

Shuai Yuan

List of Publications by Year in descending order

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100
papers

12,724
citations

25034

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h-index

32842

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101
docs citations

101
times ranked

11199
citing authors

#	ARTICLE	IF	CITATIONS
1	Stable Metal-Organic Frameworks: Design, Synthesis, and Applications. <i>Advanced Materials</i> , 2018, 30, e1704303.	21.0	1,740
2	Luminescent sensors based on metal-organic frameworks. <i>Coordination Chemistry Reviews</i> , 2018, 354, 28-45.	18.8	987
3	Stable Metal-Organic Frameworks with Group 4 Metals: Current Status and Trends. <i>ACS Central Science</i> , 2018, 4, 440-450.	11.3	382
4	A Series of Highly Stable Mesoporous Metalloporphyrin Fe-MOFs. <i>Journal of the American Chemical Society</i> , 2014, 136, 13983-13986.	13.7	363
5	A Highly Stable Porphyrinic Zirconium Metal-Organic Framework with hpa Topology. <i>Journal of the American Chemical Society</i> , 2014, 136, 17714-17717.	13.7	356
6	Topology-Guided Design and Syntheses of Highly Stable Mesoporous Porphyrinic Zirconium Metal-Organic Frameworks with High Surface Area. <i>Journal of the American Chemical Society</i> , 2015, 137, 413-419.	13.7	352
7	Construction of hierarchically porous metal-organic frameworks through linker labilization. <i>Nature Communications</i> , 2017, 8, 15356.	12.8	326
8	Sequential Linker Installation: Precise Placement of Functional Groups in Multivariate Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2015, 137, 3177-3180.	13.7	323
9	Creating Hierarchical Pores by Controlled Linker Thermolysis in Multivariate Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2018, 140, 2363-2372.	13.7	310
10	Photochromic Metal-Organic Frameworks: Reversible Control of Singlet Oxygen Generation. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 430-435.	13.8	307
11	Porous Organic Polymers for Post-Combustion Carbon Capture. <i>Advanced Materials</i> , 2017, 29, 1700229.	21.0	293
12	Optimizing Multivariate Metal-Organic Frameworks for Efficient C_2H_2/CO_2 Separation. <i>Journal of the American Chemical Society</i> , 2020, 142, 8728-8737.	13.7	289
13	Linker Installation: Engineering Pore Environment with Precisely Placed Functionalities in Zirconium MOFs. <i>Journal of the American Chemical Society</i> , 2016, 138, 8912-8919.	13.7	278
14	Stepwise Synthesis of Metal-Organic Frameworks. <i>Accounts of Chemical Research</i> , 2017, 50, 857-865.	15.6	246
15	A single crystalline porphyrinic titanium metal-organic framework. <i>Chemical Science</i> , 2015, 6, 3926-3930.	7.4	236
16	Thermodynamically Guided Synthesis of Mixed-Linker Zr-MOFs with Enhanced Tunability. <i>Journal of the American Chemical Society</i> , 2016, 138, 6636-6642.	13.7	232
17	$[Ti_8Zr_2O_{12}(COO)_{16}]$ Cluster: An Ideal Inorganic Building Unit for Photoactive Metal-Organic Frameworks. <i>ACS Central Science</i> , 2018, 4, 105-111.	11.3	204
18	Four New Cd(II) Coordination Polymers with Mixed Multidentate N-Donors and Biphenyl-Based Polycarboxylate Ligands: Syntheses, Structures, and Photoluminescent Properties. <i>Crystal Growth and Design</i> , 2013, 13, 377-385.	3.0	200

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19	Luminescence thermochromism of two entangled copper-iodide networks with a large temperature-dependent emission shift. <i>Chemical Communications</i> , 2013, 49, 6152.	4.1	180
20	Flexible Zirconium Metal-Organic Frameworks as Bioinspired Switchable Catalysts. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10776-10780.	13.8	179
21	Ligand Rigidification for Enhancing the Stability of Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 10283-10293.	13.7	172
22	Cooperative Cluster Metalation and Ligand Migration in Zirconium Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14696-14700.	13.8	169
23	Mixed-linker strategy for the construction of multifunctional metal-organic frameworks. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4280-4291.	10.3	163
24	Retrosynthesis of multi-component metal-organic frameworks. <i>Nature Communications</i> , 2018, 9, 808.	12.8	159
25	Control the Structure of Zr-Tetracarboxylate Frameworks through Steric Tuning. <i>Journal of the American Chemical Society</i> , 2017, 139, 16939-16945.	13.7	153
26	Creating Well-Defined Hexabenzocoronene in Zirconium Metal-Organic Framework by Postsynthetic Annulation. <i>Journal of the American Chemical Society</i> , 2019, 141, 2054-2060.	13.7	148
27	Stable metal-organic frameworks as a host platform for catalysis and biomimetics. <i>Chemical Communications</i> , 2018, 54, 4231-4249.	4.1	137
28	Pore-Environment Engineering with Multiple Metal Sites in Rare-Earth Porphyrinic Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5095-5099.	13.8	136
29	One-Step Synthesis of Hybrid Core-Shell Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3927-3932.	13.8	125
30	Perovskite Quantum Dots Encapsulated in a Mesoporous Metal-Organic Framework as Synergistic Photocathode Materials. <i>Journal of the American Chemical Society</i> , 2021, 143, 14253-14260.	13.7	118
31	In Situ Ligand Bonding Management of CsPbI ₃ Perovskite Quantum Dots Enables High-Performance Photovoltaics and Red Light-Emitting Diodes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22230-22237.	13.8	117
32	Redox-switchable breathing behavior in tetrathiafulvalene-based metal-organic frameworks. <i>Nature Communications</i> , 2017, 8, 2008.	12.8	116
33	A versatile synthetic route for the preparation of titanium metal-organic frameworks. <i>Chemical Science</i> , 2016, 7, 1063-1069.	7.4	114
34	A Reversible Crystallinity-Preserving Phase Transition in Metal-Organic Frameworks: Discovery, Mechanistic Studies, and Potential Applications. <i>Journal of the American Chemical Society</i> , 2015, 137, 7740-7746.	13.7	113
35	Photosensitizer-Anchored 2D MOF Nanosheets as Highly Stable and Accessible Catalysts toward Artemisinin Production. <i>Advanced Science</i> , 2019, 6, 1802059.	11.2	108
36	Stepwise Assembly of Turn-On Fluorescence Sensors in Multicomponent Metal-Organic Frameworks for in-Vitro Cyanide Detection. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9319-9323.	13.8	104

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37	Systematic Engineering of Single Substitution in Zirconium Metal-Organic Frameworks toward High-Performance Catalysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 18590-18597.	13.7	102
38	Face-Sharing Archimedean Solids Stacking for the Construction of Mixed-Ligand Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 13841-13848.	13.7	101
39	Flexible and Hierarchical Metal-Organic Framework Composites for High-Performance Catalysis. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8916-8920.	13.8	98
40	Kinetically Controlled Reticular Assembly of a Chemically Stable Mesoporous Ni(II)-Pyrazolate Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 13491-13499.	13.7	97
41	Porphyritic Metal-Organic Frameworks Installed with Brønsted Acid Sites for Efficient Tandem Semisynthesis of Artemisinin. <i>ACS Catalysis</i> , 2019, 9, 5111-5118.	11.2	96
42	Rapid desolvation-triggered domino lattice rearrangement in a metal-organic framework. <i>Nature Chemistry</i> , 2020, 12, 90-97.	13.6	93
43	Strategies for Pore Engineering in Zirconium Metal-Organic Frameworks. <i>CheM</i> , 2020, 6, 2902-2923.	11.7	91
44	Derivation and Decoration of Nets with Trigonal-Prismatic Nodes: A Unique Route to Reticular Synthesis of Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2016, 138, 5299-5307.	13.7	84
45	Uncovering Two Principles of Multivariate Hierarchical Metal-Organic Framework Synthesis via Retrosynthetic Design. <i>ACS Central Science</i> , 2018, 4, 1719-1726.	11.3	79
46	Enhancing Pore-Environment Complexity Using a Trapezoidal Linker: Toward Stepwise Assembly of Multivariate Quinary Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2018, 140, 12328-12332.	13.7	78
47	Eight Zn(ii) coordination networks based on flexible 1,4-di(1H-imidazol-1-yl)butane and different dicarboxylates: crystal structures, water clusters, and topologies. <i>Dalton Transactions</i> , 2013, 42, 12324.	3.3	76
48	Ligand-Directed Conformational Control over Porphyritic Zirconium Metal-Organic Frameworks for Size-Selective Catalysis. <i>Journal of the American Chemical Society</i> , 2021, 143, 12129-12137.	13.7	73
49	Precisely Embedding Active Sites into a Mesoporous Zr-Framework through Linker Installation for High-Efficiency Photocatalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 15020-15026.	13.7	71
50	Sequential Transformation of Zirconium(IV)-MOFs into Heterobimetallic MOFs Bearing Magnetic Anisotropic Cobalt(II) Centers. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12578-12583.	13.8	70
51	Exposed Equatorial Positions of Metal Centers via Sequential Ligand Elimination and Installation in MOFs. <i>Journal of the American Chemical Society</i> , 2018, 140, 10814-10819.	13.7	70
52	Tuning the Ionicity of Stable Metal-Organic Frameworks through Ionic Linker Installation. <i>Journal of the American Chemical Society</i> , 2019, 141, 3129-3136.	13.7	70
53	Lattice Expansion and Contraction in Metal-Organic Frameworks by Sequential Linker Reinstallation. <i>Matter</i> , 2019, 1, 156-167.	10.0	67
54	Flexible Zirconium MOFs as Bromine-Nanocontainers for Bromination Reactions under Ambient Conditions. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14622-14626.	13.8	65

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55	Continuous Variation of Lattice Dimensions and Pore Sizes in Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2020, 142, 4732-4738.	13.7	65
56	Three- and Eight-Fold Interpenetrated ThSi ₂ Metal-Organic Frameworks Fine-Tuned by the Length of Ligand. <i>Crystal Growth and Design</i> , 2012, 12, 2902-2907.	3.0	61
57	Cooperative Sieving and Functionalization of Zr Metal-Organic Frameworks through Insertion and Post-Modification of Auxiliary Linkers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 22390-22397.	8.0	60
58	Two isomeric [Cu ₄ I ₄] luminophores: solvothermal/mechanochromic syntheses, structures and thermochromic luminescence properties. <i>CrystEngComm</i> , 2014, 16, 1927.	2.6	55
59	Flexible Zirconium Metal-Organic Frameworks as Bioinspired Switchable Catalysts. <i>Angewandte Chemie</i> , 2016, 128, 10934-10938.	2.0	53
60	Facile one-pot synthesis of porphyrin based porous polymer networks (PPNs) as biomimetic catalysts. <i>Chemical Communications</i> , 2015, 51, 4005-4008.	4.1	50
61	Flexible Zirconium MOF as the Crystalline Sponge for Coordinative Alignment of Dicarboxylates. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 33408-33412.	8.0	48
62	Reactant ratio-modulated six new copper(I)-iodide coordination complexes based on diverse [Cu _n I _m] aggregates and biimidazole linkers: syntheses, structures and temperature-dependent luminescence properties. <i>CrystEngComm</i> , 2013, 15, 7792.	2.6	45
63	Recyclable and Reusable Heteroleptic Nickel Catalyst Immobilized on Metal-Organic Framework for Suzuki-Miyaura Coupling. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 41431-41438.	8.0	45
64	Functionalization of Zirconium-Based Metal-Organic Layers with Tailored Pore Environments for Heterogeneous Catalysis. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18224-18228.	13.8	44
65	Zirconium metal-organic frameworks incorporating tetrathiafulvalene linkers: robust and redox-active matrices for <i>in situ</i> confinement of metal nanoparticles. <i>Chemical Science</i> , 2020, 11, 1918-1925.	7.4	43
66	Two novel entangled metal-organic networks constructed from 4,4'-bis(2-methylimidazol-1-ylmethyl)biphenyl and dicarboxylates: From polycatenated 2D + 2D to 3D framework to polyrotaxane-like 2D + 2D to 2D layer. <i>CrystEngComm</i> , 2012, 14, 7856.	2.6	42
67	Redox-Active Covalent Organic Frameworks with Nickel-Bis(dithiolene) Units as Guiding Layers for High-Performance Lithium Metal Batteries. <i>Journal of the American Chemical Society</i> , 2022, 144, 8267-8277.	13.7	42
68	Pore Size Reduction in Zirconium Metal-Organic Frameworks for Ethylene/Ethane Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7118-7126.	6.7	39
69	An Encapsulation-Rearrangement Strategy to Integrate Superhydrophobicity into Mesoporous Metal-Organic Frameworks. <i>Matter</i> , 2020, 2, 988-999.	10.0	39
70	Highly Transparent, Robust Hydrophobic, and Amphiphilic Organic-Inorganic Hybrid Coatings for Antifogging and Antibacterial Applications. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6615-6630.	8.0	35
71	Interior Decoration of Stable Metal-Organic Frameworks. <i>Langmuir</i> , 2018, 34, 13795-13807.	3.5	34
72	One-Step Synthesis of Hybrid Core-Shell Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2018, 130, 3991-3996.	2.0	33

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73	Coordination Polymer Glasses with Lava and Healing Ability for High-Performance Gas Sieving. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21304-21309.	13.8	33
74	Discovery of precise pH-controlled biomimetic catalysts: defective zirconium metal-organic frameworks as alkaline phosphatase mimics. <i>Nanoscale</i> , 2019, 11, 11270-11278.	5.6	29
75	In Situ Ligand Bonding Management of CsPb ₃ Perovskite Quantum Dots Enables High-Performance Photovoltaics and Red Light-Emitting Diodes. <i>Angewandte Chemie</i> , 2020, 132, 22414-22421.	2.0	28
76	A continuous flow chemistry approach for the ultrafast and low-cost synthesis of MOF-808. <i>Green Chemistry</i> , 2021, 23, 9982-9991.	9.0	27
77	Enhancing the photothermal conversion of tetrathiafulvalene-based MOFs by redox doping and plasmon resonance. <i>Chemical Science</i> , 2022, 13, 1657-1664.	7.4	25
78	Rare-Earth Metal Tetrathiafulvalene Carboxylate Frameworks as Redox-Switchable Single-Molecule Magnets. <i>Chemistry - A European Journal</i> , 2021, 27, 622-627.	3.3	21
79	Coordination-bond-directed synthesis of hydrogen-bonded organic frameworks from metal-organic frameworks as templates. <i>Chemical Science</i> , 2021, 12, 14254-14259.	7.4	20
80	Stability Trend of Metal-Organic Frameworks with Heterometal-Modified Hexanuclear Zr Building Units. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28266-28274.	3.1	19
81	A review of aerosol flammability and explosion related incidents, standards, studies, and risk analysis. <i>Chemical Engineering Research and Design</i> , 2021, 146, 499-514.	5.6	19
82	Pore-Environment Engineering with Multiple Metal Sites in Rare-Earth Porphyrinic Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2018, 130, 5189-5193.	2.0	18
83	Flexible and Hierarchical Metal-Organic Framework Composites for High-Performance Catalysis. <i>Angewandte Chemie</i> , 2018, 130, 9054-9058.	2.0	18
84	Experimental and thermodynamic study of aerosol explosions in a 36-L apparatus. <i>Fuel</i> , 2019, 245, 467-477.	6.4	18
85	Stepwise Assembly of Turn-on Fluorescence Sensors in Multicomponent Metal-Organic Frameworks for in-Vitro Cyanide Detection. <i>Angewandte Chemie</i> , 2020, 132, 9405-9409.	2.0	18
86	Construction of a 36-L dust explosion apparatus and turbulence flow field comparison with a standard 20-L dust explosion vessel. <i>Journal of Loss Prevention in the Process Industries</i> , 2018, 55, 113-123.	3.3	17
87	Nitrogen-rich porphyrinic metal-organic frameworks synthesized by postsynthetic metathesis: from inert material to active catalyst. <i>Science China Chemistry</i> , 2016, 59, 975-979.	8.2	16
88	Reactivity of Atomic Layer Deposition Precursors with OH/H ₂ O-Containing Metal Organic Framework Materials. <i>Chemistry of Materials</i> , 2019, 31, 2286-2295.	6.7	16
89	A flexible thioether-based MOF as a crystalline sponge for structural characterization of liquid organic molecules. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1764-1767.	5.9	15
90	Modulated Synthesis of Metal-Organic Frameworks through Tuning of the Initial Oxidation State of the Metal. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 4368-4372.	2.0	14

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91	A 3D Luminescent Metal-organic Framework Constructed from Cu ₄ I ₄ Cubane Clusters and Triangular Imidazole Ligand. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 2030-2034.	1.2	13
92	Flexible Zirconium MOFs as Bromine-Nanocontainers for Bromination Reactions under Ambient Conditions. Angewandte Chemie, 2017, 129, 14814-14818.	2.0	13
93	Thermodynamically Controlled Linker Installation in Flexible Zirconium Metal-Organic Frameworks. Crystal Growth and Design, 2019, 19, 2069-2073.	3.0	13
94	Lithium inclusion in indium metal-organic frameworks showing increased surface area and hydrogen adsorption. APL Materials, 2014, 2, .	5.1	11
95	Functionalization of Zirconium-Based Metal-Organic Layers with Tailored Pore Environments for Heterogeneous Catalysis. Angewandte Chemie, 2020, 132, 18381-18385.	2.0	7
96	A silver-functionalized metal-organic framework with effective antibacterial activity. New Journal of Chemistry, 2022, 46, 5922-5926.	2.8	7
97	Sequential Transformation of Zirconium(IV)-MOFs into Heterobimetallic MOFs Bearing Magnetic Anisotropic Cobalt(II) Centers. Angewandte Chemie, 2018, 130, 12758-12763.	2.0	5
98	Coordination Polymer Glasses with Lava and Healing Ability for High-Performance Gas Sieving. Angewandte Chemie, 2021, 133, 21474-21479.	2.0	3
99	Generation of Environmentally Persistent Free Radicals on Metal-Organic Frameworks. Langmuir, 2022, 38, 3265-3275.	3.5	3
100	Group 4 Metals as Secondary Building Units: Ti, Zr, and Hf-based MOFs. , 2016, , 137-170.		2