# Xuan Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1540028/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 86 papers | 5,131 citations | 81900 39 h-index | 91884 69 g-index |
| 93 all docs | 93 docs citations | 93 times ranked | 5266 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Discovery of spontaneous de-interpenetration through charged point-point repulsions. CheM, 2022, 8, 225-242. | 11.7 | 11 |
| 2 | Ethylene polymerization with a crystallographically well-defined metalâ€“organic framework supported catalyst. Catalysis Science and Technology, 2022, 12, 1619-1627. | 4.1 | 6 |
| 3 | Modulating Chemical Environments of Metalâ€“Organic Framework-Supported Molybdenum(VI) Catalysts for Insights into the Structureâ€“Activity Relationship in Cyclohexene Epoxidation. Journal of the American Chemical Society, 2022, 144, 3554-3563. | 13.7 | 25 |
| 4 | Catalytic Degradation of Polyethylene Terephthalate Using a Phaseâ€Transitional Zirconiumâ€Based Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2022, 61, . | 13.8 | 30 |
| 5 | Catalytic Degradation of Polyethylene Terephthalate Using a Phaseâ€Transitional Zirconiumâ€Based Metalâ€“Organic Framework. Angewandte Chemie, 2022, 134, . | 2.0 | 4 |
| 6 | Mechanistic Investigation of Enhanced Catalytic Selectivity toward Alcohol Oxidation with Ce Oxysulfate Clusters. Journal of the American Chemical Society, 2022, 144, 12092-12101. | 13.7 | 6 |
| 7 | Reticular exploration of uranium-based metalâ€”organic frameworks with hexacarboxylate building units. Nano Research, 2021, 14, 376-380. | 10.4 | 25 |
| 8 | A historical perspective on porphyrin-based metalâ€“organic frameworks and their applications. Coordination Chemistry Reviews, 2021, 429, 213615. | 18.8 | 140 |
| 9 | The state of the field: from inception to commercialization of metalâ€“organic frameworks. Faraday Discussions, 2021, 225, 9-69. | 3.2 | 70 |
| 10 | Modulation of CO<sub>2</sub> adsorption in novel pillar-layered MOFs based on carboxylateâ€“pyrazole flexible linker. Dalton Transactions, 2021, 50, 2880-2890. | 3.3 | 7 |
| 11 | Small Molecules, Big Effects: Tuning Adsorption and Catalytic Properties of Metalâ€“Organic Frameworks. Chemistry of Materials, 2021, 33, 1444-1454. | 6.7 | 56 |
| 12 | Mechanically Enhanced Catalytic Reduction of Carbon Dioxide over Defect Hexagonal Boron Nitride. ACS Sustainable Chemistry and Engineering, 2021, 9, 2447-2455. | 6.7 | 25 |
| 13 | Insights into the Structureâ€“Activity Relationship in Aerobic Alcohol Oxidation over a Metalâ€“Organic-Framework-Supported Molybdenum(VI) Catalyst. Journal of the American Chemical Society, 2021, 143, 4302-4310. | 13.7 | 48 |
| 14 | Photon Upconversion in a Glowing Metalâ€“Organic Framework. Journal of the American Chemical Society, 2021, 143, 5053-5059. | 13.7 | 34 |
| 15 | Tuning the Structural Flexibility for Multi-Responsive Gas Sorption in Isonicotinate-Based Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2021, 13, 16820-16827. | 8.0 | 31 |
| 16 | Nanoporous Water-Stable Zr-Based Metalâ€“Organic Frameworks for Water Adsorption. ACS Applied Nano Materials, 2021, 4, 4346-4350. | 5.0 | 22 |
| 17 | Stabilization of an enzyme cytochrome c in a metal-organic framework against denaturing organic solvents. IScience, 2021, 24, 102641. | 4.1 | 15 |
| 18 | Near-instantaneous catalytic hydrolysis of organophosphorus nerve agents with zirconium-based MOF/hydrogel composites. Chem Catalysis, 2021, 1, 721-733. | 6.1 | 49 |

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|---|---|---|---|
| 19 | A contorted nanographene shelter. Nature Communications, 2021, 12, 5191. | 12.8 | 12 |
| 20 | Regulation of Catenation in Metalâ€“Organic Frameworks with Tunable Clathrochelate-Based Building Blocks. Crystal Growth and Design, 2021, 21, 6665-6670. | 3.0 | 7 |
| 21 | Fine-Tuning a Robust Metalâ€“Organic Framework toward Enhanced Clean Energy Gas Storage. Journal of the American Chemical Society, 2021, 143, 18838-18843. | 13.7 | 79 |
| 22 | Heterometallic Ce<sup>IV</sup>/ V<sup>V</sup> Oxo Clusters with Adjustable Catalytic Reactivities. Journal of the American Chemical Society, 2021, 143, 21056-21065. | 13.7 | 21 |
| 23 | Integration of Enzymes and Photosensitizers in a Hierarchical Mesoporous Metalâ€“Organic Framework for Light-Driven CO<sub>2</sub> Reduction. Journal of the American Chemical Society, 2020, 142, 1768-1773. | 13.7 | 163 |
| 24 | Singleâ€Site, Singleâ€Metalâ€Atom, Heterogeneous Electrocatalyst: Metalâ€“Organicâ€Framework Supported Molybdenum Sulfide for Redox Mediatorâ€Assisted Hydrogen Evolution Reaction. ChemElectroChem, 2020, 7, 509-516. | 3.4 | 12 |
| 25 | Insights into the Enhanced Catalytic Activity of Cytochrome c When Encapsulated in a Metalâ€“Organic Framework. Journal of the American Chemical Society, 2020, 142, 18576-18582. | 13.7 | 73 |
| 26 | Node-Accessible Zirconium MOFs. Journal of the American Chemical Society, 2020, 142, 21110-21121. | 13.7 | 103 |
| 27 | Unexpected â€œSpontaneousâ€•Evolution of Catalytic, MOF-Supported Single Cu(II) Cations to Catalytic, MOF-Supported Cu(0) Nanoparticles. Journal of the American Chemical Society, 2020, 142, 21169-21177. | 13.7 | 68 |
| 28 | Insights into the Structureâ€“Activity Relationships in Metalâ€“Organic Framework-Supported Nickel Catalysts for Ethylene Hydrogenation. ACS Catalysis, 2020, 10, 8995-9005. | 11.2 | 40 |
| 29 | Metalâ€“organic framework (MOF) materials as polymerization catalysts: a review and recent advances. Chemical Communications, 2020, 56, 10409-10418. | 4.1 | 168 |
| 30 | A historical overview of the activation and porosity of metalâ€“organic frameworks. Chemical Society Reviews, 2020, 49, 7406-7427. | 38.1 | 367 |
| 31 | Fiber Composites of Metalâ€“Organic Frameworks. Chemistry of Materials, 2020, 32, 7120-7140. | 6.7 | 82 |
| 32 | Supramolecular Porous Assemblies of Atomically Precise Catalytically Active Cerium-Based Clusters. Chemistry of Materials, 2020, 32, 8522-8529. | 6.7 | 23 |
| 33 | Tuning the Atrazine Binding Sites in an Indium-Based Flexible Metalâ€“Organic Framework. ACS Applied Materials & Interfaces, 2020, 12, 44762-44768. | 8.0 | 11 |
| 34 | Metalâ€“Organic Framework Nodes as a Supporting Platform for Tailoring the Activity of Metal Catalysts. ACS Catalysis, 2020, 10, 11556-11566. | 11.2 | 52 |
| 35 | Structural Diversity of Zirconium Metalâ€“Organic Frameworks and Effect on Adsorption of Toxic Chemicals. Journal of the American Chemical Society, 2020, 142, 21428-21438. | 13.7 | 95 |
| 36 | From spin-crossover to single molecule magnetism: tuning magnetic properties of Co(<scp>ii</scp>) bis-ferrocenylterpy cations via supramolecular interactions with organocyanide radical anions. Journal of Materials Chemistry C, 2020, 8, 8135-8144. | 5.5 | 8 |

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|---|---|---|---|
| 37 | Stabilization of Photocatalytically Active Uranyl Species in a Uranylâ€“Organic Framework for Heterogeneous Alkane Fluorination Driven by Visible Light. Inorganic Chemistry, 2020, 59, 16795-16798. | 4.0 | 26 |
| 38 | Squeezing the box: isoreticular contraction of pyrene-based linker in a Zr-based metalâ€“organic framework for Xe/Kr separation. Dalton Transactions, 2020, 49, 6553-6556. | 3.3 | 11 |
| 39 | Mechanistic Insights into Câ€“H Borylation of Arenes with Organoiridium Catalysts Embedded in a Microporous Metalâ€“Organic Framework. Organometallics, 2020, 39, 1123-1133. | 2.3 | 20 |
| 40 | Tailoring Pore Aperture and Structural Defects in Zirconium-Based Metalâ€“Organic Frameworks for Krypton/Xenon Separation. Chemistry of Materials, 2020, 32, 3776-3782. | 6.7 | 89 |
| 41 | Single crystal structure and photocatalytic behavior of grafted uranyl on the Zr-node of a pyrene-based metalâ€“organic framework. CrystEngComm, 2020, 22, 2097-2102. | 2.6 | 21 |
| 42 | Phase Transitions in Metalâ€“Organic Frameworks Directly Monitored through In Situ Variable Temperature Liquid-Cell Transmission Electron Microscopy and In Situ X-ray Diffraction. Journal of the American Chemical Society, 2020, 142, 4609-4615. | 13.7 | 69 |
| 43 | Ultrastable Mesoporous Hydrogen-Bonded Organic Framework-Based Fiber Composites toward Mustard Gas Detoxification. Cell Reports Physical Science, 2020, 1, 100024. | 5.6 | 107 |
| 44 | Single-Crystal Polycationic Polymers Obtained by Single-Crystal-to-Single-Crystal Photopolymerization. Journal of the American Chemical Society, 2020, 142, 6180-6187. | 13.7 | 50 |
| 45 | A Flexible Interpenetrated Zirconiumâ€Based Metalâ€“Organic Framework with High Affinity toward Ammonia. ChemSusChem, 2020, 13, 1710-1714. | 6.8 | 36 |
| 46 | Balancing volumetric and gravimetric uptake in highly porous materials for clean energy. Science, 2020, 368, 297-303. | 12.6 | 429 |
| 47 | Coordination Chemistry in the Structural and Functional Exploration of Actinide-Based Metal-Organic Frameworks. Bulletin of Japan Society of Coordination Chemistry, 2020, 75, 3-12. | 0.2 | 1 |
| 48 | A Hierarchical Nanoporous Diamondoid Superstructure. CheM, 2019, 5, 2353-2364. | 11.7 | 23 |
| 49 | Ligand-Directed Reticular Synthesis of Catalytically Active Missing Zirconium-Based Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 12229-12235. | 13.7 | 58 |
| 50 | Modular Synthesis of Highly Porous Zr-MOFs Assembled from Simple Building Blocks for Oxygen Storage. ACS Applied Materials & Interfaces, 2019, 11, 42179-42185. | 8.0 | 17 |
| 51 | Zirconium-Based Metalâ€“Organic Framework with 9-Connected Nodes for Ammonia Capture. ACS Applied Nano Materials, 2019, 2, 6098-6102. | 5.0 | 59 |
| 52 | Topology and porosity control of metalâ€“organic frameworks through linker functionalization. Chemical Science, 2019, 10, 1186-1192. | 7.4 | 129 |
| 53 | Exploring the Role of Hexanuclear Clusters as Lewis Acidic Sites in Isostructural Metalâ€“Organic Frameworks. Chemistry of Materials, 2019, 31, 4166-4172. | 6.7 | 80 |
| 54 | Vanadium Catalyst on Isostructural Transition Metal, Lanthanide, and Actinide Based Metalâ€“Organic Frameworks for Alcohol Oxidation. Journal of the American Chemical Society, 2019, 141, 8306-8314. | 13.7 | 112 |

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|---|---|---|---|
| 55 | Metalâ€“Organic Frameworks with Metalâ€“Catecholates for O<sub>2</sub>/N<sub>2</sub> Separation. Journal of Physical Chemistry C, 2019, 123, 12935-12946. | 3.1 | 33 |
| 56 | Stabilization of Formate Dehydrogenase in a Metalâ€“Organic Framework for Bioelectrocatalytic Reduction of CO 2. Angewandte Chemie, 2019, 131, 7764-7768. | 2.0 | 31 |
| 57 | Stabilization of Formate Dehydrogenase in a Metalâ€“Organic Framework for Bioelectrocatalytic Reduction of CO<sub>2</sub>. Angewandte Chemie - International Edition, 2019, 58, 7682-7686. | 13.8 | 103 |
| 58 | Reticular Access to Highly Porous acs-MOFs with Rigid Trigonal Prismatic Linkers for Water Sorption. Journal of the American Chemical Society, 2019, 141, 2900-2905. | 13.7 | 150 |
| 59 | Introducing Nonstructural Ligands to Zirconia-like Metalâ€“Organic Framework Nodes To Tune the Activity of Node-Supported Nickel Catalysts for Ethylene Hydrogenation. ACS Catalysis, 2019, 9, 3198-3207. | 11.2 | 68 |
| 60 | Air oxidation of sulfur mustard gas simulants using a pyrene-based metalâ€“organic framework photocatalyst. Beilstein Journal of Nanotechnology, 2019, 10, 2422-2427. | 2.8 | 14 |
| 61 | Guest-Dependent Single-Crystal-to-Single-Crystal Phase Transitions in a Two-Dimensional Uranyl-Based Metalâ€“Organic Framework. Crystal Growth and Design, 2019, 19, 506-512. | 3.0 | 29 |
| 62 | Metalâ€“Organic Framework Supported Single Site Chromium(III) Catalyst for Ethylene Oligomerization at Low Pressure and Temperature. ACS Sustainable Chemistry and Engineering, 2019, 7, 2553-2557. | 6.7 | 56 |
| 63 | Effect of Redox â€œNon-Innocentâ€•Linker on the Catalytic Activity of Copper-Catecholate-Decorated Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2018, 10, 635-641. | 8.0 | 52 |
| 64 | Room Temperature Synthesis of an 8-Connected Zr-Based Metalâ€“Organic Framework for Top-Down Nanoparticle Encapsulation. Chemistry of Materials, 2018, 30, 2193-2197. | 6.7 | 80 |
| 65 | Enforcing Ising-like magnetic anisotropy via trigonal distortion in the design of a W(<scp>v</scp>)â€“Co(<scp>ii</scp>) cyanide single-chain magnet. Chemical Science, 2018, 9, 119-124. | 7.4 | 40 |
| 66 | From Transition Metals to Lanthanides to Actinides: Metal-Mediated Tuning of Electronic Properties of Isostructural Metalâ€“Organic Frameworks. Inorganic Chemistry, 2018, 57, 13246-13251. | 4.0 | 80 |
| 67 | Highly Selective Acetylene Semihydrogenation Catalyzed by Cu Nanoparticles Supported in a Metalâ€“Organic Framework. ACS Applied Nano Materials, 2018, 1, 4413-4417. | 5.0 | 27 |
| 68 | Catalytic chemoselective functionalization of methane in a metalâ˜organic framework. Nature Catalysis, 2018, 1, 356-362. | 34.4 | 153 |
| 69 | A Flexible Metalâ€“Organic Framework with 4-Connected Zr<sub>6</sub> Nodes. Journal of the American Chemical Society, 2018, 140, 11179-11183. | 13.7 | 158 |
| 70 | Single-molecule magnet behavior in a mononuclear dysprosium(<scp>iii</scp>) complex with 1-methylimidazole. RSC Advances, 2017, 7, 2766-2772. | 3.6 | 7 |
| 71 | Size effect of the active sites in UiO-66-supported nickel catalysts synthesized via atomic layer deposition for ethylene hydrogenation. Inorganic Chemistry Frontiers, 2017, 4, 820-824. | 6.0 | 38 |
| 72 | Conducting Molecular Nanomagnet of Dy III with Partially Charged TCNQ Radicals. Chemistry - A European Journal, 2017, 23, 7448-7452. | 3.3 | 26 |

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|---|---|---|---|
| 73 | Systematic Investigation of Controlled Nanostructuring of Mn12 Single-Molecule Magnets Templated by Metalâ€“Organic Frameworks. Inorganic Chemistry, 2017, 56, 6965-6972. | 4.0 | 29 |
| 74 | A New Nitronyl Nitroxide Radical as Building Blocks for a Rare S = 13/2 High Spin Ground State 2p-3d Complex and a 2p-3d-4f Chain. Crystal Growth and Design, 2017, 17, 95-99. | 3.0 | 26 |
| 75 | Structural diversity and magnetic properties of six cobalt coordination polymers based on 2,2â€²-phosphinico-dibenzoate ligand. Dalton Transactions, 2016, 45, 19500-19510. | 3.3 | 23 |
| 76 | Self-Assembly of Organocyanide Dianions and Metalâ€“Organic Macrocycles into Polymeric Architectures Including an Unprecedented Quadruple Helical Aperiodic Structure. Crystal Growth and Design, 2016, 16, 1805-1811. | 3.0 | 7 |
| 77 | Switching of Adsorption Properties in a Zwitterionic Metalâ€“Organic Framework Triggered by Photogenerated Radical Triplets. Chemistry of Materials, 2016, 28, 7825-7832. | 6.7 | 65 |
| 78 | Trigonal antiprismatic Co(ii) single molecule magnets with large uniaxial anisotropies: importance of Raman and tunneling mechanisms. Chemical Science, 2016, 7, 6519-6527. | 7.4 | 112 |
| 79 | A cobalt(<scp>ii</scp>) spin-crossover compound with partially charged TCNQ radicals and an anomalous conducting behavior. Chemical Science, 2016, 7, 1569-1574. | 7.4 | 58 |
| 80 | Metalâ€“Organic Frameworks as Platforms for the Controlled Nanostructuring of Single-Molecule Magnets. Journal of the American Chemical Society, 2015, 137, 9254-9257. | 13.7 | 135 |
| 81 | Magnetic ordering in TCNQ-based metalâ€“organic frameworks with hostâ€“guest interactions. Inorganic Chemistry Frontiers, 2015, 2, 904-911. | 6.0 | 58 |
| 82 | Structural distortions of the spin-crossover material [Co(pyterpy)<sub>2</sub>](TCNQ)<sub>2</sub> mediated by supramolecular interactions. Journal of Materials Chemistry C, 2015, 3, 9292-9298. | 5.5 | 25 |
| 83 | Singleâ€Chain Magnetic Behavior in a Heteroâ€Triâ€Spin Complex Mediated by Supramolecular Interactions with TCNQF<sup>.â¯</sup> Radicals. Angewandte Chemie - International Edition, 2014, 53, 11567-11570. | 13.8 | 79 |
| 84 | A cadmium TCNQ-based semiconductor with versatile binding modes and non-integer redox states. Chemical Communications, 2014, 50, 1429-1431. | 4.1 | 26 |
| 85 | Semiconductors and Aperiodic Structures in Organocyanide-Based Materials. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C1265-C1265. | 0.1 | 0 |
| 86 | Synthesis of acid-functionalized composite via surface deposition of acid-containing amorphous carbon. Applied Surface Science, 2012, 258, 7166-7173. | 6.1 | 5 |