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List of Publications by Year
in descending order

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Version: 2024-02-01

61 papers	6,458 citations	109321 35 h-index	128289 60 g-index
62 all docs	62 docs citations	62 times ranked	6977 citing authors

#	Article	IF	Citations
1	Metalâ€“Organic Frameworks for Air Purification of Toxic Chemicals. Chemical Reviews, 2014, 114, 5695-5727.	47.7	825
2	Destruction of chemical warfare agents using metalâ€“organic frameworks. Nature Materials, 2015, 14, 512-516.	27.5	790
3	Stability and degradation mechanisms of metalâ€“organic frameworks containing the Zr6O4(OH)4 secondary building unit. Journal of Materials Chemistry A, 2013, 1, 5642.	10.3	578
4	The effect of water adsorption on the structure of the carboxylate containing metalâ€“organic frameworks Cu-BTC, Mg-MOF-74, and UiO-66. Journal of Materials Chemistry A, 2013, 1, 11922.	10.3	466
5	Enhanced Stability of Cu-BTC MOF via Perfluorohexane Plasma-Enhanced Chemical Vapor Deposition. Journal of the American Chemical Society, 2012, 134, 1486-1489.	13.7	246
6	Polymerâ€“Metalâ€“Organic Frameworks (polyMOFs) as Water Tolerant Materials for Selective Carbon Dioxide Separations. Journal of the American Chemical Society, 2016, 138, 920-925.	13.7	214
7	Evaluation of MOFs for air purification and air quality control applications: Ammonia removal from air. Chemical Engineering Science, 2015, 124, 118-124.	3.8	194
8	MOFabric: Electrospun Nanofiber Mats from PVDF/UiO-66-NH₂ for Chemical Protection and Decontamination. ACS Applied Materials & Interfaces, 2017, 9, 13632-13636.	8.0	187
9	Extraordinary NO₂ Removal by the Metalâ€“Organic Framework UiOâ€66â€NH₂. Angewandte Chemie - International Edition, 2016, 55, 6235-6238.	13.8	160
10	Tailoring the Pore Size and Functionality of UiO-Type Metalâ€“Organic Frameworks for Optimal Nerve Agent Destruction. Inorganic Chemistry, 2015, 54, 9684-9686.	4.0	157
11	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
12	Enhanced aging properties of HKUST-1 in hydrophobic mixed-matrix membranes for ammonia adsorption. Chemical Science, 2016, 7, 2711-2716.	7.4	145
13	Effects of pelletization pressure on the physical and chemical properties of the metalâ€“organic frameworks Cu3(BTC)2 and UiO-66. Microporous and Mesoporous Materials, 2013, 179, 48-53.	4.4	139
14	Cerium(IV) vs Zirconium(IV) Based Metalâ€“Organic Frameworks for Detoxification of a Nerve Agent. Chemistry of Materials, 2017, 29, 2672-2675.	6.7	135
15	A UiO-66 analogue with uncoordinated carboxylic acids for the broad-spectrum removal of toxic chemicals. New Journal of Chemistry, 2015, 39, 2396-2399.	2.8	133
16	Effective, Facile, and Selective Hydrolysis of the Chemical Warfare Agent VX Using Zr₆-Based Metalâ€“Organic Frameworks. Inorganic Chemistry, 2015, 54, 10829-10833.	4.0	132
17	Engineering UiO-66-NH₂ for Toxic Gas Removal. Industrial & Engineering Chemistry Research, 2014, 53, 701-707.	3.7	127
18	Metalâ€“Organic Frameworks for Oxygen Storage. Angewandte Chemie - International Edition, 2014, 53, 14092-14095.	13.8	106

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19	High volumetric uptake of ammonia using Cu-MOF-74/Cu-CPO-27. Dalton Transactions, 2016, 45, 4150-4153.	3.3	102
20	Chemical Warfare Agents Detoxification Properties of Zirconium Metalâ€“Organic Frameworks by Synergistic Incorporation of Nucleophilic and Basic Sites. ACS Applied Materials & Interfaces, 2017, 9, 23967-23973.	8.0	100
21	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
22	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
23	Chemical Protective Textiles of UiO-66-Integrated PVDF Composite Fibers with Rapid Heterogeneous Decontamination of Toxic Organophosphates. ACS Applied Materials & Interfaces, 2018, 10, 34585-34591.	8.0	82
24	Direct Surface Growth Of UIO-66-NH₂ on Polyacrylonitrile Nanofibers for Efficient Toxic Chemical Removal. Industrial & Engineering Chemistry Research, 2017, 56, 14502-14506.	3.7	69
25	Removal of chlorine gas by an amine functionalized metalâ€“organic framework via electrophilic aromatic substitution. Chemical Communications, 2015, 51, 12474-12477.	4.1	66
26	Electrospun metalâ€“organic framework polymer composites for the catalytic degradation of methyl paraoxon. New Journal of Chemistry, 2017, 41, 8748-8753.	2.8	64
27	Insight into organophosphate chemical warfare agent simulant hydrolysis in metal-organic frameworks. Journal of Hazardous Materials, 2019, 375, 191-197.	12.4	56
28	High-throughput screening of solid-state catalysts for nerve agent degradation. Chemical Communications, 2018, 54, 5768-5771.	4.1	55
29	Solid-Phase Detoxification of Chemical Warfare Agents using Zirconium-Based Metal Organic Frameworks and the Moisture Effects: Analyze via Digestion. ACS Applied Materials & Interfaces, 2019, 11, 21109-21116.	8.0	50
30	Synthesis and functionalization of phase-pure NU-901 for enhanced CO₂adsorption: the influence of a zirconium salt and modulator on the topology and phase purity. CrystEngComm, 2018, 20, 7066-7070.	2.6	43
31	Adsorption of Ammonia by Sulfuric Acid Treated Zirconium Hydroxide. Langmuir, 2012, 28, 10478-10487.	3.5	42
32	Efficient MOF-based degradation of organophosphorus compounds in non-aqueous environments. Journal of Materials Chemistry A, 2018, 6, 3038-3045.	10.3	42
33	Tailoring the Adsorption and Reaction Chemistry of the Metalâ€“Organic Frameworks UiO-66, UiO-66-NH₂, and HKUST-1 via the Incorporation of Molecular Guests. ACS Applied Materials & Interfaces, 2017, 9, 21579-21585.	8.0	40
34	Zirconium Hydroxideâ€“Metalâ€“Organic Framework Composites for Toxic Chemical Removal. Industrial & Engineering Chemistry Research, 2013, 52, 5462-5469.	3.7	37
35	Hierarchical Pore Development by Plasma Etching of Zrâ€Based Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2015, 21, 18029-18032.	3.3	36
36	Metalâ€“Organic Framework Modified Glass Substrate for Analysis of Highly Volatile Chemical Warfare Agents by Paper Spray Mass Spectrometry. ACS Applied Materials & Interfaces, 2018, 10, 8359-8365.	8.0	33

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37	Photocatalytic activity of TiO2 polycrystalline sub-micron fibers with variable rutile fraction. Applied Catalysis B: Environmental, 2016, 187, 154-162.	20.2	32
38	Facile Synthesis and Direct Activation of Zirconium Based Metalâ€“Organic Frameworks from Acetone. Industrial & Engineering Chemistry Research, 2017, 56, 1478-1484.	3.7	31
39	Filtration of chlorine and hydrogen chloride gas by engineered UiO-66-NH2 metal-organic framework. Journal of Hazardous Materials, 2017, 332, 162-167.	12.4	28
40	Single-component frameworks for heterogeneous catalytic hydrolysis of organophosphorous compounds in pure water. Chemical Communications, 2019, 55, 7005-7008.	4.1	28
41	Bottom-Up Synthesis of Anatase Nanoparticles with Graphene Domains. ACS Applied Materials & Interfaces, 2014, 6, 10638-10648.	8.0	27
42	Extraordinary NO₂ Removal by the Metalâ€“Organic Framework UiOâ€66â€NH₂. Angewandte Chemie, 2016, 128, 6343-6346.	2.0	25
43	Spectroscopically Resolved Binding Sites for the Adsorption of Sarin Gas in a Metalâ€“Organic Framework: Insights beyond Lewis Acidity. Journal of Physical Chemistry Letters, 2019, 10, 5142-5147.	4.6	24
44	High-Throughput Screening of MOFs for Breakdown of V-Series Nerve Agents. ACS Applied Materials & Interfaces, 2020, 12, 14672-14677.	8.0	21
45	Organoalkoxysilane-Grafted Silica Composites for Acidic and Basic Gas Adsorption. Langmuir, 2012, 28, 17450-17456.	3.5	20
46	Poly(3,4-ethylenedioxythiophene) (PEDOT) infused TiO₂nanofibers: the role of hole transport layer in photocatalytic degradation of phenazopyridine as a pharmaceutical contaminant. RSC Advances, 2016, 6, 113884-113892.	3.6	19
47	Metal Hydroxide/Polymer Textiles for Decontamination of Toxic Organophosphates: An Extensive Study of Wettability, Catalytic Activity, and the Effects of Aggregation. ACS Applied Materials & Interfaces, 2019, 11, 31378-31385.	8.0	19
48	The role of ruthenium photosensitizers in the degradation of phenazopyridine with TiO2 electrospun fibers. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 329, 46-53.	3.9	18
49	Chemisorption of Cyanogen Chloride by Spinel Ferrite Magnetic Nanoparticles. Langmuir, 2013, 29, 5500-5507.	3.5	14
50	Multiple effects of the presence of water on the nucleophilic substitution reactions of NaX Faujasite zeolite with dimethyl methylphosphonate (DMMP). Microporous and Mesoporous Materials, 2008, 112, 116-124.	4.4	12
51	Bioderived protoporphyrin IX incorporation into a metal-organic framework for enhanced photocatalytic degradation of chemical warfare agents. MRS Communications, 2019, 9, 464-473.	1.8	12
52	One-pot synthesis of high aspect ratio titanium dioxide nanorods using oxalic acid as a complexing agent. Materials Letters, 2016, 163, 39-42.	2.6	10
53	Trifluoroethanol and19F Magic Angle Spinning Nuclear Magnetic Resonance as a Basic Surface Hydroxyl Reactivity Probe for Zirconium(IV) Hydroxide Structures. Langmuir, 2011, 27, 9458-9464.	3.5	9
54	Insights into the solvent-assisted degradation of organophosphorus compounds by a Zr-based metalâ€“organic framework. Dalton Transactions, 2019, 48, 16153-16157.	3.3	8

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55	Preparation of Hydrophobic Metal-Organic Frameworks via Plasma Enhanced Chemical Vapor Deposition of Perfluoroalkanes for the Removal of Ammonia. Journal of Visualized Experiments, 2013, , .	0.3	7
56	Enhancing Van der Waals Interactions of Functionalized UiOâ€66 with Nonâ€polar Adsorbates: The Unique Effect of para Hydroxyl Groups. Chemistry - A European Journal, 2018, 24, 1931-1937.	3.3	7
57	Investigating the cheletropic reaction between sulfur dioxide and butadiene-containing linkers in UiO-66. Canadian Journal of Chemistry, 2018, 96, 139-143.	1.1	5
58	The room temperature chemistries of isocyanates with zeolite NaX. Microporous and Mesoporous Materials, 2011, 139, 110-119.	4.4	4
59	The room temperature chemistry of organo-sulfur esters with NaX zeolite. Microporous and Mesoporous Materials, 2011, 143, 141-148.	4.4	3
60	BEAMS: a workforce development program to bridge the gap between biologists and material scientists. Synthetic Biology, 2020, 5, ysaa009.	2.2	0
61	Advancements in MOF characterization for enhanced MALDI sensing. , 2018, , .		0