Kai Tao

List of Publications by Year
in descending order

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108	6,622	53794 45	66911 78
papers	citations	h-index	g-index

108	108	108	6483
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fmoc-modified amino acids and short peptides: simple bio-inspired building blocks for the fabrication of functional materials. Chemical Society Reviews, 2016, 45, 3935-3953.	38.1	366
2	Self-assembling peptide semiconductors. Science, 2017, 358, .	12.6	357
3	Design of a porous cobalt sulfide nanosheet array on Ni foam from zeolitic imidazolate frameworks as an advanced electrode for supercapacitors. Nanoscale, 2018, 10, 2735-2741.	5.6	253
4	Shish-kebab type MnCo2O4@Co3O4 nanoneedle arrays derived from MnCo-LDH@ZIF-67 for high-performance supercapacitors and efficient oxygen evolution reaction. Chemical Engineering Journal, 2018, 354, 875-884.	12.7	205
5	A Zinc Cobalt Sulfide Nanosheet Array Derived from a 2D Bimetallic Metalâ€“Organic Frameworks for Highâ€Performance Supercapacitors. Chemistry - A European Journal, 2018, 24, 12584-12591.	3.3	194
6	A metalâ€“organic framework derived hierarchical nickelâ€“cobalt sulfide nanosheet array on Ni foam with enhanced electrochemical performance for supercapacitors. Dalton Transactions, 2018, 47, 3496-3502.	3.3	188
7	Co3O4@CoNi-LDH core/shell nanosheet arrays for high-performance battery-type supercapacitors. Chemical Engineering Journal, 2018, 350, 551-558.	12.7	176
8	MOF-derived hierarchical double-shelled NiO/ZnO hollow spheres for high-performance supercapacitors. Dalton Transactions, 2016, 45, 13311-13316.	3.3	172
9	Enhanced photocatalytic performance of BiOBr/NH₂-MIL-125(Ti) composite for dye degradation under visible light. Dalton Transactions, 2016, 45, 17521-17529.	3.3	171
10	MOFâ€“derived hollow doubleâ€“shelled NiO nanospheres for highâ€“performance supercapacitors. Journal of Alloys and Compounds, 2018, 734, 1-8.	5.5	152
11	Photoactive properties of supramolecular assembled short peptides. Chemical Society Reviews, 2019, 48, 4387-4400.	38.1	150
12	Non-proteinaceous hydrolase comprised of a phenylalanine metallo-supramolecular amyloid-like structure. Nature Catalysis, 2019, 2, 977-985.	34.4	142
13	Formation of bimetallic metalâ€“organic framework nanosheets and their derived porous nickelâ€“cobalt sulfides for supercapacitors. Dalton Transactions, 2018, 47, 5639-5645.	3.3	127
14	Quantum confined peptide assemblies with tunable visible to near-infrared spectral range. Nature Communications, 2018, 9, 3217.	12.8	122
15	Ultrathin Ni-MOF nanosheet arrays grown on polyaniline decorated Ni foam as an advanced electrode for asymmetric supercapacitors with high energy density. Dalton Transactions, 2019, 48, 4119-4123.	3.3	122
16	Metal-Ion Modulated Structural Transformation of Amyloid-Like Dipeptide Supramolecular Self-Assembly. ACS Nano, 2019, 13, 7300-7309.	14.6	121
17	High performance ZIF-8 molecular sieve membrane on hollow ceramic fiber via crystallizing-rubbing seed deposition. Chemical Engineering Journal, 2013, 220, 1-5.	12.7	118
18	Construction of 2D ZIF-derived hierarchical and hollow NiCo-LDH â€œnanosheet-on-nanosheetâ€•arrays on reduced graphene oxide/Ni foam for boosted electrochemical energy storage. Journal of Alloys and Compounds, 2021, 850, 156864.	5.5	109

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19	ZIF-Derived Porous CoNi₂S₄ on Intercrosslinked Polypyrrole Tubes for High-Performance Asymmetric Supercapacitors. ACS Applied Energy Materials, 2021, 4, 4199-4207.	5.1	108
20	Ultrathin nanosheet-assembled hollow microplate CoMoO4 array derived from metal-organic framework for supercapacitor with ultrahigh areal capacitance. Journal of Power Sources, 2019, 430, 51-59.	7.8	98
21	In Situ Growth of Metalâ€“Organic Framework on BiOBr 2D Material with Excellent Photocatalytic Activity for Dye Degradation. Crystal Growth and Design, 2017, 17, 2309-2313.	3.0	97
22	Recent advances in metalâ€“organic framework-based electrode materials for supercapacitors. Dalton Transactions, 2021, 50, 11701-11710.	3.3	93
23	Facile Carbonization of Microporous Organic Polymers into Hierarchically Porous Carbons Targeted for Effective CO₂ Uptake at Low Pressures. ACS Applied Materials & Interfaces, 2016, 8, 18383-18392.	8.0	90
24	A hierarchical NiO/NiMn-layered double hydroxide nanosheet array on Ni foam for high performance supercapacitors. Dalton Transactions, 2017, 46, 7388-7391.	3.3	88
25	Hierarchical Two-Dimensional Conductive Metalâ€“Organic Framework/Layered Double Hydroxide Nanoarray for a High-Performance Supercapacitor. Inorganic Chemistry, 2018, 57, 6202-6205.	4.0	86
26	Construction of Ni-Co-Mn layered double hydroxide nanoflakes assembled hollow nanocages from bimetallic imidazolate frameworks for supercapacitors. Materials Research Bulletin, 2018, 106, 243-249.	5.2	83
27	Bioinspired Stable and Photoluminescent Assemblies for Power Generation. Advanced Materials, 2019, 31, e1807481.	21.0	82
28	Solvent-Controlled Morphology of Amino-Functionalized Bimetal Metalâ€“Organic Frameworks for Asymmetric Supercapacitors. Inorganic Chemistry, 2020, 59, 11385-11395.	4.0	82
29	Metalâ€“Organic Framework Templated 3D Hierarchical ZnCo₂O₄@Ni(OH)₂ Coreâ€“Shell Nanosheet Arrays for Highâ€Performance Supercapacitors. Chemistry - A European Journal, 2018, 24, 18106-18114.	3.3	79
30	Inlaying ZIF-derived Co3S4 hollow nanocages on intertwined polypyrrole tubes conductive networks for high-performance supercapacitors. Electrochimica Acta, 2020, 341, 136042.	5.2	73
31	Self-supported metalâ€“organic framework-based nanostructures as binder-free electrodes for supercapacitors. Nanoscale, 2022, 14, 2155-2166.	5.6	73
32	Construction of NiCo₂O₄ nanosheet-decorated leaf-like Co₃O₄ nanoarrays from metalâ€“organic framework for high-performance hybrid supercapacitors. Dalton Transactions, 2019, 48, 14156-14163.	3.3	72
33	Coreâ€“shell assembly of carbon nanofibers and a 2D conductive metalâ€“organic framework as a flexible free-standing membrane for high-performance supercapacitors. Inorganic Chemistry Frontiers, 2019, 6, 1824-1830.	6.0	70
34	Stable and optoelectronic dipeptide assemblies for power harvesting. Materials Today, 2019, 30, 10-16.	14.2	62
35	A hollow ceramic fiber supported ZIF-8 membrane with enhanced gas separation performance prepared by hot dip-coating seeding. Journal of Materials Chemistry A, 2013, 1, 13046.	10.3	60
36	Diphenylalanine-Derivative Peptide Assemblies with Increased Aromaticity Exhibit Metal-like Rigidity and High Piezoelectricity. ACS Nano, 2020, 14, 7025-7037.	14.6	59

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37	Zeolitic imidazolate framework-derived Co₃S₄@Co(OH)₂ nanoarrays as self-supported electrodes for asymmetric supercapacitors. Inorganic Chemistry Frontiers, 2019, 6, 1398-1404.	6.0	57
38	Controlled synthesis of Pdâ€"NiO@SiO₂ mesoporous coreâ€"shell nanoparticles and their enhanced catalytic performance for p-chloronitrobenzene hydrogenation with H₂. Catalysis Science and Technology, 2015, 5, 405-414.	4.1	56
39	In situ growth of ZIF-8 nanocrystals on layered double hydroxide nanosheets for enhanced CO₂ capture. Dalton Transactions, 2016, 45, 12632-12635.	3.3	55
40	Metalâ€Organic Frameworksâ€Derived Porous In₂O₃ Hollow Nanorod for Highâ€Performance Ethanol Gas Sensor. ChemistrySelect, 2017, 2, 10918-10925.	1.5	55
41	Influence of Ovalbumin on CaCO₃Precipitation duringin VitroBiomineralization. Journal of Physical Chemistry B, 2010, 114, 5301-5308.	2.6	50
42	Enhanced catalytic performance of molybdenum-doped mesoporous SBA-15 for metathesis of 1-butene and ethene to propene. Catalysis Science and Technology, 2014, 4, 4010-4019.	4.1	50
43	Hierarchical coreâ€"shell SiO₂@PDA@BiOBr microspheres with enhanced visible-light-driven photocatalytic performance. Dalton Transactions, 2017, 46, 11451-11458.	3.3	49
44	High-Efficiency Fluorescence through Bioinspired Supramolecular Self-Assembly. ACS Nano, 2020, 14, 2798-2807.	14.6	49
45	Co₃S₄ Nanoplate Arrays Decorated with Oxygen-Deficient CeO₂ Nanoparticles for Supercapacitor Applications. ACS Applied Nano Materials, 2021, 4, 3033-3043.	5.0	49
46	Design of Mo-doped cobalt sulfide hollow nanocages from zeolitic imidazolate frameworks as advanced electrodes for supercapacitors. Inorganic Chemistry Frontiers, 2019, 6, 2178-2184.	6.0	48
47	Short peptide-directed synthesis of one-dimensional platinum nanostructures with controllable morphologies. Scientific Reports, 2013, 3, 2565.	3.3	45
48	Hierarchical coreâ€"shell 2D MOF nanosheet hybrid arrays for high-performance hybrid supercapacitors. Dalton Transactions, 2021, 50, 8179-8188.	3.3	44
49	Piezoelectric Peptide and Metabolite Materials. Research, 2019, 2019, 9025939.	5.7	44
50	Engineering coordination polymer-derived one-dimensional porous S-doped Co₃O₄ nanorods with rich oxygen vacancies as high-performance electrode materials for hybrid supercapacitors. Dalton Transactions, 2020, 49, 10421-10430.	3.3	42
51	MOF-derived Bi₂O₃@C microrods as negative electrodes for advanced asymmetric supercapacitors. RSC Advances, 2020, 10, 14107-14112.	3.6	41
52	Development of platinum-based bimodal pore catalyst for CO2 reforming of CH4. Catalysis Today, 2010, 153, 150-155.	4.4	40
53	Fabrication of 2D/2D nanosheet heterostructures of ZIF-derived Co₃S₄ and g-C₃N₄ for asymmetric supercapacitors with superior cycling stability. Dalton Transactions, 2020, 49, 14017-14029.	3.3	40
54	Accelerated charge transfer in water-layered peptide assemblies. Energy and Environmental Science, 2020, 13, 96-101.	30.8	39

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55	Tanghulu-like NiO microcubes on Co3O4 nanowires arrays anchored on Ni foam with improved electrochemical performances for supercapacitors. Journal of Alloys and Compounds, 2018, 748, 496-503.	5.5	38
56	Conductive 2D Metalâ€Organic Frameworks Decorated on Layered Double Hydroxides Nanoflower Surface for Highâ€Performance Supercapacitor. ChemistrySelect, 2018, 3, 13596-13602.	1.5	35
57	Heterostructure of metalâ€“organic framework-derived straw-bundle-like CeO2 decorated with (Ni,) Tj ETQq1 1 0.784314 rgBT /Overlo	6.1	35
58	Chemical and spatial promotional effects of bimodal pore catalysts for methane dry reforming. Chemical Engineering Journal, 2011, 170, 258-263.	12.7	33
59	Stringing metalâ€“organic framework-derived hollow Co3S4 nanopolyhedra on V2O5 nanowires for high-performance supercapacitors. Applied Surface Science, 2022, 600, 154076.	6.1	33
60	Multiporous Supramolecular Microspheres for Artificial Photosynthesis. Chemistry of Materials, 2017, 29, 4454-4460.	6.7	32
61	Controllable In Situ Transformation of Layered Double Hydroxides into Ultrathin Metalâ€“Organic Framework Nanosheet Arrays for Energy Storage. Inorganic Chemistry, 2022, 61, 3832-3842.	4.0	32
62	Microwave-assisted synthesis of pillared Ni-based metalâ€“organic framework and its derived hierarchical NiO nanoparticles for supercapacitors. Journal of Materials Science: Materials in Electronics, 2018, 29, 14697-14704.	2.2	31
63	Cobalt-Borate Nanoarray: An Efficient and Durable Electrocatalyst for Water Oxidation under Benign Conditions. ACS Applied Materials & Interfaces, 2017, 9, 15383-15387.	8.0	30
64	Coreâ€“shell assembly of Co₃O₄@NiO-ZnO nanoarrays as battery-type electrodes for high-performance supercapatteries. Inorganic Chemistry Frontiers, 2019, 6, 2481-2487.	6.0	30
65	Metal-organic frameworks derived porous carbon coated SiO composite as superior anode material for lithium ion batteries. Journal of Alloys and Compounds, 2018, 765, 512-519.	5.5	29
66	NiCo₂S₄@Ni₃S₂ hybrid nanoarray on Ni foam for high-performance supercapacitors. New Journal of Chemistry, 2019, 43, 7344-7349.	2.8	29
67	Construction of S-doped ZnCo2O4 microspindles with enhanced electrochemical performance for supercapacitors. Vacuum, 2020, 181, 109740.	3.5	29
68	Construction of Hierarchical 2D PANI/Ni₃S₂ Nanosheet Arrays on Ni Foam for Highâ€Performance Asymmetric Supercapacitors. Batteries and Supercaps, 2020, 3, 370-375.	4.7	29
69	Boosting the energy storage performance of MOF-derived Co₃S₄ nanoarrays via sulfur vacancy and surface engineering. Chemical Communications, 2022, 58, 6243-6246.	4.1	29
70	MOF-derived hierarchical coreâ€“shell hollow Co₃S₄@NiCo₂O₄ nanosheet arrays for asymmetric supercapacitors. Dalton Transactions, 2022, 51, 4406-4413.	3.3	27
71	Optical property modulation of Fmoc group by pH-dependent self-assembly. RSC Advances, 2015, 5, 73914-73918.	3.6	25
72	Metal-Organosulfide Coordination Polymer Nanosheet Array as a Battery-Type Electrode for an Asymmetric Supercapacitor. Inorganic Chemistry, 2020, 59, 7360-7369.	4.0	25

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73	Solâ€“gel auto-combustion synthesis of Niâ€“CexZr1â^'xO2 catalysts for carbon dioxide reforming of methane. RSC Advances, 2013, 3, 22285.	3.6	24
74	Enhanced catalytic performance for metathesis reactions over ordered tungsten and aluminum co-doped mesoporous KIT-6 catalysts. New Journal of Chemistry, 2015, 39, 7971-7978.	2.8	24
75	Mechanically rigid supramolecular assemblies formed from an Fmoc-guanine conjugated peptide nucleic acid. Nature Communications, 2019, 10, 5256.	12.8	24
76	Design of trimetallic sulfide hollow nanocages from metalâ€“organic frameworks as electrode materials for supercapacitors. Dalton Transactions, 2021, 50, 15260-15266.	3.3	24
77	Enhanced Capacitance Performance by Coupling 2D Conductive Metalâ€“Organic Frameworks and Conducting Polymers for Hybrid Supercapacitors. ACS Applied Energy Materials, 2021, 4, 9534-9541.	5.1	24
78	Studying structure and dynamics of self-assembled peptide nanostructures using fluorescence and super resolution microscopy. Chemical Communications, 2017, 53, 7294-7297.	4.1	23
79	Controlled Preparation of Hollow and Porous Co₉S₈ Microplate Arrays for High-Performance Hybrid Supercapacitors. Inorganic Chemistry, 2020, 59, 11174-11183.	4.0	23
80	Precisely designing bimodal catalyst structure to trap cobalt nanoparticles inside mesopores and its application in Fischer-Tropsch synthesis. Chemical Engineering Journal, 2016, 306, 784-790.	12.7	22
81	MOF-assisted construction of a Co₉S₈@Ni₃S₂/ZnS microplate array with ultrahigh areal specific capacity for advanced supercapattery. Dalton Transactions, 2020, 49, 10535-10544.	3.3	22
82	Tandem catalytic conversion of 1-butene and ethene to propene over combined mesoporous W-FDU-12 and MgO catalysts. RSC Advances, 2015, 5, 23981-23989.	3.6	19
83	Bi₂S₃ nanorod-stacked hollow microtubes self-assembled from bismuth-based metalâ€“organic frameworks as advanced negative electrodes for hybrid supercapacitors. Dalton Transactions, 2019, 48, 9057-9061.	3.3	19
84	Bioinspired Supramolecular Packing Enables High Thermoâ€Sustainability. Angewandte Chemie - International Edition, 2020, 59, 19037-19041.	13.8	18
85	Interfacial adsorption of lipopeptidesurfactants at the silica/water interface studied by neutron reflection. Soft Matter, 2011, 7, 1777-1788.	2.7	17
86	Design of Controllable Bio-Inspired Chiroptic Self-Assemblies. Biomacromolecules, 2016, 17, 2937-2945.	5.4	17
87	Hollow and Hierarchical Cobaltâ€“Metal Organic Framework@CoCr₂O₄ Microplate Array as a Batteryâ€Type Electrode for Highâ€Performance Hybrid Supercapacitors. ChemElectroChem, 2020, 7, 437-444.	3.4	17
88	Controllable Transformation of Metalâ€“Organic Framework Nanosheets into Oxygen Vacancy Ni_xCo_{3â€“x}O₄ Arrays for Ultrahigh-Capacitance Supercapacitors with Long Lifespan. Inorganic Chemistry, 2022, 61, 4283-4291.	4.0	17
89	Zeolitic imidazolate framework derived ZnCo₂O₄ hollow tubular nanofibers for long-life supercapacitors. RSC Advances, 2020, 10, 13922-13928.	3.6	16
90	High-performance supercapacitors of Cu-based porous coordination polymer nanowires and the derived porous CuO nanotubes. Dalton Transactions, 2017, 46, 16821-16827.	3.3	15

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91	CO2 hydrogenation to methanol over Cu/ZnO catalysts synthesized via a facile solid-phase grinding process using oxalic acid. Korean Journal of Chemical Engineering, 2018, 35, 110-117.	2.7	15
92	Self-Assembly of Cyclic Dipeptides: Platforms for Functional Materials. Protein and Peptide Letters, 2020, 27, 688-697.	0.9	15
93	Metathesis of 1-butene and ethene to propene over mesoporous W-KIT-6 catalysts: the influence of Si/W ratio. Journal of Porous Materials, 2015, 22, 613-620.	2.6	13
94	Metalâ€“Organic Framework-Derived Bi₂O₃/C and NiCo₂S₄ Hollow Nanofibers for Asymmetric Supercapacitors. ACS Applied Nano Materials, 2021, 4, 11895-11906.	5.0	13
95	Mesoporous Ni2CoS4 electrode materials derived from coordination polymer bricks for high-performance supercapacitor. Journal of Solid State Chemistry, 2019, 271, 239-245.	2.9	11
96	Enhanced Hydrogen Production from Steam Reforming of Vegetable Oil over Bimodal ZrO₂â€“SiO₂ Supported Ni Catalyst. ChemistrySelect, 2017, 2, 527-532.	1.5	10
97	A Self-Bleaching Electrochromic Mirror Based on Metal Organic Frameworks. Materials, 2021, 14, 2771.	2.9	10
98	Transformation of Au3M/SiO2 (MÂ=ÂNi, Co, Fe) into Auâ€“MO x /SiO2 Catalysts for the Reduction of p-Nitrophenol. Catalysis Letters, 2014, 144, 1001-1008.	2.6	9
99	Entropy Method for Structural Health Monitoring Based on Statistical Cause and Effect Analysis of Acoustic Emission and Vibration Signals. IEEE Access, 2019, 7, 172515-172525.	4.2	9
100	Entropic Phase Transitions with Stable Twisted Intermediates of Bioâ€Inspired Selfâ€Assembly. Chemistry - A European Journal, 2016, 22, 15237-15241.	3.3	8
101	Preparation of Polydopamine-Modified 3D Interconnected Macroporous Silica for Laccase Immobilization. Macromolecular Research, 2018, 26, 616-622.	2.4	7
102	Bioinspired Suprahelical Frameworks as Scaffolds for Artificial Photosynthesis. ACS Applied Materials & Interfaces, 2020, 12, 45192-45201.	8.0	7
103	An anthropomorphic fuzzy model for the time-spatial assessment of sandstone seepage damage. Automation in Construction, 2020, 109, 102989.	9.8	6
104	Modulating vectored non-covalent interactions for layered assembly with engineerable properties. Bio-Design and Manufacturing, 2022, 5, 529-539.	7.7	6
105	Controllable Phase Separation by Boc-Modified Lipophilic Acid as a Multifunctional Extractant. Scientific Reports, 2015, 5, 17509.	3.3	4
106	Preparation of Hierarchical Porous Sâ€1/silica Monoliths by Steaming Crystallization. ChemistrySelect, 2019, 4, 3741-3744.	1.5	4
107	EDTA-mimicking amino acidâ€“metal ion coordination for multifunctional packings. Journal of Materials Chemistry A, 2021, 9, 20385-20394.	10.3	4
108	Bioinspired Supramolecular Packing Enables High Thermoâ€Sustainability. Angewandte Chemie, 2020, 132, 19199-19203.	2.0	2