

Zhengtao Xu

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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	Effective mercury sorption by thiol-laced metal-organic frameworks: in strong acid and the vapor phase. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7795-8	16.4	387
103	Variable Pore Size, Variable Chemical Functionality, and an Example of Reactivity within Porous Phenylacetylene Silver Salts. <i>Journal of the American Chemical Society</i> , 1999 , 121, 8204-8215	16.4	194
102	A minimalist fluorescent probe for differentiating Cys, Hcy and GSH in live cells. <i>Chemical Science</i> , 2016 , 7, 256-260	9.4	176
101	An electroactive porous network from covalent metal-dithiolene links. <i>Chemical Communications</i> , 2014 , 50, 3986-8	5.8	139
100	Thioether Side Chains Improve the Stability, Fluorescence, and Metal Uptake of a Metal-Organic Framework. <i>Chemistry of Materials</i> , 2011 , 23, 2940-2947	9.6	131
99	White light emission and second harmonic generation from secondary group participation (SGP) in a coordination network. <i>Journal of the American Chemical Society</i> , 2012 , 134, 1553-9	16.4	130
98	2D metal-organic framework for stable perovskite solar cells with minimized lead leakage. <i>Nature Nanotechnology</i> , 2020 , 15, 934-940	28.7	119
97	Selective Ag(I) binding, H ₂ S sensing, and white-light emission from an easy-to-make porous conjugated polymer. <i>Journal of the American Chemical Society</i> , 2014 , 136, 2818-24	16.4	108
96	Convenient detection of Pd(II) by a metal-organic framework with sulfur and olefin functions. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7807-10	16.4	103
95	Semiconducting perovskites (2-XC ₆ H ₄ C ₂ H ₄ NH ₃) ₂ SnI ₄ (X = F, Cl, Br): steric interaction between the organic and inorganic layers. <i>Inorganic Chemistry</i> , 2003 , 42, 2031-9	5.1	91
94	A selective review on the making of coordination networks with potential semiconductive properties. <i>Coordination Chemistry Reviews</i> , 2006 , 250, 2745-2757	23.2	87
93	Multiphase-Assembly of Siloxane Oligomers with Improved Mechanical Strength and Water-Enhanced Healing. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 11242-11246	16.4	85
92	Reversible uptake of HgCl ₂ in a porous coordination polymer based on the dual functions of carboxylate and thioether. <i>Chemical Communications</i> , 2009 , 5439-41	5.8	85
91	Conjugated porous polymers: incredibly versatile materials with far-reaching applications. <i>Chemical Society Reviews</i> , 2020 , 49, 3981-4042	58.5	80
90	Pd uptake and H ₂ S sensing by an amphoteric metal-organic framework with a soft core and rigid side arms. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 14438-42	16.4	79
89	[CH ₃ (CH ₂) ₁₁ NH ₃] ₃ SnI ₃ : a hybrid semiconductor with MoO ₃ -type tin(II) iodide layers. <i>Inorganic Chemistry</i> , 2003 , 42, 6589-91	5.1	66
88	Small amphiphilic organics, coordination extended solids, and constant curvature structures. <i>Accounts of Chemical Research</i> , 2005 , 38, 251-61	24.3	65

87	[(CH ₃) ₃ NCH ₂ CH ₂ NH ₃] ₄ SnI ₄ : a layered perovskite with quaternary/primary ammonium dications and short interlayer iodine-iodine contacts. <i>Inorganic Chemistry</i> , 2003 , 42, 1400-2	5.1	60
86	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> , 2015 , 3, 3928-3934	13	58
85	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> , 2000 , 122, 8376-8391	16.4	58
84	SnI ₄ -Based Hybrid Perovskites Templated by Multiple Organic Cations: Combining Organic Functionalities through Noncovalent Interactions. <i>Chemistry of Materials</i> , 2003 , 15, 3632-3637	9.6	57
83	Anodic nanoporous SnO ₂ grown on Cu foils as superior binder-free Na-ion battery anodes. <i>Journal of Power Sources</i> , 2016 , 307, 634-640	8.9	53
82	Rare earth-free composites of carbon dots/metal-organic frameworks as white light emitting phosphors. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 2207-2211	7.1	52
81	Porous Siloxane Linked Phenylacetylene Nitrile Silver Salts from Solid State Dimerization and Low Polymerization. <i>Journal of the American Chemical Society</i> , 2000 , 122, 6871-6883	16.4	52
80	Mixed-valence Cu(II)Cu(I) ₁₅ I ₁₇ cluster builds up a 3D metal-organic framework with paramagnetic and thermochromic characteristics. <i>Inorganic Chemistry</i> , 2008 , 47, 7948-50	5.1	49
79	Building thiol and metal-thiolate functions into coordination nets: Clues from a simple molecule. <i>Journal of Solid State Chemistry</i> , 2009 , 182, 1821-1826	3.3	46
78	Shape-Selective Sorption and Fluorescence Sensing of Aromatics in a Flexible Network of Tetrakis[(4-methylthiophenyl)ethynyl]silane and AgBF ₄ . <i>Chemistry of Materials</i> , 2009 , 21, 541-546	9.6	46
77	Coordination Networks of C _{3v} and C _{2v} Phenylacetylene Nitriles and Silver(I) Salts: Interplay of Ligand Symmetry and Molecular Dipole Moments in the Solid State. <i>Chemistry of Materials</i> , 1999 , 11, 1776-1783	9.6	41
76	Anchoring Co Ions into a Thiol-Laced Metal-Organic Framework for Efficient Visible-Light-Driven Conversion of CO into C ₂ H ₄ . <i>ChemSusChem</i> , 2019 , 12, 2166-2170	8.3	40
75	Coordination networks from a bifunctional molecule containing carboxyl and thioether groups. <i>Inorganic Chemistry</i> , 2008 , 47, 7459-61	5.1	40
74	Metalation Triggers Single Crystalline Order in a Porous Solid. <i>Journal of the American Chemical Society</i> , 2016 , 138, 14852-14855	16.4	38
73	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> , 2005 , 17, 4426-4437	9.6	38
72	Halogen-C-H Binding in Ultramicroporous Metal-Organic Frameworks (MOFs) for Benchmark C ₂ H ₂ /CO Separation Selectivity. <i>Chemistry - A European Journal</i> , 2020 , 26, 4923-4929	4.8	36
71	A semiconducting gyroidal metal-sulfur framework for chemiresistive sensing. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 16139-16143	13	35
70	Room-temperature acetylene hydration by a Hg(II)-laced metal-organic framework. <i>Chemical Communications</i> , 2015 , 51, 10941-4	5.8	34

- 69 In situ production of silver nanoparticles on an aldehyde-equipped conjugated porous polymer and subsequent heterogeneous reduction of aromatic nitro groups at room temperature. *Chemical Communications*, **2015**, 51, 12197-200 5.8 33
- 68 Improving stability against desolvation and mercury removal performance of Zr(IV)-carboxylate frameworks by using bulky sulfur functions. *Journal of Materials Chemistry A*, **2018**, 6, 1648-1654 13 30
- 67 Immobilization of volatile and corrosive iodine monochloride (ICl) and I₂ reagents in a stable metal-organic framework. *Inorganic Chemistry*, **2014**, 53, 6837-43 5.1 30
- 66 A Boiling-Water-Stable, Tunable White-Emitting Metal-Organic Framework from Soft-Imprint Synthesis. *Chemistry - A European Journal*, **2016**, 22, 1597-601 4.8 30
- 65 Dense thiol arrays for metal-organic frameworks: boiling water stability, Hg removal beyond 2 ppb and facile crosslinking. *Journal of Materials Chemistry A*, **2018**, 6, 14566-14570 13 29
- 64 Mesoporous C-coated SnO_x nanosheets on copper foil as flexible and binder-free anodes for superior sodium-ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 2243-2250 13 27
- 63 Facile synthesis of a conjugated microporous polymeric monolith via copper-free Sonogashira-Hagihara cross-coupling in water under aerobic conditions. *Polymer Chemistry*, **2015**, 6, 7251-7255 4.9 27
- 62 Three-dimensional nets from star-shaped hexakis(aryltio)triphenylene molecules and silver(I) salts. *Inorganic Chemistry*, **2006**, 45, 1032-7 5.1 26
- 61 Semiconductive coordination networks from bismuth(III) bromide and 1,2-bis(methylthio)phenylacetylene-based ligands. *Inorganic Chemistry*, **2005**, 44, 8855-60 5.1 25
- 60 Reactions of H₂S with AgCl within a porous coordination network. *Inorganic Chemistry*, **2010**, 49, 7629-31 5.1 23
- 59 Centripetal molecules as multifunctional building blocks for coordination networks. *Chemical Communications*, **2007**, 4779-81 5.8 23
- 58 Bio-inspired stabilization of sulfenyl iodide RS-I in a Zr(IV)-based metal-organic framework. *Dalton Transactions*, **2016**, 45, 5334-8 4.3 22
- 57 Multiphase-Assembly of Siloxane Oligomers with Improved Mechanical Strength and Water-Enhanced Healing. *Angewandte Chemie*, **2018**, 130, 11412-11416 3.6 22
- 56 A Thiol-Functionalized UiO-67-Type Porous Single Crystal: Filling in the Synthetic Gap. *Inorganic Chemistry*, **2019**, 58, 1462-1468 5.1 20
- 55 Semirigid aromatic sulfone-carboxylate molecule for dynamic coordination networks: multiple substitutions of the ancillary ligands. *Inorganic Chemistry*, **2011**, 50, 7142-9 5.1 19
- 54 Functional shakeup of metal-organic frameworks: the rise of the sidekick. *CrystEngComm*, **2015**, 17, 9254-9263 5.3 18
- 53 A nanoporous graphene analog for superfast heavy metal removal and continuous-flow visible-light photoredox catalysis. *Journal of Materials Chemistry A*, **2017**, 5, 20180-20187 13 18
- 52 Flexible Thioether-Ag(I) Interactions for Assembling Large Organic Ligands into Crystalline Networks. *Crystal Growth and Design*, **2009**, 9, 1444-1451 3.5 18

51	Structural regularity and diversity in hybrids of aromatic thioethers and BiBr ₃ : from discrete complexes to layers and 3D nets. <i>Dalton Transactions</i> , 2009 , 5083-93	4.3	18
50	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> , 2002 , 124, 121-35	16.4	18
49	Photocatalytic cofactor regeneration involving triethanolamine revisited: The critical role of glycolaldehyde. <i>Applied Catalysis B: Environmental</i> , 2019 , 243, 686-692	21.8	18
48	Coordination networks from Cu cations and tetrakis(methylthio)benzenedicarboxylic acid: tunable bonding patterns and selective sensing for NH ₃ gas. <i>Inorganic Chemistry</i> , 2010 , 49, 10191-8	5.1	17
47	Metal-Based Photonic Coatings from Electrochemical Deposition. <i>Journal of the Electrochemical Society</i> , 2009 , 156, D508	3.9	16
46	A Semiconductive Coordination Network Based on 2,3,6,7,10,11-Hexakis(methylthio)triphenylene and BiCl ₃ . <i>Crystal Growth and Design</i> , 2005 , 5, 423-425	3.5	16
45	Dramatic improvement of stability by in situ linker cyclization of a metal-organic framework. <i>Chemical Communications</i> , 2018 , 54, 9470-9473	5.8	15
44	Networks of Hexagonal Hierarchy from a Self-Similar Tritopic Molecule. <i>Crystal Growth and Design</i> , 2009 , 9, 1663-1665	3.5	15
43	Fluorescent coordination networks of 2,3,6,7,10,11-hexakis(phenylthio)triphenylene and silver(I) triflate. <i>Inorganic Chemistry</i> , 2004 , 43, 8018-22	5.1	15
42	Assembly of Large Aromatic Selenoether Ligands into Cubic and Non-interpenetrated (10, 3)-a Nets. <i>Crystal Growth and Design</i> , 2007 , 7, 2542-2547	3.5	14
41	CuCN Pillars Induce Face-to-Face π -Overlap of Anthracene-Based Thioether Molecules within a Hybrid Coordination Network. <i>Crystal Growth and Design</i> , 2008 , 8, 1468-1470	3.5	13
40	Single-Crystalline UiO-67-Type Porous Network Stable to Boiling Water, Solvent Loss, and Oxidation. <i>Inorganic Chemistry</i> , 2018 , 57, 6198-6201	5.1	13
39	Highly Polarizable Triiodide Anions (I ₃ ⁻) as Cross-Linkers for Coordination Polymers: Closing the Semiconductive Band Gap. <i>Inorganic Chemistry</i> , 2015 , 54, 6087-9	5.1	11
38	Dense Alkyne Arrays of a Zr(IV) Metal-Organic Framework Absorb Co(CO) for Functionalization. <i>Inorganic Chemistry</i> , 2020 , 59, 5626-5631	5.1	11
37	Made in Water: A Stable Microporous Cu(I)-carboxylate Framework (CityU-7) for CO, Water, and Iodine Uptake. <i>Inorganic Chemistry</i> , 2018 , 57, 4807-4811	5.1	11
36	Multiple bismuth(III)-thioether secondary interactions integrate metalloporphyrin ligands into functional networks. <i>Inorganic Chemistry</i> , 2007 , 46, 4844-9	5.1	11
35	Porphyrin Grafting on a Mercapto-Equipped Zr(IV)-Carboxylate Framework Enhances Photocatalytic Hydrogen Production. <i>Inorganic Chemistry</i> , 2020 , 59, 12643-12649	5.1	11
34	An air-stable anionic two-dimensional semiconducting metal-thiolate network and its exfoliation into ultrathin few-layer nanosheets. <i>Chemical Communications</i> , 2020 , 56, 3645-3648	5.8	10

33	Improving the Loading Capacity of Metal-Organic Framework Thin Films Using Optimized Linkers. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 24699-702	9.5	9
32	A Bumper Crop of Boiling-Water-Stable Metal-Organic Frameworks from Controlled Linker Sulfuration. <i>Inorganic Chemistry</i> , 2020 , 59, 7097-7102	5.1	8
31	Coordination-Driven Assembly of Metal-Organic Framework Coating for Catalytically Active Superhydrophobic Surface. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2001202	4.6	8
30	Zwitterionic ultrathin covalent organic polymers for high-performance electrocatalytic carbon dioxide reduction. <i>Applied Catalysis B: Environmental</i> , 2021 , 284, 119750	21.8	8
29	Janus triple tripods build up a microporous manifold for HgCl and I uptake. <i>Chemical Communications</i> , 2019 , 55, 5091-5094	5.8	7
28	Bestow metal foams with nanostructured surfaces via a convenient electrochemical method for improved device performance. <i>Nano Research</i> , 2016 , 9, 2364-2371	10	7
27	Donor-acceptor covalent organic frameworks of nickel(II) porphyrin for selective and efficient CO reduction into CO. <i>Dalton Transactions</i> , 2020 , 49, 15587-15591	4.3	7
26	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. <i>Journal of Solid State Chemistry</i> , 2006 , 179, 3688-3694	3.3	6
25	Crystallinity after decarboxylation of a metal-carboxylate framework: indestructible porosity for catalysis. <i>Dalton Transactions</i> , 2020 , 49, 11902-11910	4.3	6
24	Solution-Based Comproportionation Reaction for Facile Synthesis of Black TiO ₂ Nanotubes and Nanoparticles. <i>ACS Applied Energy Materials</i> , 2020 , 3, 6087-6092	6.1	5
23	Complex Metal-Organic Frameworks from Symmetrically Backfolded Dendrimers. <i>ChemistrySelect</i> , 2016 , 1, 4075-4081	1.8	5
22	Beadwork and Network: Strings of Silver Ions Stitch Large-Pyrazolate Patches into a Two-dimensional Sheet. <i>Crystal Growth and Design</i> , 2018 , 18, 3713-3718	3.5	5
21	Conjugated crosslinks boost the conductivity and stability of a single crystalline metal-organic framework. <i>Chemical Communications</i> , 2021 , 57, 187-190	5.8	5
20	Sulfur Chemistry for Stable and Electroactive Metal-Organic Frameworks: The Crosslinking Story. <i>Chemistry - A European Journal</i> , 2019 , 25, 8654-8662	4.8	4
19	Building Conjugated Donor-Acceptor Cross-Links into Metal-Organic Frameworks for Photo- and Electroactivity. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 19201-19209	9.5	4
18	Pd Uptake and H ₂ S Sensing by an Amphoteric Metal-Organic Framework with a Soft Core and Rigid Side Arms. <i>Angewandte Chemie</i> , 2014 , 126, 14666-14670	3.6	4
17	Linker Deficiency, Aromatic Ring Fusion, and Electrocatalysis in a Porous Ni-Pyrazolate Network. <i>Inorganic Chemistry</i> , 2021 , 60, 161-166	5.1	4
16	Frontispiece: Sulfur Chemistry for Stable and Electroactive Metal-Organic Frameworks: The Crosslinking Story. <i>Chemistry - A European Journal</i> , 2019 , 25,	4.8	3

15	Uniting Form and Function, Stability and Reactivity in Open Framework Materials. <i>Chemistry Letters</i> , 2021 , 50, 627-631	1.7	3
14	Symmetrically backfolded molecules emulating the self-similar features of a Sierpinski triangle. <i>Organic and Biomolecular Chemistry</i> , 2019 , 17, 6032-6037	3.9	2
13	Liquefaction-induced plasticity from entropy-boosted amorphous ceramics. <i>Applied Materials Today</i> , 2021 , 23, 101011	6.6	2
12	Supervariate Ceramics: Gelatinous and Monolithic Ceramics Fabricated under Ambient Conditions. <i>Advanced Engineering Materials</i> , 2100866	3.5	2
11	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> , 2019 , 25, 1486-1487	0.5	1
10	Metal-Organic Frameworks: Semiconducting Frameworks 2014 , 1-13		1
9	Invisible Silver Guests Boost Order in a Framework That Cyclizes and Deposits AgSb Nanodots. <i>Inorganic Chemistry</i> , 2021 , 60, 5757-5763	5.1	1
8	The Coordination Chemistry of Metal-Organic Frameworks: Metalation, Catalysis and Beyond 2021 , 99-117		1
7	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> , 2022 , 32, 2109302	15.6	1
6	Telltale diamagnetism at 50 K of a coordination polymer system. <i>Materials Research Letters</i> , 2022 , 10, 496-500	7.4	1
5	A Ferrocene Metal-Organic Framework Solid for Fe-Loaded Carbon Matrices and Nanotubes: High-Yield Synthesis and Oxygen Reduction Electrocatalysis. <i>Inorganic Chemistry</i> , 2021 , 60, 17315-17324	5.1	0
4	Enhancement of Protein Crystallization Using Nano-Sized Metal-Organic Framework. <i>Crystals</i> , 2022 , 12, 578	2.3	0
3	Metal-Organic Frameworks for Heavy Metal Removal. <i>Series on Chemistry, Energy and the Environment</i> , 2018 , 377-410	0.2	
2	A Porous and Solution-Processable Molecular Crystal Stable at 200 °C: The Surprising Donor-Acceptor Impact. <i>Crystal Growth and Design</i> , 2019 , 19, 7411-7419	3.5	
1	Supervariate Ceramics: Gelatinous and Monolithic Ceramics Fabricated under Ambient Conditions. <i>Advanced Engineering Materials</i> , 2021 , 23, 2170048	3.5	