2008, 890, 139-143.	1.8	23
134	When the Solvent Locks the Cage: Theoretical Insight into the Transmetalation of MOF-5 Lattices and Its Kinetic Limitations. <i>Chemistry of Materials</i> , 2015, 27, 3422-3429.	3.2	23
135	Isorecticular Linker Substitution in Conductive Metal-Organic Frameworks with Through-Space Transport Pathways. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19623-19626.	7.2	22
136	Rapid and precise determination of zero-field splittings by terahertz time-domain electron paramagnetic resonance spectroscopy. <i>Chemical Science</i> , 2017, 8, 7312-7323.	3.7	20
137	Computational Exploration of NO Single-Site Disproportionation on Fe-MOF-5. <i>Chemistry of Materials</i> , 2019, 31, 8875-8885.	3.2	20
138	Ultrathin, High-Aspect Ratio, and Free-Standing Magnetic Nanowires by Exfoliation of Ferromagnetic Quasi-One-Dimensional van der Waals Lattices. <i>Journal of the American Chemical Society</i> , 2021, 143, 19551-19558.	6.6	19
139	Der derzeitige Stand von MOF- und COF-Anwendungen. <i>Angewandte Chemie</i> , 2021, 133, 24174-24202.	1.6	18
140	Teaching Metal-Organic Frameworks to Conduct: Ion and Electron Transport in Metal-Organic Frameworks. <i>Annual Review of Materials Research</i> , 2022, 52, 103-128.	4.3	18
141	Gas-Phase Ethylene Polymerization by Single-Site Cr Centers in a Metal-Organic Framework. <i>ACS Catalysis</i> , 2020, 10, 3864-3870.	5.5	17
142	Redox Ladder of Ni <sub>3</sub> Complexes with Closed-Shell, Mono-, and Diradical Triphenylene Units: Molecular Models for Conductive 2D MOFs. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23784-23789.	7.2	17
143	Dual-Ion Intercalation and High Volumetric Capacitance in a Two-dimensional Non-porous Coordination Polymer. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 27119-27125.	7.2	17
144	Dynamic structural flexibility of Fe-MOF-5 evidenced by <sup>57</sup> Fe Mössbauer spectroscopy. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 782-788.	3.0	15

#	ARTICLE	IF	CITATIONS
145	Selective Oxidation of C-H Bonds through a Manganese(III) Hydroperoxo in Mn <sup>II</sup> -Exchanged CFA-1. <i>Inorganic Chemistry</i> , 2019, 58, 13221-13228.	1.9	15
146	<i>Quo vadis niobium?</i> Divergent coordination behavior of early-transition metals towards MOF-5. <i>Chemical Science</i> , 2019, 10, 5906-5910.	3.7	15
147	Observation of Ion Electrosorption in Metal-Organic Framework Micropores with In Operando Small-Angle Neutron Scattering. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9773-9779.	7.2	15
148	Divergent Adsorption Behavior Controlled by Primary Coordination Sphere Anions in the Metal-Organic Framework Ni <sub>2</sub> X <sub>2</sub> BTDD. <i>Journal of the American Chemical Society</i> , 2021, 143, 16343-16347.	6.6	15
149	Catalysis in MOFs: general discussion. <i>Faraday Discussions</i> , 2017, 201, 369-394.	1.6	14
150	Interdigitated conducting tetrathiafulvalene-based coordination networks. <i>Chemical Communications</i> , 2020, 56, 2407-2410.	2.2	14
151	Colloidal nano-MOFs nucleate and stabilize ultra-small quantum dots of lead bromide perovskites. <i>Chemical Science</i> , 2021, 12, 6129-6135.	3.7	14
152	Frontier Orbital Engineering of Metal-Organic Frameworks with Extended Inorganic Connectivity: Porous Alkaline-Earth Oxides. <i>Inorganic Chemistry</i> , 2016, 55, 7265-7269.	1.9	13
153	Pt Electrodes Enable the Formation of 1/4-O Centers in MOF-5 from Multiple Oxygen Sources. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 33528-33532.	4.0	12
154	Programming Framework Materials for Ammonia Capture. <i>ACS Central Science</i> , 2018, 4, 666-667.	5.3	12
155	A Three-Dimensional Porous Organic Semiconductor Based on Fully sp <sup>2</sup> -Hybridized Graphitic Polymer. <i>Angewandte Chemie</i> , 2020, 132, 15278-15282.	1.6	12
156	Why conductivity is not always king – physical properties governing the capacitance of 2D metal-organic framework-based EDLC supercapacitor electrodes: a Ni <sub>3</sub> (HITP) <sub>2</sub> case study. <i>Faraday Discussions</i> , 2021, 231, 298-304.	1.6	12
157	Aperiodic metal-organic frameworks. <i>Chemical Science</i> , 2020, 11, 11094-11103.	3.7	11
158	Spectroscopic Evidence of Hyponitrite Radical Intermediate in NO Disproportionation at a MOF-Supported Mononuclear Copper Site. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7845-7850.	7.2	11
159	Low-Temperature H <sub>2</sub> /CO <sub>2</sub> /CH <sub>4</sub> Separation in Mixed-Matrix Membranes Containing MFU-4. <i>Chemistry of Materials</i> , 2021, 33, 6825-6831.	3.2	11
160	Fully Conjugated Tetraoxa[8]circulene-Based Porous Semiconducting Polymers. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	11
161	Organometallic Chemistry within Metal-Organic Frameworks. <i>Organometallics</i> , 2019, 38, 3389-3391.	1.1	9
162	Molecular Niobium Precursors in Various Oxidation States: An XAS Case Study. <i>Inorganic Chemistry</i> , 2018, 57, 13998-14004.	1.9	8

#	ARTICLE	IF	CITATIONS
163	Radical PolyMOFs: A Role for Ligand Dispersity in Enabling Crystallinity. <i>Chemistry of Materials</i> , 2021, 33, 9508-9514.	3.2	8
164	Structural Evolution of MOF-Derived RuCo, A General Catalyst for the Guerbet Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, , .	4.0	7
165	New directions in gas sorption and separation with MOFs: general discussion. <i>Faraday Discussions</i> , 2017, 201, 175-194.	1.6	6
166	Stabilized Vanadium Catalyst for Olefin Polymerization by Site Isolation in a Metal-Organic Framework. <i>Angewandte Chemie</i> , 2018, 130, 8267-8271.	1.6	6
167	Tricking Inert Metals into Water-Absorbing MOFs. <i>Joule</i> , 2018, 2, 18-20.	11.7	6
168	Moisture Farming with Metal-Organic Frameworks. <i>CheM</i> , 2017, 2, 757-759.	5.8	5
169	Isorecticular Linker Substitution in Conductive Metal-Organic Frameworks with Through-Space Transport Pathways. <i>Angewandte Chemie</i> , 2020, 132, 19791-19794.	1.6	5
170	Observation of Ion Electrosorption in Metal-Organic Framework Micropores with In Operando Small-Angle Neutron Scattering. <i>Angewandte Chemie</i> , 2020, 132, 9860-9866.	1.6	4
171	Spectroscopic Evidence of Hyponitrite Radical Intermediate in NO Disproportionation at a MOF-Supported Mononuclear Copper Site. <i>Angewandte Chemie</i> , 2021, 133, 7924-7929.	1.6	4
172	MOF-Derived RuCo Catalyzes the Formation of a Plasticizer Alcohol from Renewable Precursors. <i>ACS Catalysis</i> , 2021, 11, 8521-8526.	5.5	4
173	Isolation of a Side-On V(III)-( $\eta^2$ -O <sub>2</sub> ) through the Intermediacy of a Low-Valent V(II) in a Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2021, 60, 18205-18210.	1.9	4
174	Structural, Thermodynamic, and Transport Properties of the Small-Gap Two-Dimensional Metal-Organic Kagom $\text{\AA}$ Materials Cu <sub>3</sub> (hexaiminobenzene) <sub>2</sub> and Ni <sub>3</sub> (hexaiminobenzene) <sub>2</sub> . <i>Inorganic Chemistry</i> , 2022, 61, 6480-6487.	1.9	4
175	Structural Characterization of a High-Nuclearity Niobium(V) Carboxylate Cluster Based on Pivalic Acid. <i>Helvetica Chimica Acta</i> , 2020, 103, e2000186.	1.0	3
176	Redox Ladder of Ni <sub>3</sub> Complexes with Closed-Shell, Mono $\pi$ , and Diradical Triphenylene Units: Molecular Models for Conductive 2D MOFs. <i>Angewandte Chemie</i> , 2021, 133, 23977.	1.6	3
177	Dual-Ion Intercalation and High Volumetric Capacitance in a Two-Dimensional Non-Porous Coordination Polymer. <i>Angewandte Chemie</i> , 2021, 133, 27325-27331.	1.6	2
178	Fully Conjugated Tetraoxa[8]circulene-Based Porous Semiconducting Polymers. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
179	9,10-Dibromotriptycene. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2004, 60, o1248-o1249.	0.2	1
180	New talent: Americas. <i>Dalton Transactions</i> , 2012, 41, 7781.	1.6	1

#	ARTICLE	IF	CITATIONS
181	Strong magnetic exchange coupling in a radical-bridged trinuclear nickel complex. Dalton Transactions, 0, , .	1.6	1
182	RÅ¼cktitelbild: Observation of Ion Electrosorption in Metalâ€“Organic Framework Micropores with In Operando Smallâ€“Angle Neutron Scattering (Angew. Chem. 24/2020). Angewandte Chemie, 2020, 132, 9868-9868.	1.6	0
183	Complexes of Platinum Group Metals with a Conformationally Locked Scorpionate in a Metalâ€“Organic Framework: An Unusually Close Apical Interaction of Palladium(II). Inorganic Chemistry, 2021, 60, 11764-11774.	1.9	0
184	Surprising Properties of 2D Metal-Organic Frameworks. , 0, , .		0