Wen-Yang Gao

List of Publications by Year
in descending order

64 papers	4,703 citations	126907 33 h-index	98798 67 g-index
71 all docs	71 docs citations	71 times ranked	5687 citing authors

#	Article	IF	Citations
1	Metalâ€“metalloporphyrin frameworks: a resurging class of functional materials. Chemical Society Reviews, 2014, 43, 5841-5866.	38.1	547
2	Crystal Engineering of an nbo Topology Metalâ€“Organic Framework for Chemical Fixation of CO₂ under Ambient Conditions. Angewandte Chemie - International Edition, 2014, 53, 2615-2619.	13.8	505
3	A Stable Metalâ€“Organic Framework Featuring a Local Buffer Environment for Carbon Dioxide Fixation. Angewandte Chemie - International Edition, 2018, 57, 4657-4662.	13.8	283
4	Predicting capacity of hard carbon anodes in sodium-ion batteries using porosity measurements. Carbon, 2014, 76, 165-174.	10.3	279
5	A porous metalâ€“metalloporphyrin framework featuring high-density active sites for chemical fixation of CO₂under ambient conditions. Chemical Communications, 2014, 50, 5316-5318.	4.1	203
6	Reversible Switching between Highly Porous and Nonporous Phases of an Interpenetrated Diamondoid Coordination Network That Exhibits Gateâ€Opening at Methane Storage Pressures. Angewandte Chemie - International Edition, 2018, 57, 5684-5689.	13.8	161
7	Crystal Engineering of a Microporous, Catalytically Active fcu Topology MOF Using a Customâ€Designed Metalloporphyrin Linker. Angewandte Chemie - International Edition, 2012, 51, 10082-10085.	13.8	154
8	Tunability of Band Gaps in Metalâ€“Organic Frameworks. Inorganic Chemistry, 2012, 51, 9039-9044.	4.0	148
9	Inserting CO₂ into Aryl Câˆ’H Bonds of Metalâ€“Organic Frameworks: CO₂ Utilization for Direct Heterogeneous Câˆ’H Activation. Angewandte Chemie - International Edition, 2016, 55, 5472-5476.	13.8	129
10	Imparting amphiphobicity on single-crystalline porous materials. Nature Communications, 2016, 7, 13300.	12.8	126
11	Interpenetrating Metalâ€“Metalloporphyrin Framework for Selective CO₂ Uptake and Chemical Transformation of CO₂. Inorganic Chemistry, 2016, 55, 7291-7294.	4.0	115
12	Postâ€Synthetic Modification of Porphyrinâ€Encapsulating Metalâ€“Organic Materials by Cooperative Addition of Inorganic Salts to Enhance CO₂<i>/</i>CH₄ Selectivity. Angewandte Chemie - International Edition, 2012, 51, 9330-9334.	13.8	106
13	A metalâ€“metalloporphyrin framework based on an octatopic porphyrin ligand for chemical fixation of CO₂with aziridines. Chemical Communications, 2018, 54, 1170-1173.	4.1	104
14	Reducing CO2 to dense nanoporous graphene by Mg/Zn for high power electrochemical capacitors. Nano Energy, 2015, 11, 600-610.	16.0	100
15	Precise Molecular Fission and Fusion: Quantitative Selfâ€Assembly and Chemistry of a Metalloâ€Cuboctahedron. Angewandte Chemie - International Edition, 2015, 54, 9224-9229.	13.8	93
16	Quest for highly porous metalâ€“metalloporphyrin framework based upon a custom-designed octatopic porphyrin ligand. Chemical Communications, 2012, 48, 7173.	4.1	92
17	Vertex-directed self-assembly of a high symmetry supermolecular building block using a custom-designed porphyrin. Chemical Science, 2012, 3, 2823.	7.4	92
18	A pillared metalâ€“organic framework incorporated with 1,2,3-triazole moieties exhibiting remarkable enhancement of CO2 uptake. Chemical Communications, 2012, 48, 8898.	4.1	77

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19	A new microporous carbon material synthesized via thermolysis of a porous aromatic framework embedded with an extra carbon source for low-pressure CO2 uptake. Chemical Communications, 2013, 49, 10269.	4.1	76
20	Remote Stabilization of Copper Paddlewheel Based Molecular Building Blocks in Metalâ€“Organic Frameworks. Chemistry of Materials, 2015, 27, 2144-2151.	6.7	72
21	Anionic Metalâ€“Organic Framework for Selective Dye Removal and CO₂ Fixation. European Journal of Inorganic Chemistry, 2016, 2016, 4373-4377.	2.0	66
22	Two homochiral organocatalytic metal organic materials with nanoscopic channels. Chemical Communications, 2013, 49, 7693.	4.1	54
23	Porous Double-Walled Metal Triazolate Framework Based upon a Bifunctional Ligand and a Pentanuclear Zinc Cluster Exhibiting Selective CO₂ Uptake. Inorganic Chemistry, 2012, 51, 4423-4425.	4.0	52
24	The local electric field favours more than exposed nitrogen atoms on CO₂ capture: a case study on the rht-type MOF platform. Chemical Communications, 2015, 51, 9636-9639.	4.1	48
25	Porous metalâ€“organic framework based on a macrocyclic tetracarboxylate ligand exhibiting selective CO2 uptake. CrystEngComm, 2012, 14, 6115.	2.6	47
26	Visualizing Structural Transformation and Guest Binding in a Flexible Metalâ€“Organic Framework under High Pressure and Room Temperature. ACS Central Science, 2018, 4, 1194-1200.	11.3	46
27	Two rare indium-based porous metalâ€“metalloporphyrin frameworks exhibiting interesting CO2 uptake. CrystEngComm, 2013, 15, 9320.	2.6	45
28	In Operando Analysis of Diffusion in Porous Metalâ€Organic Framework Catalysts. Chemistry - A European Journal, 2019, 25, 3465-3476.	3.3	42
29	Inserting CO₂ into Aryl Câˆ’H Bonds of Metalâ€“Organic Frameworks: CO₂ Utilization for Direct Heterogeneous Câˆ’H Activation. Angewandte Chemie, 2016, 128, 5562-5566.	2.0	41
30	A new family of anionic organicâ€“inorganic hybrid doughnut-like nanostructures. Chemical Communications, 2015, 51, 9223-9226.	4.1	40
31	Quest for a highly connected robust porous metalâ€“organic framework on the basis of a bifunctional linker and a rare heptanuclear zinc cluster. Chemical Communications, 2013, 49, 10516.	4.1	35
32	Probing Substrate Diffusion in Interstitial MOF Chemistry with Kinetic Isotope Effects. Angewandte Chemie - International Edition, 2018, 57, 3676-3681.	13.8	34
33	Investigation of prototypal MOFs consisting of polyhedral cages with accessible Lewis-acid sites for quinoline synthesis. Chemical Communications, 2015, 51, 4827-4829.	4.1	33
34	An effective strategy to boost the robustness of metalâ€“organic frameworks via introduction of size-matching ligand braces. Chemical Communications, 2016, 52, 1971-1974.	4.1	33
35	A Stable Metalâ€“Organic Framework Featuring a Local Buffer Environment for Carbon Dioxide Fixation. Angewandte Chemie, 2018, 130, 4747-4752.	2.0	32
36	Sulfonoâ€Î³â€AApeptides as a New Class of Nonnatural Helical Foldamer. Chemistry - A European Journal, 2015, 21, 2501-2507.	3.3	30

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37	The diverse structures of Cd(ii) coordination polymers with 1,3,5-benzenetribenzoate tuned by organic bases. CrystEngComm, 2011, 13, 5825.	2.6	27
38	Reversible Switching between Highly Porous and Nonporous Phases of an Interpenetrated Diamondoid Coordination Network That Exhibits Gateâ€Opening at Methane Storage Pressures. Angewandte Chemie, 2018, 130, 5786-5791.	2.0	27
39	A Mixedâ€Metal Porphyrinic Framework Promoting Gasâ€Phase CO₂ Photoreduction without Organic Sacrificial Agents. ChemSusChem, 2020, 13, 6273-6277.	6.8	26
40	A new photoactive Ru(<scp>ii</scp>)tris(2,2â€²-bipyridine) templated Zn(<scp>ii</scp>) benzene-1,4-dicarboxylate metal organic framework: structure and photophysical properties. Dalton Transactions, 2015, 44, 5331-5337.	3.3	25
41	Open metal sites dangled on cobalt trigonal prismatic clusters within porous MOF for CO₂ capture. Inorganic Chemistry Frontiers, 2015, 2, 369-372.	6.0	23
42	Large Thermal Motion in Halide Perovskites. Scientific Reports, 2017, 7, 9401.	3.3	23
43	Measuring and Modulating Substrate Confinement during Nitrogen-Atom Transfer in a Ru₂-Based Metal-Organic Framework. Journal of the American Chemical Society, 2019, 141, 19203-19207.	13.7	21
44	Imparting BrÃ¸nsted acidity into a zeolitic imidazole framework. Inorganic Chemistry Frontiers, 2016, 3, 393-396.	6.0	19
45	Advanced Photoemission Spectroscopy Investigations Correlated with DFT Calculations on the Self-Assembly of 2D Metal Organic Frameworks Nano Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 31403-31412.	8.0	17
46	Investigation of a microporous iron(<scp>iii</scp>) porphyrin framework derived cathode catalyst in PEM fuel cells. Journal of Materials Chemistry A, 2016, 4, 15621-15630.	10.3	15
47	Templating metastable Pd2 carboxylate aggregates. Chemical Science, 2019, 10, 1823-1830.	7.4	15
48	Theoretical Insights into the Tuning of Metal Binding Sites of Paddlewheels in <i>rht</i>â€Metalâ€"Organic Frameworks. ChemPhysChem, 2015, 16, 3170-3179.	2.1	14
49	Two highly porous single-crystalline zirconium-based metal-organic frameworks. Science China Chemistry, 2016, 59, 980-983.	8.2	14
50	A Robust Metal-Metalloporphyrin Framework Based upon a Secondary Building Unit of Infinite Nickel Oxide Chain. Crystal Growth and Design, 2016, 16, 1005-1009.	3.0	14
51	Iodosylbenzene Coordination Chemistry Relevant to Metalâ€"Organic Framework Catalysis. Inorganic Chemistry, 2019, 58, 10543-10553.	4.0	14
52	The effect of surfactant-free TiO₂surface hydroxyl groups on physicochemical, optical and self-cleaning properties of developed coatings on polycarbonate. Journal Physics D: Applied Physics, 2013, 46, 505316.	2.8	13
53	Atomically Precise Crystalline Materials Based on Kinetically Inert Metal Ions via Reticular Mechanopolymerization. Angewandte Chemie - International Edition, 2020, 59, 10878-10883.	13.8	13
54	Beyond Custom Design of Organic Ligands: An Integrative Strategy for Metal-Organic Frameworks Design. Comments on Inorganic Chemistry, 2014, 34, 125-141.	5.2	12

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55	The synthesis of head-to-tail cyclic sulfono-Î³-AApeptides. Organic and Biomolecular Chemistry, 2015, 13, 672-676.	2.8	12
56	Probing Substrate Diffusion in Interstitial MOF Chemistry with Kinetic Isotope Effects. Angewandte Chemie, 2018, 130, 3738-3743.	2.0	12
57	Metallopolymerization as a Strategy to Translate Ligand-Modulated Chemoselectivity to Porous Catalysts. Organometallics, 2019, 38, 3436-3443.	2.3	9
58	Mechanochemistry of Group 4 Element-Based Metalâ€“Organic Frameworks. Inorganic Chemistry, 2021, 60, 16079-16084.	4.0	9
59	A lanthanide metal-organic framework based on a custom-designed macrocyclic ligand. Journal of Coordination Chemistry, 2016, 69, 1844-1851.	2.2	6
60	Leveraging Exchange Kinetics for the Synthesis of Atomically Precise Porous Catalysts. ChemCatChem, 2021, 13, 2117-2131.	3.7	6
61	A porous supramolecular ionic solid. Chemical Communications, 2021, 57, 7248-7251.	4.1	5
62	Synthesis of atomically precise single-crystalline Ru₂-based coordination polymers. Dalton Transactions, 2020, 49, 16077-16081.	3.3	3
63	Atomically Precise Crystalline Materials Based on Kinetically Inert Metal Ions via Reticular Mechanopolymerization. Angewandte Chemie, 2020, 132, 10970-10975.	2.0	3
64	Titelbild: Precise Molecular Fission and Fusion: Quantitative Self-Assembly and Chemistry of a Metallo-Cuboctahedron (Angew. Chem. 32/2015). Angewandte Chemie, 2015, 127, 9259-9259.	2.0	0