Hui Huang

List of Publications by Year
in descending order

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207	27,413	10956 71	5663 162
papers	citations	h-index	g-index

208	208	208	23870
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Metal-free efficient photocatalyst for stable visible water splitting via a two-electron pathway. Science, 2015, 347, 970-974.	6.0	3,803
2	Carbon nanodots: synthesis, properties and applications. Journal of Materials Chemistry, 2012, 22, 24230.	6.7	2,339
3	Waterâ€Soluble Fluorescent Carbon Quantum Dots and Photocatalyst Design. Angewandte Chemie - International Edition, 2010, 49, 4430-4434.	7.2	2,258
4	A graphene quantum dot photodynamic therapy agent with high singlet oxygen generation. Nature Communications, 2014, 5, 4596.	5.8	1,141
5	One-step ultrasonic synthesis of water-soluble carbon nanoparticles with excellent photoluminescent properties. Carbon, 2011, 49, 605-609.	5.4	783
6	Large scale electrochemical synthesis of high quality carbon nanodots and their photocatalytic property. Dalton Transactions, 2012, 41, 9526.	1.6	684
7	Carbon quantum dots/Ag3PO4 complex photocatalysts with enhanced photocatalytic activity and stability under visible light. Journal of Materials Chemistry, 2012, 22, 10501.	6.7	676
8	High Efficiency Photocatalytic Water Splitting Using 2D Î±â€Fe₂O₃/gâ€C₃N₄ Zâ€Scheme Catalysts. Advanced Energy Materials, 2017, 7, 1700025.	10.2	664
9	One-step ultrasonic synthesis of fluorescent N-doped carbon dots from glucose and their visible-light sensitive photocatalytic ability. New Journal of Chemistry, 2012, 36, 861.	1.4	493
10	Carbon Quantum Dot/NiFe Layered Double-Hydroxide Composite as a Highly Efficient Electrocatalyst for Water Oxidation. ACS Applied Materials & Interfaces, 2014, 6, 7918-7925.	4.0	440
11	C₃Nâ€”A 2D Crystalline, Holeâ€Free, Tunableâ€Narrowâ€Bandgap Semiconductor with Ferromagnetic Properties. Advanced Materials, 2017, 29, 1605625.	11.1	350
12	Carbon quantum dots/Cu2O composites with protruding nanostructures and their highly efficient (near) infrared photocatalytic behavior. Journal of Materials Chemistry, 2012, 22, 17470.	6.7	322
13	Fe2O3/carbon quantum dots complex photocatalysts and their enhanced photocatalytic activity under visible light. Dalton Transactions, 2011, 40, 10822.	1.6	304
14	Coupling surface plasmon resonance of gold nanoparticles with slow-photon-effect of TiO2 photonic crystals for synergistically enhanced photoelectrochemical water splitting. Energy and Environmental Science, 2014, 7, 1409.	15.6	288
15	Near-infrared light controlled photocatalytic activity of carbon quantum dots for highly selective oxidation reaction. Nanoscale, 2013, 5, 3289.	2.8	283
16	Carbon quantum dot sensitized TiO2 nanotube arrays for photoelectrochemical hydrogen generation under visible light. Nanoscale, 2013, 5, 2274.	2.8	281
17	Carbon dots as solid-state electron mediator for BiVO4/CDs/CdS Z-scheme photocatalyst working under visible light. Applied Catalysis B: Environmental, 2017, 206, 501-509.	10.8	270
18	Facile microwave synthesis of a Z-scheme imprinted ZnFe2O4/Ag/PEDOT with the specific recognition ability towards improving photocatalytic activity and selectivity for tetracycline. Chemical Engineering Journal, 2018, 337, 228-241.	6.6	246

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19	Degradable Carbon Dots with Broad-Spectrum Antibacterial Activity. ACS Applied Materials & Interfaces, 2018, 10, 26936-26946.	4.0	246
20	Facile fabrication of a CoO/g-C₃N₄ pâ€“n heterojunction with enhanced photocatalytic activity and stability for tetracycline degradation under visible light. Catalysis Science and Technology, 2017, 7, 3325-3331.	2.1	224
21	Carbon dots enhance the stability of CdS for visible-light-driven overall water splitting. Applied Catalysis B: Environmental, 2017, 216, 114-121.	10.8	217
22	Study on highly enhanced photocatalytic tetracycline degradation of type â…¡ AgI/CuBi2O4 and Z-scheme AgBr/CuBi2O4 heterojunction photocatalysts. Journal of Hazardous Materials, 2018, 349, 111-118.	6.5	213
23	Advances in carbon dots: from the perspective of traditional quantum dots. Materials Chemistry Frontiers, 2020, 4, 1586-1613.	3.2	208
24	A metal-free photocatalyst for highly efficient hydrogen peroxide photoproduction in real seawater. Nature Communications, 2021, 12, 483.	5.8	193
25	Bioinspired Bifunctional Membrane for Efficient Clean Water Generation. ACS Applied Materials & Interfaces, 2016, 8, 772-779.	4.0	187
26	Carbon dots promote the growth and photosynthesis of mung bean sprouts. Carbon, 2018, 136, 94-102.	5.4	182
27	Construction of CDs/CdS photocatalysts for stable and efficient hydrogen production in water and seawater. Applied Catalysis B: Environmental, 2019, 242, 178-185.	10.8	174
28	Carbon quantum dots enhance the photocatalytic performance of BiVO4 with different exposed facets. Dalton Transactions, 2013, 42, 6285.	1.6	164
29	Fluorescent N-doped carbon dots for both cellular imaging and highly-sensitive catechol detection. Carbon, 2015, 91, 66-75.	5.4	161
30	Carbon dots/g-C3N4/ZnO nanocomposite as efficient visible-light driven photocatalyst for tetracycline total degradation. Separation and Purification Technology, 2017, 173, 295-303.	3.9	156
31	Reducing the charging voltage of a Liâ€“O₂battery to 1.9 V by incorporating a photocatalyst. Energy and Environmental Science, 2015, 8, 2664-2667.	15.6	147
32	Low temperature synthesis of phosphorous and nitrogen co-doped yellow fluorescent carbon dots for sensing and bioimaging. Journal of Materials Chemistry B, 2015, 3, 6813-6819.	2.9	144
33	Fluorescent carbon nanoparticles: electrochemical synthesis and their pH sensitive photoluminescence properties. New Journal of Chemistry, 2011, 35, 2666.	1.4	143
34	Impacts of Carbon Dots on Rice Plants: Boosting the Growth and Improving the Disease Resistance. ACS Applied Bio Materials, 2018, 1, 663-672.	2.3	143
35	Carbon Dots as Fillers Inducing Healing/Selfâ€Healing and Anticorrosion Properties in Polymers. Advanced Materials, 2017, 29, 1701399.	11.1	142
36	A Co3O4-CDots-C3N4 three component electrocatalyst design concept for efficient and tunable CO2 reduction to syngas. Nature Communications, 2017, 8, 1828.	5.8	140

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37	Biocompatible Chitosanâ€“Carbon Dot Hybrid Nanogels for NIR-Imaging-Guided Synergistic Photothermalâ€“Chemo Therapy. ACS Applied Materials & Interfaces, 2017, 9, 18639-18649.	4.0	137
38	One-step conversion from metalâ€“organic frameworks to Co3O4@N-doped carbon nanocomposites towards highly efficient oxygen reduction catalysts. Journal of Materials Chemistry A, 2014, 2, 8184.	5.2	130
39	Intrinsic â€œVacancy Point Defectâ€•Induced Electrochemiluminescence from Coreless Supertetrahedral Chalcogenide Nanocluster. Journal of the American Chemical Society, 2016, 138, 7718-7724.	6.6	128
40	One-step hydrothermal synthesis of chiral carbon dots and their effects on mung bean plant growth. Nanoscale, 2018, 10, 12734-12742.	2.8	128
41	Advances, challenges and promises of carbon dots. Inorganic Chemistry Frontiers, 2017, 4, 1963-1986.	3.0	127
42	Mesoporous nitrogen, sulfur co-doped carbon dots/CoS hybrid as an efficient electrocatalyst for hydrogen evolution. Journal of Materials Chemistry A, 2017, 5, 2717-2723.	5.2	126
43	Fluorescent N-Doped Carbon Dots as in Vitro and in Vivo Nanothermometer. ACS Applied Materials & Interfaces, 2015, 7, 27324-27330.	4.0	122
44	Gramâ€Scale Synthesis of 41% Efficient Singleâ€Component Whiteâ€Lightâ€Emissive Carbonized Polymer Dots with Hybrid Fluorescence/Phosphorescence for White Lightâ€Emitting Diodes. Advanced Science, 2020, 7, 1902688.	5.6	122
45	Carbon dot and BiVO₄quantum dot composites for overall water splitting via a two-electron pathway. Nanoscale, 2016, 8, 17314-17321.	2.8	121
46	Tunable Ternary (N, P, B)-Doped Porous Nanocarbons and Their Catalytic Properties for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2014, 6, 22297-22304.	4.0	117
47	N,S co-doped carbon dots as a stable bio-imaging probe for detection of intracellular temperature and tetracycline. Journal of Materials Chemistry B, 2017, 5, 3293-3299.	2.9	117
48	Non-metal single/dual doped carbon quantum dots: a general flame synthetic method and electro-catalytic properties. Nanoscale, 2015, 7, 5955-5962.	2.8	116
49	Immobilization of Carbon Dots in Molecularly Imprinted Microgels for Optical Sensing of Glucose at Physiological pH. ACS Applied Materials & Interfaces, 2015, 7, 15735-15745.	4.0	112
50	Strategy for Activating Room-Temperature Phosphorescence of Carbon Dots in Aqueous Environments. Chemistry of Materials, 2019, 31, 7979-7986.	3.2	112
51	Efficient production of H2O2 via two-channel pathway over ZIF-8/C3N4 composite photocatalyst without any sacrificial agent. Applied Catalysis B: Environmental, 2020, 278, 119289.	10.8	110
52	Carbon quantum dots modified MoS2 with visible-light-induced high hydrogen evolution catalytic ability. Carbon, 2016, 99, 599-606.	5.4	108
53	Fluorescent porous carbon nanocapsules for two-photon imaging, NIR/pH dual-responsive drug carrier, and photothermal therapy. Biomaterials, 2015, 53, 117-126.	5.7	105
54	Bioinspired Photoelectric Conversion System Based on Carbon-Quantum-Dot-Doped Dyeâ€“Semiconductor Complex. ACS Applied Materials & Interfaces, 2013, 5, 5080-5084.	4.0	103

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55	H2O2 production and in situ sterilization over a ZnO/g-C3N4 heterojunction photocatalyst. Chemical Engineering Journal, 2021, 420, 129722.	6.6	101
56	Carbon dots anchored on octahedral CoO as a stable visible-light-responsive composite photocatalyst for overall water splitting. Journal of Materials Chemistry A, 2017, 5, 19800-19807.	5.2	100
57	Carbon quantum dots with photo-generated proton property as efficient visible light controlled acid catalyst. Nanoscale, 2014, 6, 867-873.	2.8	98
58	Carbon dots decorated the exposing high-reactive (111) facets CoO octahedrons with enhanced photocatalytic activity and stability for tetracycline degradation under visible light irradiation. Applied Catalysis B: Environmental, 2017, 219, 36-44.	10.8	96
59	Tuning Laccase Catalytic Activity with Phosphate Functionalized Carbon Dots by Visible Light. ACS Applied Materials & Interfaces, 2015, 7, 10004-10012.	4.0	95
60	Enhanced Activity for CO₂ Electroreduction on a Highly Active and Stable Ternary Au-CDots-C₃N₄ Electrocatalyst. ACS Catalysis, 2018, 8, 188-197.	5.5	94
61	Fabrication of a CuBi₂O₄/g-C₃N₄ pâ€“n heterojunction with enhanced visible light photocatalytic efficiency toward tetracycline degradation. Inorganic Chemistry Frontiers, 2017, 4, 1714-1720.	3.0	93
62	High-yield fabrication of Ti₃C₂T_x MXene quantum dots and their electrochemiluminescence behavior. Nanoscale, 2018, 10, 14000-14004.	2.8	93
63	High-performance NiO/g-C₃N₄ composites for visible-light-driven photocatalytic overall water splitting. Inorganic Chemistry Frontiers, 2018, 5, 1646-1652.	3.0	92
64	Bifunctional template-mediated synthesis of porous ordered g-C3N4 decorated with potassium and cyano groups for effective photocatalytic H2O2 evolution from dual-electron O2 reduction. Chemical Engineering Journal, 2022, 427, 132032.	6.6	92
65	Phosphorus-doped porous carbon nitride for efficient sole production of hydrogen peroxide via photocatalytic water splitting with a two-channel pathway. Journal of Materials Chemistry A, 2020, 8, 3701-3707.	5.2	89
66	A nickel nanoparticle/carbon quantum dot hybrid as an efficient electrocatalyst for hydrogen evolution under alkaline conditions. Journal of Materials Chemistry A, 2015, 3, 18598-18604.	5.2	87
67	Carbon Nanodot Surface Modifications Initiate Highly Efficient, Stable Catalysts for Both Oxygen Evolution and Reduction Reactions. Advanced Energy Materials, 2016, 6, 1502039.	10.2	83
68	Hydroxyl-Group-Dominated Graphite Dots Reshape Laser Desorption/Ionization Mass Spectrometry for Small Biomolecular Analysis and Imaging. ACS Nano, 2017, 11, 9500-9513.	7.3	79
69	One-step synthesis of chiral carbon quantum dots and their enantioselective recognition. RSC Advances, 2016, 6, 59956-59960.	1.7	78
70	Photocatalytic H₂O₂ and H₂ Generation from Living Chlorella vulgaris and Carbon Micro Particle Comodified gâ€C₃N₄. Advanced Energy Materials, 2018, 8, 1802525.	10.2	78
71	2D/1D Zn0.7Cd0.3S p-n heterogeneous junction enhanced with NiWO4 for efficient photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2019, 554, 113-124.	5.0	77
72	Carbon dots-Pt modified polyaniline nanosheet grown on carbon cloth as stable and high-efficient electrocatalyst for hydrogen evolution in pH-universal electrolyte. Applied Catalysis B: Environmental, 2019, 257, 117905.	10.8	74

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73	Carbon Dots Derived from Citric Acid and Glutathione as a Highly Efficient Intracellular Reactive Oxygen Species Scavenger for Alleviating the Lipopolysaccharide-Induced Inflammation in Macrophages. ACS Applied Materials & Interfaces, 2020, 12, 41088-41095.	4.0	74
74	Enhanced RuBisCO activity and promoted dicotyledons growth with degradable carbon dots. Nano Research, 2019, 12, 1585-1593.	5.8	73
75	Mediator-free Z-scheme photocatalytic system based on ultrathin CdS nanosheets for efficient hydrogen evolution. Journal of Materials Chemistry A, 2016, 4, 13626-13635.	5.2	71
76	All-solid-state Z-scheme system of NiO/CDs/BiVO4 for visible light-driven efficient overall water splitting. Chemical Engineering Journal, 2019, 358, 134-142.	6.6	71
77	Carbon Quantum Dot/Silver Nanoparticle/Polyoxometalate Composites as Photocatalysts for Overall Water Splitting in Visible Light. ChemCatChem, 2014, 6, 2634-2641.	1.8	70
78	Carbon quantum dot/CuS_xnanocomposites towards highly efficient lubrication and metal wear repair. Nanoscale, 2015, 7, 11321-11327.	2.8	70
79	Matrix-Free and Highly Efficient Room-Temperature Phosphorescence of Nitrogen-Doped Carbon Dots. Langmuir, 2018, 34, 12845-12852.	1.6	69
80	Chiral evolution of carbon dots and the tuning of laccase activity. Nanoscale, 2018, 10, 2333-2340.	2.8	68
81	A 4e-â€“2e- cascaded pathway for highly efficient production of H2 and H2O2 from water photo-splitting at normal pressure. Applied Catalysis B: Environmental, 2020, 270, 118875.	10.8	68
82	Highâ€Safety and Lowâ€Cost Photoassisted Chargeable Aqueous Sodiumâ€Ion Batteries with 90% Input Electric Energy Savings. Advanced Energy Materials, 2016, 6, 1600632.	10.2	67
83	Control Strategy on Two-/Four-Electron Pathway of Water Splitting by Multidoped Carbon Based Catalysts. ACS Catalysis, 2017, 7, 1637-1645.	5.5	66
84	Carbon-Supported Oxygen Vacancy-Rich Co₃O₄ for Robust Photocatalytic H₂O₂ Production via Coupled Water Oxidation and Oxygen Reduction Reaction. ACS Applied Energy Materials, 2019, 2, 8737-8746.	2.5	66
85	Fluorescent carbon dots with tunable negative charges for bio-imaging in bacterial viability assessment. Carbon, 2017, 120, 95-102.	5.4	65
86	Preparation of g-C3N4 nanorod/InVO4 hollow sphere composite with enhanced visible-light photocatalytic activities. Applied Catalysis B: Environmental, 2017, 213, 127-135.	10.8	65
87	A Ptâ€“Co₃O₄â€“CD electrocatalyst with enhanced electrocatalytic performance and resistance to CO poisoning achieved by carbon dots and Co₃O₄ for direct methanol fuel cells. Nanoscale, 2017, 9, 5467-5474.	2.8	65
88	CuBi2O4 single crystal nanorods prepared by hydrothermal method: Growth mechanism and optical properties. Materials Research Bulletin, 2011, 46, 1443-1450.	2.7	62
89	Near-infrared light photocatalytic ability for degradation of tetracycline using carbon dots modified Ag/AgBr nanocomposites. Separation and Purification Technology, 2017, 174, 75-83.	3.9	62
90	Quantitative and real-time effects of carbon quantum dots on single living HeLa cell membrane permeability. Nanoscale, 2014, 6, 5116.	2.8	61

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91	Dodecahedron ZIF-67 anchoring ZnCdS particles for photocatalytic hydrogen evolution. Molecular Catalysis, 2020, 485, 110832.	1.0	61
92	Carbonâ€Dotâ€Based Whiteâ€Lightâ€Emitting Diodes with Adjustable Correlated Color Temperature Guided by Machine Learning. Angewandte Chemie - International Edition, 2021, 60, 12585-12590.	7.2	60
93	Cobalt phosphide/carbon dots composite as an efficient electrocatalyst for oxygen evolution reaction. Dalton Transactions, 2018, 47, 5459-5464.	1.6	58
94	Carbon Dots Enhance the Nitrogen Fixation Activity of Azotobacter Chroococcum. ACS Applied Materials & Interfaces, 2018, 10, 16308-16314.	4.0	57
95	Selective inactivation of Gram-negative bacteria by carbon dots derived from natural biomass: Artemisia argyi leaves. Journal of Materials Chemistry B, 2020, 8, 2666-2672.	2.9	57
96	Fluorescent carbon dots with highly negative charges as a sensitive probe for real-time monitoring of bacterial viability. Journal of Materials Chemistry B, 2017, 5, 6008-6015.	2.9	56
97	Maltase Decorated by Chiral Carbon Dots with Inhibited Enzyme Activity for Glucose Level Control. Small, 2019, 15, e1901512.	5.2	56
98	Nitrogen and sulfur co-doped chiral carbon quantum dots with independent photoluminescence and chirality. Inorganic Chemistry Frontiers, 2017, 4, 946-953.	3.0	55
99	Ultraâ€Bright and Stable Pure Blue Lightâ€Emitting Diode from O, N Coâ€Doped Carbon Dots. Laser and Photonics Reviews, 2021, 15, 2000412.	4.4	54
100	Charge storage of carbon dot enhances photo-production of H2 and H2O2 over Ni2P/carbon dot catalyst under normal pressure. Chemical Engineering Journal, 2021, 409, 128184.	6.6	54
101	One-step synthesis of CoO/g-C₃N₄ composites by thermal decomposition for overall water splitting without sacrificial reagents. Inorganic Chemistry Frontiers, 2017, 4, 1691-1696.	3.0	53
102	Interface photo-charge kinetics regulation by carbon dots for efficient hydrogen peroxide production. Journal of Materials Chemistry A, 2021, 9, 515-522.	5.2	53
103	Carbon dots from PEG for highly sensitive detection of levodopa. Journal of Materials Chemistry B, 2015, 3, 2378-2387.	2.9	52
104	Carbon-dots-mediated highly efficient hole transfer in I-III-VI quantum dots for photocatalytic hydrogen production. Applied Catalysis B: Environmental, 2021, 292, 120154.	10.8	52
105	Porous cobalt, nitrogen-codoped carbon nanostructures from carbon quantum dots and VB12 and their catalytic properties for oxygen reduction. Physical Chemistry Chemical Physics, 2014, 16, 25350-25357.	1.3	51
106	New Insight of Water-Splitting Photocatalyst: H₂O₂-Resistance Poisoning and Photothermal Deactivation in Sub-micrometer CoO Octahedrons. ACS Applied Materials & Interfaces, 2017, 9, 20585-20593.	4.0	51
107	Carbon dots with positive surface charge from tartaric acid and m-aminophenol for selective killing of Gram-positive bacteria. Journal of Materials Chemistry B, 2021, 9, 125-130.	2.9	50
108	Pyrrolic nitrogen dominated the carbon dot mimic oxidase activity. Carbon, 2021, 179, 692-700.	5.4	50

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109	Cu-CDots nanocorals as electrocatalyst for highly efficient CO₂reduction to formate. Nanoscale, 2017, 9, 298-304.	2.8	49
110	Degradable Carbon Dots from Cigarette Smoking with Broad-Spectrum Antimicrobial Activities against Drug-Resistant Bacteria. ACS Applied Bio Materials, 2018, 1, 1871-1879.	2.3	49
111	Role of Pt-pyridinic nitrogen sites in methanol oxidation on Pt/polypyrrole-carbon black Catalyst. Journal of Power Sources, 2012, 197, 44-49.	4.0	48
112	Chiral Control of Carbon Dots via Surface Modification for Tuning the Enzymatic Activity of Glucose Oxidase. ACS Applied Materials & Interfaces, 2021, 13, 5877-5886.	4.0	48
113	Defects induced efficient overall water splitting on a carbon-based metal-free photocatalyst. Applied Catalysis B: Environmental, 2018, 237, 166-174.	10.8	46
114	Negatively Charged Carbon Nanodots with Bacteria Resistance Ability for Highâ€Performance Antibiofilm Formation and Anticorrosion Coating Design. Small, 2019, 15, e1900007.	5.2	46
115	Template-free fabrication of mesoporous carbons from carbon quantum dots and their catalytic application to the selective oxidation of hydrocarbons. Nanoscale, 2014, 6, 5831.	2.8	45
116	Carbon Defect-Induced Reversible Carbonâ€“Oxygen Interfaces for Efficient Oxygen Reduction. ACS Applied Materials & Interfaces, 2018, 10, 39735-39744.	4.0	45
117	Pristine Carbon Dots Boost the Growth of Chlorella vulgaris by Enhancing Photosynthesis. ACS Applied Bio Materials, 2018, 1, 894-902.	2.3	45
118	Carbon dots regulate the interface electron transfer and catalytic kinetics of Pt-based alloys catalyst for highly efficient hydrogen oxidation. Journal of Energy Chemistry, 2022, 66, 61-67.	7.1	45
119	Robust carbon-dot-based evaporator with an enlarged evaporation area for efficient solar steam generation. Journal of Materials Chemistry A, 2020, 8, 14566-14573.	5.2	44
120	Cascaded photo-potential in a carbon dot-hematite system driving overall water splitting under visible light. Nanoscale, 2018, 10, 2454-2460.	2.8	43
121	Synergistic Cu@CoOx core-cage structure on carbon layers as highly active and durable electrocatalysts for methanol oxidation. Applied Catalysis B: Environmental, 2019, 244, 795-801.	10.8	42
122	A function-switchable metal-free photocatalyst for the efficient and selective production of hydrogen and hydrogen peroxide. Journal of Materials Chemistry A, 2020, 8, 11773-11780.	5.2	42
123	Tunable synthesis of metalâ€“graphene complex nanostructures and their catalytic ability for solvent-free cyclohexene oxidation in air. Nanoscale, 2012, 4, 4964.	2.8	41
124	A g-C₃N₄ based photoelectrochemical cell using O₂/H₂O redox couples. Energy and Environmental Science, 2018, 11, 1841-1847.	15.6	41
125	Polyaniline/Carbon Dots Composite as a Highly Efficient Metal-Free Dual-Functional Photoassisted Electrocatalyst for Overall Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 24814-24823.	4.0	41
126	In-situ transient photovoltage study on interface electron transfer regulation of carbon dots/NiCo2O4 photocatalyst for the enhanced overall water splitting activity. Nano Research, 2022, 15, 1786-1795.	5.8	41

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127	Z-Scheme in a Co₃(PO₄)₂/Î±-Fe₂O₃ photocatalysis system for overall water splitting under visible light. Catalysis Science and Technology, 2018, 8, 840-846.	2.1	39
128	Hydrogen peroxide-impregnated supramolecular precursors synthesize mesoporous-rich ant nest-like filled tubular g-C3N4 for effective photocatalytic removal of pollutants. Chemical Engineering Journal, 2022, 447, 137332.	6.6	39
129	Strong coupling effect at the interface of cobalt phosphate-carbon dots boost photocatalytic water splitting. Journal of Colloid and Interface Science, 2018, 530, 256-263.	5.0	38
130	Silver modified carbon quantum dots for solvent-free selective oxidation of cyclohexane. New Journal of Chemistry, 2015, 39, 2815-2821.	1.4	37
131	Highly Selective and Efficient Electroreduction of Carbon Dioxide to Carbon Monoxide with Phosphate Silver-Derived Coral-like Silver. ACS Sustainable Chemistry and Engineering, 2019, 7, 3536-3543.	3.2	35
132	Si-assisted N, P Co-doped room temperature phosphorescent carbonized polymer Dots: Information Encryption, graphic Anti-counterfeiting and biological imaging. Journal of Colloid and Interface Science, 2022, 609, 279-288.	5.0	35
133	Carbon dots for photoswitching enzyme catalytic activity. Journal of Materials Chemistry B, 2014, 2, 5652.	2.9	34
134	Photo-charge regulation of metal-free photocatalyst by carbon dots for efficient and stable hydrogen peroxide production. Journal of Materials Chemistry A, 2021, 9, 25453-25462.	5.2	34
135	Carbon Dots Enable Efficient Delivery of Functional DNA in Plants. ACS Applied Bio Materials, 2020, 3, 8857-8864.	2.3	33
136	Air activation by a metal-free photocatalyst for â€œtotally-greenâ€•hydrocarbon selective oxidation. Catalysis Science and Technology, 2016, 6, 7252-7258.	2.1	32
137	Multifunctional carbon dot for lifetime thermal sensing, nucleolus imaging and antialgal activity. Journal of Materials Chemistry B, 2018, 6, 5708-5717.	2.9	32
138	Oxygen Containing Functional Groups Dominate the Electrochemiluminescence of Pristine Carbon Dots. Journal of Physical Chemistry C, 2017, 121, 27546-27554.	1.5	31
139	Carbon dots modified Ti3C2Tx-based fibrous supercapacitor with photo-enhanced capacitance. Nano Research, 2021, 14, 3886-3892.	5.8	31
140	A practical and highly sensitive C₃N₄-TYR fluorescent probe for convenient detection of dopamine. Nanoscale, 2015, 7, 12068-12075.	2.8	30
141	A nitrogen and boron co-doped metal-free carbon electrocatalyst for an efficient oxygen reduction reaction. Inorganic Chemistry Frontiers, 2018, 5, 2985-2991.	3.0	30
142	A Bright and Stable Violet Carbon Dot Lightâ€Emitting Diode. Advanced Optical Materials, 2020, 8, 2000239.	3.6	30
143	N-doped carbon dots derived from leaves with low toxicity via damaging cytomembrane for broad-spectrum antibacterial activity. Materials Today Communications, 2020, 24, 101222.	0.9	30
144	One-step synthesis of MnOx/g-C3N4 nanocomposites for enhancing the visible light photoelectrochemical oxidation performance. Chemical Engineering Journal, 2020, 399, 125825.	6.6	29

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145	Amino Modified Carbon Dots with Electron Sink Effect Increase Interface Charge Transfer Rate of Cuâ€Based Electrocatalyst to Enhance the CO₂ Conversion Selectivity to C₂H₄. Advanced Functional Materials, 2022, 32, .	7.8	29
146	Third-order nonlinear optical properties of carboxyl group dominant carbon nanodots. Journal of Materials Chemistry C, 2016, 4, 8490-8495.	2.7	28
147	Câ€“O^{â^'}â€“K⁺ (Na⁺) groups in non-doped carbon as active sites for the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 8955-8961.	5.2	28
148	Efficient photocatalytic water splitting through titanium silicalite stabilized CoO nanodots. Nanoscale, 2019, 11, 15984-15990.	2.8	28
149	Biotoxicity of degradable carbon dots towards microalgae Chlorella vulgaris. Environmental Science: Nano, 2019, 6, 3316-3323.	2.2	28
150	Agâ€“Inâ€“Znâ€“S Quantum Dot-Dominated Interface Kinetics in Agâ€“Inâ€“Znâ€“S/NiFe LDH Composites toward Efficient Photoassisted Electrocatalytic Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 42125-42137.	4.0	26
151	Highly efficient metal-free catalyst from cellulose for hydrogen peroxide photoproduction instructed by machine learning and transient photovoltage technology. Nano Research, 2022, 15, 4000-4007.	5.8	26
152	N-Doped carbon dot with surface dominant non-linear optical properties. RSC Advances, 2016, 6, 95476-95482.	1.7	25
153	Carbon quantum dot-covered porous Ag with enhanced activity for selective electroreduction of CO₂ to CO. Inorganic Chemistry Frontiers, 2019, 6, 1453-1460.	3.0	25
154	Carbon dot-modified mesoporous carbon as a supercapacitor with enhanced light-assisted capacitance. Nanoscale, 2020, 12, 17925-17930.	2.8	25
155	Tree-inspired ultra-rapid steam generation and simultaneous energy harvesting under weak illumination. Journal of Materials Chemistry A, 2020, 8, 10260-10268.	5.2	25
156	Carbon dots/PtW6O24 composite as efficient and stable electrocatalyst for hydrogen oxidation reaction in PEMFCs. Chemical Engineering Journal, 2021, 426, 130709.	6.6	25
157	Rational construction of hierarchical porous FeP nanorod arrays encapsulated in polypyrrole for efficient and durable hydrogen evolution reaction. Chemical Engineering Journal, 2022, 433, 133643.	6.6	25
158	Replacing Ru complex with carbon dots over MOF-derived Co₃O₄/In₂O₃ catalyst for efficient solar-driven CO₂ reduction. Journal of Materials Chemistry A, 2022, 10, 4279-4287.	5.2	25
159	Nitrogen-doped carbon dots coupled with morin-Al3+: Cleverly design an integrated sensing platform for ratiometric optical dual-mode and smartphone-assisted visual detection of fluoride ion. Journal of Hazardous Materials, 2022, 439, 129596.	6.5	25
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