Zhong Cao

List of Publications by Year in descending order

109 papers	4,561 citations	101543 36 h-index	110387 64 g-index
111 all docs	111 docs citations	111 times ranked	3248 citing authors

#	Article	IF	Citations
1	Recent advances of 1,2,3,5-tetrakis(carbazol-9-yl)-4,6-dicyanobenzene (4CzIPN) in photocatalytic transformations. Chemical Communications, 2019, 55, 5408-5419.	4.1	423
2	Ultrasound-promoted BrÃ¸nsted acid ionic liquid-catalyzed hydrothiocyanation of activated alkynes under minimal solvent conditions. Green Chemistry, 2018, 20, 3683-3688.	9.0	203
3	Visible-light-induced deoxygenative C2-sulfonylation of quinoline N-oxides with sulfinic acids. Green Chemistry, 2019, 21, 3858-3863.	9.0	175
4	A base-free, ultrasound accelerated one-pot synthesis of 2-sulfonylquinolines in water. Green Chemistry, 2017, 19, 5642-5646.	9.0	153
5	Visible-light-induced decarboxylative acylation of quinoxalin-2(1H)-ones with Î±-oxo carboxylic acids under metal-, strong oxidant- and external photocatalyst-free conditions. Green Chemistry, 2020, 22, 1720-1725.	9.0	145
6	Metal-free deoxygenative sulfonylation of quinoline N-oxides with sodium sulfinates via a dual radical coupling process. Organic Chemistry Frontiers, 2018, 5, 2604-2609.	4.5	135
7	Visible-Light-Initiated Decarboxylative Alkylation of Quinoxalin-2(1H)-ones with Phenyliodine(III) Dicarboxylates in Recyclable Ruthenium(II) Catalytic System. ACS Sustainable Chemistry and Engineering, 2019, 7, 14153-14160.	6.7	130
8	CaCl2Â·6H2O/Expanded graphite composite as form-stable phase change materials for thermal energy storage. Journal of Thermal Analysis and Calorimetry, 2014, 115, 111-117.	3.6	116
9	The concept of dual roles design in clean organic preparation. Chinese Chemical Letters, 2019, 30, 2132-2138.	9.0	114
10	Metal-free C3-alkoxycarbonylation of quinoxalin-2(1H)-ones with carbazates as ecofriendly ester sources. Science China Chemistry, 2019, 62, 460-464.	8.2	110
11	Visible-light-promoted direct Câ€“H/Sâ€“H cross-coupling of quinoxalin-2(1H)-ones with thiols leading to 3-sulfenylated quinoxalin-2(1H)-ones in air. Organic Chemistry Frontiers, 2019, 6, 3950-3955.	4.5	107
12	Selective oxidation of (hetero)sulfides with molecular oxygen under clean conditions. Green Chemistry, 2020, 22, 433-438.	9.0	102
13	Visible-light-initiated tandem synthesis of difluoromethylated oxindoles in 2-MeTHF under additive-, metal catalyst-, external photosensitizer-free and mild conditions. Chinese Chemical Letters, 2021, 32, 1907-1910.	9.0	100
14	Aryl acyl peroxides for visible-light induced decarboxylative arylation of quinoxalin-2(1H)-ones under additive-, metal catalyst-, and external photosensitizer-free and ambient conditions. Green Chemistry, 2021, 23, 374-378.	9.0	99
15	Visible-light-initiated malic acid-promoted cascade coupling/cyclization of aromatic amines and KSCN to 2-aminobenzothiazoles without photocatalyst. Chinese Chemical Letters, 2020, 31, 1895-1898.	9.0	98
16	Sustainable routes for quantitative green selenocyanation of activated alkynes. Chinese Chemical Letters, 2019, 30, 1237-1240.	9.0	96
17	In situ formation of fluorescent copper nanoparticles for ultrafast zero-background Cu 2+ detection and its toxicides screening. Biosensors and Bioelectronics, 2016, 78, 471-476.	10.1	87
18	C(sp2)â€“H/Oâ€“H cross-dehydrogenative coupling of quinoxalin-2(1H)-ones with alcohols under visible-light photoredox catalysis. Chinese Journal of Catalysis, 2020, 41, 1168-1173.	14.0	87

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19	Synergistic cooperative effect of CF₃SO₂Na and bis(2-butoxyethyl)ether towards selective oxygenation of sulfides with molecular oxygen under visible-light irradiation. Green Chemistry, 2021, 23, 496-500.	9.0	86
20	Sustainable electrochemical cross-dehydrogenative coupling of 4-quinolones and diorganyl diselenides. Chinese Journal of Catalysis, 2021, 42, 1445-1450.	14.0	86
21	TsCl-promoted sulfonylation of quinoline N-oxides with sodium sulfinates in water. Chinese Chemical Letters, 2019, 30, 2287-2290.	9.0	78
22	Clean Preparation of Quinolin-2-yl Substituted Ureas in Water. ACS Sustainable Chemistry and Engineering, 2019, 7, 7193-7199.	6.7	75
23	The clean preparation of multisubstituted pyrroles under metal- and solvent-free conditions. Green Chemistry, 2020, 22, 118-122.	9.0	68
24	Practical and sustainable approach for clean preparation of 5-organylselanyl uracils. Chinese Chemical Letters, 2021, 32, 475-479.	9.0	66
25	Visible-Light-Initiated Cross-Dehydrogenative Coupling of Quinoxalin-2(1H)-ones and Simple Amides with Air as an Oxidant. ACS Sustainable Chemistry and Engineering, 2019, 7, 19993-19999.	6.7	64
26	Iodine-Catalyzed Odorless Synthesis of S-Thiocarbamates with Sulfonyl Chlorides as a Sulfur Source. Journal of Organic Chemistry, 2019, 84, 6065-6071.	3.2	62
27	Clean preparation of S-thiocarbamates with in situ generated hydroxide in 2-methyltetrahydrofuran. Chinese Chemical Letters, 2019, 30, 2259-2262.	9.0	56
28	A Dualâ€Response DNA Probe for Simultaneously Monitoring Enzymatic Activity and Environmental pH Using a Nanopore. Angewandte Chemie - International Edition, 2019, 58, 14929-14934.	13.8	50
29	Metalâ€Free C3 Hydroxylation of Quinoxalinâ€2(1 H)â€ones in Water. Advanced Synthesis and Catalysis, 2019, 361, 5721-5726.	4.3	50
30	Clean Oxidation of (Hetero)benzylic C_{sp3}â€“H Bonds with Molecular Oxygen. ACS Sustainable Chemistry and Engineering, 2019, 7, 10293-10298.	6.7	49
31	Rapid and selective DNA-based detection of melamine using Î±-hemolysin nanopores. Analyst, The, 2018, 143, 2411-2415.	3.5	44
32	Determination of trace nitrite in pickled food with a nano-composite electrode by electrodepositing ZnO and Pt nanoparticles on MWCNTs substrate. LWT - Food Science and Technology, 2015, 64, 663-670.	5.2	43
33	Molecular Engineering of Î±-Substituted Acrylate Ester Template for Efficient Fluorescence Probe of Hydrogen Polysulfides. Analytical Chemistry, 2018, 90, 881-887.	6.5	43
34	Solvent-dependent selective oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid under neat conditions. Chinese Chemical Letters, 2019, 30, 2304-2308.	9.0	43
35	Modification research of LiAlO2-coated LiNi0.8Co0.1Mn0.1O2 as a cathode material for lithium-ion battery. Ionics, 2018, 24, 91-98.	2.4	42
36	Research Progress on the Surface of High-Nickel Nickelâ€“Cobaltâ€“Manganese Ternary Cathode Materials: A Mini Review. Frontiers in Chemistry, 2020, 8, 761.	3.6	38

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37	Preparation, morphology and thermal properties of microencapsulated palmitic acid phase change material with polyaniline shells. Journal of Thermal Analysis and Calorimetry, 2017, 129, 1583-1592.	3.6	37
38	Ultrasound-assisted tandem synthesis of tri- and tetra-substituted pyrrole-2-carbonitriles from alkenes, TMSCN and N,N-disubstituted formamides. Chinese Chemical Letters, 2020, 31, 3241-3244.	9.0	37
39	Electrochemical Synthesis of Î±-Ketoamides under Catalyst-, Oxidant-, and Electrolyte-Free Conditions. Organic Letters, 2020, 22, 2206-2209.	4.6	37
40	Selective and sensitive detection of picric acid based on a water-soluble fluorescent probe. RSC Advances, 2016, 6, 38328-38331.	3.6	35
41	Effects of some nucleating agents on the supercooling of erythritol to be applied as phase change material. Journal of Thermal Analysis and Calorimetry, 2017, 129, 1291-1299.	3.6	35
42	Enhanced Electrochemical Properties of Polyaniline-Coated LiNi0.8Co0.1Mn0.1O2 Cathode Material for Lithium-Ion Batteries. Journal of Electronic Materials, 2018, 47, 5896-5904.	2.2	35
43	Measuring Binding Constants of Cucurbituril-Based Hostâ€“Guest Interactions at the Single-Molecule Level with Nanopores. ACS Sensors, 2019, 4, 774-779.	7.8	35
44	Highly sensitive determination of L-tyrosine in pig serum based on ultrathin CuS nanosheets composite electrode. Biosensors and Bioelectronics, 2019, 140, 111356.	10.1	32
45	Preparation and thermal properties of palmitic acid/polyaniline/copper nanowires form-stable phase change materials. Journal of Thermal Analysis and Calorimetry, 2014, 115, 1133-1141.	3.6	31
46	Enzymatic cascade based fluorescent DNAzyme machines for the ultrasensitive detection of Cu(II) ions. Biosensors and Bioelectronics, 2014, 60, 112-117.	10.1	31
47	An electrochemical impedimetric sensing platform based on a peptide aptamer identified by high-throughput molecular docking for sensitive l-arginine detection. Bioelectrochemistry, 2021, 137, 107634.	4.6	31
48	Highly cysteine-selective fluorescent nanoprobes based on ultrabright and directly synthesized carbon quantum dots. Analytical and Bioanalytical Chemistry, 2018, 410, 2961-2970.	3.7	28
49	A Novel Fluorescent Probe for Copper Ions Based on Polymer-modified CdSe/CdS Core/Shell Quantum Dots. Analytical Sciences, 2011, 27, 643-647.	1.6	26
50	Programmable DNA triple-helix molecular switch in biosensing applications: from in homogenous solutions to in living cells. Chemical Communications, 2017, 53, 2507-2510.	4.1	25
51	Sensitive Determination of Toxic Clenbuterol in Pig Meat and Pig Liver Based on a Carbon Nanopolymer Composite. Food Analytical Methods, 2017, 10, 2252-2261.	2.6	24
52	Sensitive surface plasmon resonance detection of methyltransferase activity and screening of its inhibitors amplified by p53 protein bound to methylation-specific ds-DNA consensus sites. Biosensors and Bioelectronics, 2019, 126, 269-274.	10.1	23
53	1,2-Diethoxyethane catalyzed oxidative cleavage of gem-disubstituted aromatic alkenes to ketones under minimal solvent conditions. Chinese Chemical Letters, 2020, 31, 1868-1872.	9.0	22
54	Telomerase-triggered DNAzyme spiders for exponential amplified assay of cancer cells. Biosensors and Bioelectronics, 2019, 144, 111692.	10.1	21

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55	Ultrasensitive detection of thiophenol based on a water-soluble pyrenyl probe. Talanta, 2018, 185, 146-150.	5.5	20
56	Synthesis of Yolkâ€“Shell-Structured Si@C Nanocomposite Anode Material for Lithium-Ion Battery. Journal of Electronic Materials, 2018, 47, 6311-6318.	2.2	19
57	Molecular iodine-catalyzed multicomponent synthesis of Î±-cyanopyrrolines with ambient air as the oxidant under neat conditions. Organic Chemistry Frontiers, 2020, 7, 4026-4030.	4.5	18
58	Highly Selective Adsorption and Recovery of Palladium from Spent Catalyst Wastewater by 1,4,7,10-Tetraazacyclododecane-Modified Mesoporous Silica. ACS Sustainable Chemistry and Engineering, 2022, 10, 1103-1114.	6.7	18
59	Approach Based on Polyelectrolyte-Induced Nanoassemblies for Enhancing Sensitivity of Pyrenyl Probes. Analytical Chemistry, 2016, 88, 10605-10610.	6.5	17
60	Heat capacities and thermodynamic properties of MgBTC. Journal of Thermal Analysis and Calorimetry, 2010, 101, 365-370.	3.6	16
61	Effect of Zr doping and Li2O-2B2O3 layer on the structural electrochemical properties of LiNi0.5Co0.2Mn0.3O2 cathode material: experiments and first-principle calculations. Ionics, 2019, 25, 2017-2026.	2.4	16
62	A Target-Lighted dsDNA-Indicator for High-Performance Monitoring of Mercury Pollution and Its Antagonists Screening. Environmental Science & Technology, 2017, 51, 11884-11890.	10.0	15
63	Intrinsically fluorescent and highly functionalized polymer nanoparticles as probes for the detection of zinc and pyrophosphate ions in rabbit serum samples. Talanta, 2018, 188, 203-209.	5.5	15
64	Pyridyl derivatives provide new pathways for labeling protein with fac-[188Re(CO)3(H2O)3]+. Journal of Radioanalytical and Nuclear Chemistry, 2009, 281, 493-499.	1.5	14
65	Heat capacities and thermodynamic properties of MgNDC. Journal of Thermal Analysis and Calorimetry, 2011, 103, 365-372.	3.6	14
66	Direct Detection of Nucleic Acid with Minimizing Background and Improving Sensitivity Based on a Conformation-Discriminating Indicator. ACS Sensors, 2017, 2, 1198-1204.	7.8	14
67	Heat capacities and thermodynamic properties of one manganese-based MOFs. Journal of Thermal Analysis and Calorimetry, 2010, 102, 1161-1166.	3.6	13
68	Simple and rapid mercury ion selective electrode based on 1-undecanethiol assembled Au substrate and its recognition mechanism. Materials Science and Engineering C, 2017, 72, 26-33.	7.3	13
69	Hybridization chain reaction based DNAzyme fluorescent sensor for <scp>l</scp>-histidine assay. Analytical Methods, 2019, 11, 2204-2210.	2.7	12
70	Energy Storage and Thermostability of Li3VO4-Coated LiNi0.8Co0.1Mn0.1O2 as Cathode Materials for Lithium Ion Batteries. Frontiers in Chemistry, 2018, 6, 546.	3.6	11
71	Real-time surface plasmon resonance monitoring of site-specific phosphorylation of p53 protein and its interaction with MDM2 protein. Analyst, The, 2019, 144, 6033-6040.	3.5	11
72	Copper(<scp>i</scp>)-catalyzed intermolecular cyanoarylation of alkenes: convenient access to Î±-alkylated arylacetonitriles. Organic and Biomolecular Chemistry, 2020, 18, 5234-5237.	2.8	11

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73	Visibleâ€Lightâ€Initiated Cascade Reaction of 2â€Isothiocyanatonaphthalenes and Amines under Additiveâ€and External Photocatalystâ€Free and Mild Conditions. Advanced Synthesis and Catalysis, 2021, 363, 757-761.	4.3	11
74	Preparation of S-Containing Aminophosphine and Phosphoramidite Ligands and Their Applications in Enantioselective Câ€“C Bond Forming Reactions. Catalysis Letters, 2010, 136, 243-248.	2.6	10
75	Heat capacities and thermodynamic properties of M(HBTC)(4,4â€²-bipy)Â·3DMF (MÂ=ÂNi and Co). Journal of Thermal Analysis and Calorimetry, 2012, 110, 949-954.	3.6	10
76	Thermoeletrochemical study on LiNi0.8Co0.1Mn0.1O2 with in situ modification of Li2ZrO3. Ionics, 2018, 24, 3325-3335.	2.4	10
77	DSN/TdT recycling digestion based cyclic amplification strategy for microRNA assay. Talanta, 2020, 219, 121173.	5.5	10
78	An <scp>Enzymeâ€Free</scp> Amperometric Sensor Based on <scp>Selfâ€Assembling Ferroceneâ€Conjugated</scp> Oligopeptide for Specific Determination of <scp>Lâ€Arginine</scp>. Chinese Journal of Chemistry, 2021, 39, 2755-2762.	4.9	10
79	Preliminary Recognition of c-Myc Gene Protein Using an Optical Biosensor with Gold Colloid Nanoparticles Based on Localized Surface Plasmon Resonance. Analytical Letters, 2009, 42, 2820-2837.	1.8	9
80	Synthesize, crystal structure, heat capacities and thermodynamic properties of a potential enantioselective catalyst. Journal of Thermal Analysis and Calorimetry, 2011, 105, 961-968.	3.6	9
81	Dual-channel surface plasmon resonance monitoring of intracellular levels of the p53-MDM2 complex and caspase-3 induced by MDM2 antagonist Nutlin-3. Analyst, The, 2019, 144, 3959-3966.	3.5	9
82	Enhanced electrochemical properties of Ni-rich LiNi0.8Co0.1Mn0.1O2 by SnO2 coating under high cutoff voltage. Ionics, 2020, 26, 2681-2688.	2.4	9
83	Improved dehydrogenation/rehydrogenation performance of LiBH4 by doping mesoporous Fe2O3 or/and TiF3. Journal of Thermal Analysis and Calorimetry, 2013, 112, 1407-1414.	3.6	8
84	Estimation of temperature distribution of LiFePO4 lithium ion battery during chargeâ€“discharge process. Ionics, 2016, 22, 1517-1525.	2.4	8
85	Thermodynamic and thermal energy storage properties of a new medium-temperature phase change material. Journal of Thermal Analysis and Calorimetry, 2019, 135, 3171-3179.	3.6	8
86	A Dualâ€Response DNA Probe for Simultaneously Monitoring Enzymatic Activity and Environmental pH Using a Nanopore. Angewandte Chemie, 2019, 131, 15071-15076.	2.0	8
87	Sensitive fluorescence and visual detection of organophosphorus pesticides with a Ru(bpy)₃²⁺â€“ZIF-90â€“MnO₂ sensing platform. Analytical Methods, 2021, 13, 2981-2988.	2.7	8
88	Electrochemical Multicomponent Synthesis of Î±-Ketoamides from Î±-Oxocarboxylic Acids, Isocyanides and Water. Chinese Journal of Organic Chemistry, 2021, 41, 4712.	1.3	8
89	Cleaved DNAzyme substrate induced enzymatic cascade for the exponential amplified analysis of l-histidine. Talanta, 2015, 132, 809-813.	5.5	7
90	Core-shell structure LiNi0.8Co0.1Mn0.1O2 cathode material with improved electrochemical performance at high voltage. Ionics, 2021, 27, 949-959.	2.4	7

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91	Synthesis and Crystal Structure of [Ni(L)(Phen)(H2O)]Â·3.75H2O. Journal of Chemical Crystallography, 2010, 40, 761-764.	1.1	6
92	DNA-templated copper nanoclusters obtained via TdT isothermal nucleic acid amplification for mercury(<scp>ii</scp>) assay. Analytical Methods, 2019, 11, 4165-4172.	2.7	6
93	Mesoporous Si/C composite anode material: experiments and first-principles calculations. Ionics, 2020, 26, 589-599.	2.4	6
94	A solvent-assisted ESIPT fluorescent dye for Fâ˜†/Ag+ sensing and high-resolution imaging of the cilia in live cells. Analytical and Bioanalytical Chemistry, 2021, 413, 6343-6353.	3.7	6
95	A simple and effective strategy for detecting artemisinin based on oxidative cyclization of vitamin B₁ eliciting fluorescence turn-on. Analytical Methods, 2019, 11, 88-96.	2.7	5
96	Dual-modification of WO3-coating and Mg-doping on LiNi0.8Co0.1Mn0.1O2 cathodes for enhanced electrochemical performance at high voltage. Ionics, 2021, 27, 1909-1917.	2.4	5
97	A new group contribution-based method for estimation of flash point temperature of alkanes. Journal of Central South University, 2015, 22, 30-36.	3.0	4
98	Polymer nanoparticles integrated with ESIPT modules for sensing cysteine based on modulation of their tautomeric emission. Analytical Methods, 2019, 11, 3714-3720.	2.7	4
99	Intrinsically ESIPT-exhibiting and enhanced emission in polymer nanoparticles as signaling for sensing nitrite. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 226, 117654.	3.9	4
100	Sensitive and selective monitoring of the DNA damage-induced intracellular p21 protein and unraveling the role of the p21 protein in DNA repair and cell apoptosis by surface plasmon resonance. Analyst, The, 2020, 145, 3697-3704.	3.5	4
101	Molecule counting with alkanethiol and DNA immobilized on gold microplates for extended gate FET. Materials Science and Engineering C, 2013, 33, 1481-1490.	7.3	3
102	Thermal properties characterization of two promising phase change material candidates. Journal of Thermal Analysis and Calorimetry, 2017, 129, 189-199.	3.6	3
103	Novel fluorescence sensor based on covalent immobilization of 3-amino-9-ethylcarbazole via electrostatically assembled gold nanoparticle layer. Central South University, 2009, 16, 212-217.	0.5	2
104	Cyanidin-horseradish peroxidase-hydroperoxide reaction system and its application in enzymelinked immunosensing assays. Science in China Series B: Chemistry, 2009, 52, 1142-1147.	0.8	2
105	Heat capacities and thermodynamic properties of Ni9(btz)12(DMA)6(NO3)6. Journal of Thermal Analysis and Calorimetry, 2013, 111, 1603-1608.	3.6	2
106	Thermo-electrochemical study of co-modified Li2O-2B2O3-(LiNi0.5Co0.2Mn0.3)0.98Zr0.02O2 cathode material. Ionics, 2020, 26, 673-681.	2.4	2
107	Research on alternative teaching means for culture introduction. , 2010, , .		0
108	Preliminary exploration on bilingual instruction mode and orientation based on internationalization. , 2010, , .		0

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109	Determination of trace sodium in water from high-parameter power plant with fluorescent spectrometry. , 2010, , .		0