

# Zhengtao Xu

## 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.

104  
papers

3,783  
citations

34  
h-index

59  
g-index

122  
ext. papers

4,303  
ext. citations

8.4  
avg, IF

5.61  
L-index

#	Paper	IF	Citations
104	Mineral Hydrogel from Inorganic Salts: Biocompatible Synthesis, All-in-One Charge Storage, and Possible Implications in the Origin of Life. <i>Advanced Functional Materials</i> , <b>2022</b> , 32, 2109302	15.6	1
103	Enhancement of Protein Crystallization Using Nano-Sized Metal-Organic Framework. <i>Crystals</i> , <b>2022</b> , 12, 578	2.3	0
102	Telltale diamagnetism at 50 K of a coordination polymer system. <i>Materials Research Letters</i> , <b>2022</b> , 10, 496-500	7.4	1
101	A Ferrocene Metal-Organic Framework Solid for Fe-Loaded Carbon Matrices and Nanotubes: High-Yield Synthesis and Oxygen Reduction Electrocatalysis. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 17315-17324	5.1	0
100	Invisible Silver Guests Boost Order in a Framework That Cyclizes and Deposits AgSb Nanodots. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 5757-5763	5.1	1
99	Uniting Form and Function, Stability and Reactivity in Open Framework Materials. <i>Chemistry Letters</i> , <b>2021</b> , 50, 627-631	1.7	3
98	Liquefaction-induced plasticity from entropy-boosted amorphous ceramics. <i>Applied Materials Today</i> , <b>2021</b> , 23, 101011	6.6	2
97	Coordination-Driven Assembly of Metal-Organic Framework Coating for Catalytically Active Superhydrophobic Surface. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2001202	4.6	8
96	Zwitterionic ultrathin covalent organic polymers for high-performance electrocatalytic carbon dioxide reduction. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 284, 119750	21.8	8
95	Conjugated crosslinks boost the conductivity and stability of a single crystalline metal-organic framework. <i>Chemical Communications</i> , <b>2021</b> , 57, 187-190	5.8	5
94	Linker Deficiency, Aromatic Ring Fusion, and Electrocatalysis in a Porous Ni-Pyrazolate Network. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 161-166	5.1	4
93	The Coordination Chemistry of Metal-Organic Frameworks: Metalation, Catalysis and Beyond <b>2021</b> , 99-117		1
92	Supervariate Ceramics: Gelatinous and Monolithic Ceramics Fabricated under Ambient Conditions. <i>Advanced Engineering Materials</i> , <b>2021</b> , 23, 2170048	3.5	
91	Conjugated porous polymers: incredibly versatile materials with far-reaching applications. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 3981-4042	58.5	80
90	Solution-Based Comproportionation Reaction for Facile Synthesis of Black TiO <sub>2</sub> Nanotubes and Nanoparticles. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 6087-6092	6.1	5
89	Building Conjugated Donor-Acceptor Cross-Links into Metal-Organic Frameworks for Photo- and Electroactivity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 19201-19209	9.5	4
88	Dense Alkyne Arrays of a Zr(IV) Metal-Organic Framework Absorb Co(CO) for Functionalization. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 5626-5631	5.1	11

87	An air-stable anionic two-dimensional semiconducting metal-thiolate network and its exfoliation into ultrathin few-layer nanosheets. <i>Chemical Communications</i> , <b>2020</b> , 56, 3645-3648	5.8	10
86	A Bumper Crop of Boiling-Water-Stable Metal-Organic Frameworks from Controlled Linker Sulfuration. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 7097-7102	5.1	8
85	Halogen-C H Binding in Ultramicroporous Metal-Organic Frameworks (MOFs) for Benchmark C H /CO Separation Selectivity. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 4923-4929	4.8	36
84	Donor-acceptor covalent organic frameworks of nickel(II) porphyrin for selective and efficient CO reduction into CO. <i>Dalton Transactions</i> , <b>2020</b> , 49, 15587-15591	4.3	7
83	2D metal-organic framework for stable perovskite solar cells with minimized lead leakage. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 934-940	28.7	119
82	Crystallinity after decarboxylation of a metal-carboxylate framework: indestructible porosity for catalysis. <i>Dalton Transactions</i> , <b>2020</b> , 49, 11902-11910	4.3	6
81	Porphyrin Grafting on a Mercapto-Equipped Zr(IV)-Carboxylate Framework Enhances Photocatalytic Hydrogen Production. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 12643-12649	5.1	11
80	In Situ Observations of Abnormal Pore Size Changes of a Zirconium Based Metal-Organic Framework Using Atomic Resolution S/TEM and EELS. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 1486-1487 <sup>0.5</sup>		1
79	Rare earth-free composites of carbon dots/metal-organic frameworks as white light emitting phosphors. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 2207-2211	7.1	52
78	Symmetrically backfolded molecules emulating the self-similar features of a Sierpinski triangle. <i>Organic and Biomolecular Chemistry</i> , <b>2019</b> , 17, 6032-6037	3.9	2
77	Sulfur Chemistry for Stable and Electroactive Metal-Organic Frameworks: The Crosslinking Story. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25, 8654-8662	4.8	4
76	Janus triple tripods build up a microporous manifold for HgCl and I uptake. <i>Chemical Communications</i> , <b>2019</b> , 55, 5091-5094	5.8	7
75	Anchoring Co Ions into a Thiol-Laced Metal-Organic Framework for Efficient Visible-Light-Driven Conversion of CO into CO. <i>ChemSusChem</i> , <b>2019</b> , 12, 2166-2170	8.3	40
74	Frontispiece: Sulfur Chemistry for Stable and Electroactive Metal-Organic Frameworks: The Crosslinking Story. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25,	4.8	3
73	A Porous and Solution-Processable Molecular Crystal Stable at 200 °C: The Surprising Donor-Acceptor Impact. <i>Crystal Growth and Design</i> , <b>2019</b> , 19, 7411-7419	3.5	
72	A Thiol-Functionalized UiO-67-Type Porous Single Crystal: Filling in the Synthetic Gap. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 1462-1468	5.1	20
71	Photocatalytic cofactor regeneration involving triethanolamine revisited: The critical role of glycolaldehyde. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 243, 686-692	21.8	18
70	Made in Water: A Stable Microporous Cu(I)-carboxylate Framework (CityU-7) for CO, Water, and Iodine Uptake. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 4807-4811	5.1	11

69	Improving stability against desolvation and mercury removal performance of Zr(IV)-carboxylate frameworks by using bulky sulfur functions. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 1648-1654	13	30
68	Metal-Organic Frameworks for Heavy Metal Removal. <i>Series on Chemistry, Energy and the Environment</i> , <b>2018</b> , 377-410	0.2	
67	Beadwork and Network: Strings of Silver Ions Stitch Large-Pyrazolate Patches into a Two-dimensional Sheet. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 3713-3718	3.5	5
66	Dramatic improvement of stability by in situ linker cyclization of a metal-organic framework. <i>Chemical Communications</i> , <b>2018</b> , 54, 9470-9473	5.8	15
65	Multiphase-Assembly of Siloxane Oligomers with Improved Mechanical Strength and Water-Enhanced Healing. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 11242-11246	16.4	85
64	Multiphase-Assembly of Siloxane Oligomers with Improved Mechanical Strength and Water-Enhanced Healing. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 11412-11416	3.6	22
63	Single-Crystalline UiO-67-Type Porous Network Stable to Boiling Water, Solvent Loss, and Oxidation. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 6198-6201	5.1	13
62	Dense thiol arrays for metal-organic frameworks: boiling water stability, Hg removal beyond 2 ppb and facile crosslinking. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14566-14570	13	29
61	A semiconducting gyroidal metal-sulfur framework for chemiresistive sensing. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 16139-16143	13	35
60	Mesoporous C-coated SnO <sub>x</sub> nanosheets on copper foil as flexible and binder-free anodes for superior sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 2243-2250	13	27
59	A nanoporous graphene analog for superfast heavy metal removal and continuous-flow visible-light photoredox catalysis. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 20180-20187	13	18
58	Improving the Loading Capacity of Metal-Organic Framework Thin Films Using Optimized Linkers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 24699-702	9.5	9
57	Complex Metal-Organic Frameworks from Symmetrically Backfolded Dendrimers. <i>ChemistrySelect</i> , <b>2016</b> , 1, 4075-4081	1.8	5
56	Metalation Triggers Single Crystalline Order in a Porous Solid. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 14852-14855	16.4	38
55	Bestow metal foams with nanostructured surfaces via a convenient electrochemical method for improved device performance. <i>Nano Research</i> , <b>2016</b> , 9, 2364-2371	10	7
54	Anodic nanoporous SnO <sub>2</sub> grown on Cu foils as superior binder-free Na-ion battery anodes. <i>Journal of Power Sources</i> , <b>2016</b> , 307, 634-640	8.9	53
53	Bio-inspired stabilization of sulfenyl iodide RS-I in a Zr(IV)-based metal-organic framework. <i>Dalton Transactions</i> , <b>2016</b> , 45, 5334-8	4.3	22
52	A minimalist fluorescent probe for differentiating Cys, Hcy and GSH in live cells. <i>Chemical Science</i> , <b>2016</b> , 7, 256-260	9.4	176

51	A Boiling-Water-Stable, Tunable White-Emitting Metal-Organic Framework from Soft-Imprint Synthesis. <i>Chemistry - A European Journal</i> , <b>2016</b> , 22, 1597-601	4.8	30
50	Room-temperature acetylene hydration by a Hg(II)-laced metal-organic framework. <i>Chemical Communications</i> , <b>2015</b> , 51, 10941-4	5.8	34
49	Highly Polarizable Triiodide Anions (I <sub>3</sub> <sup>-</sup> ) as Cross-Linkers for Coordination Polymers: Closing the Semiconductive Band Gap. <i>Inorganic Chemistry</i> , <b>2015</b> , 54, 6087-9	5.1	11
48	In situ production of silver nanoparticles on an aldehyde-equipped conjugated porous polymer and subsequent heterogeneous reduction of aromatic nitro groups at room temperature. <i>Chemical Communications</i> , <b>2015</b> , 51, 12197-200	5.8	33
47	Functional shakeup of metal-organic frameworks: the rise of the sidekick. <i>CrystEngComm</i> , <b>2015</b> , 17, 9254-9263	5.9	18
46	Facile synthesis of a conjugated microporous polymeric monolith via copper-free Sonogashira-Hagihara cross-coupling in water under aerobic conditions. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 7251-7255	4.9	27
45	Extraction of palladium from nuclear waste-like acidic solutions by a metal-organic framework with sulfur and alkene functions. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 3928-3934	13	58
44	Pd uptake and H <sub>2</sub> S sensing by an amphoteric metal-organic framework with a soft core and rigid side arms. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 14438-42	16.4	79
43	An electroactive porous network from covalent metal-dithiolene links. <i>Chemical Communications</i> , <b>2014</b> , 50, 3986-8	5.8	139
42	Selective Ag(I) binding, H <sub>2</sub> S sensing, and white-light emission from an easy-to-make porous conjugated polymer. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 2818-24	16.4	108
41	Immobilization of volatile and corrosive iodine monochloride (ICl) and I <sub>2</sub> reagents in a stable metal-organic framework. <i>Inorganic Chemistry</i> , <b>2014</b> , 53, 6837-43	5.1	30
40	Metal-Organic Frameworks: Semiconducting Frameworks <b>2014</b> , 1-13		1
39	Pd Uptake and H <sub>2</sub> S Sensing by an Amphoteric Metal-Organic Framework with a Soft Core and Rigid Side Arms. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 14666-14670	3.6	4
38	Convenient detection of Pd(II) by a metal-organic framework with sulfur and olefin functions. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 7807-10	16.4	103
37	Effective mercury sorption by thiol-laced metal-organic frameworks: in strong acid and the vapor phase. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 7795-8	16.4	387
36	White light emission and second harmonic generation from secondary group participation (SGP) in a coordination network. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 1553-9	16.4	130
35	Thioether Side Chains Improve the Stability, Fluorescence, and Metal Uptake of a Metal-Organic Framework. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 2940-2947	9.6	131
34	Semirigid aromatic sulfone-carboxylate molecule for dynamic coordination networks: multiple substitutions of the ancillary ligands. <i>Inorganic Chemistry</i> , <b>2011</b> , 50, 7142-9	5.1	19

- 33 Reactions of H<sub>2</sub>S with AgCl within a porous coordination network. *Inorganic Chemistry*, **2010**, 49, 7629-31 5.1 23
- 32 Coordination networks from Cu cations and tetrakis(methylthio)benzenedicarboxylic acid: tunable bonding patterns and selective sensing for NH<sub>3</sub> gas. *Inorganic Chemistry*, **2010**, 49, 10191-8 5.1 17
- 31 Metal-Based Photonic Coatings from Electrochemical Deposition. *Journal of the Electrochemical Society*, **2009**, 156, D508 3.9 16
- 30 Building thiol and metal-thiolate functions into coordination nets: Clues from a simple molecule. *Journal of Solid State Chemistry*, **2009**, 182, 1821-1826 3.3 46
- 29 Networks of Hexagonal Hierarchy from a Self-Similar Tritopic Molecule. *Crystal Growth and Design*, **2009**, 9, 1663-1665 3.5 15
- 28 Flexible Thioether-Ag(I) Interactions for Assembling Large Organic Ligands into Crystalline Networks. *Crystal Growth and Design*, **2009**, 9, 1444-1451 3.5 18
- 27 Shape-Selective Sorption and Fluorescence Sensing of Aromatics in a Flexible Network of Tetrakis[(4-methylthiophenyl)ethynyl]silane and AgBF<sub>4</sub>. *Chemistry of Materials*, **2009**, 21, 541-546 9.6 46
- 26 Reversible uptake of HgCl<sub>2</sub> in a porous coordination polymer based on the dual functions of carboxylate and thioether. *Chemical Communications*, **2009**, 5439-41 5.8 85
- 25 Structural regularity and diversity in hybrids of aromatic thioethers and BiBr<sub>3</sub>: from discrete complexes to layers and 3D nets. *Dalton Transactions*, **2009**, 5083-93 4.3 18
- 24 Coordination networks from a bifunctional molecule containing carboxyl and thioether groups. *Inorganic Chemistry*, **2008**, 47, 7459-61 5.1 40
- 23 CuCN Pillars Induce Face-to-Face  $\pi$ -Overlap of Anthracene-Based Thioether Molecules within a Hybrid Coordination Network. *Crystal Growth and Design*, **2008**, 8, 1468-1470 3.5 13
- 22 Mixed-valence Cu(II)Cu(I)<sub>15</sub> cluster builds up a 3D metal-organic framework with paramagnetic and thermochromic characteristics. *Inorganic Chemistry*, **2008**, 47, 7948-50 5.1 49
- 21 Multiple bismuth(III)-thioether secondary interactions integrate metalloporphyrin ligands into functional networks. *Inorganic Chemistry*, **2007**, 46, 4844-9 5.1 11
- 20 Assembly of Large Aromatic Selenoether Ligands into Cubic and Non-interpenetrated (10, 3)-a Nets. *Crystal Growth and Design*, **2007**, 7, 2542-2547 3.5 14
- 19 Centripetal molecules as multifunctional building blocks for coordination networks. *Chemical Communications*, **2007**, 4779-81 5.8 23
- 18 Distinct host-guest interaction and subdued fluorescence in a coordination network of 2,3,6,7,10,11-hexakis(phenylthio)triphenylene and silver(I) triflate. *Journal of Solid State Chemistry*, **2006**, 179, 3688-3694 3.3 6
- 17 Three-dimensional nets from star-shaped hexakis(arylthio)triphenylene molecules and silver(I) salts. *Inorganic Chemistry*, **2006**, 45, 1032-7 5.1 26
- 16 A selective review on the making of coordination networks with potential semiconductive properties. *Coordination Chemistry Reviews*, **2006**, 250, 2745-2757 23.2 87

15	Small amphiphilic organics, coordination extended solids, and constant curvature structures. <i>Accounts of Chemical Research</i> , <b>2005</b> , 38, 251-61	24.3	65
14	Semiconductive coordination networks from bismuth(III) bromide and 1,2-bis(methylthio)phenylacetylene-based ligands. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 8855-60	5.1	25
13	Semiconductive Coordination Networks from 2,3,6,7,10,11-Hexakis(alkylthio)triphenylenes and Bismuth(III) Halides: Synthesis, Structure-Property Relations, and Solution Processing. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 4426-4437	9.6	38
12	A Semiconductive Coordination Network Based on 2,3,6,7,10,11-Hexakis(methylthio)triphenylene and BiCl <sub>3</sub> . <i>Crystal Growth and Design</i> , <b>2005</b> , 5, 423-425	3.5	16
11	Fluorescent coordination networks of 2,3,6,7,10,11-hexakis(phenylthio)triphenylene and silver(I) triflate. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 8018-22	5.1	15
10	[(CH <sub>3</sub> ) <sub>3</sub> NCH <sub>2</sub> CH <sub>2</sub> NH <sub>3</sub> ] <sub>2</sub> SnI <sub>4</sub> : a layered perovskite with quaternary/primary ammonium dications and short interlayer iodine-iodine contacts. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 1400-2	5.1	60
9	SnI <sub>4</sub> -Based Hybrid Perovskites Templated by Multiple Organic Cations: Combining Organic Functionalities through Noncovalent Interactions. <i>Chemistry of Materials</i> , <b>2003</b> , 15, 3632-3637	9.6	57
8	Semiconducting perovskites (2-XC <sub>6</sub> H <sub>4</sub> C <sub>2</sub> H <sub>4</sub> NH <sub>3</sub> ) <sub>2</sub> SnI <sub>4</sub> (X = F, Cl, Br): steric interaction between the organic and inorganic layers. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 2031-9	5.1	91
7	[CH <sub>3</sub> (CH <sub>2</sub> ) <sub>11</sub> NH <sub>3</sub> ] <sub>2</sub> SnI <sub>4</sub> : a hybrid semiconductor with MoO <sub>3</sub> -type tin(II) iodide layers. <i>Inorganic Chemistry</i> , <b>2003</b> , 42, 6589-91	5.1	66
6	Structure rationalization and topology prediction of two-distinct-component organic crystals: the role of volume fraction and interface topology. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 121-35 <sup>4</sup>	16.4	18
5	Hydrophilic-to-Hydrophobic Volume Ratios as Structural Determinant in Small-Length Scale Amphiphilic Crystalline Systems: Silver Salts of Phenylacetylene Nitriles with Pendant Oligo(ethylene Oxide) Chains. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 8376-8391	16.4	58
4	Porous Siloxane Linked Phenylacetylene Nitrile Silver Salts from Solid State Dimerization and Low Polymerization. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 6871-6883	16.4	52
3	Variable Pore Size, Variable Chemical Functionality, and an Example of Reactivity within Porous Phenylacetylene Silver Salts. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 8204-8215	16.4	194
2	Coordination Networks of C <sub>3v</sub> and C <sub>2v</sub> Phenylacetylene Nitriles and Silver(I) Salts: Interplay of Ligand Symmetry and Molecular Dipole Moments in the Solid State. <i>Chemistry of Materials</i> , <b>1999</b> , 11, 1776-1783	9.6	41
1	Supervariate Ceramics: Gelatinous and Monolithic Ceramics Fabricated under Ambient Conditions. <i>Advanced Engineering Materials</i> , 2100866	3.5	2