Joseph E Mondloch

List of Publications by Year
in descending order

34 papers	7,403 citations	159585 30 h-index	345221 36 g-index
40 all docs	40 docs citations	40 times ranked	7907 citing authors

#	Article	IF	Citations
1	Vapor-Phase Metalation by Atomic Layer Deposition in a Metalâ€“Organic Framework. Journal of the American Chemical Society, 2013, 135, 10294-10297.	13.7	821
2	Destruction of chemical warfare agents using metalâ€“organic frameworks. Nature Materials, 2015, 14, 512-516.	27.5	790
3	Beyond post-synthesis modification: evolution of metalâ€“organic frameworks via building block replacement. Chemical Society Reviews, 2014, 43, 5896-5912.	38.1	721
4	Perfluoroalkane Functionalization of NU-1000 via Solvent-Assisted Ligand Incorporation: Synthesis and CO₂ Adsorption Studies. Journal of the American Chemical Society, 2013, 135, 16801-16804.	13.7	473
5	Metalâ€“organic framework materials for light-harvesting and energy transfer. Chemical Communications, 2015, 51, 3501-3510.	4.1	409
6	Simple and Compelling Biomimetic Metalâ€“Organic Framework Catalyst for the Degradation of Nerve Agent Simulants. Angewandte Chemie - International Edition, 2014, 53, 497-501.	13.8	364
7	Solventâ€Assisted Linker Exchange: An Alternative to the Deâ€…Novo Synthesis of Unattainable Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2014, 53, 4530-4540.	13.8	339
8	Ultrahigh Surface Area Zirconium MOFs and Insights into the Applicability of the BET Theory. Journal of the American Chemical Society, 2015, 137, 3585-3591.	13.7	329
9	Are Zr₆-based MOFs water stable? Linker hydrolysis vs. capillary-force-driven channel collapse. Chemical Communications, 2014, 50, 8944.	4.1	277
10	Exploiting parameter space in MOFs: a 20-fold enhancement of phosphate-ester hydrolysis with UiO-66-NH₂. Chemical Science, 2015, 6, 2286-2291.	7.4	265
11	Metalâ€“Organic Framework Thin Films Composed of Free-Standing Acicular Nanorods Exhibiting Reversible Electrochromism. Chemistry of Materials, 2013, 25, 5012-5017.	6.7	242
12	Activation of metalâ€“organic framework materials. CrystEngComm, 2013, 15, 9258.	2.6	239
13	A porous proton-relaying metal-organic framework material that accelerates electrochemical hydrogen evolution. Nature Communications, 2015, 6, 8304.	12.8	239
14	Defining the Proton Topology of the Zr₆-Based Metalâ€“Organic Framework NU-1000. Journal of Physical Chemistry Letters, 2014, 5, 3716-3723.	4.6	228
15	Computational Design of Metalâ€“Organic Frameworks Based on Stable Zirconium Building Units for Storage and Delivery of Methane. Chemistry of Materials, 2014, 26, 5632-5639.	6.7	191
16	Waterâ€Stable Zirconiumâ€Based Metalâ€“Organic Framework Material with Highâ€Surface Area and Gasâ€Storage Capacities. Chemistry - A European Journal, 2014, 20, 12389-12393.	3.3	150
17	Metalâ€“Organic Framework Thin Films as Platforms for Atomic Layer Deposition of Cobalt Ions To Enable Electrocatalytic Water Oxidation. ACS Applied Materials & Interfaces, 2015, 7, 28223-28230.	8.0	145
18	A review of the kinetics and mechanisms of formation of supported-nanoparticle heterogeneous catalysts. Journal of Molecular Catalysis A, 2012, 355, 1-38.	4.8	144

#	Article	IF	Citations
19	A historical perspective on porphyrin-based metalâ€“organic frameworks and their applications. Coordination Chemistry Reviews, 2021, 429, 213615.	18.8	140
20	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
21	Carborane-Based Metalâ€“Organic Framework with High Methane and Hydrogen Storage Capacities. Chemistry of Materials, 2013, 25, 3539-3543.	6.7	115
22	One Step Backward Is Two Steps Forward: Enhancing the Hydrolysis Rate of UiO-66 by Decreasing [OH^{â€“}]. ACS Catalysis, 2015, 5, 4637-4642.	11.2	84
23	Accessing functionalized porous aromatic frameworks (PAFs) through a de novo approach. CrystEngComm, 2013, 15, 1515-1519.	2.6	75
24	Monitoring Supported-Nanocluster Heterogeneous Catalyst Formation: Product and Kinetic Evidence for a 2-Step, Nucleation and Autocatalytic Growth Mechanism of Pt(0)_nFormation from H₂PtCl₆on Al₂O₃or TiO₂. Journal of the American Chemical Society, 2009, 131, 6389-6396.	13.7	58
25	Development Plus Kinetic and Mechanistic Studies of a Prototype Supported-Nanoparticle Heterogeneous Catalyst Formation System in Contact with Solution: Ir(1,5-COD)Cl/Î³-Al2O3and Its Reduction by H2to Ir(0)n/Î³-Al2O3. Journal of the American Chemical Society, 2010, 132, 9701-9714.	13.7	54
26	Selective Solvent-Assisted Linker Exchange (SALE) in a Series of Zeolitic Imidazolate Frameworks. Inorganic Chemistry, 2015, 54, 7142-7144.	4.0	49
27	A Four-Step Mechanism for the Formation of Supported-Nanoparticle Heterogenous Catalysts in Contact with Solution: The Conversion of Ir(1,5-COD)Cl/Î³-Al₂O₃ to Ir(0)_{âˆ¼170}/Î³-Al₂O₃. Journal of the American Chemical Society, 2014, 136, 1930-1941.	13.7	48
28	Stabilization of a highly porous metalâ€“organic framework utilizing a carborane-based linker. Chemical Communications, 2015, 51, 6521-6523.	4.1	47
29	Supported-Nanoparticle Heterogeneous Catalyst Formation in Contact with Solution: Kinetics and Proposed Mechanism for the Conversion of Ir(1,5-COD)Cl/Î³-Al₂O₃to Ir(0)_{âˆ¼900}/Î³-Al₂O₃. Journal of the American Chemical Society, 2011, 133, 7744-7756.	13.7	32
30	Synthesis and Characterization of [Ir(1,5-Cyclooctadiene)(Î¼-H)]₄: A Tetrametallic Ir₄H₄-Core, Coordinatively Unsaturated Cluster. Inorganic Chemistry, 2012, 51, 3186-3193.	4.0	17
31	Kinetic Evidence for Bimolecular Nucleation in Supported-Transition-Metal-Nanoparticle Catalyst Formation in Contact with Solution: The Prototype Ir(1,5-COD)Cl/Î³-Al2O3 to Ir(0)âˆ¼900/Î³-Al2O3 System. ACS Catalysis, 2012, 2, 298-305.	11.2	16
32	Hydrocarbon-Soluble, Isolable Ziegler-Type Ir(0)_{<i>n</i>} Nanoparticle Catalysts Made from [(1,5-COD)Ir(Î¼-O₂C₈H₁₅)]₂ and 2â€“5 Equivalents of AlEt₃: Their High Catalytic Activity, Long Lifetime, and AlEt₃-Dependent, Exceptional, 200 Â°C Thermal Stability. ACS Catalysis, 2012, 2, 632-641.	11.2	14
33	Synthesis of Heterogeneous Ir0âˆ¼600â€“900/Î³-Al2O3 in One Pot From the Precatalyst Ir(1,5-COD)Cl/Î³-Al2O3: Discovery of Two Competing Trace â€œEthyl Acetate Effectsâ€•on the Nucleation Step and Resultant Product. ACS Catalysis, 2016, 6, 5449-5461.	11.2	11
34	â€œWeakly Ligated, Labile Ligandâ€•Nanoparticles: The Case of Ir(0)<i>_n</i>Â·(H⁺Cl^{â€“})<i>_m</i>. ACS Omega, 2018, 3, 14538-14550.	3.5	9