Timothy C Wang

List of Publications by Citations

41 papers	5,017 citations	31 h-index	42 g-index
42 ext. papers	5,912 ext. citations	13.5 avg, IF	5.64 L-index

#	Paper	IF	Citations
41	Chemical, thermal and mechanical stabilities of metal–organic frameworks. *Nature Reviews Materials*, **2016**, 1,	73.3	1026
40	Best Practices for the Synthesis, Activation, and Characterization of Metal–Organic Frameworks. *Chemistry of Materials*, **2017**, 29, 26-39	9.6	341
39	High efficiency adsorption and removal of selenate and selenite from water using metal-organic frameworks. *Journal of the American Chemical Society*, **2015**, 137, 7488-94	16.4	265
38	Ultrahigh surface area zirconium MOFs and insights into the applicability of the BET theory. *Journal of the American Chemical Society*, **2015**, 137, 3585-91	16.4	249
37	Sintering-Resistant Single-Site Nickel Catalyst Supported by Metal-Organic Framework. *Journal of the American Chemical Society*, **2016**, 138, 1977-82	16.4	233
36	Temperature Treatment of Highly Porous Zirconium-Containing Metal-Organic Frameworks Extends Drug Delivery Release. *Journal of the American Chemical Society*, **2017**, 139, 7522-7532	16.4	216
35	Evaluation of Brønsted acidity and proton topology in Zr- and Hf-based metal–organic frameworks using potentiometric acid–base titration. *Journal of Materials Chemistry A*, **2016**, 4, 1479-1485	13	194
34	Mechanochemical and solvent-free assembly of zirconium-based metal-organic frameworks. *Chemical Communications*, **2016**, 52, 2133-6	5.8	194
33	Scalable synthesis and post-modification of a mesoporous metal-organic framework called NU-1000. *Nature Protocols*, **2016**, 11, 149-62	18.8	192
32	Metal-organic framework nodes as nearly ideal supports for molecular catalysts: NU-1000- and UiO-66-supported iridium complexes. *Journal of the American Chemical Society*, **2015**, 137, 7391-6	16.4	192
31	Synthesis of nanocrystals of Zr-based metal-organic frameworks with csq-net: significant enhancement in the degradation of a nerve agent simulant. *Chemical Communications*, **2015**, 51, 10925-8	5.8	155
30	Evaluating topologically diverse metal–organic frameworks for cryo-adsorbed hydrogen storage. *Energy and Environmental Science*, **2016**, 9, 3279-3289	35.4	151
29	In Situ Monitoring and Mechanism of the Mechanochemical Formation of a Microporous MOF-74 Framework. *Journal of the American Chemical Society*, **2016**, 138, 2929-32	16.4	143
28	Tuning Zr6 Metal–Organic Framework (MOF) Nodes as Catalyst Supports: Site Densities and Electron-Donor Properties Influence Molecular Iridium Complexes as Ethylene Conversion Catalysts. *ACS Catalysis*, **2016**, 6, 235-247	13.1	128
27	Metal-Organic Framework Thin Films as Platforms for Atomic Layer Deposition of Cobalt Ions To Enable Electrocatalytic Water Oxidation. *ACS Applied Materials & Interfaces*, **2015**, 7, 28223-30	9.5	126
26	Ultraporous, Water Stable, and Breathing Zirconium-Based Metal-Organic Frameworks with ftw Topology. *Journal of the American Chemical Society*, **2015**, 137, 13183-90	16.4	125
25	Catalytic chemoselective functionalization of methane in a metal–organic framework. *Nature Catalysis*, **2018**, 1, 356-362	36.5	109

24	Targeted Single-Site MOF Node Modification: Trivalent Metal Loading via Atomic Layer Deposition. *Chemistry of Materials*, **2015**, 27, 4772-4778	9.6	103
23	Rendering High Surface Area, Mesoporous Metal-Organic Frameworks Electronically Conductive. *ACS Applied Materials & Interfaces*, **2017**, 9, 12584-12591	9.5	78
22	Stable Metal-Organic Framework-Supported Niobium Catalysts. *Inorganic Chemistry*, **2016**, 55, 11954-11961	5.1	76
21	Understanding Volumetric and Gravimetric Hydrogen Adsorption Trade-off in Metal-Organic Frameworks. *ACS Applied Materials & Interfaces*, **2017**, 9, 33419-33428	9.5	73
20	G-quadruplex organic frameworks. *Nature Chemistry*, **2017**, 9, 466-472	17.6	72
19	Synthetic Access to Atomically Dispersed Metals in Metal–Organic Frameworks via a Combined Atomic-Layer-Deposition-in-MOF and Metal-Exchange Approach. *Chemistry of Materials*, **2016**, 28, 1213-1219	9.6	70
18	Regioselective Atomic Layer Deposition in Metal-Organic Frameworks Directed by Dispersion Interactions. *Journal of the American Chemical Society*, **2016**, 138, 13513-13516	16.4	65
17	Thermal Stabilization of Metal-Organic Framework-Derived Single-Site Catalytic Clusters through Nanocasting. *Journal of the American Chemical Society*, **2016**, 138, 2739-48	16.4	63
16	Charge Transport in Zirconium-Based Metal-Organic Frameworks. *Accounts of Chemical Research*, **2020**, 53, 1187-1195	24.3	47
15	A visually detectable pH responsive zirconium metal-organic framework. *Chemical Communications*, **2016**, 52, 3438-41	5.8	47
14	Computational Screening of Nanoporous Materials for Hexane and Heptane Isomer Separation. *Chemistry of Materials*, **2017**, 29, 6315-6328	9.6	46
13	Installing Heterobimetallic Cobalt–Aluminum Single Sites on a Metal Organic Framework Support. *Chemistry of Materials*, **2016**, 28, 6753-6762	9.6	45
12	Efficient extraction of sulfate from water using a Zr-metal-organic framework. *Dalton Transactions*, **2016**, 45, 93-7	4.3	43
11	Inorganic "Conductive Glass" Approach to Rendering Mesoporous Metal-Organic Frameworks Electronically Conductive and Chemically Responsive. *ACS Applied Materials & Interfaces*, **2018**, 10, 30532-30540	9.5	38
10	Tuning the properties of metal-organic framework nodes as supports of single-site iridium catalysts: node modification by atomic layer deposition of aluminium. *Faraday Discussions*, **2017**, 201, 195-206	3.6	24
9	Get the light out: nanoscaling MOFs for luminescence sensing and optical applications. *Chemical Communications*, **2019**, 55, 4647-4650	5.8	24
8	Tunable Crystallinity and Charge Transfer in Two-Dimensional G-Quadruplex Organic Frameworks. *Angewandte Chemie - International Edition*, **2018**, 57, 3985-3989	16.4	18
7	Calcium Vapor Adsorption on the Metal–Organic Framework NU-1000: Structure and Energetics. *Journal of Physical Chemistry C*, **2016**, 120, 16850-16862	3.8	12

6	Tunable Crystallinity and Charge Transfer in Two-Dimensional G-Quadruplex Organic Frameworks. *Angewandte Chemie*, **2018**, 130, 4049-4053	3.6	7
5	Design Rules for Metal-Organic Framework Stability in High-Pressure Hydrogen Environments. *ChemPhysChem*, **2019**, 20, 1305-1310	3.2	5
4	Extending the Compositional Range of Nanocasting in the Oxozirconium Cluster-Based Metal�Organic Framework NU-1000�A Comparative Structural Analysis. *Chemistry of Materials*, **2018**, 30, 1301-1315	9.6	5
3	Electrolyte-Assisted Hydrogen Storage Reactions. *Journal of Physical Chemistry C*, **2018**, 122, 26845-26850	3.8	5
2	Surviving Under Pressure: The Role of Solvent, Crystal Size, and Morphology During Pelletization of Metal-Organic Frameworks. *ACS Applied Materials & Interfaces*, **2021**,	9.5	4
1	Correction to �Tuning Zr6 Metal-Organic Framework (MOF) Nodes as Catalyst Supports: Site Densities and Electron-Donor Properties Influence Molecular Iridium Complexes as Ethylene Conversion Catalysts�*ACS Catalysis*, **2018**, 8, 2364-2364	13.1	3