Ashlee J Howarth

List of Publications by Year
in descending order

59 papers	8,447 citations	109321 35 h-index	138484 58 g-index
70 all docs	70 docs citations	70 times ranked	9378 citing authors

#	Article	IF	Citations
1	Chemical, thermal and mechanical stabilities of metalâ€“organic frameworks. Nature Reviews Materials, 2016, 1, .	48.7	1,490
2	Metalâ€“organic frameworks for heavy metal removal from water. Coordination Chemistry Reviews, 2018, 358, 92-107.	18.8	719
3	Metalâ€“organic frameworks for the removal of toxic industrial chemicals and chemical warfare agents. Chemical Society Reviews, 2017, 46, 3357-3385.	38.1	707
4	Postsynthetic Tuning of Metalâ€“Organic Frameworks for Targeted Applications. Accounts of Chemical Research, 2017, 50, 805-813.	15.6	644
5	Best Practices for the Synthesis, Activation, and Characterization of Metalâ€“Organic Frameworks. Chemistry of Materials, 2017, 29, 26-39.	6.7	518
6	High Efficiency Adsorption and Removal of Selenate and Selenite from Water Using Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2015, 137, 7488-7494.	13.7	330
7	Catalytic Zirconium/Hafnium-Based Metalâ€“Organic Frameworks. ACS Catalysis, 2017, 7, 997-1014.	11.2	288
8	Bottom-up construction of a superstructure in a porous uranium-organic crystal. Science, 2017, 356, 624-627.	12.6	286
9	Catalytic degradation of chemical warfare agents and their simulants by metal-organic frameworks. Coordination Chemistry Reviews, 2017, 346, 101-111.	18.8	275
10	Selective Photooxidation of a Mustardâ€Gas Simulant Catalyzed by a Porphyrinic Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2015, 54, 9001-9005.	13.8	244
11	Rare-earth metalâ€“organic frameworks: from structure to applications. Chemical Society Reviews, 2020, 49, 7949-7977.	38.1	244
12	Enzyme encapsulation in metalâ€“organic frameworks for applications in catalysis. CrystEngComm, 2017, 19, 4082-4091.	2.6	235
13	Efficient and selective oxidation of sulfur mustard using singlet oxygen generated by a pyrene-based metalâ€“organic framework. Journal of Materials Chemistry A, 2016, 4, 13809-13813.	10.3	147
14	A historical perspective on porphyrin-based metalâ€“organic frameworks and their applications. Coordination Chemistry Reviews, 2021, 429, 213615.	18.8	140
15	A Hafnium-Based Metalâ€“Organic Framework as a Nature-Inspired Tandem Reaction Catalyst. Journal of the American Chemical Society, 2015, 137, 13624-13631.	13.7	137
16	Metalâ€“organic frameworks for applications in remediation of oxyanion/cation-contaminated water. CrystEngComm, 2015, 17, 7245-7253.	2.6	133
17	Efficient Capture of Perrhenate and Pertechnetate by a Mesoporous Zr Metalâ€“Organic Framework and Examination of Anion Binding Motifs. Chemistry of Materials, 2018, 30, 1277-1284.	6.7	125
18	Presence versus Proximity: The Role of Pendant Amines in the Catalytic Hydrolysis of a Nerve Agent Simulant. Angewandte Chemie - International Edition, 2018, 57, 1949-1953.	13.8	121

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19	Benign by Design: Green and Scalable Synthesis of Zirconium UiO-Metalâ€“Organic Frameworks by Water-Assisted Mechanochemistry. ACS Sustainable Chemistry and Engineering, 2018, 6, 15841-15849.	6.7	120
20	Detoxification of a Sulfur Mustard Simulant Using a BODIPY-Functionalized Zirconium-Based Metalâ€“Organic Framework. ACS Applied Materials & Interfaces, 2017, 9, 24555-24560.	8.0	112
21	High volumetric uptake of ammonia using Cu-MOF-74/Cu-CPO-27. Dalton Transactions, 2016, 45, 4150-4153.	3.3	102
22	Postsynthetic Incorporation of a Singlet Oxygen Photosensitizer in a Metalâ€“Organic Framework for Fast and Selective Oxidative Detoxification of Sulfur Mustard. Chemistry - A European Journal, 2017, 23, 214-218.	3.3	98
23	Rational Synthesis of Mixed-Metal Microporous Metalâ€“Organic Frameworks with Controlled Composition Using Mechanochemistry. Chemistry of Materials, 2019, 31, 5494-5501.	6.7	96
24	Detoxification of Chemical Warfare Agents Using a Zr₆â€Based Metalâ€“Organic Framework/Polymer Mixture. Chemistry - A European Journal, 2016, 22, 14864-14868.	3.3	93
25	Growth of ZnO self-converted 2D nanosheet zeolitic imidazolate framework membranes by an ammonia-assisted strategy. Nano Research, 2018, 11, 1850-1860.	10.4	72
26	Improving the Efficiency of Mustard Gas Simulant Detoxification by Tuning the Singlet Oxygen Quantum Yield in Metalâ€“Organic Frameworks and Their Corresponding Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 23802-23806.	8.0	67
27	Green and rapid mechanosynthesis of high-porosity NU- and UiO-type metalâ€“organic frameworks. Chemical Communications, 2018, 54, 6999-7002.	4.1	63
28	Adding to the Arsenal of Zirconiumâ€Based Metalâ€“Organic Frameworks: the Topology as a Platform for Solventâ€Assisted Metal Incorporation. European Journal of Inorganic Chemistry, 2016, 2016, 4349-4352.	2.0	59
29	A visually detectable pH responsive zirconium metalâ€“organic framework. Chemical Communications, 2016, 52, 3438-3441.	4.1	57
30	Efficient extraction of sulfate from water using a Zr-metalâ€“organic framework. Dalton Transactions, 2016, 45, 93-97.	3.3	56
31	Simple, scalable mechanosynthesis of metalâ€“organic frameworks using liquid-assisted resonant acoustic mixing (LA-RAM). Chemical Science, 2020, 11, 7578-7584.	7.4	55
32	Green applications of metalâ€“organic frameworks. CrystEngComm, 2018, 20, 5899-5912.	2.6	54
33	Adsorptive removal of Sb(V) from water using a mesoporous Zr-based metalâ€“organic framework. Polyhedron, 2018, 151, 338-343.	2.2	43
34	Building a shp: A Rare-Earth Metalâ€“Organic Framework and Its Application in a Catalytic Photooxidation Reaction. Chemistry of Materials, 2021, 33, 4163-4169.	6.7	39
35	Supercritical Carbon Dioxide Enables Rapid, Clean, and Scalable Conversion of a Metal Oxide into Zeolitic Metalâ€“Organic Frameworks. Crystal Growth and Design, 2018, 18, 3222-3228.	3.0	36
36	Ammonia Capture within Zirconium Metalâ€“Organic Frameworks: Reversible and Irreversible Uptake. ACS Applied Materials & Interfaces, 2021, 13, 20081-20093.	8.0	36

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37	Efficient activation of peroxymonosulfate by composites containing iron mining waste and graphitic carbon nitride for the degradation of acetaminophen. Journal of Hazardous Materials, 2020, 400, 123310.	12.4	35
38	Tuning the Emission Lifetime in Bis-cyclometalated Iridium(III) Complexes Bearing Iminopyrene Ligands. Inorganic Chemistry, 2014, 53, 11882-11889.	4.0	34
39	Efficient extraction of inorganic selenium from water by a Zr metalâ€“organic framework: investigation of volumetric uptake capacity and binding motifs. CrystEngComm, 2018, 20, 6140-6145.	2.6	33
40	Detoxification of a Mustard-Gas Simulant by Nanosized Porphyrin-Based Metalâ€“Organic Frameworks. ACS Applied Nano Materials, 2019, 2, 465-469.	5.0	32
41	Towards hydroxamic acid linked zirconium metalâ€“organic frameworks. Materials Chemistry Frontiers, 2017, 1, 1194-1199.	5.9	29
42	Elucidating the Origin of Enhanced Phosphorescence Emission in the Solid State (EPESS) in Cyclometallated Iridium Complexes. European Journal of Inorganic Chemistry, 2014, 2014, 3657-3664.	2.0	27
43	Presence versus Proximity: The Role of Pendant Amines in the Catalytic Hydrolysis of a Nerve Agent Simulant. Angewandte Chemie, 2018, 130, 1967-1971.	2.0	24
44	Modulating Photo- and Radioluminescence in Tb(III) Cluster-Based Metalâ€“Organic Frameworks. , 2022, 4, 1025-1031.		19
45	Synthetic approaches for accessing rare-earth analogues of UiO-66. Chemical Communications, 2021, 57, 6121-6124.	4.1	18
46	Bottom-Up Design and Generation of Complex Structures: A New Twist in Reticular Chemistry. Crystal Growth and Design, 2018, 18, 449-455.	3.0	14
47	Modular Construction of Porous Hydrogenâ€Bonded Molecular Materials from Melams. Chemistry - A European Journal, 2020, 26, 7026-7040.	3.3	14
48	Combining solvent-assisted linker exchange and transmetallation strategies to obtain a new non-catenated nickel (II) pillared-paddlewheel MOF. Inorganic Chemistry Communication, 2016, 67, 60-63.	3.9	13
49	Remodelling a shp: Transmetalation in a Rare-Earth Cluster-Based Metalâ€“Organic Framework. Inorganic Chemistry, 2021, 60, 11795-11802.	4.0	8
50	Simplifying and expanding the scope of boron imidazolate framework (BIF) synthesis using mechanochemistry. Chemical Science, 2021, 12, 14499-14506.	7.4	7
51	Metalâ€“organic frameworks for the generation of reactive oxygen species. Chemical Physics Reviews, 2021, 2, .	5.7	7
52	A Step toward Change: A Green Alternative for the Synthesis of Metalâ€“Organic Frameworks. ACS Sustainable Chemistry and Engineering, 2021, 9, 16356-16362.	6.7	7
53	Experimentalists and theorists need to talk. Nature, 2017, 551, 433-434.	27.8	6
54	Phosphonates Meet Metalâ”Organic Frameworks: Towards CO 2 Adsorption. Israel Journal of Chemistry, 2018, 58, 1164-1170.	2.3	4

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55	Metal-organic frameworks for capture and detoxification of nerve agents. , 2019, , 179-202.		3
56	Adding to the Arsenal of Zirconium-Based Metal-Organic Frameworks:theTopology as a Platform for Solvent-Assisted Metal Incorporation. European Journal of Inorganic Chemistry, 2016, 2016, 4266-4266.	2.0	1
57	Precision in 3D. Nature Chemistry, 2017, 9, 299-301.	13.6	1
58	Crystalline Molecular Materials: From Structure to Function. Crystal Growth and Design, 2020, 20, 7565-7567.	3.0	1
59	Valuing Humanity As Much As Research Output And Ideas. ChemistryViews, 0, , .	0.0	0