Xin Zhao

List of Publications by Year in descending order

116 papers	6,355 citations	66315 42 h-index	71651 76 g-index
120 all docs	120 docs citations	120 times ranked	5444 citing authors

#	Article	IF	Citations
1	One-Step Construction of Two Different Kinds of Pores in a 2D Covalent Organic Framework. Journal of the American Chemical Society, 2014, 136, 15885-15888.	6.6	386
2	Stabilizing Zinc Anodes by Regulating the Electrical Double Layer with Saccharin Anions. Advanced Materials, 2021, 33, e2100445.	11.1	351
3	Toward a Single-Layer Two-Dimensional Honeycomb Supramolecular Organic Framework in Water. Journal of the American Chemical Society, 2013, 135, 17913-17918.	6.6	349
4	Two-dimensional covalent organic frameworks with hierarchical porosity. Chemical Society Reviews, 2020, 49, 3920-3951.	18.7	302
5	Construction of Covalent Organic Frameworks Bearing Three Different Kinds of Pores through the Heterostructural Mixed Linker Strategy. Journal of the American Chemical Society, 2016, 138, 4710-4713.	6.6	249
6	Ultrahigh volatile iodine uptake by hollow microspheres formed from a heteropore covalent organic framework. Chemical Communications, 2017, 53, 7266-7269.	2.2	224
7	Toward Covalent Organic Frameworks Bearing Three Different Kinds of Pores: The Strategy for Construction and COF-to-COF Transformation via Heterogeneous Linker Exchange. Journal of the American Chemical Society, 2017, 139, 6736-6743.	6.6	217
8	Three-dimensional periodic supramolecular organic framework ion sponge in water and microcrystals. Nature Communications, 2014, 5, 5574.	5.8	196
9	Materials genomics methods for high-throughput construction of COFs and targeted synthesis. Nature Communications, 2018, 9, 5274.	5.8	182
10	The Organic Flatlandâ€”Recent Advances in Synthetic 2D Organic Layers. Advanced Materials, 2015, 27, 5762-5770.	11.1	162
11	Few layer covalent organic frameworks with graphene sheets as cathode materials for lithium-ion batteries. Nanoscale, 2019, 11, 5330-5335.	2.8	131
12	Aminal-Linked Covalent Organic Frameworks through Condensation of Secondary Amine with Aldehyde. Journal of the American Chemical Society, 2019, 141, 14981-14986.	6.6	114
13	Regulating the topology of 2D covalent organic frameworks by the rational introduction of substituents. Chemical Science, 2017, 8, 3866-3870.	3.7	110
14	Nanoengineering Construction of Cu₂O Nanowire Arrays Encapsulated with g-C₃N₄ as 3D Spatial Reticulation All-Solid-State Direct Z-Scheme Photocatalysts for Photocatalytic Reduction of Carbon Dioxide. ACS Catalysis, 2020, 10, 6367-6376.	5.5	108
15	A gaseous hydrogen chloride chemosensor based on a 2D covalent organic framework. Chemical Communications, 2019, 55, 4550-4553.	2.2	107
16	A two-dimensional single-layer supramolecular organic framework that is driven by viologen radical cation dimerization and further promoted by cucurbit[8]uril. Polymer Chemistry, 2014, 5, 4715-4721.	1.9	106
17	The construction of a two-dimensional supramolecular organic framework with parallelogram pores and stepwise fluorescence enhancement. Chemical Communications, 2015, 51, 16417-16420.	2.2	106
18	Single-Step Solution-Phase Synthesis of Free-Standing Two-Dimensional Polymers and Their Evolution into Hollow Spheres. Macromolecules, 2013, 46, 7745-7752.	2.2	102

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19	Cï£¿Hâ‹…â‹…â‹…O Hydrogen Bonding Induced Triazole Foldamers: Efficient Halogen Bonding Receptors for Organohalogens. Angewandte Chemie - International Edition, 2012, 51, 1657-1661.	7.2	95
20	A Facile, Efficient, and General Synthetic Method to Amide-Linked Covalent Organic Frameworks. Journal of the American Chemical Society, 2022, 144, 1138-1143.	6.6	89
21	Hydrogen bonded aryl amide and hydrazide oligomers: a new generation of preorganized soft frameworks. Chemical Communications, 2010, 46, 1601.	2.2	87
22	Diversity of Covalent Organic Frameworks (COFs): A 2D COF Containing Two Kinds of Triangular Micropores of Different Sizes. ACS Macro Letters, 2016, 5, 99-102.	2.3	87
23	Fabricating Organic Nanotubes through Selective Disassembly of Two-Dimensional Covalent Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 70-74.	6.6	81
24	The construction of fluorescent heteropore covalent organic frameworks and their applications in spectroscopic and visual detection of trinitrophenol with high selectivity and sensitivity. Chemical Communications, 2018, 54, 2308-2311.	2.2	79
25	Fluorescence enhancement through the formation of a single-layer two-dimensional supramolecular organic framework and its application in highly selective recognition of picric acid. Chemical Communications, 2016, 52, 7588-7591.	2.2	76
26	Novel three-dimensional Co3O4 dendritic superstructures: hydrothermal synthesis, formation mechanism and magnetic properties. CrystEngComm, 2013, 15, 1389.	1.3	73
27	Nickel-Coordinated Carbon Nitride as a Metallaphotoredox Platform for the Cross-Coupling of Aryl Halides with Alcohols. ACS Catalysis, 2020, 10, 15178-15185.	5.5	72
28	Selfâ€Healing SeO₂ Additives Enable Zinc Metal Reversibility in Aqueous ZnSO₄ Electrolytes. Advanced Functional Materials, 2022, 32, .	7.8	71
29	Efficient Removal of Cr(VI) from Aqueous Solutions by a Dualâ€Pore Covalent Organic Framework. Advanced Sustainable Systems, 2019, 3, 1800150.	2.7	66
30	Highly Stable Chiral (A)₆â€“B Supramolecular Copolymers: A Multivalency-Based Self-Assembly Process. Journal of the American Chemical Society, 2011, 133, 11124-11127.	6.6	62
31	Heteropore covalent organic frameworks: a new class of porous organic polymers with well-ordered hierarchical porosities. Organic Chemistry Frontiers, 2018, 5, 3341-3356.	2.3	62
32	Two-dimensional dual-pore covalent organic frameworks obtained from the combination of two D_{2h} symmetrical building blocks. Chemical Communications, 2016, 52, 11704-11707.	2.2	61
33	A Study on Constitutional Isomerism in Covalent Organic Frameworks: Controllable Synthesis, Transformation, and Distinct Difference in Properties. CCS Chemistry, 2020, 2, 139-145.	4.6	59
34	Rational design of crystalline two-dimensional frameworks with highly complicated topological structures. Nature Communications, 2019, 10, 4609.	5.8	54
35	A heteropore covalent organic framework for adsorptive removal of Cd(II) from aqueous solutions with high efficiency. Chinese Chemical Letters, 2020, 31, 386-390.	4.8	53
36	Toward azo-linked covalent organic frameworks by developing linkage chemistry via linker exchange. Nature Communications, 2022, 13, 2180.	5.8	53

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37	Low-temperature combustion synthesis of CuCr2O4 spinel powder for spectrally selective paints. Journal of Sol-Gel Science and Technology, 2012, 61, 281-288.	1.1	51
38	A Covalent Organic Framework with Extended Ï€-Conjugated Building Units as a Highly Efficient Recipient for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2020, 12, 34990-34998.	4.0	50
39	The construction of single-layer two-dimensional supramolecular organic frameworks in water through the self-assembly of rigid vertexes and flexible edges. Polymer Chemistry, 2015, 6, 1923-1927.	1.9	49
40	Precision Construction of 2D Heteropore Covalent Organic Frameworks by a Multipleâ€Linkingâ€Site Strategy. Chemistry - A European Journal, 2016, 22, 17784-17789.	1.7	46
41	Construction of 2D covalent organic frameworks by taking advantage of the variable orientation of imine bonds. Chemical Communications, 2017, 53, 2431-2434.	2.2	46
42	Sewable and Cuttable Flexible Zinc-Ion Hybrid Supercapacitor Using a Polydopamine/Carbon Cloth-Based Cathode. ACS Sustainable Chemistry and Engineering, 2020, 8, 16028-16036.	3.2	43
43	Large-scale synthesis of azine-linked covalent organic frameworks in water and promoted by water. New Journal of Chemistry, 2019, 43, 6116-6120.	1.4	40
44	A rings-in-pores net: crown ether-based covalent organic frameworks for phase-transfer catalysis. Chemical Communications, 2020, 56, 595-598.	2.2	39
45	Highly thermally stable hydrogels derived from monolayered two-dimensional supramolecular polymers. Polymer Chemistry, 2015, 6, 3018-3023.	1.9	38
46	A Case Study on the Influence of Substitutes on Interlayer Stacking of 2D Covalent Organic Frameworks. Chemistry - A European Journal, 2017, 23, 5668-5672.	1.7	38
47	Encapsulation Enhanced Dimerization of a Series of 4â€Arylâ€Nâ€Methylpyridinium Derivatives in Water: New Building Blocks for Selfâ€Assembly in Aqueous Media. Chemistry - an Asian Journal, 2014, 9, 1530-1534.	1.7	36
48	Supramolecular radical polymers self-assembled from the stacking of radical cations of rod-like viologen di- and trimers. Organic Chemistry Frontiers, 2016, 3, 1635-1645.	2.3	34
49	Solâ€“Gel Combustionâ€Derived CoCuMnO_x Spinels as Pigment for Spectrally Selective Paints. Journal of the American Ceramic Society, 2011, 94, 827-832.	1.9	33
50	The construction of rigid supramolecular polymers in water through the self-assembly of rod-like monomers and cucurbit[8]uril. Chemical Communications, 2014, 50, 7982-7985.	2.2	31
51	Self-sorted pore-formation in the construction of heteropore covalent organic frameworks based on orthogonal reactions. Chemical Communications, 2018, 54, 880-883.	2.2	30
52	A hexaazatriphenylene-based organogel that responds to silver(I) with high selectivity under aqueous condition. Tetrahedron Letters, 2012, 53, 1840-1842.	0.7	29
53	Tunable Coordinative Assembly of a Disc-Like Molecule and Metal Ions: From Mirospheres to Microtubes and Microrods. Chemistry of Materials, 2011, 23, 1505-1511.	3.2	28
54	Recent advances of hexaazatriphenylene (HAT) derivatives: Their applications in self-assembly and porous organic materials. Tetrahedron Letters, 2018, 59, 592-604.	0.7	28

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55	Enhancing the Photovoltaic Performance and Moisture Stability of Perovskite Solar Cells Via Polyfluoroalkylated Imidazolium Additives. ACS Applied Materials & Interfaces, 2021, 13, 4553-4559.	4.0	28
56	Construction of Microbelts through the Coassembly of a Disclike Molecule and Primary Alkyl Ammoniums: A Noncovalent Strategy to Mimic Covalently Bonded ï€-Core Alkyl Chain Structure. Langmuir, 2010, 26, 13048-13051.	1.6	26
57	Highly selective recognition of fluoride anion through direct deprotonation of intramolecularly hydrogen-bonded phenolic hydroxyl groups. Tetrahedron Letters, 2013, 54, 5039-5042.	0.7	26
58	Foldamer-based chiral supramolecular alternate block copolymers tuned by ion-pair binding. Chemical Communications, 2013, 49, 2673.	2.2	26
59	Intramolecular Câ€“Hâ‹¯F hydrogen bonding-induced 1,2,3-triazole-based foldamers. Organic Chemistry Frontiers, 2014, 1, 494-500.	2.3	26
60	A Triptyceneâ€Based Microporous Organic Polymer Bearing Tridentate Ligands and Its Application in Suzukiâ€“Miyaura Crossâ€Coupling Reaction. Macromolecular Rapid Communications, 2015, 36, 413-418.	2.0	26
61	A supramolecular bottlebrush polymer assembled on the basis of cucurbit[8]uril-encapsulation-enhanced donorâ€“acceptor interaction. Chinese Chemical Letters, 2017, 28, 1167-1171.	4.8	26
62	Foldingâ€Induced Folding: The Assembly of Aromatic Amide and 1,2,3â€Triazole Hybrid Helices. Chemistry - A European Journal, 2014, 20, 1418-1426.	1.7	25
63	Foldamers as Cross-Links for Tuning the Dynamic Mechanical Property of Methacrylate Copolymers. Macromolecules, 2010, 43, 6185-6192.	2.2	24
64	Assessment of the intramolecular Câ€“Hâ‹¯X (X=F, Cl, Br) hydrogen bonding of 1,4-diphenyl-1,2,3-triazoles. Tetrahedron, 2012, 68, 8857-8862.	1.0	24
65	Carbon Nitride Quantum Dots Enhancing the Anodic Electrochemiluminescence of Ruthenium(II) Tris(2,2â€²-bipyridyl) via Inhibiting the Oxygen Evolution Reaction. Analytical Chemistry, 2020, 92, 15352-15360.	3.2	24
66	meta-Substituted benzamide oligomers that complex mono-, di- and tricarboxylates: folding-induced selectivity and chirality. Organic and Biomolecular Chemistry, 2011, 9, 8122.	1.5	23
67	Construction of two heteropore covalent organic frameworks with Kagome lattices. CrystEngComm, 2017, 19, 4877-4881.	1.3	22
68	Soluble Two-dimensional Supramolecular Organic Frameworks (SOFs): An Emerging Class of 2D Supramolecular Polymers with Internal Long-range Orders. Chinese Journal of Polymer Science (English Edition), 2019, 37, 1-10.	2.0	22
69	A facile and scalable synthetic method for covalent organic nanosheets: ultrasonic polycondensation and photocatalytic degradation of organic pollutants. Chemical Science, 2022, 13, 1009-1015.	3.7	22
70	Highly reversible zinc metal anodes enabled by protonated melamine. Journal of Materials Chemistry A, 2022, 10, 6636-6640.	5.2	21
71	Ultra-weak photon emission of hands in aging prediction. Journal of Photochemistry and Photobiology B: Biology, 2016, 162, 529-534.	1.7	20
72	A design strategy for the construction of 2D heteropore covalent organic frameworks based on the combination of C_{2v} and D_{3h} symmetric building blocks. Polymer Chemistry, 2018, 9, 279-283.	1.9	19

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73	Ligand directed debromination of tetrabromodiphenyl ether mediated by nickel under visible irradiation. Environmental Science: Nano, 2019, 6, 1585-1593.	2.2	18
74	Enhanced photocatalytic CO₂ reduction by constructing an In₂O₃â€“CuO heterojunction with CuO as a cocatalyst. Catalysis Science and Technology, 2021, 11, 2713-2717.	2.1	18
75	Selfâ€Assembly of Chiral Propellerâ€like Supermolecules with Unusual â€œSergeantsâ€andâ€Soldiersâ€•and â€œMajorityâ€Rulesâ€•Effects. Chemistry - an Asian Journal, 2014, 9, 754-758.	1.7	17
76	Viologen derivatives with extended Ï€-conjugation structures: From supra-/molecular building blocks to organic porous materials. Chinese Chemical Letters, 2020, 31, 1757-1767.	4.8	17
77	Extending Ï€â€Conjugation and Integrating Multiâ€Redox Centers into One Molecule for Highâ€Capacity Organic Cathodes. ChemSusChem, 2021, 14, 3858-3866.	3.6	17
78	Effects of connecting sequences of building blocks on reticular synthesis of covalent organic frameworks. Nano Research, 2021, 14, 381-386.	5.8	16
79	Novel strategy of natural antioxidant nutrition quality evaluation in food: Oxidation resistance mechanism and synergistic effects investigation. Food Chemistry, 2021, 359, 129768.	4.2	16
80	Designed Synthesis of a <scp>Twoâ€Dimensional</scp> Covalent Organic Framework with <scp>Threeâ€Level</scp> Hierarchical Porosity^{â€}. Chinese Journal of Chemistry, 2020, 38, 1676-1680.	2.6	15
81	[Fe(bpy)₃]²⁺-based porous organic polymers with boosted photocatalytic activity for recyclable organic transformations. Journal of Materials Chemistry A, 2021, 9, 6361-6367.	5.2	15
82	A two-step solvothermal procedure to improve crystallinity of covalent organic frameworks and achieve scale-up preparation. Chinese Chemical Letters, 2022, 33, 2464-2468.	4.8	15
83	Two novel quadruple hydrogen-bonding motifs: the formation of supramolecular polymers, vesicles, and organogels. Tetrahedron Letters, 2010, 51, 188-191.	0.7	14
84	Transformation between 2D covalent organic frameworks with distinct pore hierarchy via exchange of building blocks with different symmetries. Chemical Communications, 2020, 56, 15418-15421.	2.2	14
85	Controllable self-assemblies of micro/nano-tubes and vesicles from arylamides and their applications as templates to fabricate Pt micro/nano-tubes and hollow Pt nanospheres. Soft Matter, 2010, 6, 1246.	1.2	13
86	A highly selective chemosensor for the detection of Cu2+ through the formation of coordination polymer. Tetrahedron Letters, 2014, 55, 6486-6489.	0.7	13
87	Toward a Two-Dimensional Supramolecular Organic Framework with High Degree of Internal Order via Amphiphilic Modification. CCS Chemistry, 2022, 4, 141-150.	4.6	13
88	Organic nanotubes assembled from isophthalamides and their application as templates to fabricate Pt nanotubes. Chemical Communications, 2009, , 4212.	2.2	11
89	Hydrogenâ€Bonded Shapeâ€Persistent Aryl Hydrazide Polymers: Sideâ€Chainâ€Tuned Formation of Vesicles and Organogels. Macromolecular Chemistry and Physics, 2010, 211, 2090-2101.	1.1	11
90	Synthesis, properties, and self-assembly of 2,3-bis(n-octyl)hexaazatriphenylene. Chinese Chemical Letters, 2013, 24, 453-456.	4.8	11

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91	The construction of supramolecular polymers through anion bridging: from frustrated hydrogen-bonding networks to well-ordered linear arrays. Polymer Chemistry, 2015, 6, 7586-7593.	1.9	11
92	A thiophene-derived hexaazatriphenylene (HAT) fluorescent sensor for the selective detection of Ag+ ion. Tetrahedron Letters, 2021, 68, 152911.	0.7	11
93	Synthesis of novel 2D in-plane anisotropic covalent organic frameworks through a solvent modulated orthogonal strategy. Polymer Chemistry, 2018, 9, 4288-4293.	1.9	10
94	Oligo(quinoxalineethynylene)s: synthesis, properties, and Ag+-mediated complanation. Chemical Communications, 2011, 47, 1524-1526.	2.2	9
95	Coreâ€“Shell Al2O3-Supported Ni for High-Performance Catalytic Reforming of Toluene as a Model Compound of Tar. Arabian Journal for Science and Engineering, 2014, 39, 6671-6678.	1.1	9
96	Selfâ€assembly of Novel Hetero[3]rotaxane, [2]Rotaxanes and [2]Catenane. Chinese Journal of Chemistry, 2003, 21, 739-745.	2.6	8
97	A Triptyceneâ€Based Porous Organic Polymer that Exhibited High Hydrogen and Carbon Dioxide Storage Capacities and Excellent CO₂/N₂ Selectivity. Chinese Journal of Chemistry, 2015, 33, 539-544.	2.6	8
98	Programed self-assembly of microstructures: self-sorting based on size-matched disk-like molecules and remarkable cooperative reinforcement of hydrogen-bonding and donorâ€“acceptor interaction. Tetrahedron Letters, 2011, 52, 3836-3839.	0.7	7
99	Hydrogen Bonded Supramolecular Polymers in Both Apolar and Aqueous Media: Selfâ€Assembly and Reversible Conversion of Vesicles and Gels. Chinese Journal of Chemistry, 2011, 29, 2597-2605.	2.6	6
100	Solvothermal synthesis of Co₃O₄/Al₂O₃ hollow coreâ€“shell microspheres for the catalytic oxidation of CO. CrystEngComm, 2014, 16, 6126-6134.	1.3	6
101	Size-Controlled Synthesis of BiPO4 Nanostructures and Their Photocatalytic Performances. Arabian Journal for Science and Engineering, 2014, 39, 6721-6725.	1.1	6
102	Donorâ€“acceptor interaction-driven folding of linear naphthaleneâ€“glycol oligomers templated by a rigid bipyridinium rod. Organic Chemistry Frontiers, 2015, 2, 1578-1583.	2.3	6
103	A series of polyaromatic hydrocarbons conjugated viologens: synthesis, supramolecular structures in solid state, and electrochemical and photophysical properties. Tetrahedron, 2015, 71, 1124-1131.	1.0	5
104	A Simple Approach towards Highly Dense Graphene Films for High Volumetric Performance Supercapacitors. ChemElectroChem, 2022, 9, .	1.7	5
105	A thermally stable pH-responsive â€œsupramolecular buckleâ€•based on the encapsulation of 4-(4-aminophenyl)-N-methylpyridinium by cucurbit[8]uril. Organic Chemistry Frontiers, 2015, 2, 1030-1034.	2.3	4
106	Synthesis, Photophysical and Electrochemical Properties, and Selfâ€assembly Behavior of Two Hexaazatriphenylene Derivatives: A Single Bond Makes a Big Difference. Chemistry - an Asian Journal, 2016, 11, 839-843.	1.7	4
107	An amphiphilic supramolecular polymer: Construction, self-assembly and pH-responsive behavior in water. Tetrahedron Letters, 2019, 60, 1727-1731.	0.7	4
108	Amide Chain. Chinese Journal of Chemistry, 2010, 28, 1547-1552.	2.6	3

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109	Construction of Vesicles, Micro/Nanorods and Ultralong Nanotubes through the Selfâ€Assembly of Nonâ€Classical Amphiphiles with Rigid Conformation. Chinese Journal of Chemistry, 2017, 35, 429-434.	2.6	3
110	Pore Engineering for Covalent Organic Framework Membranes. Chemical Research in Chinese Universities, 2022, 38, 364-372.	1.3	3
111	Photoinduced Electron Transfer within Porphyrinâ€Anthraâ€quinone Dyads Connected by Hamilton Hydrogen Bonding. Chinese Journal of Chemistry, 2010, 28, 1580-1586.	2.6	2
112	Redox-responsive morphology transformation of self-assembled nanostructures based on thiol-disulfide interconversion. Tetrahedron Letters, 2012, 53, 4447-4451.	0.7	2
113	RNA-Seq Reveals the Angiogenesis Diversity between the Fetal and Adults Bone Mesenchyme Stem Cell. PLoS ONE, 2016, 11, e0149171.	1.1	2
114	Protonâ€anion Ionâ€pair Recognition by a Hexaazatriphenyleneâ€Hexaurea Receptor. Chinese Journal of Chemistry, 2017, 35, 392-396.	2.6	2
115	Self-Assembled Two-Dimensional Organic Layers in Solution Phase Based on Cucurbit[8]uril-Mediated Host-Guest Interactions. , 2019, , 1-22.		0
116	Self-Assembled Two-Dimensional Organic Layers in Solution Phase Based on Cucurbit[8]uril-Mediated Host-Guest Interactions. , 2020, , 673-694.		0