Eric D Bloch

List of Publications by Year
in descending order

76 papers	14,455 citations	101543 36 h-index	69250 77 g-index
78 all docs	78 docs citations	78 times ranked	12879 citing authors

#	Article	IF	Citations
1	Templated synthesis of zirconium(<scp>iv</scp>)-based metalâ€“organic layers (MOLs) with accessible chelating sites. Chemical Communications, 2022, 58, 957-960.	4.1	6
2	Utilization of a Mixed-Ligand Strategy to Tune the Properties of Cuboctahedral Porous Coordination Cages. Inorganic Chemistry, 2022, 61, 4609-4617.	4.0	7
3	Gas Storage in Porous Molecular Materials. Chemistry - A European Journal, 2021, 27, 4531-4547.	3.3	30
4	Synthesis, characterization, and polymerization of capped paddlewheel porous cages. Dalton Transactions, 2021, 50, 3127-3131.	3.3	6
5	Tuning water adsorption, stability, and phase in Fe-MIL-101 and Fe-MIL-88 analogs with amide functionalization. Chemical Communications, 2021, 57, 8312-8315.	4.1	11
6	Synthesis and Characterization of an Isoreticular Family of Calixarene-Capped Porous Coordination Cages. Inorganic Chemistry, 2021, 60, 5607-5616.	4.0	18
7	Frontispiece: Gas Storage in Porous Molecular Materials. Chemistry - A European Journal, 2021, 27, .	3.3	0
8	Manipulating solvent and solubility in the synthesis, activation, and modification of permanently porous coordination cages. Coordination Chemistry Reviews, 2021, 430, 213679.	18.8	20
9	Stabilizing Porosity in Organic Cages through Coordination Chemistry. Inorganic Chemistry, 2021, 60, 7044-7050.	4.0	9
10	Using Helium Pycnometry to Study the Apparent Densities of Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2021, 13, 51925-51932.	8.0	5
11	Facile and Rapid Room-Temperature Electrosynthesis and Controlled Surface Growth of Fe-MIL-101 and Fe-MIL-101-NH₂. ACS Central Science, 2021, 7, 1427-1433.	11.3	25
12	Elaboration of Porous Salts. Journal of the American Chemical Society, 2021, 143, 14956-14961.	13.7	25
13	Porous metalâ€“organic alloys based on soluble coordination cages. Chemical Science, 2020, 11, 12540-12546.	7.4	16
14	Evaluating UiO-66 Metalâ€“Organic Framework Nanoparticles as Acid-Sensitive Carriers for Pulmonary Drug Delivery Applications. ACS Applied Materials & Interfaces, 2020, 12, 38989-39004.	8.0	102
15	Elucidating the Structure of the Metalâ€“Organic Framework Ru-HKUST-1. Chemistry of Materials, 2020, 32, 7710-7715.	6.7	9
16	Using Low-Pressure Methane Adsorption Isotherms for Higher-Throughput Screening of Methane Storage Materials. ACS Applied Materials & Interfaces, 2020, 12, 40318-40327.	8.0	19
17	Structure and redox tuning of gas adsorption properties in calixarene-supported Fe(<scp>ii</scp>)-based porous cages. Chemical Science, 2020, 11, 5273-5279.	7.4	19
18	A Charged Coordination Cage-Based Porous Salt. Journal of the American Chemical Society, 2020, 142, 9594-9598.	13.7	60

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19	Ligand-Based Phase Control in Porous Zirconium Coordination Cages. Chemistry of Materials, 2020, 32, 5872-5878.	6.7	37
20	Synthesis and characterization of low-nuclearity lantern-type porous coordination cages. Chemical Communications, 2020, 56, 8924-8927.	4.1	7
21	Permanently Microporous Metalâ€"Organic Polyhedra. Chemical Reviews, 2020, 120, 8987-9014.	47.7	209
22	Design and synthesis of aryl-functionalized carbazole-based porous coordination cages. Chemical Communications, 2020, 56, 9352-9355.	4.1	8
23	MOF-mimetic molecules: carboxylate-based supramolecular complexes as molecular metalâ€"organic framework analogues. Journal of Materials Chemistry A, 2020, 8, 4217-4229.	10.3	28
24	Neutron diffraction structural study of CO₂ binding in mixed-metal CPM-200 metalâ€"organic frameworks. Chemical Communications, 2020, 56, 2574-2577.	4.1	5
25	Atomically Precise Crystalline Materials Based on Kinetically Inert Metal Ions via Reticular Mechanopolymerization. Angewandte Chemie - International Edition, 2020, 59, 10878-10883.	13.8	13
26	Atomically Precise Crystalline Materials Based on Kinetically Inert Metal Ions via Reticular Mechanopolymerization. Angewandte Chemie, 2020, 132, 10970-10975.	2.0	3
27	Tuning the Porosity, Solubility, and Gas-Storage Properties of Cuboctahedral Coordination Cages via Amide or Ester Functionalization. ACS Applied Materials & Interfaces, 2020, 12, 24913-24919.	8.0	34
28	Novel syntheses of carbazole-3,6-dicarboxylate ligands and their utilization for porous coordination cages. Dalton Transactions, 2020, 49, 16340-16347.	3.3	11
29	Design and synthesis of capped-paddlewheel-based porous coordination cages. Chemical Communications, 2019, 55, 9527-9530.	4.1	19
30	Electrochemically Mediated Syntheses of Titanium(III)-Based Metalâ€"Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 11383-11387.	13.7	29
31	Understanding Gas Storage in Cuboctahedral Porous Coordination Cages. Journal of the American Chemical Society, 2019, 141, 12128-12138.	13.7	73
32	High-pressure methane storage and selective gas adsorption in a cyclohexane-functionalised porous organic cage. Supramolecular Chemistry, 2019, 31, 508-513.	1.2	16
33	Controlling Size, Defectiveness, and Fluorescence in Nanoparticle UiO-66 through Water and Ligand Modulation. Chemistry of Materials, 2019, 31, 4831-4839.	6.7	41
34	Mechanochemical synthesis of two-dimensional metal-organic frameworks. Powder Diffraction, 2019, 34, 119-123.	0.2	7
35	An experimental and computational study of CO2adsorption in the sodalite-type M-BTT (M = Cr, Mn, Fe,) Tj ETQq1 1 0.784314 rgBT /Ov	7.4	43
36	Separation of Xylene Isomers through Multiple Metal Site Interactions in Metalâ€"Organic Frameworks. Journal of the American Chemical Society, 2018, 140, 3412-3422.	13.7	150

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37	Structurally characterized terminal manganese(<scp>iv</scp>) oxo tris(alkoxide) complex. Chemical Science, 2018, 9, 4524-4528.	7.4	28
38	Ligand-Based Phase Control in Porous Molecular Assemblies. ACS Applied Materials & Interfaces, 2018, 10, 11420-11424.	8.0	41
39	Mechanochemical Synthesis of Porous Molecular Assemblies. Chemistry of Materials, 2018, 30, 3975-3978.	6.7	17
40	Gas adsorption in an isostructural series of pillared coordination cages. Chemical Communications, 2018, 54, 6392-6395.	4.1	19
41	Design and Synthesis of Porous Nickel(II) and Cobalt(II) Cages. Inorganic Chemistry, 2018, 57, 11847-11850.	4.0	25
42	Methane Storage in Paddlewheel-Based Porous Coordination Cages. Journal of the American Chemical Society, 2018, 140, 11153-11157.	13.7	84
43	Oxygen activation at a dicobalt centre of a dipyridylethane naphthyridine complex. Dalton Transactions, 2018, 47, 11903-11908.	3.3	9
44	Structural characterization of frameworkâ€“gas interactions in the metalâ€“organic framework Co₂(dobdc) by in situ single-crystal X-ray diffraction. Chemical Science, 2017, 8, 4387-4398.	7.4	80
45	Metal Insertion in a Methylamine-Functionalized Zirconium Metalâ€“Organic Framework for Enhanced Carbon Dioxide Capture. Inorganic Chemistry, 2017, 56, 4308-4316.	4.0	11
46	Selective Gas Adsorption in Highly Porous Chromium(II)-Based Metalâ€“Organic Polyhedra. Chemistry of Materials, 2017, 29, 8583-8587.	6.7	68
47	Hydrogen Storage and Selective, Reversible O₂ Adsorption in a Metalâ€“Organic Framework with Open Chromium(II) Sites. Angewandte Chemie - International Edition, 2016, 55, 8605-8609.	13.8	102
48	Hydrogen Storage and Selective, Reversible O₂ Adsorption in a Metalâ€“Organic Framework with Open Chromium(II) Sites. Angewandte Chemie, 2016, 128, 8747-8751.	2.0	23
49	Electronic Structure of Copper Corroles. Angewandte Chemie, 2016, 128, 2216-2220.	2.0	26
50	Electronic Structure of Copper Corroles. Angewandte Chemie - International Edition, 2016, 55, 2176-2180.	13.8	76
51	Hydrogen Storage in the Expanded Pore Metalâ€“Organic Frameworks M₂(dobpdc) (M = Mg,) Tj ETQq1 1 0.784314 rgBT /	6.7	171
52	Influence of Solventâ€Like Sidechains on the Adsorption of Light Hydrocarbons in Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2015, 21, 18764-18769.	3.3	32
53	NMR relaxation and exchange in metalâ€“organic frameworks for surface area screening. Microporous and Mesoporous Materials, 2015, 205, 65-69.	4.4	14
54	Gradual Release of Strongly Bound Nitric Oxide from Fe₂(NO)₂(dobdc). Journal of the American Chemical Society, 2015, 137, 3466-3469.	13.7	81

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55	Single-Crystal-to-Single-Crystal Metalation of a Metalâ€“Organic Framework: A Route toward Structurally Well-Defined Catalysts. Inorganic Chemistry, 2015, 54, 2995-3005.	4.0	161
56	Cooperative insertion of CO2 in diamine-appended metal-organic frameworks. Nature, 2015, 519, 303-308.	27.8	1,026
57	Carbohydrate-Mediated Purification of Petrochemicals. Journal of the American Chemical Society, 2015, 137, 5706-5719.	13.7	112
58	Critical Factors Driving the High Volumetric Uptake of Methane in Cu₃(btc)₂. Journal of the American Chemical Society, 2015, 137, 10816-10825.	13.7	73
59	Counteranion effects on the catalytic activity of copper salts immobilized on the 2,2â€²-bipyridine-functionalized metalâ€“organic framework MOF-253. Catalysis Today, 2015, 246, 55-59.	4.4	27
60	Multifunctional, Defectâ€Engineered Metalâ€“Organic Frameworks with Ruthenium Centers: Sorption and Catalytic Properties. Angewandte Chemie - International Edition, 2014, 53, 7058-7062.	13.8	237
61	Oxidation of ethane to ethanol by N2O in a metalâ€“organic framework with coordinatively unsaturated iron(II) sites. Nature Chemistry, 2014, 6, 590-595.	13.6	398
62	Design of a Metalâ€“Organic Framework with Enhanced Back Bonding for Separation of N₂ and CH₄. Journal of the American Chemical Society, 2014, 136, 698-704.	13.7	157
63	Selective Propene Oligomerization with Nickel(II)-Based Metalâ€“Organic Frameworks. ACS Catalysis, 2014, 4, 717-721.	11.2	87
64	Hydrocarbon Separations in Metalâ€“Organic Frameworks. Chemistry of Materials, 2014, 26, 323-338.	6.7	517
65	Comprehensive study of carbon dioxide adsorption in the metalâ€“organic frameworks M₂(dobdc) (M = Mg, Mn, Fe, Co, Ni, Cu, Zn). Chemical Science, 2014, 5, 4569-4581.	7.4	342
66	CO₂ Adsorption in Fe₂(dobdc): A Classical Force Field Parameterized from Quantum Mechanical Calculations. Journal of Physical Chemistry C, 2014, 118, 12230-12240.	3.1	45
67	Reversible CO Binding Enables Tunable CO/H₂ and CO/N₂ Separations in Metalâ€“Organic Frameworks with Exposed Divalent Metal Cations. Journal of the American Chemical Society, 2014, 136, 10752-10761.	13.7	210
68	Impact of Metal and Anion Substitutions on the Hydrogen Storage Properties of M-BTT Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2013, 135, 1083-1091.	13.7	139
69	Selective adsorption of ethylene over ethane and propylene over propane in the metalâ€“organic frameworks M2(dobdc) (M = Mg, Mn, Fe, Co, Ni, Zn). Chemical Science, 2013, 4, 2054.	7.4	398
70	Highly Selective Quantum Sieving of D₂ from H₂ by a Metalâ€“Organic Framework As Determined by Gas Manometry and Infrared Spectroscopy. Journal of the American Chemical Society, 2013, 135, 9458-9464.	13.7	116
71	Hydrogen adsorption in the metalâ€“organic frameworks Fe2(dobdc) and Fe2(O2)(dobdc). Dalton Transactions, 2012, 41, 4180.	3.3	78
72	Carbon Dioxide Capture in Metalâ€“Organic Frameworks. Chemical Reviews, 2012, 112, 724-781.	47.7	5,612

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73	Hydrocarbon Separations in a Metal-Organic Framework with Open Iron(II) Coordination Sites. Science, 2012, 335, 1606-1610.	12.6	1,635
74	Acetylene Adsorption on CPOâ€27â€M Metalâ€"Organic Frameworks (M=Fe, Co and Ni). ChemPhysChem, 2012, 13, 445-448.	2.1	38
75	Selective Binding of O₂ over N₂ in a Redoxâ€"Active Metalâ€"Organic Framework with Open Iron(II) Coordination Sites. Journal of the American Chemical Society, 2011, 133, 14814-14822.	13.7	470
76	Metal Insertion in a Microporous Metalâˆ’Organic Framework Lined with 2,2â€²-Bipyridine. Journal of the American Chemical Society, 2010, 132, 14382-14384.	13.7	514