

# Joseph E Mondloch

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/12138980/publications.pdf>

Version: 2024-02-01

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	A historical perspective on porphyrin-based metal-organic frameworks and their applications. <i>Coordination Chemistry Reviews</i> , 2021, 429, 213615.	18.8	140
2	Weakly Ligated, Labile Ligand Nanoparticles: The Case of Ir(0)(HCl) <sub>n</sub> . <i>ACS Omega</i> , 2018, 3, 14538-14550.	3.5	9
3	Synthesis of Heterogeneous IrO <sub>4</sub> -Al <sub>2</sub> O <sub>3</sub> in One Pot From the Precatalyst Ir(1,5-COD)Cl-Al <sub>2</sub> O <sub>3</sub> : Discovery of Two Competing Trace Ethyl Acetate Effects on the Nucleation Step and Resultant Product. <i>ACS Catalysis</i> , 2016, 6, 5449-5461.	11.2	11
4	Metal-Organic Framework Thin Films as Platforms for Atomic Layer Deposition of Cobalt Ions To Enable Electrocatalytic Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 28223-28230.	8.0	145
5	Metal-organic framework materials for light-harvesting and energy transfer. <i>Chemical Communications</i> , 2015, 51, 3501-3510.	4.1	409
6	Exploiting parameter space in MOFs: a 20-fold enhancement of phosphate-ester hydrolysis with UiO-66-NH <sub>2</sub> . <i>Chemical Science</i> , 2015, 6, 2286-2291.	7.4	265
7	Ultrahigh Surface Area Zirconium MOFs and Insights into the Applicability of the BET Theory. <i>Journal of the American Chemical Society</i> , 2015, 137, 3585-3591.	13.7	329
8	Destruction of chemical warfare agents using metal-organic frameworks. <i>Nature Materials</i> , 2015, 14, 512-516.	27.5	790
9	One Step Backward Is Two Steps Forward: Enhancing the Hydrolysis Rate of UiO-66 by Decreasing [OH <sup>-</sup> ]. <i>ACS Catalysis</i> , 2015, 5, 4637-4642.	11.2	84
10	Selective Solvent-Assisted Linker Exchange (SALE) in a Series of Zeolitic Imidazolate Frameworks. <i>Inorganic Chemistry</i> , 2015, 54, 7142-7144.	4.0	49
11	Stabilization of a highly porous metal-organic framework utilizing a carborane-based linker. <i>Chemical Communications</i> , 2015, 51, 6521-6523.	4.1	47
12	Effective, Facile, and Selective Hydrolysis of the Chemical Warfare Agent VX Using Zr <sub>6</sub> -Based Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2015, 54, 10829-10833.	4.0	132
13	A porous proton-relaying metal-organic framework material that accelerates electrochemical hydrogen evolution. <i>Nature Communications</i> , 2015, 6, 8304.	12.8	239
14	Simple and Compelling Biomimetic Metal-Organic Framework Catalyst for the Degradation of Nerve Agent Simulants. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 497-501.	13.8	364
15	Solvent-Assisted Linker Exchange: An Alternative to the De Novo Synthesis of Unattainable Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4530-4540.	13.8	339
16	Computational Design of Metal-Organic Frameworks Based on Stable Zirconium Building Units for Storage and Delivery of Methane. <i>Chemistry of Materials</i> , 2014, 26, 5632-5639.	6.7	191
17	Water-Stable Zirconium-Based Metal-Organic Framework Material with High Surface Area and Gas Storage Capacities. <i>Chemistry - A European Journal</i> , 2014, 20, 12389-12393.	3.3	150
18	Beyond post-synthesis modification: evolution of metal-organic frameworks via building block replacement. <i>Chemical Society Reviews</i> , 2014, 43, 5896-5912.	38.1	721

#	ARTICLE	IF	CITATIONS
19	Defining the Proton Topology of the Zr <sub>6</sub> -Based Metal-Organic Framework NU-1000. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 3716-3723.	4.6	228
20	Are Zr <sub>6</sub> -based MOFs water stable? Linker hydrolysis vs. capillary-force-driven channel collapse. <i>Chemical Communications</i> , 2014, 50, 8944.	4.1	277
21	A Four-Step Mechanism for the Formation of Supported-Nanoparticle Heterogeneous Catalysts in Contact with Solution: The Conversion of Ir(1,5-COD)Cl/Al <sub>2</sub> O <sub>3</sub> to Ir(O) <sub>4</sub> /Al <sub>2</sub> O <sub>3</sub> . <i>Journal of the American Chemical Society</i> , 2014, 136, 1930-1941.	13.7	48
22	Carborane-Based Metal-Organic Framework with High Methane and Hydrogen Storage Capacities. <i>Chemistry of Materials</i> , 2013, 25, 3539-3543.	6.7	115
23	Activation of metal-organic framework materials. <i>CrystEngComm</i> , 2013, 15, 9258.	2.6	239
24	Perfluoroalkane Functionalization of NU-1000 via Solvent-Assisted Ligand Incorporation: Synthesis and CO <sub>2</sub> Adsorption Studies. <i>Journal of the American Chemical Society</i> , 2013, 135, 16801-16804.	13.7	473
25	Metal-Organic Framework Thin Films Composed of Free-Standing Acicular Nanorods Exhibiting Reversible Electrochromism. <i>Chemistry of Materials</i> , 2013, 25, 5012-5017.	6.7	242
26	Vapor-Phase Metalation by Atomic Layer Deposition in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2013, 135, 10294-10297.	13.7	821
27	Accessing functionalized porous aromatic frameworks (PAFs) through a de novo approach. <i>CrystEngComm</i> , 2013, 15, 1515-1519.	2.6	75
28	Kinetic Evidence for Bimolecular Nucleation in Supported-Transition-Metal-Nanoparticle Catalyst Formation in Contact with Solution: The Prototype Ir(1,5-COD)Cl/Al <sub>2</sub> O <sub>3</sub> to Ir(O) <sub>4</sub> /Al <sub>2</sub> O <sub>3</sub> System. <i>ACS Catalysis</i> , 2012, 2, 298-305.	11.2	16
29	Synthesis and Characterization of [Ir(1,5-Cyclooctadiene)( <sup>1</sup> / <sub>4</sub> -H)] <sub>4</sub> : A Tetrametallic Ir <sub>4</sub> H <sub>4</sub> -Core, Coordinatively Unsaturated Cluster. <i>Inorganic Chemistry</i> , 2012, 51, 3186-3193.	4.0	17
30	Hydrocarbon-Soluble, Isolable Ziegler-Type Ir(O) Nanoparticle Catalysts Made from [(1,5-COD)Ir( <sup>1</sup> / <sub>4</sub> -O) <sub>2</sub> C <sub>8</sub> H <sub>15</sub> ] <sub>2</sub> and 2 <sup>+</sup> 5 Equivalents of AlEt <sub>3</sub> : Their High Catalytic Activity, Long Lifetime, and AlEt <sub>3</sub> -Dependent, Exceptional, 200 °C Thermal Stability. <i>ACS Catalysis</i> , 2012, 2, 632-641.	11.2	14
31	A review of the kinetics and mechanisms of formation of supported-nanoparticle heterogeneous catalysts. <i>Journal of Molecular Catalysis A</i> , 2012, 355, 1-38.	4.8	144
32	Supported-Nanoparticle Heterogeneous Catalyst Formation in Contact with Solution: Kinetics and Proposed Mechanism for the Conversion of Ir(1,5-COD)Cl/Al <sub>2</sub> O <sub>3</sub> to Ir(O) <sub>4</sub> /Al <sub>2</sub> O <sub>3</sub> . <i>Journal of the American Chemical Society</i> , 2011, 133, 7744-7756.	13.7	32
33	Development Plus Kinetic and Mechanistic Studies of a Prototype Supported-Nanoparticle Heterogeneous Catalyst Formation System in Contact with Solution: Ir(1,5-COD)Cl/Al <sub>2</sub> O <sub>3</sub> and Its Reduction by H <sub>2</sub> to Ir(O) <sub>n</sub> /Al <sub>2</sub> O <sub>3</sub> . <i>Journal of the American Chemical Society</i> , 2010, 132, 9701-9714.	13.7	54
34	Monitoring Supported-Nanocluster Heterogeneous Catalyst Formation: Product and Kinetic Evidence for a 2-Step, Nucleation and Autocatalytic Growth Mechanism of Pt(O) <sub>n</sub> Formation from H <sub>2</sub> /PtCl <sub>6</sub> on Al <sub>2</sub> O <sub>3</sub> or TiO <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2009, 131, 6389-6396.	13.7	58