

# Dawei Zhang

## List of Publications by Year in descending order

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45  
papers

2,366  
citations

218677

26  
h-index

243625

44  
g-index

48  
all docs

48  
docs citations

48  
times ranked

2500  
citing authors

#	ARTICLE	IF	CITATIONS
1	Functional Capsules via Subcomponent Self-Assembly. <i>Accounts of Chemical Research</i> , 2018, 51, 2423-2436.	15.6	380
2	Metal-organic cages for molecular separations. <i>Nature Reviews Chemistry</i> , 2021, 5, 168-182.	30.2	227
3	Emergence of Hemicryptophanes: From Synthesis to Applications for Recognition, Molecular Machines, and Supramolecular Catalysis. <i>Chemical Reviews</i> , 2017, 117, 4900-4942.	47.7	160
4	Acid strength controlled reaction pathways for the catalytic cracking of 1-butene to propene over ZSM-5. <i>Journal of Catalysis</i> , 2014, 309, 136-145.	6.2	145
5	Selective Anion Extraction and Recovery Using a Fe <sup>II</sup> <sub>4</sub> L <sub>4</sub> Cage. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3717-3721.	13.8	117
6	Anion Binding in Water Drives Structural Adaptation in an Azaphosphatrane-Functionalized Fe <sup>II</sup> <sub>4</sub> L <sub>4</sub> Tetrahedron. <i>Journal of the American Chemical Society</i> , 2017, 139, 6574-6577.	13.7	94
7	One-Pot Conversion of Carbon Dioxide, Ethylene Oxide, and Amines to 3-Aryloxazolidinones Catalyzed with Binary Ionic Liquids. <i>ChemCatChem</i> , 2014, 6, 278-283.	3.7	87
8	Enantiopure [Cs <sup>+</sup> /Xe <sup>+</sup> ] <sub>2</sub> Cryptophane] <sub>2</sub> Fe <sup>II</sup> <sub>4</sub> L <sub>4</sub> Hierarchical Superstructures. <i>Journal of the American Chemical Society</i> , 2019, 141, 8339-8345.	13.7	83
9	Temperature Controls Guest Uptake and Release from Zn <sub>4</sub> L <sub>4</sub> Tetrahedra. <i>Journal of the American Chemical Society</i> , 2019, 141, 14534-14538.	13.7	74
10	Acid Strength Controlled Reaction Pathways for the Catalytic Cracking of 1-Pentene to Propene over ZSM-5. <i>ACS Catalysis</i> , 2015, 5, 4048-4059.	11.2	71
11	Selective Separation of Polyaromatic Hydrocarbons by Phase Transfer of Coordination Cages. <i>Journal of the American Chemical Society</i> , 2019, 141, 18949-18953.	13.7	70
12	Recent advances in H <sub>2</sub> PO <sub>4</sub> <sup>-</sup> fluorescent sensors. <i>RSC Advances</i> , 2014, 4, 29735-29749.	3.6	65
13	A proof-of-concept fluorescent strategy for highly selective detection of Cr(vi) based on inner filter effect using a hydrophilic ionic chemosensor. <i>Analytical Methods</i> , 2013, 5, 1669.	2.7	55
14	A Cavity-Tailored Metal-Organic Cage Entraps Gases Selectively in Solution and the Amorphous Solid State. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11789-11792.	13.8	49
15	Improved Acid Resistance of a Metal-Organic Cage Enables Cargo Release and Exchange between Hosts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7435-7438.	13.8	47
16	Transformation Network Culminating in a Heteroleptic Cd <sub>6</sub> L <sub>6</sub> L <sup>2+</sup> <sub>2</sub> Twisted Trigonal Prism. <i>Journal of the American Chemical Society</i> , 2020, 142, 9152-9157.	13.7	47
17	Selective Anion Extraction and Recovery Using a Fe <sup>II</sup> <sub>4</sub> L <sub>4</sub> Cage. <i>Angewandte Chemie</i> , 2018, 130, 3779-3783.	2.0	45
18	Novel benzimidazolium-urea-based macrocyclic fluorescent sensors: synthesis, ratiometric sensing of H <sub>2</sub> PO <sub>4</sub> <sup>-</sup> and improvement of the anion binding performance via a synergistic binding strategy. <i>Chemical Communications</i> , 2013, 49, 6149.	4.1	42

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19	Bioinspired Oxidation of Methane in the Confined Spaces of Molecular Cages. <i>Inorganic Chemistry</i> , 2019, 58, 7220-7228.	4.0	38
20	Acridine-based macrocyclic fluorescent sensors: self-assembly behavior characterized by crystal structures and a tunable bathochromic-shift in emission induced by H <sub>2</sub> PO <sub>4</sub> <sup>3-</sup> via adjusting the ring size and rigidity. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 3375.	2.8	37
21	Tailored oxido-vanadium(V) cage complexes for selective sulfoxidation in confined spaces. <i>Chemical Science</i> , 2017, 8, 789-794.	7.4	36
22	The immobilization of hydrophilic ionic liquid for Cr(VI) retention and chromium speciation. <i>Journal of Analytical Atomic Spectrometry</i> , 2010, 25, 1688.	3.0	35
23	Sterics and Hydrogen Bonding Control Stereochemistry and Self-Sorting in BINOL-Based Assemblies. <i>Journal of the American Chemical Society</i> , 2021, 143, 9009-9015.	13.7	35
24	A fluorescent heteroditopic hemicyptophane cage for the selective recognition of choline phosphate. <i>Chemical Communications</i> , 2015, 51, 2679-2682.	4.1	33
25	A bifunctional acridine-based fluorescent sensor: ratiometric sensing of H <sub>2</sub> O <sub>2</sub> and obvious fluorescence quenching towards H <sub>2</sub> O <sub>2</sub> and obvious fluorescence quenching towards H <sub>2</sub> O <sub>2</sub> . <i>Journal of Inorganic Chemistry</i> , 2013, 60, 10457-10462.	3.7	31
26	Helical, Axial, and Central Chirality Combined in a Single Cage: Synthesis, Absolute Configuration, and Recognition Properties. <i>Chemistry - A European Journal</i> , 2016, 22, 8038-8042.	3.3	27
27	Sulfoxidation inside a C <sub>3</sub> -Vanadium(V) Bowl-Shaped Catalyst. <i>ACS Catalysis</i> , 2017, 7, 7340-7345.	11.2	25
28	Large-Scale Synthesis of Enantiopure Molecular Cages: Chiroptical and Recognition Properties. <i>Chemistry - A European Journal</i> , 2016, 22, 2068-2074.	3.3	23
29	Templation and Concentration Drive Conversion Between a Fe <sub>12</sub> Pseudoicosahedron, a Fe <sub>4</sub> Tetrahedron, and a Fe <sub>2</sub> L <sub>3</sub> Helicate. <i>Journal of the American Chemical Society</i> , 2022, 144, 1106-1112.	13.7	21
30	“Breathing” Motion of a Modulable Molecular Cavity. <i>Chemistry - A European Journal</i> , 2017, 23, 6495-6498.	3.3	20
31	Synthesis, Resolution, and Absolute Configuration of Chiral Tris(2-pyridylmethyl)amine-Based Hemicyptophane Molecular Cages. <i>Journal of Organic Chemistry</i> , 2017, 82, 6082-6088.	3.2	18
32	N-Heterocyclic Carbene Formation Induced Fluorescent and Colorimetric Sensing of Fluoride Using Perimidinium Derivatives. <i>Chemistry - A European Journal</i> , 2014, 20, 17161-17167.	3.3	17
33	CO <sub>2</sub> atmosphere enables efficient catalytic hydration of ethylene oxide by ionic liquids/organic bases at low water/epoxide ratios. <i>Green Chemistry</i> , 2021, 23, 3386-3391.	9.0	15
34	Pyrene-appended, benzimidazolium-urea-based ratiometric fluorescent chemosensor for highly selective detecting of H <sub>2</sub> PO <sub>4</sub> <sup>3-</sup> . <i>Analytical Methods</i> , 2013, 5, 3222.	2.7	14
35	A viologen-urea-based anion receptor: Colorimetric sensing of dicarboxylate anions. <i>Chinese Chemical Letters</i> , 2013, 24, 688-690.	9.0	11
36	Microfabrication-free fused silica nanofluidic interface for on chip electrokinetic stacking of DNA. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 69-76.	2.2	11

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37	Improved Acid Resistance of a Metal-Organic Cage Enables Cargo Release and Exchange between Hosts. <i>Angewandte Chemie</i> , 2020, 132, 7505-7508.	2.0	11
38	Azaphosphatranes as Hydrogen-Bonding Organocatalysts for the Activation of Carbonyl Groups: Investigation of Lactide Ring-Opening Polymerization. <i>European Journal of Organic Chemistry</i> , 2016, 2016, 1619-1624.	2.4	10
39	Nanofracture on fused silica microchannel for Donnan exclusion based electrokinetic stacking of biomolecules. <i>Lab on A Chip</i> , 2012, 12, 3408.	6.0	9
40	A Cavity-Tailored Metal-Organic Cage Entraps Gases Selectively in Solution and the Amorphous Solid State. <i>Angewandte Chemie</i> , 2021, 133, 11895-11898.	2.0	9
41	Selective recognition of acetate ion by perimidinium-based receptors. <i>Tetrahedron Letters</i> , 2012, 53, 6292-6296.	1.4	8
42	Insights into the Complexity of Weak Intermolecular Interactions Interfering in Host-Guest Systems. <i>ChemPhysChem</i> , 2015, 16, 2931-2935.	2.1	6
43	Synthesis of Bis-benzimidazolium Cyclic Receptors and Their Anion Binding Properties. <i>Chinese Journal of Chemistry</i> , 2013, 31, 673-678.	4.9	5
44	Control over the Free Space within Poly(ionic liquid)s for Selective Adsorption of "Size-Matching" Dyes. <i>ACS Applied Polymer Materials</i> , 2020, 2, 4864-4873.	4.4	3
45	Self-assembly of a large, closed capsule reminiscent of protein-cage formation. <i>CheM</i> , 2022, 8, 902-904.	11.7	0