

Omar K Farha

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

579 papers	68,047 citations	128 h-index	246 g-index
642 ext. papers	78,128 ext. citations	11.2 avg, IF	8.29 L-index

#	Paper	IF	Citations
579	Water Sorption Evolution Enabled by Reticular Construction of Zirconium Metal-Organic Frameworks Based on a Unique [2.2]Paracyclophane Scaffold.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	5
578	Development of a Metal-Organic Framework/Textile Composite for the Rapid Degradation and Sensitive Detection of the Nerve Agent VX. <i>Chemistry of Materials</i> , 2022 , 34, 1269-1277	9.6	5
577	Investigating the Influence of Hexanuclear Clusters in Isostructural Metal-Organic Frameworks on Toxic Gas Adsorption.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	5
576	Reticular Chemistry for Highly Porous Metal-Organic Frameworks: The Chemistry and Applications.. <i>Accounts of Chemical Research</i> , 2022 ,	24.3	17
575	Porous materials for hydrogen storage. <i>Chem</i> , 2022 ,	16.2	8
574	MOF-enabled confinement and related effects for chemical catalyst presentation and utilization.. <i>Chemical Society Reviews</i> , 2022 ,	58.5	22
573	Modulating Chemical Environments of Metal-Organic Framework-Supported Molybdenum(VI) Catalysts for Insights into the Structure-Activity Relationship in Cyclohexene Epoxidation.. <i>Journal of the American Chemical Society</i> , 2022 , 144, 3554-3563	16.4	3
572	Creating Optimal Pockets in a Clathrochelate-Based Metal-Organic Framework for Gas Adsorption and Separation: Experimental and Computational Studies.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	9
571	An Electrically Conductive Tetrathiafulvalene-Based Hydrogen-Bonded Organic Framework 2022 , 4, 128-135		3
570	Insights into Mass Transfer Barriers in Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2022 , 34, 4134-4142	9.6	12
569	Chemically Engineered Porous Molecular Coatings as Reactive Oxygen Species Generators and Reservoirs for Long-Lasting Self-Cleaning Textiles.. <i>Angewandte Chemie - International Edition</i> , 2021 , e202115956	16.4	5
568	Are you using the right probe molecules for assessing the textural properties of metal-organic frameworks?. <i>Journal of Materials Chemistry A</i> , 2021 , 10, 157-173	13	6
567	The Molecular Path Approaching the Active Site in Catalytic Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021 , 143, 20090-20094	16.4	4
566	Regulation of Catenation in Metal-Organic Frameworks with Tunable Clathrochelate-Based Building Blocks. <i>Crystal Growth and Design</i> , 2021 , 21, 6665-6670	3.5	1
565	Discovery of spontaneous de-interpenetration through charged point-point repulsions. <i>Chem</i> , 2021 ,	16.2	3
564	Fine-Tuning a Robust Metal-Organic Framework toward Enhanced Clean Energy Gas Storage. <i>Journal of the American Chemical Society</i> , 2021 , 143, 18838-18843	16.4	14
563	Active mechanisorption driven by pumping cassettes. <i>Science</i> , 2021 , 374, 1215-1221	33.3	15

562	Unusual Metal-Organic Framework Topology and Radiation Resistance through Neptunyl Coordination Chemistry. <i>Journal of the American Chemical Society</i> , 2021 , 143, 17354-17359	16.4	5
561	Micropore environment regulation of zirconium MOFs for instantaneous hydrolysis of an organophosphorus chemical. <i>Cell Reports Physical Science</i> , 2021 , 2, 100612	6.1	3
560	Systematic Study on the Removal of Per- and Polyfluoroalkyl Substances from Contaminated Groundwater Using Metal-Organic Frameworks. <i>Environmental Science & Technology</i> , 2021 , 55, 15162-15174	10.3	14
559	Allomelanin: A Biopolymer of Intrinsic Microporosity. <i>Journal of the American Chemical Society</i> , 2021 , 143, 4005-4016	16.4	10
558	Insights into the Structure-Activity Relationship in Aerobic Alcohol Oxidation over a Metal-Organic-Framework-Supported Molybdenum(VI) Catalyst. <i>Journal of the American Chemical Society</i> , 2021 , 143, 4302-4310	16.4	17
557	Photon Upconversion in a Glowing Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2021 , 143, 5053-5059	16.4	11
556	Ammonia Capture within Zirconium Metal-Organic Frameworks: Reversible and Irreversible Uptake. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 20081-20093	9.5	15
555	Tuning the Structural Flexibility for Multi-Responsive Gas Sorption in Isonicotinate-Based Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 16820-16827	9.5	10
554	Nanoporous Water-Stable Zr-Based Metal-Organic Frameworks for Water Adsorption. <i>ACS Applied Nano Materials</i> , 2021 , 4, 4346-4350	5.6	3
553	Efficient Removal of Per- and Polyfluoroalkyl Substances from Water with Zirconium-Based Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2021 , 33, 3276-3285	9.6	17
552	Thermochemical Investigation of Oxyanion Coordination in a Zirconium-Based Metal-Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	3
551	Zirconium Metal-Organic Frameworks Integrating Chloride Ions for Ammonia Capture and/or Chemical Separation. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 22485-22494	9.5	10
550	Insights into Catalytic Hydrolysis of Organophosphonates at M-OH Sites of Azolate-Based Metal Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021 , 143, 9893-9900	16.4	10
549	Mechanistic Insights into Nanoparticle Formation from Bimetallic Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021 , 143, 8976-8980	16.4	2
548	Anisotropic Synthetic Allomelanin Materials via Solid-State Polymerization of Self-Assembled 1,8-Dihydroxynaphthalene Dimers. <i>Angewandte Chemie</i> , 2021 , 133, 17605-17612	3.6	
547	Titelbild: Anisotropic Synthetic Allomelanin Materials via Solid-State Polymerization of Self-Assembled 1,8-Dihydroxynaphthalene Dimers (Angew. Chem. 32/2021). <i>Angewandte Chemie</i> , 2021 , 133, 17361-17361	3.6	
546	Stabilization of an enzyme cytochrome in a metal-organic framework against denaturing organic solvents. <i>IScience</i> , 2021 , 24, 102641	6.1	3
545	Product Inhibition and the Catalytic Destruction of a Nerve Agent Simulant by Zirconium-Based Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 30565-30575	9.5	8

544	Anisotropic Synthetic Allomelanin Materials via Solid-State Polymerization of Self-Assembled 1,8-Dihydroxynaphthalene Dimers. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 17464-17471	16.4	5
543	Reticular exploration of uranium-based metal-organic frameworks with hexacarboxylate building units. <i>Nano Research</i> , 2021 , 14, 376-380	10	14
542	A historical perspective on porphyrin-based metal-organic frameworks and their applications. <i>Coordination Chemistry Reviews</i> , 2021 , 429,	23.2	43
541	The state of the field: from inception to commercialization of metal-organic frameworks. <i>Faraday Discussions</i> , 2021 , 225, 9-69	3.6	22
540	Transient Catenation in a Zirconium-Based Metal-Organic Framework and Its Effect on Mechanical Stability and Sorption Properties. <i>Journal of the American Chemical Society</i> , 2021 , 143, 1503-1512	16.4	9
539	Topological Strain-Induced Regioselective Linker Elimination in a Chiral Zr(IV)-Based Metal-Organic Framework. <i>CheM</i> , 2021 , 7, 190-201	16.2	7
538	Modulation of CO adsorption in novel pillar-layered MOFs based on carboxylate-pyrazole flexible linker. <i>Dalton Transactions</i> , 2021 , 50, 2880-2890	4.3	1
537	Proton Conductivity via Trapped Water in Phosphonate-Based Metal-Organic Frameworks Synthesized in Aqueous Media. <i>Inorganic Chemistry</i> , 2021 , 60, 1086-1091	5.1	10
536	Vapor-Phase Cyclohexene Epoxidation by Single-Ion Fe(III) Sites in Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2021 , 60, 2457-2463	5.1	6
535	Inverse design of nanoporous crystalline reticular materials with deep generative models. <i>Nature Machine Intelligence</i> , 2021 , 3, 76-86	22.5	58
534	Highly Specific Coordination-Driven Self-Assembly of 2D Heterometallic Metal-Organic Frameworks with Unprecedented Johnson-type () Nonanuclear Zr-Oxocarboxylate Clusters. <i>Journal of the American Chemical Society</i> , 2021 , 143, 657-663	16.4	8
533	An Amidoxime-Functionalized Porous Reactive Fiber against Toxic Chemicals 2021 , 3, 320-326		4
532	Synthetic Porous Melanin. <i>Journal of the American Chemical Society</i> , 2021 , 143, 3094-3103	16.4	10
531	Postsynthetically Modified Polymers of Intrinsic Microporosity (PIMs) for Capturing Toxic Gases. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 10409-10415	9.5	9
530	Small Molecules, Big Effects: Tuning Adsorption and Catalytic Properties of Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2021 , 33, 1444-1454	9.6	19
529	Mechanically Enhanced Catalytic Reduction of Carbon Dioxide over Defect Hexagonal Boron Nitride. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 2447-2455	8.3	7
528	Transport Diffusion of Linear Alkanes (C-C) through Thin Films of ZIF-8 as Assessed by Quartz Crystal Microgravimetry. <i>Langmuir</i> , 2021 , 37, 9405-9414	4	2
527	Near-instantaneous catalytic hydrolysis of organophosphorus nerve agents with zirconium-based MOF/hydrogel composites. <i>Chem Catalysis</i> , 2021 , 1, 721-733		11

526	Benign Synthesis and Modification of a Zn ^{II} -Azolate Metal-Organic Framework for Enhanced Ammonia Uptake and Catalytic Hydrolysis of an Organophosphorus Chemical 2021 , 3, 1363-1368		7
525	Surviving Under Pressure: The Role of Solvent, Crystal Size, and Morphology During Pelletization of Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	4
524	A contorted nanographene shelter. <i>Nature Communications</i> , 2021 , 12, 5191	17.4	2
523	Immobilized Regenerable Active Chlorine within a Zirconium-Based MOF Textile Composite to Eliminate Biological and Chemical Threats. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16777-16785	16.4	10
522	Isomer of linker for NU-1000 yields a new she-type, catalytic, and hierarchically porous, Zr-based metal-organic framework. <i>Chemical Communications</i> , 2021 , 57, 3571-3574	5.8	8
521	Rapid, Biomimetic Degradation of a Nerve Agent Simulant by Incorporating Imidazole Bases into a Metal-Organic Framework. <i>ACS Catalysis</i> , 2021 , 11, 1424-1429	13.1	14
520	Simplifying and expanding the scope of boron imidazolate framework (BIF) synthesis using mechanochemistry. <i>Chemical Science</i> , 2021 , 12, 14499-14506	9.4	0
519	Heterometallic Ce/V Oxo Clusters with Adjustable Catalytic Reactivities. <i>Journal of the American Chemical Society</i> , 2021 ,	16.4	0
518	Structural Diversity of Zirconium Metal-Organic Frameworks and Effect on Adsorption of Toxic Chemicals. <i>Journal of the American Chemical Society</i> , 2020 , 142, 21428-21438	16.4	44
517	Charge Transport in Zirconium-Based Metal-Organic Frameworks. <i>Accounts of Chemical Research</i> , 2020 , 53, 1187-1195	24.3	47
516	Pd modified prussian blue frameworks: Multiple electron transfer pathways for improving catalytic activity toward hydrogenation of nitroaromatics. <i>Molecular Catalysis</i> , 2020 , 492, 110967	3.3	20
515	Recent Advances in Rechargeable Aluminum-Ion Batteries and Considerations for Their Future Progress. <i>ACS Applied Energy Materials</i> , 2020 , 3, 6019-6035	6.1	27
514	Stabilization of Photocatalytically Active Uranyl Species in a Uranyl-Organic Framework for Heterogeneous Alkane Fluorination Driven by Visible Light. <i>Inorganic Chemistry</i> , 2020 , 59, 16795-16798	5.1	12
513	Influence of spin state and electron configuration on the active site and mechanism for catalytic hydrogenation on metal cation catalysts supported on NU-1000: insights from experiments and microkinetic modeling. <i>Catalysis Science and Technology</i> , 2020 , 10, 3594-3602	5.5	8
512	Colloidal crystal engineering with metal-organic framework nanoparticles and DNA. <i>Nature Communications</i> , 2020 , 11, 2495	17.4	45
511	Control of the Porosity in Manganese Trimer-Based Metal-Organic Frameworks by Linker Functionalization. <i>Inorganic Chemistry</i> , 2020 , 59, 8444-8450	5.1	7
510	Covalent Organic Frameworks: Emerging Organic Solid Materials for Energy and Electrochemical Applications. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 27821-27852	9.5	44
509	Enhancing Four-Carbon Olefin Production from Acetylene over Copper Nanoparticles in Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 31496-31502	9.5	4

508	Cyclohexene epoxidation with H ₂ O ₂ in the vapor and liquid phases over a vanadium-based metal-organic framework. <i>Catalysis Science and Technology</i> , 2020 , 10, 4580-4585	5.5	9
507	Isolating the Role of the Node-Linker Bond in the Compression of UiO-66 Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2020 , 32, 5864-5871	9.6	12
506	Illuminating a Practical Solution to Clothing Protection from Mustard Gas. <i>Matter</i> , 2020 , 2, 286-287	12.7	0
505	Squeezing the box: isorecticular contraction of pyrene-based linker in a Zr-based metal-organic framework for Xe/Kr separation. <i>Dalton Transactions</i> , 2020 , 49, 6553-6556	4.3	4
504	Metal-Organic Frameworks against Toxic Chemicals. <i>Chemical Reviews</i> , 2020 , 120, 8130-8160	68.1	191
503	Precise Control of Cu Nanoparticle Size and Catalytic Activity through Pore Templating in Zr Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2020 , 32, 3078-3086	9.6	11
502	Mechanistic Insights into C-H Borylation of Arenes with Organoiridium Catalysts Embedded in a Microporous Metal-Organic Framework. <i>Organometallics</i> , 2020 , 39, 1123-1133	3.8	10
501	Structural Features of Zirconium-Based Metal-Organic Frameworks Affecting Radiolytic Stability. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 7520-7526	3.9	24
500	Process-level modelling and optimization to evaluate metal-organic frameworks for post-combustion capture of CO ₂ . <i>Molecular Systems Design and Engineering</i> , 2020 , 5, 1205-1218	4.6	17
499	Isothermal Titration Calorimetry to Explore the Parameter Space of Organophosphorus Agrochemical Adsorption in MOFs. <i>Journal of the American Chemical Society</i> , 2020 , 142, 12357-12366	16.4	26
498	Tuning the Redox Activity of Metal-Organic Frameworks for Enhanced, Selective O Binding: Design Rules and Ambient Temperature O Chemisorption in a Cobalt-Triazolate Framework. <i>Journal of the American Chemical Society</i> , 2020 , 142, 4317-4328	16.4	36
497	Structural reversibility of Cu doped NU-1000 MOFs under hydrogenation conditions. <i>Journal of Chemical Physics</i> , 2020 , 152, 084703	3.9	8
496	Tailoring Pore Aperture and Structural Defects in Zirconium-Based Metal-Organic Frameworks for Krypton/Xenon Separation. <i>Chemistry of Materials</i> , 2020 , 32, 3776-3782	9.6	43
495	Single crystal structure and photocatalytic behavior of grafted uranyl on the Zr-node of a pyrene-based metal-organic framework. <i>CrystEngComm</i> , 2020 , 22, 2097-2102	3.3	10
494	Phase Transitions in Metal-Organic Frameworks Directly Monitored through In Situ Variable Temperature Liquid-Cell Transmission Electron Microscopy and In Situ X-ray Diffraction. <i>Journal of the American Chemical Society</i> , 2020 , 142, 4609-4615	16.4	35
493	Ultrastable Mesoporous Hydrogen-Bonded Organic Framework-Based Fiber Composites toward Mustard Gas Detoxification. <i>Cell Reports Physical Science</i> , 2020 , 1, 100024	6.1	36
492	Isothermal Titration Calorimetry to Investigate Uremic Toxins Adsorbing onto Metal-Organic Frameworks. <i>Cell Reports Physical Science</i> , 2020 , 1, 100006	6.1	16
491	Strategies for Incorporating Catalytically Active Polyoxometalates in Metal-Organic Frameworks for Organic Transformations. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 5345-5360	9.5	72

490	Solvent-assisted linker exchange enabled preparation of cerium-based metal-organic frameworks constructed from redox active linkers. <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 984-990	6.8	22
489	Zirconium-Based Metal-Organic Frameworks for the Catalytic Hydrolysis of Organophosphorus Nerve Agents. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 14702-14720	9.5	90
488	Demonstrating the Critical Role of Solvation in Supported Ti and Nb Epoxidation Catalysts via Vapor-Phase Kinetics. <i>ACS Catalysis</i> , 2020 , 10, 2817-2825	13.1	8
487	Organic Counteranion Co-assembly Strategy for the Formation of β -Cyclodextrin-Containing Hybrid Frameworks. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2042-2050	16.4	15
486	Single-Crystal Polycationic Polymers Obtained by Single-Crystal-to-Single-Crystal Photopolymerization. <i>Journal of the American Chemical Society</i> , 2020 , 142, 6180-6187	16.4	18
485	A Flexible Interpenetrated Zirconium-Based Metal-Organic Framework with High Affinity toward Ammonia. <i>ChemSusChem</i> , 2020 , 13, 1710-1714	8.3	21
484	Designing Porous Materials to Resist Compression: Mechanical Reinforcement of a Zr-MOF with Structural Linkers. <i>Chemistry of Materials</i> , 2020 , 32, 3545-3552	9.6	16
483	Advancement of Actinide Metal-Organic Framework Chemistry via Synthesis of Pu-UiO-66. <i>Journal of the American Chemical Society</i> , 2020 , 142, 9363-9371	16.4	24
482	Coordination Chemistry in the Structural and Functional Exploration of Actinide-Based Metal-Organic Frameworks. <i>Bulletin of Japan Society of Coordination Chemistry</i> , 2020 , 75, 3-12	0.3	1
481	Uncovering the Role of Metal-Organic Framework Topology on the Capture and Reactivity of Chemical Warfare Agents. <i>Chemistry of Materials</i> , 2020 , 32, 4609-4617	9.6	36
480	Vibrational Paddlewheel Cu ₂ Tu Node in Metal-Organic Frameworks: Probe of Nonradiative Relaxation. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 13187-13195	3.8	4
479	Regioselective Functionalization of the Mesoporous Metal-Organic Framework, NU-1000, with Photo-Active Tris-(2,2'-bipyridine)ruthenium(II). <i>ACS Omega</i> , 2020 , 5, 30299-30305	3.9	6
478	Effect of ionic liquid on sugar-aromatic separation selectivity by metal-organic framework NU-1000 in aqueous solution. <i>Fuel Processing Technology</i> , 2020 , 197, 106189	7.2	2
477	Integration of Enzymes and Photosensitizers in a Hierarchical Mesoporous Metal-Organic Framework for Light-Driven CO Reduction. <i>Journal of the American Chemical Society</i> , 2020 , 142, 1768-1773	16.4	80
476	Isobutane Dehydrogenation over Bulk and Supported Molybdenum Sulfide Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 1113-1122	3.9	11
475	H5PV2Mo10O40 Polyoxometalate Encapsulated in NU-1000 Metal-Organic Framework for Aerobic Oxidation of a Mustard Gas Simulant. <i>ACS Applied Nano Materials</i> , 2020 , 3, 658-664	5.6	38
474	Computational Predictions and Experimental Validation of Alkane Oxidative Dehydrogenation by Fe2M MOF Nodes. <i>ACS Catalysis</i> , 2020 , 10, 1460-1469	13.1	27
473	Single-Site, Single-Metal-Atom, Heterogeneous Electrocatalyst: Metal-Organic-Framework Supported Molybdenum Sulfide for Redox Mediator-Assisted Hydrogen Evolution Reaction. <i>ChemElectroChem</i> , 2020 , 7, 509-516	4.3	9

472	Real-Time in Situ Monitoring of Particle and Structure Evolution in the Mechanochemical Synthesis of UiO-66 Metal-Organic Frameworks. <i>Crystal Growth and Design</i> , 2020 , 20, 49-54	3.5	22
471	The Synthesis Science of Targeted Vapor-Phase Metal-Organic Framework Postmodification. <i>Journal of the American Chemical Society</i> , 2020 , 142, 242-250	16.4	24
470	Post-Synthetically Elaborated BODIPY-Based Porous Organic Polymers (POPs) for the Photochemical Detoxification of a Sulfur Mustard Simulant. <i>Journal of the American Chemical Society</i> , 2020 , 142, 18554-18564	16.4	38
469	Benign Integration of a Zn-Azolate Metal-Organic Framework onto Textile Fiber for Ammonia Capture. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 47747-47753	9.5	18
468	Insights into the Enhanced Catalytic Activity of Cytochrome c When Encapsulated in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2020 , 142, 18576-18582	16.4	32
467	Unprecedented Radiation Resistant Thorium-Binaphthol Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2020 , 142, 13299-13304	16.4	19
466	Modulation of crystal growth and structure within cerium-based metal-organic frameworks. <i>CrystEngComm</i> , 2020 , 22, 8182-8188	3.3	8
465	Node-Accessible Zirconium MOFs. <i>Journal of the American Chemical Society</i> , 2020 , 142, 21110-21121	16.4	42
464	Zr6O8 Node-Catalyzed Butene Hydrogenation and Isomerization in the Metal-Organic Framework NU-1000. <i>ACS Catalysis</i> , 2020 , 10, 14959-14970	13.1	9
463	Unexpected "Spontaneous" Evolution of Catalytic, MOF-Supported Single Cu(II) Cations to Catalytic, MOF-Supported Cu(0) Nanoparticles. <i>Journal of the American Chemical Society</i> , 2020 , 142, 21169-21177	16.4	28
462	Isomerization and Selective Hydrogenation of Propyne: Screening of Metal-Organic Frameworks Modified by Atomic Layer Deposition. <i>Journal of the American Chemical Society</i> , 2020 ,	16.4	5
461	Observation of reduced thermal conductivity in a metal-organic framework due to the presence of adsorbates. <i>Nature Communications</i> , 2020 , 11, 4010	17.4	36
460	Insights into the Structure-Activity Relationships in Metal-Organic Framework-Supported Nickel Catalysts for Ethylene Hydrogenation. <i>ACS Catalysis</i> , 2020 , 10, 8995-9005	13.1	11
459	Catalytic Degradation of an Organophosphorus Agent at Zn-OH Sites in a Metal-Organic Framework. <i>Chemistry of Materials</i> , 2020 , 32, 6998-7004	9.6	16
458	Metal-organic framework (MOF) materials as polymerization catalysts: a review and recent advances. <i>Chemical Communications</i> , 2020 , 56, 10409-10418	5.8	68
457	Using nature's blueprint to expand catalysis with Earth-abundant metals. <i>Science</i> , 2020 , 369,	33.3	124
456	Water-Based Synthesis of a Stable Iron-Based Metal-Organic Framework for Capturing Toxic Gases 2020 , 2, 1129-1134		20
455	Reactive Porous Polymers for Detoxification of a Chemical Warfare Agent Simulant. <i>Chemistry of Materials</i> , 2020 , 32, 9299-9306	9.6	14

454	A historical overview of the activation and porosity of metal-organic frameworks. <i>Chemical Society Reviews</i> , 2020 , 49, 7406-7427	58.5	158
453	Fiber Composites of Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2020 , 32, 7120-7140	9.6	28
452	Maximizing Magnetic Resonance Contrast in Gd(III) Nanoconjugates: Investigation of Proton Relaxation in Zirconium Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 41157-41166	9.5	10
451	Supramolecular Porous Assemblies of Atomically Precise Catalytically Active Cerium-Based Clusters. <i>Chemistry of Materials</i> , 2020 , 32, 8522-8529	9.6	10
450	Insights into the Structure and Dynamics of Metal-Organic Frameworks via Transmission Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2020 , 142, 17224-17235	16.4	21
449	Tuning the Atrazine Binding Sites in an Indium-Based Flexible Metal-Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 44762-44768	9.5	9
448	Metal-Organic Framework Nodes as a Supporting Platform for Tailoring the Activity of Metal Catalysts. <i>ACS Catalysis</i> , 2020 , 10, 11556-11566	13.1	29
447	Recent Electrochemical Applications of Metal-Organic Framework-Based Materials. <i>Crystal Growth and Design</i> , 2020 , 20, 7034-7064	3.5	57
446	Balancing volumetric and gravimetric uptake in highly porous materials for clean energy. <i>Science</i> , 2020 , 368, 297-303	33.3	215
445	Extended Metal-Organic Frameworks on Diverse Supports as Electrode Nanomaterials for Electrochemical Energy Storage. <i>ACS Applied Nano Materials</i> , 2020 , 3, 3964-3990	5.6	46
444	Time-Resolved in Situ Polymorphic Transformation from One 12-Connected Zr-MOF to Another 2020 , 2, 499-504		6
443	Metal-Organic frameworks: A tunable platform to access single-site heterogeneous catalysts. <i>Applied Catalysis A: General</i> , 2019 , 586, 117214	5.1	68
442	Ammonia Capture within Isorecticular Metal-Organic Frameworks with Rod Secondary Building Units 2019 , 1, 476-480		28
441	Identification Schemes for Metal-Organic Frameworks To Enable Rapid Search and Cheminformatics Analysis. <i>Crystal Growth and Design</i> , 2019 , 19, 6682-6697	3.5	59
440	Scalable and Template-Free Aqueous Synthesis of Zirconium-Based Metal-Organic Framework Coating on Textile Fiber. <i>Journal of the American Chemical Society</i> , 2019 , 141, 15626-15633	16.4	77
439	Zirconium-Based Metal-Organic Framework with 9-Connected Nodes for Ammonia Capture. <i>ACS Applied Nano Materials</i> , 2019 , 2, 6098-6102	5.6	37
438	DNA-Functionalized Metal-Organic Framework Nanoparticles for Intracellular Delivery of Proteins. <i>Journal of the American Chemical Society</i> , 2019 , 141, 2215-2219	16.4	136
437	Energy-based descriptors to rapidly predict hydrogen storage in metal-organic frameworks. <i>Molecular Systems Design and Engineering</i> , 2019 , 4, 162-174	4.6	100

436	Molybdenum Sulfide within a Metal-Organic Framework for Photocatalytic Hydrogen Evolution from Water. <i>Journal of the Electrochemical Society</i> , 2019 , 166, H3154-H3158	3.9	11
435	Exploiting π -Interactions to Design an Efficient Sorbent for Atrazine Removal from Water. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 6097-6103	9.5	60
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