

Zhenghui Kang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/952074/publications.pdf>

Version: 2024-02-01

308
papers

31,703
citations

6233

80
h-index

4870

168
g-index

314
all docs

314
docs citations

314
times ranked

25224
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal-free efficient photocatalyst for stable visible water splitting via a two-electron pathway. <i>Science</i> , 2015, 347, 970-974.	6.0	3,803
2	Carbon nanodots: synthesis, properties and applications. <i>Journal of Materials Chemistry</i> , 2012, 22, 24230.	6.7	2,339
3	Water-soluble Fluorescent Carbon Quantum Dots and Photocatalyst Design. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 4430-4434.	7.2	2,258
4	One-step ultrasonic synthesis of water-soluble carbon nanoparticles with excellent photoluminescent properties. <i>Carbon</i> , 2011, 49, 605-609.	5.4	783
5	Large scale electrochemical synthesis of high quality carbon nanodots and their photocatalytic property. <i>Dalton Transactions</i> , 2012, 41, 9526.	1.6	684
6	Carbon quantum dots/Ag ₃ PO ₄ complex photocatalysts with enhanced photocatalytic activity and stability under visible light. <i>Journal of Materials Chemistry</i> , 2012, 22, 10501.	6.7	676
7	Highly efficient hydrogen evolution from seawater by a low-cost and stable CoMoP@C electrocatalyst superior to Pt/C. <i>Energy and Environmental Science</i> , 2017, 10, 788-798.	15.6	629
8	In Vivo NIR Fluorescence Imaging, Biodistribution, and Toxicology of Photoluminescent Carbon Dots Produced from Carbon Nanotubes and Graphite. <i>Small</i> , 2012, 8, 281-290.	5.2	625
9	One-step ultrasonic synthesis of fluorescent N-doped carbon dots from glucose and their visible-light sensitive photocatalytic ability. <i>New Journal of Chemistry</i> , 2012, 36, 861.	1.4	493
10	Carbon Quantum Dot/NiFe Layered Double-Hydroxide Composite as a Highly Efficient Electrocatalyst for Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 7918-7925.	4.0	440
11	Large-scale fabrication of heavy doped carbon quantum dots with tunable-photoluminescence and sensitive fluorescence detection. <i>Journal of Materials Chemistry A</i> , 2014, 2, 8660.	5.2	405
12	C ₃ N ₄ 2D Crystalline, Hole-Free, Tunable-Narrow-Bandgap Semiconductor with Ferromagnetic Properties. <i>Advanced Materials</i> , 2017, 29, 1605625.	11.1	350
13	Carbon quantum dots/Cu ₂ O composites with protruding nanostructures and their highly efficient (near) infrared photocatalytic behavior. <i>Journal of Materials Chemistry</i> , 2012, 22, 17470.	6.7	322
14	Metal Nanoparticle/Carbon Quantum Dot Composite as a Photocatalyst for High-Efficiency Cyclohexane Oxidation. <i>ACS Catalysis</i> , 2014, 4, 328-336.	5.5	297
15	Coupling surface plasmon resonance of gold nanoparticles with slow-photon-effect of TiO ₂ photonic crystals for synergistically enhanced photoelectrochemical water splitting. <i>Energy and Environmental Science</i> , 2014, 7, 1409.	15.6	288
16	Near-infrared light controlled photocatalytic activity of carbon quantum dots for highly selective oxidation reaction. <i>Nanoscale</i> , 2013, 5, 3289.	2.8	283
17	Carbon quantum dot sensitized TiO ₂ nanotube arrays for photoelectrochemical hydrogen generation under visible light. <i>Nanoscale</i> , 2013, 5, 2274.	2.8	281
18	Carbon dots as solid-state electron mediator for BiVO ₄ /CDs/CdS Z-scheme photocatalyst working under visible light. <i>Applied Catalysis B: Environmental</i> , 2017, 206, 501-509.	10.8	270

#	ARTICLE	IF	CITATIONS
19	Carbon dots: advances in nanocarbon applications. <i>Nanoscale</i> , 2019, 11, 19214-19224.	2.8	267
20	Graphitic carbon quantum dots as a fluorescent sensing platform for highly efficient detection of Fe ³⁺ ions. <i>RSC Advances</i> , 2013, 3, 3733.	1.7	246
21	Degradable Carbon Dots with Broad-Spectrum Antibacterial Activity. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 26936-26946.	4.0	246
22	Silicon Quantum Dots: A General Photocatalyst for Reduction, Decomposition, and Selective Oxidation Reactions. <i>Journal of the American Chemical Society</i> , 2007, 129, 12090-12091.	6.6	232
23	Carbon Dots: A Small Conundrum. <i>Trends in Chemistry</i> , 2019, 1, 235-246.	4.4	232
24	Facile fabrication of a CoO/g-C ₃ N ₄ p-n heterojunction with enhanced photocatalytic activity and stability for tetracycline degradation under visible light. <i>Catalysis Science and Technology</i> , 2017, 7, 3325-3331.	2.1	224
25	Highly efficient hydrogen evolution triggered by a multi-interfacial Ni/WC hybrid electrocatalyst. <i>Energy and Environmental Science</i> , 2018, 11, 2114-2123.	15.6	224
26	Carbon dots enhance the stability of CdS for visible-light-driven overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2017, 216, 114-121.	10.8	217
27	Study on highly enhanced photocatalytic tetracycline degradation of type p-n AgI/CuBi ₂ O ₄ and Z-scheme AgBr/CuBi ₂ O ₄ heterojunction photocatalysts. <i>Journal of Hazardous Materials</i> , 2018, 349, 111-118.	6.5	213
28	Installing earth-abundant metal active centers to covalent organic frameworks for efficient heterogeneous photocatalytic CO ₂ reduction. <i>Applied Catalysis B: Environmental</i> , 2019, 254, 624-633.	10.8	212
29	Advances in carbon dots: from the perspective of traditional quantum dots. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1586-1613.	3.2	208
30	A metal-free photocatalyst for highly efficient hydrogen peroxide photoproduction in real seawater. <i>Nature Communications</i> , 2021, 12, 483.	5.8	193
31	Carbon Quantum Dots with Photoenhanced Hydrogen-Bond Catalytic Activity in Aldol Condensations. <i>ACS Catalysis</i> , 2014, 4, 781-787.	5.5	192
32	Pt-O bond as an active site superior to Pt ₀ in hydrogen evolution reaction. <i>Nature Communications</i> , 2020, 11, 490.	5.8	184
33	Ultra-High Quantum Yield of Graphene Quantum Dots: Aromatic-Nitrogen Doping and Photoluminescence Mechanism. <i>Particle and Particle Systems Characterization</i> , 2015, 32, 434-440.	1.2	182
34	Carbon dots promote the growth and photosynthesis of mung bean sprouts. <i>Carbon</i> , 2018, 136, 94-102.	5.4	182
35	CoO and g-C ₃ N ₄ complement each other for highly efficient overall water splitting under visible light. <i>Applied Catalysis B: Environmental</i> , 2018, 226, 412-420.	10.8	176
36	Construction of CDs/CdS photocatalysts for stable and efficient hydrogen production in water and seawater. <i>Applied Catalysis B: Environmental</i> , 2019, 242, 178-185.	10.8	174

#	ARTICLE	IF	CITATIONS
37	Carbon quantum dots enhance the photocatalytic performance of BiVO ₄ with different exposed facets. Dalton Transactions, 2013, 42, 6285.	1.6	164
38	Fluorescent N-doped carbon dots for both cellular imaging and highly-sensitive catechol detection. Carbon, 2015, 91, 66-75.	5.4	161
39	Crystallized RuTe ₂ as unexpected bifunctional catalyst for overall water splitting. Applied Catalysis B: Environmental, 2020, 278, 119281.	10.8	161
40	Controllable Fabrication of Carbon Nanotube and Nanobelt with a Polyoxometalate-Assisted Mild Hydrothermal Process. Journal of the American Chemical Society, 2005, 127, 6534-6535.	6.6	160
41	Fluorescent carbon nanoparticles: electrochemical synthesis and their pH sensitive photoluminescence properties. New Journal of Chemistry, 2011, 35, 2666.	1.4	143
42	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
43	Carbon Dots as Fillers Inducing Healing/Self-Healing and Anticorrosion Properties in Polymers. Advanced Materials, 2017, 29, 1701399.	11.1	142
44	A Co ₃ O ₄ -CDots-C ₃ N ₄ three component electrocatalyst design concept for efficient and tunable CO ₂ reduction to syngas. Nature Communications, 2017, 8, 1828.	5.8	140
45	Cable-like Ru/WNO@C nanowires for simultaneous high-efficiency hydrogen evolution and low-energy consumption chlor-alkali electrolysis. Energy and Environmental Science, 2019, 12, 2569-2580.	15.6	137
46	One-Step Water-Assisted Synthesis of High-Quality Carbon Nanotubes Directly from Graphite. Journal of the American Chemical Society, 2003, 125, 13652-13653.	6.6	132
47	One-step conversion from metal-organic frameworks to Co ₃ O ₄ @N-doped carbon nanocomposites towards highly efficient oxygen reduction catalysts. Journal of Materials Chemistry A, 2014, 2, 8184.	5.2	130
48	One-step hydrothermal synthesis of chiral carbon dots and their effects on mung bean plant growth. Nanoscale, 2018, 10, 12734-12742.	2.8	128
49	Advances, challenges and promises of carbon dots. Inorganic Chemistry Frontiers, 2017, 4, 1963-1986.	3.0	127
50	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
51	Peering into water splitting mechanism of g-C ₃ N ₄ -carbon dots metal-free photocatalyst. Applied Catalysis B: Environmental, 2018, 227, 418-424.	10.8	126
52	Fluorescent N-Doped Carbon Dots as <i>in Vitro</i> and <i>in Vivo</i> Nanothermometer. ACS Applied Materials & Interfaces, 2015, 7, 27324-27330.	4.0	122
53	Carbon dot and BiVO ₄ quantum dot composites for overall water splitting via a two-electron pathway. Nanoscale, 2016, 8, 17314-17321.	2.8	121
54	A new mild, clean and highly efficient method for the preparation of graphene quantum dots without by-products. Journal of Materials Chemistry B, 2015, 3, 6871-6876.	2.9	120

#	ARTICLE	IF	CITATIONS
55	Tunable Ternary (N, P, B)-Doped Porous Nanocarbons and Their Catalytic Properties for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 22297-22304.	4.0	117
56	N,S co-doped carbon dots as a stable bio-imaging probe for detection of intracellular temperature and tetracycline. <i>Journal of Materials Chemistry B</i> , 2017, 5, 3293-3299.	2.9	117
57	Non-metal single/dual doped carbon quantum dots: a general flame synthetic method and electro-catalytic properties. <i>Nanoscale</i> , 2015, 7, 5955-5962.	2.8	116
58	Carbon quantum dots/SnO ₂ @Co ₃ O ₄ composite for highly efficient electrochemical water oxidation. <i>Carbon</i> , 2015, 92, 64-73.	5.4	114
59	Facile electron delivery from graphene template to ultrathin metal-organic layers for boosting CO ₂ photoreduction. <i>Nature Communications</i> , 2021, 12, 813.	5.8	114
60	Efficient production of H ₂ O ₂ via two-channel pathway over ZIF-8/C ₃ N ₄ composite photocatalyst without any sacrificial agent. <i>Applied Catalysis B: Environmental</i> , 2020, 278, 119289.	10.8	110
61	Hydroxyl decorated g-C ₃ N ₄ nanoparticles with narrowed bandgap for high efficient photocatalyst design. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 262-271.	10.8	109
62	Carbon quantum dots modified MoS ₂ with visible-light-induced high hydrogen evolution catalytic ability. <i>Carbon</i> , 2016, 99, 599-606.	5.4	108
63	Photocatalyst for High-Performance H ₂ Production: Ga-Doped Polymeric Carbon Nitride. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6124-6129.	7.2	108
64	High-Performance Metal-Organic Framework-Based Single Ion Conducting Solid-State Electrolytes for Low-Temperature Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43206-43213.	4.0	104
65	Bioinspired Photoelectric Conversion System Based on Carbon-Quantum-Dot-Doped Dye-Semiconductor Complex. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 5080-5084.	4.0	103
66	Carbon dots anchored on octahedral CoO as a stable visible-light-responsive composite photocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19800-19807.	5.2	100
67	Carbon quantum dots with photo-generated proton property as efficient visible light controlled acid catalyst. <i>Nanoscale</i> , 2014, 6, 867-873.	2.8	98
68	Emancipating Target-Functionalized Carbon Dots from Autophagy Vesicles for a Novel Visualized Tumor Therapy. <i>Advanced Functional Materials</i> , 2018, 28, 1800881.	7.8	97
69	Carbon dots decorated the exposing high-reactive (111) facets CoO octahedrons with enhanced photocatalytic activity and stability for tetracycline degradation under visible light irradiation. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 36-44.	10.8	96
70	Tuning Laccase Catalytic Activity with Phosphate Functionalized Carbon Dots by Visible Light. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 10004-10012.	4.0	95
71	Enhanced Activity for CO ₂ Electroreduction on a Highly Active and Stable Ternary Au-CDots-C ₃ N ₄ Electro-catalyst. <i>ACS Catalysis</i> , 2018, 8, 188-197.	5.5	94
72	Fabrication of a CuBi ₂ O ₄ /g-C ₃ N ₄ p-n heterojunction with enhanced visible light photocatalytic efficiency toward tetracycline degradation. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 1714-1720.	3.0	93

#	ARTICLE	IF	CITATIONS
73	High-yield fabrication of Ti ₃ C ₂ T _x MXene quantum dots and their electrochemiluminescence behavior. <i>Nanoscale</i> , 2018, 10, 14000-14004.	2.8	93
74	High-performance NiO/g-C ₃ N ₄ composites for visible-light-driven photocatalytic overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1646-1652.	3.0	92
75	Phosphorus-doped porous carbon nitride for efficient sole production of hydrogen peroxide via photocatalytic water splitting with a two-channel pathway. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3701-3707.	5.2	89
76	The design of room-temperature-phosphorescent carbon dots and their application as a security ink. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10605-10612.	2.7	88
77	Simple Strategy for Preparation of Core Colloids Modified with Metal Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3651-3657.	1.5	87
78	A nickel nanoparticle/carbon quantum dot hybrid as an efficient electrocatalyst for hydrogen evolution under alkaline conditions. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18598-18604.	5.2	87
79	Carbon nitride assisted 2D conductive metal-organic frameworks composite photocatalyst for efficient visible light-driven H ₂ O ₂ production. <i>Applied Catalysis B: Environmental</i> , 2021, 289, 120035.	10.8	84
80	Carbon Nanodot Surface Modifications Initiate Highly Efficient, Stable Catalysts for Both Oxygen Evolution and Reduction Reactions. <i>Advanced Energy Materials</i> , 2016, 6, 1502039.	10.2	83
81	Hydroxyl-Group-Dominated Graphite Dots Reshape Laser Desorption/Ionization Mass Spectrometry for Small Biomolecular Analysis and Imaging. <i>ACS Nano</i> , 2017, 11, 9500-9513.	7.3	79
82	Total photocatalysis conversion from cyclohexane to cyclohexanone by C ₃ N ₄ /Au nanocomposites. <i>Green Chemistry</i> , 2014, 16, 4559-4565.	4.6	78
83	One-step synthesis of chiral carbon quantum dots and their enantioselective recognition. <i>RSC Advances</i> , 2016, 6, 59956-59960.	1.7	78
84	Photocatalytic H ₂ O ₂ and H ₂ Generation from Living <i>Chlorella vulgaris</i> and Carbon Micro Particle Comodified g-C ₃ N ₄ . <i>Advanced Energy Materials</i> , 2018, 8, 1802525.	10.2	78
85	Inside Cover: Ultrastable, Highly Fluorescent, and Water-Dispersed Silicon-Based Nanospheres as Cellular Probes (<i>Angew. Chem. Int. Ed.</i> 1/2009). <i>Angewandte Chemie - International Edition</i> , 2009, 48, 2-2.	7.2	77
86	A CO ₂ adsorption dominated carbon defect-based electrocatalyst for efficient carbon dioxide reduction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1205-1211.	5.2	75
87	Highly Efficient Oxygen Evolution by a Thermocatalytic Process Cascaded Electrocatalysis Over Sulfur-Treated Fe-Based Metal-Organic Frameworks. <i>Advanced Energy Materials</i> , 2020, 10, 2000184.	10.2	75
88	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. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 41088-41095.	4.0	74
89	Enhanced RuBisCO activity and promoted dicotyledons growth with degradable carbon dots. <i>Nano Research</i> , 2019, 12, 1585-1593.	5.8	73
90	Carbon dots decorated magnetic ZnFe ₂ O ₄ nanoparticles with enhanced adsorption capacity for the removal of dye from aqueous solution. <i>Applied Surface Science</i> , 2018, 433, 790-797.	3.1	72

#	ARTICLE	IF	CITATIONS
91	Highly sensitive humidity sensing properties of carbon quantum dots films. <i>Materials Research Bulletin</i> , 2013, 48, 790-794.	2.7	71
92	All-solid-state Z-scheme system of NiO/CDs/BiVO ₄ for visible light-driven efficient overall water splitting. <i>Chemical Engineering Journal</i> , 2019, 358, 134-142.	6.6	71
93	Carbon Quantum Dot/Silver Nanoparticle/Polyoxometalate Composites as Photocatalysts for Overall Water Splitting in Visible Light. <i>ChemCatChem</i> , 2014, 6, 2634-2641.	1.8	70
94	Carbon quantum dot/CuS nanocomposites towards highly efficient lubrication and metal wear repair. <i>Nanoscale</i> , 2015, 7, 11321-11327.	2.8	70
95	Convenient Controllable Synthesis of Inorganic 1D Nanocrystals and 3D High-Ordered Microtubes. <i>European Journal of Inorganic Chemistry</i> , 2003, 2003, 370-376.	1.0	69
96	Chiral evolution of carbon dots and the tuning of laccase activity. <i>Nanoscale</i> , 2018, 10, 2333-2340.	2.8	68
97	A 4e ⁻ 2e ⁻ cascaded pathway for highly efficient production of H ₂ and H ₂ O ₂ from water photo-splitting at normal pressure. <i>Applied Catalysis B: Environmental</i> , 2020, 270, 118875.	10.8	68
98	Control Strategy on Two-/Four-Electron Pathway of Water Splitting by Multidoped Carbon Based Catalysts. <i>ACS Catalysis</i> , 2017, 7, 1637-1645.	5.5	66
99	Carbon-Supported Oxygen Vacancy-Rich Co ₃ O ₄ for Robust Photocatalytic H ₂ O ₂ Production via Coupled Water Oxidation and Oxygen Reduction Reaction. <i>ACS Applied Energy Materials</i> , 2019, 2, 8737-8746.	2.5	66
100	Fluorescent carbon dots with tunable negative charges for bio-imaging in bacterial viability assessment. <i>Carbon</i> , 2017, 120, 95-102.	5.4	65
101	A Pt-Co ₃ O ₄ CD electrocatalyst with enhanced electrocatalytic performance and resistance to CO poisoning achieved by carbon dots and Co ₃ O ₄ for direct methanol fuel cells. <i>Nanoscale</i> , 2017, 9, 5467-5474.	2.8	65
102	Carbon quantum dots coated BiVO ₄ inverse opals for enhanced photoelectrochemical hydrogen generation. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	64
103	Synergetic effect of carbon dots as co-catalyst for enhanced photocatalytic performance of methyl orange on ZnIn ₂ S ₄ microspheres. <i>Separation and Purification Technology</i> , 2017, 174, 282-289.	3.9	63
104	Rhodium Nanoparticles/F-Doped Graphene Composites as Multifunctional Electrocatalyst Superior to Pt/C for Hydrogen Evolution and Formic Acid Oxidation Reaction. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 33153-33161.	4.0	63
105	Carbon dots mediated charge sinking effect for boosting hydrogen evolution in Cu-In-Zn-S QDs/MoS ₂ photocatalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120755.	10.8	63
106	Near-infrared light photocatalytic ability for degradation of tetracycline using carbon dots modified Ag/AgBr nanocomposites. <i>Separation and Purification Technology</i> , 2017, 174, 75-83.	3.9	62
107	Quantitative and real-time effects of carbon quantum dots on single living HeLa cell membrane permeability. <i>Nanoscale</i> , 2014, 6, 5116.	2.8	61
108	Polyoxometalate-based electron transfer modulation for efficient electrocatalytic carbon dioxide reduction. <i>Chemical Science</i> , 2020, 11, 3007-3015.	3.7	61

#	ARTICLE	IF	CITATIONS
109	Achieving electroreduction of CO ₂ to CH ₃ OH with high selectivity using a pyrite-nickel sulfide nanocomposite. RSC Advances, 2017, 7, 1376-1381.	1.7	60
110	Carbon-Dot-Based White-Light-Emitting Diodes with Adjustable Correlated Color Temperature Guided by Machine Learning. Angewandte Chemie - International Edition, 2021, 60, 12585-12590.	7.2	60
111	Cobalt phosphide/carbon dots composite as an efficient electrocatalyst for oxygen evolution reaction. Dalton Transactions, 2018, 47, 5459-5464.	1.6	58
112	Bifunctional Pd-O ₂ Center at the Liquid-Solid-Gas Triphase Interface for H ₂ O ₂ Photosynthesis. ACS Catalysis, 2022, 12, 2138-2149.	5.5	58
113	Synthesis of carbon quantum dots/SiO ₂ porous nanocomposites and their catalytic ability for photo-enhanced hydrocarbon selective oxidation. Dalton Transactions, 2013, 42, 10380.	1.6	57
114	Carbon Dots Enhance the Nitrogen Fixation Activity of Azotobacter Chroococcum. ACS Applied Materials & Interfaces, 2018, 10, 16308-16314.	4.0	57
115	Selective inactivation of Gram-negative bacteria by carbon dots derived from natural biomass: <i>Artemisia argyi</i> leaves. Journal of Materials Chemistry B, 2020, 8, 2666-2672.	2.9	57
116	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
117	Maltase Decorated by Chiral Carbon Dots with Inhibited Enzyme Activity for Glucose Level Control. Small, 2019, 15, e1901512.	5.2	56
118	Convenient and sensitive detection of norfloxacin with fluorescent carbon dots. Journal of Materials Chemistry B, 2014, 2, 7964-7970.	2.9	55
119	Nitrogen and sulfur co-doped chiral carbon quantum dots with independent photoluminescence and chirality. Inorganic Chemistry Frontiers, 2017, 4, 946-953.	3.0	55
120	Carbon dots enhance the interface electron transfer and photoelectrochemical kinetics in TiO ₂ photoanode. Applied Catalysis B: Environmental, 2022, 304, 120983.	10.8	55
121	The Pivotal Role of s, p, and d-Block Metals in Water Electrolysis: Status Quo and Perspectives. Advanced Materials, 2022, 34, e2108432.	11.1	55
122	One-step catalase controllable degradation of C ₃ N ₄ for N-doped carbon dot green fabrication and their bioimaging applications. Journal of Materials Chemistry B, 2014, 2, 5768.	2.9	54
123	Ultra-Bright and Stable Pure Blue Light-Emitting Diode from O, N Co-Doped Carbon Dots. Laser and Photonics Reviews, 2021, 15, 2000412.	4.4	54
124	Charge storage of carbon dot enhances photo-production of H ₂ and H ₂ O ₂ over Ni ₂ P/carbon dot catalyst under normal pressure. Chemical Engineering Journal, 2021, 409, 128184.	6.6	54
125	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
126	Advanced hydrogen evolution electrocatalysts promising sustainable hydrogen and chlor-alkali co-production. Energy and Environmental Science, 2021, 14, 6191-6210.	15.6	53

#	ARTICLE	IF	CITATIONS
127	Carbon dots from PEG for highly sensitive detection of levodopa. <i>Journal of Materials Chemistry B</i> , 2015, 3, 2378-2387.	2.9	52
128	Carbon-dots-mediated highly efficient hole transfer in III-VI quantum dots for photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2021, 292, 120154.	10.8	52
129	Porous cobalt, nitrogen-codoped carbon nanostructures from carbon quantum dots and VB12 and their catalytic properties for oxygen reduction. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 25350-25357.	1.3	51
130	New Insight of Water-Splitting Photocatalyst: H ₂ O ₂ -Resistance Poisoning and Photothermal Deactivation in Sub-micrometer CoO Octahedrons. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 20585-20593.	4.0	51
131	Adsorption dominant catalytic activity of a carbon dots stabilized gold nanoparticles system. <i>Dalton Transactions</i> , 2014, 43, 10920.	1.6	50
132	Carbon dots with positive surface charge from tartaric acid and <i>m</i> -aminophenol for selective killing of Gram-positive bacteria. <i>Journal of Materials Chemistry B</i> , 2021, 9, 125-130.	2.9	50
133	Pyrrolic nitrogen dominated the carbon dot mimic oxidase activity. <i>Carbon</i> , 2021, 179, 692-700.	5.4	50
134	Keplerate-type polyoxometalate/semiconductor composite electrodes with light-enhanced conductivity towards highly efficient photoelectronic devices. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14025-14032.	5.2	49
135	Cu-CDots nanocorals as electrocatalyst for highly efficient CO ₂ reduction to formate. <i>Nanoscale</i> , 2017, 9, 298-304.	2.8	49
136	Degradable Carbon Dots from Cigarette Smoking with Broad-Spectrum Antimicrobial Activities against Drug-Resistant Bacteria. <i>ACS Applied Bio Materials</i> , 2018, 1, 1871-1879.	2.3	49
137	One-step synthesis of cobalt, nitrogen-codoped carbon as nonprecious bifunctional electrocatalyst for oxygen reduction and evolution reactions. <i>Science Bulletin</i> , 2016, 61, 68-77.	4.3	48
138	Ultrasml C-TiO ₂ nanoparticle/g-C ₃ N ₄ composite for CO ₂ photoreduction with high efficiency and selectivity. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21596-21604.	5.2	48
139	Imaging Cellular Aerobic Glycolysis using Carbon Dots for Early Warning of Tumorigenesis. <i>Advanced Materials</i> , 2021, 33, e2005096.	11.1	48
140	Chiral Control of Carbon Dots via Surface Modification for Tuning the Enzymatic Activity of Glucose Oxidase. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 5877-5886.	4.0	48
141	Composition Engineering of Amorphous Nickel Boride Nanoarchitectures Enabling Highly Efficient Electrosynthesis of Hydrogen Peroxide. <i>Advanced Materials</i> , 2022, 34, .	11.1	48
142	Reduced polyoxometalates and bipyridine ruthenium complex forming a tunable photocatalytic system for high efficient CO ₂ reduction. <i>Chemical Engineering Journal</i> , 2020, 398, 125518.	6.6	47
143	Defects induced efficient overall water splitting on a carbon-based metal-free photocatalyst. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 166-174.	10.8	46
144	Negatively Charged Carbon Nanodots with Bacteria Resistance Ability for High-Performance Antibiofilm Formation and Anticorrosion Coating Design. <i>Small</i> , 2019, 15, e1900007.	5.2	46

#	ARTICLE	IF	CITATIONS
145	Single atoms or not? The limitation of EXAFS. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	46
146	Template-free fabrication of mesoporous carbons from carbon quantum dots and their catalytic application to the selective oxidation of hydrocarbons. <i>Nanoscale</i> , 2014, 6, 5831.	2.8	45
147	Fluorescent carbon dots for sensitive determination and intracellular imaging of zinc(II) ion. <i>Mikrochimica Acta</i> , 2015, 182, 2443-2450.	2.5	45
148	Carbon Defect-Induced Reversible Carbonâ€“Oxygen Interfaces for Efficient Oxygen Reduction. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 39735-39744.	4.0	45
149	Pristine Carbon Dots Boost the Growth of <i>Chlorella vulgaris</i> by Enhancing Photosynthesis. <i>ACS Applied Bio Materials</i> , 2018, 1, 894-902.	2.3	45
150	Carbon dots regulate the interface electron transfer and catalytic kinetics of Pt-based alloys catalyst for highly efficient hydrogen oxidation. <i>Journal of Energy Chemistry</i> , 2022, 66, 61-67.	7.1	45
151	Robust carbon-dot-based evaporator with an enlarged evaporation area for efficient solar steam generation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14566-14573.	5.2	44
152	Cascaded photo-potential in a carbon dot-hematite system driving overall water splitting under visible light. <i>Nanoscale</i> , 2018, 10, 2454-2460.	2.8	43
153	Synergistic Cu@CoOx core-cage structure on carbon layers as highly active and durable electrocatalysts for methanol oxidation. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 795-801.	10.8	42
154	In-situ photovoltage transients assisted catalytic study on H2O2 photoproduction over organic molecules modified carbon nitride photocatalyst. <i>Applied Catalysis B: Environmental</i> , 2021, 285, 119817.	10.8	42
155	A function-switchable metal-free photocatalyst for the efficient and selective production of hydrogen and hydrogen peroxide. <i>Journal of Materials Chemistry A</i> , 2020, 8, 11773-11780.	5.2	42
156	Tunable synthesis of metalâ€“graphene complex nanostructures and their catalytic ability for solvent-free cyclohexene oxidation in air. <i>Nanoscale</i> , 2012, 4, 4964.	2.8	41
157	A g-C ₃ N ₄ based photoelectrochemical cell using O ₂ /H ₂ O redox couples. <i>Energy and Environmental Science</i> , 2018, 11, 1841-1847.	15.6	41
158	Polyaniline/Carbon Dots Composite as a Highly Efficient Metal-Free Dual-Functional Photoassisted Electrocatalyst for Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 24814-24823.	4.0	41
159	In-situ transient photovoltage study on interface electron transfer regulation of carbon dots/NiCo ₂ O ₄ photocatalyst for the enhanced overall water splitting activity. <i>Nano Research</i> , 2022, 15, 1786-1795.	5.8	41
160	Z-Scheme in a Co ₃ (PO ₄) ₂ /Fe ₂ O ₃ photocatalysis system for overall water splitting under visible light. <i>Catalysis Science and Technology</i> , 2018, 8, 840-846.	2.1	39
161	Cube-like CuCoO nanostructures on reduced graphene oxide for H ₂ generation from ammonia borane. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1180-1187.	3.0	39
162	Pseudo-Periodically Coupling Ni ₂ O Lattice with Ce ₂ O Lattice in Ultrathin Heteronanowire Arrays for Efficient Water Oxidation. <i>Small</i> , 2021, 17, e2101727.	5.2	39

#	ARTICLE	IF	CITATIONS
163	Significant improvement of near-UV electroluminescence from ZnO quantum dot LEDs via coupling with carbon nanodot surface plasmons. <i>Nanoscale</i> , 2017, 9, 14592-14601.	2.8	38
164	Strong coupling effect at the interface of cobalt phosphate-carbon dots boost photocatalytic water splitting. <i>Journal of Colloid and Interface Science</i> , 2018, 530, 256-263.	5.0	38
165	Highly Efficient Photoreduction of Low Concentration CO ₂ to Syngas by Using a Polyoxometalates/Ru Composite. <i>Chemistry - A European Journal</i> , 2020, 26, 2735-2740.	1.7	38
166	Enhanced charge separation and photocatalytic hydrogen evolution in carbonized-polymer-dot-coupled lead halide perovskites. <i>Materials Horizons</i> , 2020, 7, 2719-2725.	6.4	38
167	Bi-functional Fe ₂ ZrO ₅ modified hematite photoanode for efficient solar water splitting. <i>Applied Catalysis B: Environmental</i> , 2020, 269, 118768.	10.8	38
168	A photoactive process cascaded electrocatalysis for enhanced methanol oxidation over Pt-MXene-TiO ₂ composite. <i>Nano Research</i> , 2020, 13, 2683-2690.	5.8	37
169	A novel photochromic multilayer based on preyssler's cluster Electronic supplementary information (ESI) available: ESR spectrum of the NaP ₅ W ₃₀ /PEI sample after irradiation. See http://www.rsc.org/suppdata/nj/b3/b305578g/ . <i>New Journal of Chemistry</i> , 2003, 27, 1291.	1.4	36
170	Oxidized carbon quantum dot-graphene oxide nanocomposites for improving data retention of resistive switching memory. <i>Journal of Materials Chemistry C</i> , 2018, 6, 2026-2033.	2.7	36
171	Bandgap engineering of two-dimensional C ₃ N bilayers. <i>Nature Electronics</i> , 2021, 4, 486-494.	13.1	36
172	Highly Selective and Efficient Electroreduction of Carbon Dioxide to Carbon Monoxide with Phosphate Silver-Derived Coral-like Silver. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3536-3543.	3.2	35
173	Highly efficient CoNiP nanoboxes on graphene oxide for the hydrolysis of ammonia borane. <i>Chemical Engineering Journal</i> , 2022, 428, 131219.	6.6	35
174	Revealing Hydrogen Evolution Performance of Single-Atom Platinum Electrocatalyst with Polyoxometalate Molecular Models. <i>ACS Energy Letters</i> , 2021, 6, 4055-4062.	8.8	35
175	Carbon dots for photoswitching enzyme catalytic activity. <i>Journal of Materials Chemistry B</i> , 2014, 2, 5652.	2.9	34
176	Photo-charge regulation of metal-free photocatalyst by carbon dots for efficient and stable hydrogen peroxide production. <i>Journal of Materials Chemistry A</i> , 2021, 9, 25453-25462.	5.2	34
177	Carbon Dots Enable Efficient Delivery of Functional DNA in Plants. <i>ACS Applied Bio Materials</i> , 2020, 3, 8857-8864.	2.3	33
178	Air activation by a metal-free photocatalyst for totally-green hydrocarbon selective oxidation. <i>Catalysis Science and Technology</i> , 2016, 6, 7252-7258.	2.1	32
179	Multifunctional carbon dot for lifetime thermal sensing, nucleolus imaging and antialgal activity. <i>Journal of Materials Chemistry B</i> , 2018, 6, 5708-5717.	2.9	32
180	Progress of electrochemical CO ₂ reduction reactions over polyoxometalate-based materials. <i>Chinese Journal of Catalysis</i> , 2021, 42, 920-937.	6.9	32

#	ARTICLE	IF	CITATIONS
181	Oxygen Containing Functional Groups Dominate the Electrochemiluminescence of Pristine Carbon Dots. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27546-27554.	1.5	31
182	Carbon dots modified Ti ₃ C ₂ T _x -based fibrous supercapacitor with photo-enhanced capacitance. <i>Nano Research</i> , 2021, 14, 3886-3892.	5.8	31
183	A practical and highly sensitive C ₃ N ₄ -TYR fluorescent probe for convenient detection of dopamine. <i>Nanoscale</i> , 2015, 7, 12068-12075.	2.8	30
184	CoMn-S/CDs nanocomposite for effective long wavelength visible-light-driven photocatalytic water splitting. <i>Applied Catalysis B: Environmental</i> , 2018, 226, 295-302.	10.8	30
185	A nitrogen and boron co-doped metal-free carbon electrocatalyst for an efficient oxygen reduction reaction. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2985-2991.	3.0	30
186	A Bright and Stable Violet Carbon Dot Light-Emitting Diode. <i>Advanced Optical Materials</i> , 2020, 8, 2000239.	3.6	30
187	Polytritycene@CdS double shell hollow spheres with enhanced interfacial charge transfer for highly efficient photocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9105-9112.	5.2	30
188	N-doped carbon dots derived from leaves with low toxicity via damaging cytomembrane for broad-spectrum antibacterial activity. <i>Materials Today Communications</i> , 2020, 24, 101222.	0.9	30
189	Physicochemical Property Estimation of an Ionic Liquid Based on Glutamic Acid ⁻ BMIGlu. <i>Journal of Chemical & Engineering Data</i> , 2010, 55, 2616-2619.	1.0	29
190	Carbon nanodots modified cobalt phosphate as efficient electrocatalyst for water oxidation. <i>Journal of Materiomics</i> , 2015, 1, 236-244.	2.8	29
191	N doped carbon dots modified needle-like NiCo ₂ O ₄ supported on graphene as efficient dual-functional electrocatalyst for oxygen reduction and evolution reactions. <i>Journal of Electroanalytical Chemistry</i> , 2019, 855, 113617.	1.9	29
192	Highly efficient water splitting over a RuO ₂ /F-doped graphene electrocatalyst with ultra-low ruthenium content. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 2188-2194.	3.0	29
193	Amino Modified Carbon Dots with Electron Sink Effect Increase Interface Charge Transfer Rate of Cu-Based Electrocatalyst to Enhance the CO ₂ Conversion Selectivity to C ₂ H ₄ . <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	29
194	Third-order nonlinear optical properties of carboxyl group dominant carbon nanodots. <i>Journal of Materials Chemistry C</i> , 2016, 4, 8490-8495.	2.7	28
195	C=O ⁺ K ⁺ (Na ⁺) groups in non-doped carbon as active sites for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8955-8961.	5.2	28
196	Efficient photocatalytic water splitting through titanium silicalite stabilized CoO nanodots. <i>Nanoscale</i> , 2019, 11, 15984-15990.	2.8	28
197	Co-doped carbon layer to lower the onset potential of hematite for solar water oxidation. <i>Applied Catalysis B: Environmental</i> , 2019, 258, 117962.	10.8	28
198	Biotoxicity of degradable carbon dots towards microalgae <i>Chlorella vulgaris</i> . <i>Environmental Science: Nano</i> , 2019, 6, 3316-3323.	2.2	28

#	ARTICLE	IF	CITATIONS
199	An A-site management and oxygen-deficient regulation strategy with a perovskite oxide electrocatalyst for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1336-1342.	5.2	27
200	The Electron Transport Regulation in Carbon Dots/ In_2O_3 Electro-catalyst Enable 100% Selectivity for Oxygen Reduction to Hydrogen Peroxide. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	27
201	$\text{Ag}^{\text{In}}\text{Zn}^{\text{S}}$ Quantum Dot-Dominated Interface Kinetics in $\text{Ag}^{\text{In}}\text{Zn}^{\text{S}}/\text{NiFe}$ LDH Composites toward Efficient Photoassisted Electrocatalytic Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 42125-42137.	4.0	26
202	Highly efficient metal-free catalyst from cellulose for hydrogen peroxide photoproduction instructed by machine learning and transient photovoltage technology. <i>Nano Research</i> , 2022, 15, 4000-4007.	5.8	26
203	N-Doped carbon dot with surface dominant non-linear optical properties. <i>RSC Advances</i> , 2016, 6, 95476-95482.	1.7	25
204	Carbon quantum dot-covered porous Ag with enhanced activity for selective electroreduction of CO_2 to CO. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1453-1460.	3.0	25
205	Carbon dot-modified mesoporous carbon as a supercapacitor with enhanced light-assisted capacitance. <i>Nanoscale</i> , 2020, 12, 17925-17930.	2.8	25
206	Tree-inspired ultra-rapid steam generation and simultaneous energy harvesting under weak illumination. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10260-10268.	5.2	25
207	Carbon dots/ $\text{PtW}_6\text{O}_{24}$ composite as efficient and stable electrocatalyst for hydrogen oxidation reaction in PEMFCs. <i>Chemical Engineering Journal</i> , 2021, 426, 130709.	6.6	25
208	Rh/RhO_x nanosheets as pH-universal bifunctional catalysts for hydrazine oxidation and hydrogen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1891-1898.	5.2	25
209	Replacing Ru complex with carbon dots over MOF-derived $\text{Co}_3\text{O}_4/\text{In}_2\text{O}_3$ catalyst for efficient solar-driven CO_2 reduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4279-4287.	5.2	25
210	A comprehensive understanding on the roles of carbon dots in metallated graphyne based catalyst for photoinduced H_2O_2 production. <i>Nano Today</i> , 2022, 43, 101428.	6.2	25
211	A switchable-selectivity multiple-interface Ni-WC hybrid catalyst for efficient nitroarene reduction. <i>Journal of Catalysis</i> , 2019, 377, 174-182.	3.1	24
212	Hydroxyl functionalized carbon dots with strong radical scavenging ability promote cell proliferation. <i>Materials Research Express</i> , 2019, 6, 065030.	0.8	24
213	Carbon Nitride Quantum Dots Enhancing the Anodic Electrochemiluminescence of Ruthenium(II) $\text{Tris}(2,2\text{-bipyridyl})$ via Inhibiting the Oxygen Evolution Reaction. <i>Analytical Chemistry</i> , 2020, 92, 15352-15360.	3.2	24
214	Organic Semiconductor/Carbon Dot Composites for Highly Efficient Hydrogen and Hydrogen Peroxide Coproduction from Water Photosplitting. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 60561-60570.	4.0	24
215	Fe-doped SnO_2 nanosheet for ambient electrocatalytic nitrogen reduction reaction. <i>Nano Research</i> , 2022, 15, 6026-6035.	5.8	24
216	Quasi-layer Co_2P -polarized Cu_3P nanocomposites with enhanced intrinsic interfacial charge transfer for efficient overall water splitting. <i>Nanoscale</i> , 2019, 11, 6394-6400.	2.8	23

#	ARTICLE	IF	CITATIONS
217	Carbon dots/Bi ₂ WO ₆ composite with compensatory photo-electronic effect for overall water photo-splitting at normal pressure. <i>Chinese Chemical Letters</i> , 2021, 32, 2283-2286.	4.8	23
218	In situ controllable synthesis of polyoxometalate nanoparticles in polyelectrolyte multilayers. Electronic supplementary information (ESI) available: Fig. S1 and S2, discussed in the text. See http://www.rsc.org/suppdata/jm/b3/b301056b/ . <i>Journal of Materials Chemistry</i> , 2003, 13, 647-649.	6.7	22
219	Highly selective conversion of CO ₂ to C ₂ H ₆ on graphene modified chlorophyll Cu through multi-electron process for artificial photosynthesis. <i>Nanoscale</i> , 2019, 11, 22980-22988.	2.8	22
220	Simple Semiempirical Method for the Location Determination of HOMO and LUMO of Carbon Dots. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7451-7457.	1.5	22
221	Layered double hydroxide nanosheets activate CsPbBr ₃ nanocrystals for enhanced photocatalytic CO ₂ reduction. <i>Nano Research</i> , 2022, 15, 5953-5961.	5.8	22
222	Nitrogen, phosphorus co-doped carbon dots/CoS ₂ hybrid for enhanced electrocatalytic hydrogen evolution reaction. <i>RSC Advances</i> , 2016, 6, 66893-66899.	1.7	21
223	Lasing behavior of surface functionalized carbon quantum dot/RhB composites. <i>Nanoscale</i> , 2017, 9, 5049-5054.	2.8	21
224	Facile Surface Engineering of AgInZnS Quantum Dot Photocatalysts by Mixed-Ligand Passivation with Improved Charge Carrier Lifetime. <i>Catalysis Letters</i> , 2019, 149, 1800-1812.	1.4	21
225	Metal-Free Catalyst with Large Carbon Defects for Efficient Direct Overall Water Splitting in Air at Room Pressure. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 30280-30288.	4.0	21
226	Photocatalyst for High-Performance H ₂ Production: Ga-Doped Polymeric Carbon Nitride. <i>Angewandte Chemie</i> , 2021, 133, 6189-6194.	1.6	21
227	Converting Organic Wastewater into CO Using MOFs-Derived Co/In ₂ O ₃ Double-Shell Photocatalyst. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 40754-40765.	4.0	21
228	Converting water impurity in organic solvent into hydrogen and hydrogen peroxide by organic semiconductor photocatalyst. <i>Applied Catalysis B: Environmental</i> , 2022, 305, 121047.	10.8	21
229	A nickel-modified polyoxometalate towards a highly efficient catalyst for selective oxidation of hydrocarbons. <i>Journal of Materials Chemistry A</i> , 2014, 2, 12686.	5.2	20
230	Cobalt oxyhydroxide and carbon dots modified by platinum as superior electrocatalyst for methanol oxidation. <i>Materials Chemistry and Physics</i> , 2019, 225, 64-71.	2.0	20
231	Water-soluble carbon dots derived from curcumin and citric acid with enhanced broad-spectrum antibacterial and antibiofilm activity. <i>Materials Today Communications</i> , 2021, 26, 102000.	0.9	20
232	Transient photovoltage study of the kinetics and synergy of electron/hole co-extraction in MoS ₂ /Ag-In-Zn-S/carbon dot photocatalysts for promoted hydrogen production. <i>Chemical Engineering Journal</i> , 2022, 439, 135759.	6.6	20
233	Enhanced supercapacitor performance of Bi ₂ O ₃ by Mn doping. <i>Journal of Alloys and Compounds</i> , 2022, 914, 165258.	2.8	20
234	N-Doped nanodots/np ⁺ -Si photocathodes for efficient photoelectrochemical hydrogen generation. <i>Chemical Communications</i> , 2015, 51, 15340-15343.	2.2	18

#	ARTICLE	IF	CITATIONS
235	Pyridine derivative-induced fluorescence in multifunctional modified carbon dots and their application in thermometers. <i>Journal of Materials Chemistry B</i> , 2017, 5, 3964-3969.	2.9	18
236	Polyoxometalate film simultaneously converts multiple low-value all-weather environmental energy to electricity. <i>Nano Energy</i> , 2020, 68, 104349.	8.2	18
237	Photo-tunable organic resistive random access memory based on PVP/N-doped carbon dot nanocomposites for encrypted image storage. <i>Journal of Materials Chemistry C</i> , 2020, 8, 14789-14795.	2.7	18
238	Hydroxyl-terminated carbon dots for efficient conversion of cyclohexane to adipic acid. <i>Journal of Colloid and Interface Science</i> , 2021, 591, 281-289.	5.0	18
239	Carbon dots with different energy levels regulate the activity of metal-free catalyst for hydrogen peroxide photoproduction. <i>Journal of Colloid and Interface Science</i> , 2022, 616, 769-780.	5.0	18
240	Photocatalytic Polymerization from Amino Acid to Protein by Carbon Dots at Room Temperature. <i>ACS Applied Bio Materials</i> , 2019, 2, 5144-5153.	2.3	17
241	Edible and highly biocompatible nanodots from natural plants for the treatment of stress gastric ulcers. <i>Nanoscale</i> , 2021, 13, 6809-6818.	2.8	17
242	Functionalization of metal oxides with thiocyanate groups: A general strategy for boosting oxygen evolution reaction in neutral media. <i>Nano Energy</i> , 2020, 76, 105079.	8.2	16
243	Effective Low-Temperature Methanol Aqueous Phase Reforming with Metal-Free Carbon Dots/C ₃ N ₄ Composites. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 24702-24709.	4.0	16
244	Electric field polarized sulfonated carbon dots/NiFe layered double hydroxide as highly efficient electrocatalyst for oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 420, 129690.	6.6	16
245	Engineering a polyoxometalate-based metal organic framework with more exposed active edge sites of Ag for visible light-driven selective oxidation of <i>cis</i> -cyclooctene. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2493-2500.	3.0	15
246	Pd Nanoparticles with Twin Structures on F ₂ Doped Graphene for Formic Acid Oxidation. <i>ChemCatChem</i> , 2020, 12, 504-509.	1.8	15
247	Highly mesoporous carbon nitride photocatalysts for efficient and stable overall water splitting. <i>Applied Surface Science</i> , 2020, 509, 144706.	3.1	15
248	A molecular architectural design that promises potent antimicrobial activity against multidrug-resistant pathogens. <i>NPG Asia Materials</i> , 2021, 13, .	3.8	15
249	Small-molecule catalyzed H ₂ O ₂ production via a phase-transfer photocatalytic process. <i>Applied Catalysis B: Environmental</i> , 2022, 314, 121499.	10.8	15
250	Selected synthesis of carbon nanostructures directed by silver nanocrystals. <i>Nanotechnology</i> , 2004, 15, 490-493.	1.3	14
251	Homochiral metal-organic porous materials for enantioselective recognition and electrocatalysis. <i>CrystEngComm</i> , 2013, 15, 3288.	1.3	14
252	Extraction of High-Quality Quantum Dot Photocatalysts via Combination of Size Selection and Electrochemiluminescence. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 20043-20050.	3.2	14

#	ARTICLE	IF	CITATIONS
253	Carbon dots modified WO ₂ -Na _x WO ₃ composite as UV-Vis-NIR broad spectrum-driven photocatalyst for overall water splitting. <i>Catalysis Today</i> , 2020, 340, 152-160.	2.2	14
254	Carbon dots dominated photoelectric surface in titanium dioxide nanotube/nitrogen-doped carbon dot/gold nanocomposites for improved photoelectrochemical water splitting. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 1274-1283.	5.0	14
255	A WO _x mediated interface boosts the activity and stability of Pt-catalyst for alkaline water splitting. <i>Chemical Engineering Journal</i> , 2022, 431, 133287.	6.6	14
256	High-throughput glycolytic inhibitor discovery targeting glioblastoma by graphite dots-assisted LDI mass spectrometry. <i>Science Advances</i> , 2022, 8, eabl4923.	4.7	14
257	Preparation of chiral graphene oxides by covalent attachment of chiral cysteines for voltammetric recognition of tartrates. <i>Mikrochimica Acta</i> , 2019, 186, 298.	2.5	13
258	A photo-activated process cascaded electrocatalysis for the highly efficient CO ₂ reduction over a core-shell ZIF-8@Co/C. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16616-16623.	5.2	13
259	Optoelectronic and photocatalytic properties of III-VI QDs: Bridging between traditional and emerging new QDs. <i>Journal of Semiconductors</i> , 2020, 41, 091701.	2.0	13
260	Fluorescent nanoparticles as tools in ecology and physiology. <i>Biological Reviews</i> , 2021, 96, 2392-2424.	4.7	13
261	Simultaneous enzymatic activity modulation and rapid determination of enzyme kinetics by highly crystalline graphite dots. <i>Nanoscale</i> , 2017, 9, 8410-8417.	2.8	12
262	Nonlinear optical switching behavior of nitrogen-doped carbon dots. <i>Optical Materials</i> , 2019, 95, 109216.	1.7	12
263	A carbon dot-based total green and self-recoverable solid-state electrochemical cell fully utilizing O ₂ /H ₂ O redox couple. <i>SusMat</i> , 2021, 1, 448-457.	7.8	12
264	Bisodium-substituted vanadium oxide cluster with encapsulated [VO ₄] ⁴⁻ core and its electrochemical property. <i>Inorganic Chemistry Communication</i> , 2012, 20, 153-156.	1.8	11
265	Phosphorus-doped macroporous carbon spheres for high efficiency selective oxidation of cyclooctene by air. <i>RSC Advances</i> , 2014, 4, 22419.	1.7	11
266	Nucleation and growth of polyoxometalate nanoparticles in polyelectrolyte multilayer films. <i>New Journal of Chemistry</i> , 2005, 29, 1249.	1.4	10
267	Gold nanoparticle and carbon dot coated SnO ₂ nanocomposite with high photo-electronic catalytic activity for oxygen evolution reaction. <i>Dalton Transactions</i> , 2015, 44, 7318-7323.	1.6	10
268	A Novel CoO _{1.6} C _{0.7} Nanocomposite with Enhanced Photocatalytic Activity and Stability for Hydrogen Evolution Achieved by Carbon Dots. <i>ChemistrySelect</i> , 2018, 3, 904-910.	0.7	10
269	Hierarchical and Highly Stable Conductive Network Cathode for Ultraflexible Li-S Batteries. <i>ACS Applied Energy Materials</i> , 2018, 1, 2689-2697.	2.5	10
270	All-in-one photocatalysis device for one-step high concentration H ₂ O ₂ photoproduction. <i>Chemical Engineering Journal</i> , 2022, 427, 131972.	6.6	10

#	ARTICLE	IF	CITATIONS
271	Chiral carbon dots as a functional domain for tyrosinase Cu active site modulation via remote target interaction. <i>Nanoscale</i> , 2022, 14, 1202-1210.	2.8	10
272	A carbon dot-based metal-free photocatalyst enables O ₂ to serve as both a reactant and electron sink for enhancing H ₂ O ₂ photoproduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 15074-15079.	5.2	10
273	One-step synthesis of ZnS-N/C nanocomposites derived from Zn-based chiral metal-organic frameworks with highly efficient photocatalytic activity for the selective oxidation of <i>cis</i> -cyclooctene. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 723-731.	3.0	9
274	Real-time monitoring the interfacial dynamic processes at model cell membranes: Taking cell penetrating peptide TAT as an example. <i>Journal of Colloid and Interface Science</i> , 2022, 609, 707-717.	5.0	9
275	Dynamic Interface with Enhanced Visible-Light Absorption and Electron Transfer for Direct Photoreduction of Flue Gas to Syngas. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 6476-6483.	4.0	9
276	Carbon dots with chiral surface selectively inhibit the activity of laccase. <i>Applied Surface Science</i> , 2022, 583, 152540.	3.1	9
277	Carbon dots up-regulate heme oxygenase-1 expression towards acute lung injury therapy. <i>Journal of Materials Chemistry B</i> , 2021, 9, 9005-9011.	2.9	8
278	Carbon-Dot-Based White-Light-Emitting Diodes with Adjustable Correlated Color Temperature Guided by Machine Learning. <i>Angewandte Chemie</i> , 2021, 133, 12693-12698.	1.6	8
279	Size-dependent and real-time effect of SiO ₂ nanoparticles on a single living HeLa Cell's membrane permeability. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1198-1203.	2.9	7
280	Investigation of Regeneration Kinetics of a Carbon-Dot-Sensitized Metal Oxide Semiconductor with Scanning Electrochemical Microscopy. <i>ACS Applied Energy Materials</i> , 2018, 1, 1483-1488.	2.5	7
281	ZIF/Co-C ₃ N ₄ with enhanced electrocatalytic reduction of carbon dioxide activity by the photoactivation process. <i>Nanoscale</i> , 2021, 13, 14089-14095.	2.8	7
282	Continuous Homogeneous Catalytic Oxidation of C-H Bonds by Metal-Free Carbon Dots with a Poly(ascorbic acid) Structure. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 26682-26689.	4.0	7
283	Inorganic-Organic Hybrid 18-Molybdodiphosphate Nanoparticles Bulk-Modified Carbon Paste Electrode and Its Electrocatalysis. <i>Chinese Journal of Chemistry</i> , 2002, 20, 777-783.	2.6	6
284	Composition and morphology control of Fe _x (PO ₄) _y (OH) _z ·nH ₂ O microcrystals. <i>Crystal Research and Technology</i> , 2011, 46, 711-717.	0.6	6
285	Spatial-temporal profiling of antibiotic metabolites using graphite dots-assisted laser desorption ionization mass spectrometry. <i>Talanta</i> , 2020, 220, 121371.	2.9	6
286	Highly stable and bright blue light-emitting diodes based on carbon dots with a chemically inert surface. <i>Nanoscale Advances</i> , 2021, 3, 6949-6955.	2.2	6
287	A metal-free catalyst for the efficient and stable one-step photocatalytic production of pure hydrogen peroxide. <i>Catalysis Science and Technology</i> , 2022, 12, 1837-1842.	2.1	6
288	A spherical deca-vanadophosphate covalent assembled all-inorganic open framework. <i>Dalton Transactions</i> , 2017, 46, 3115-3119.	1.6	5

#	ARTICLE	IF	CITATIONS
289	Photo-Voltage Transients for Real-Time Analysis of the Interactions between Molecules and Membranes. ACS Applied Bio Materials, 2021, 4, 620-629.	2.3	5
290	Carbon dots promote the carrier recombination in Poly (9-vinyl carbazole) to enhance its electroluminescence. Applied Surface Science, 2022, 585, 152649.	3.1	5
291	A biomass derived porous carbon materials with adjustable interfacial electron transmission dynamics as highly-efficient air cathode for Zn-Air battery. Materials Research Bulletin, 2022, 153, 111908.	2.7	5
292	Highly crystalline core dominated the catalytic performance of carbon dot for cyclohexane to adipic acid reaction. Nano Research, 2022, 15, 7662-7669.	5.8	5
293	Water-capsule strategy in crystal engineering for water-solubility conversion from insoluble to soluble. Dalton Transactions, 2012, 41, 13277.	1.6	4
294	Phosphate functionalized activated carbon as an efficient metal-free electrocatalyst for the oxygen reduction reaction. New Journal of Chemistry, 2015, 39, 8881-8886.	1.4	4
295	Cu atomic clusters on N-doped porous carbon with tunable oxidation state for the highly-selective electroreduction of CO ₂ . Materials Advances, 2020, 1, 2286-2292.	2.6	4
296	Carbon dots with tunable third-order nonlinear coefficient instructed by machine learning. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 426, 113729.	2.0	4
297	Transition metal-directed assembly of diverse coordination polymers based on multifunctional ligand 2,4-dichloro-5-sulfamoylbenzoic acid. CrystEngComm, 2013, 15, 8483.	1.3	3
298	Co ₃ O ₄ and CDots nanocrystals on g-C ₃ N ₄ as a synergetic catalyst for oxygen reduction reaction. Green Processing and Synthesis, 2015, 4, .	1.3	3
299	One-Step Direct Fixation of Atmospheric CO ₂ by Si-H Surface in Solution. IScience, 2020, 23, 100806.	1.9	3
300	Photocatalytic selective H ₂ release from formic acid enabled by CO ₂ captured carbon nitride. Nanotechnology, 2021, 32, 275404.	1.3	3
301	Ascorbic acid derived carbon dots promote circadian rhythm and contribute to attention deficit hyperactivity disorder. Nano Research, 2022, 15, 8247-8254.	5.8	3
302	Inside Cover: Polyhedral Organic Microcrystals: From Cubes to Rhombic Dodecahedra (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 T	7.2	2
303	Diverse catalytic behavior of a dye-based polymer metal-free catalyst for hydrogen peroxide photoproduction. Materials Advances, 2022, 3, 4243-4251.	2.6	2
304	ONE-STEP SOLID-STATE REACTION AT ROOM TEMPERATURE FOR THE SYNTHESIS OF POLYOXOMETALATE NANOPARTICLES AND NANORODS. , 2002, , .		0
305	Innentitelbild: Ultrastable, Highly Fluorescent, and Water-Dispersed Silicon-Based Nanospheres as Cellular Probes (Angew. Chem. 1/2009). Angewandte Chemie, 2009, 121, 2-2.	1.6	0
306	Innentitelbild: Polyhedral Organic Microcrystals: From Cubes to Rhombic Dodecahedra (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.6	0

#	ARTICLE	IF	CITATIONS
307	Real-time monitoring the staged interactions between cationic surfactants and a phospholipid bilayer membrane. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 5360-5370.	1.3	0
308	Cu ^{II} -Bridged Tetrakis(4-ethynylphenyl)ethene Aggregates with Photo-Regulated 1O_2 and $O_2^{\bullet -}$ Generation for Selective Photocatalytic Aerobic Oxidation. <i>Angewandte Chemie</i> , 0, , .	1.6	0