Louzhen Fan

List of Publications by Year in descending order

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		101496	4	19868
85	8,258	36		87
papers	citations	h-index		g-index
93	93	93		8936
all docs	docs citations	times ranked		citing authors

#	Article	IF	CITATIONS
1	Engineering triangular carbon quantum dots with unprecedented narrow bandwidth emission for multicolored LEDs. Nature Communications, 2018, 9, 2249.	5.8	676
2	Facile synthesis of water-soluble, highly fluorescent graphene quantum dots as a robust biological label for stem cells. Journal of Materials Chemistry, 2012, 22, 7461.	6.7	667
3	Bright Multicolor Bandgap Fluorescent Carbon Quantum Dots for Electroluminescent Lightâ€Emitting Diodes. Advanced Materials, 2017, 29, 1604436.	11.1	643
4	Shining carbon dots: Synthesis and biomedical and optoelectronic applications. Nano Today, 2016, 11, 565-586.	6.2	563
5	53% Efficient Red Emissive Carbon Quantum Dots for High Color Rendering and Stable Warm Whiteâ€Lightâ€Emitting Diodes. Advanced Materials, 2017, 29, 1702910.	11.1	563
6	Sulfur-Doped Graphene Quantum Dots as a Novel Fluorescent Probe for Highly Selective and Sensitive Detection of Fe ³⁺ . Analytical Chemistry, 2014, 86, 10201-10207.	3.2	519
7	Electrochemical synthesis of small-sized red fluorescent graphene quantum dots as a bioimaging platform. Chemical Communications, 2015, 51, 2544-2546.	2.2	297
8	Targeted tumour theranostics in mice via carbon quantum dots structurally mimicking large amino acids. Nature Biomedical Engineering, 2020, 4, 704-716.	11.6	243
9	Surrounding media sensitive photoluminescence of boron-doped graphene quantum dots for highly fluorescent dyed crystals, chemical sensing and bioimaging. Carbon, 2014, 70, 149-156.	5.4	232
10	Carbon quantum dots: an emerging material for optoelectronic applications. Journal of Materials Chemistry C, 2019, 7, 6820-6835.	2.7	225
11	Fluorescent graphene quantum dots for biosensing and bioimaging. RSC Advances, 2015, 5, 19773-19789.	1.7	203
12	Multicolor fluorescent graphene quantum dots colorimetrically responsive to all-pH and a wide temperature range. Nanoscale, 2015, 7, 11727-11733.	2.8	187
13	Electroluminescent Warm White Lightâ€Emitting Diodes Based on Passivation Enabled Bright Red Bandgap Emission Carbon Quantum Dots. Advanced Science, 2019, 6, 1900397.	5.6	174
14	The uptake mechanism and biocompatibility of graphene quantum dots with human neural stem cells. Nanoscale, 2014, 6, 5799-5806.	2.8	171
15	Exceptionally High Payload of the IR780 lodide on Folic Acid-Functionalized Graphene Quantum Dots for Targeted Photothermal Therapy. ACS Applied Materials & Diterfaces, 2017, 9, 22332-22341.	4.0	167
16	Passivation of the grain boundaries of CH ₃ NH ₃ Pbl ₃ using carbon quantum dots for highly efficient perovskite solar cells with excellent environmental stability. Nanoscale, 2019, 11, 115-124.	2.8	164
17	Rhodamine-Functionalized Graphene Quantum Dots for Detection of Fe ³⁺ in Cancer Stem Cells. ACS Applied Materials & amp; Interfaces, 2015, 7, 23958-23966.	4.0	163
18	Carbon dots: a booming material for biomedical applications. Materials Chemistry Frontiers, 2020, 4, 821-836.	3.2	150

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19	Red-Emissive Carbon Quantum Dots for Nuclear Drug Delivery in Cancer Stem Cells. Journal of Physical Chemistry Letters, 2020, 11, 1357-1363.	2.1	127
20	pH-Responsive fluorescent graphene quantum dots for fluorescence-guided cancer surgery and diagnosis. Nanoscale, 2017, 9, 4928-4933.	2.8	122
21	Graphene quantum dots as smart probes for biosensing. Analytical Methods, 2016, 8, 4001-4016.	1.3	116
22	Fluorescence–phosphorescence dual emissive carbon nitride quantum dots show 25% white emission efficiency enabling single-component WLEDs. Chemical Science, 2019, 10, 9801-9806.	3.7	115
23	Highly efficient and stable white LEDs based on pure red narrow bandwidth emission triangular carbon quantum dots for wide-color gamut backlight displays. Nano Research, 2019, 12, 1669-1674.	5.8	107
24	Recent advances in white light-emitting diodes of carbon quantum dots. Nanoscale, 2020, 12, 4826-4832.	2.8	98
25	Electrochemical route to the preparation of highly dispersed composites of ZnO/carbon nanotubes with significantly enhanced electrochemiluminescence from ZnO. Journal of Materials Chemistry, 2008, 18, 4964.	6.7	90
26	Gramâ€Scale Synthesis of Highly Efficient Rareâ€Earthâ€Elementâ€Free Red/Green/Blue Solidâ€State Bandgap Fluorescent Carbon Quantum Rings for White Lightâ€Emitting Diodes. Angewandte Chemie - International Edition, 2021, 60, 16343-16348.	7.2	70
27	Ultrastable and Lowâ€Threshold Random Lasing from Narrowâ€Bandwidthâ€Emission Triangular Carbon Quantum Dots. Advanced Optical Materials, 2019, 7, 1801202.	3.6	67
28	Ultrabroad-band, red sufficient, solid white emission from carbon quantum dot aggregation for single component warm white light emitting diodes with a 91 high color rendering index. Chemical Communications, 2019, 55, 6531-6534.	2.2	62
29	CdS-Ag nanocomposite arrays: enhanced electro-chemiluminescence but quenched photoluminescence. Journal of Materials Chemistry, 2009, 19, 3841.	6.7	56
30	Highly Ordered Hierarchical Pt and PtNi Nanowire Arrays for Enhanced Electrocatalytic Activity toward Methanol Oxidation. ACS Applied Materials & Samp; Interfaces, 2018, 10, 9444-9450.	4.0	54
31	Red Phosphorescent Carbon Quantum Dot Organic Framework-Based Electroluminescent Light-Emitting Diodes Exceeding 5% External Quantum Efficiency. Journal of the American Chemical Society, 2021, 143, 18941-18951.	6.6	54
32	Multifunctional pâ€Type Carbon Quantum Dots: a Novel Hole Injection Layer for Highâ€Performance Perovskite Lightâ€Emitting Diodes with Significantly Enhanced Stability. Advanced Optical Materials, 2019, 7, 1901299.	3.6	52
33	A novel colorimetric potassium sensor based on the substitution of lead from G-quadruplex. Analyst, The, 2013, 138, 856-862.	1.7	50
34	Na ⁺ -Induced Conformational Change of Pb ²⁺ -Stabilized G-Quadruplex and Its Influence on Pb ²⁺ Detection. Analytical Chemistry, 2016, 88, 9375-9380.	3.2	45
35	Solution Grown Single-Unit-Cell Quantum Wires Affording Self-Powered Solar-Blind UV Photodetectors with Ultrahigh Selectivity and Sensitivity. Journal of the American Chemical Society, 2019, 141, 3480-3488.	6.6	44
36	Electrochemically generated fluorescent fullerene [60] nanoparticles as a new and viable bioimaging platform. Journal of Materials Chemistry, 2011, 21, 819-823.	6.7	41

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37	Activatable Protein Nanoparticles for Targeted Delivery of Therapeutic Peptides. Advanced Materials, 2018, 30, 1705383.	11.1	38
38	Nitrogen-Rich D-Ï€-A Structural Carbon Quantum Dots with a Bright Two-Photon Fluorescence for Deep-Tissue Imaging. ACS Applied Bio Materials, 2018, 1, 853-858.	2.3	37
39	Graphene-based porous carbon-Pd/SnO ₂ nanocomposites with enhanced electrocatalytic activity and durability for methanol oxidation. Journal of Materials Chemistry A, 2016, 4, 8898-8904.	5.2	36
40	Single small molecule-assembled nanoparticles mediate efficient oral drug delivery. Nano Research, 2019, 12, 2468-2476.	5.8	36
41	Ligand-Tuned Shape Control, Oriented Assembly, and Electrochemical Characterization of Colloidal ZnTe Nanocrystals. Chemistry of Materials, 2010, 22, 4632-4641.	3.2	33
42	Highly Selective and Sensitive Detection of Dopamine in the Presence of Excessive Ascorbic Acid Using Electrodes Modified with C ₆₀ â€Functionalized Multiwalled Carbon Nanotube Films. Electroanalysis, 2009, 21, 2660-2666.	1.5	31
43	Ultralong CdTe Nanowires: Catalystâ€Free Synthesis and Highâ€Yield Transformation into Core–Shell Heterostructures. Advanced Functional Materials, 2012, 22, 2402-2411.	7.8	31
44	Carbon dots: An innovative luminescent nanomaterial. Aggregate, 2022, 3, e108.	5.2	31
45	Photovoltaic Devices with Methanofullerenes as Electron Acceptors. Journal of Physical Chemistry B, 2002, 106, 11509-11514.	1.2	30
46	Applications of carbon dots on tumour theranostics. View, 2021, 2, 20200061.	2.7	30
47	Singleâ€Crystalline C ₆₀ Nanostructures by Sonophysical Preparation: Tuning Hollow Nanobowls as Catalyst Supports for Methanol Oxidation. Chemistry - A European Journal, 2011, 17, 4921-4926.	1.7	28
48	Ultrathin ZnSe nanowires: one-pot synthesis via a heat-triggered precursor slow releasing route, controllable Mn doping and application in UV and near-visible light detection. Nanoscale, 2017, 9, 15044-15055.	2.8	27
49	Recent Advance in Carbon Dots: From Properties to Applications. Chinese Journal of Chemistry, 2021, 39, 1364-1388.	2.6	24
50	Glucose oxidase decorated fluorescent metal–organic frameworks as biomimetic cascade nanozymes for glucose detection through the inner filter effect. Analyst, The, 2021, 146, 4188-4194.	1.7	24
51	Highly dispersible and charge-tunable magnetic Fe ₃ O ₄ nanoparticles: facile fabrication and reversible binding to GO for efficient removal of dye pollutants. Journal of Materials Chemistry A, 2014, 2, 15763-15767.	5.2	23
52	Toward phosphorescent and delayed fluorescent carbon quantum dots for next-generation electroluminescent displays. Journal of Materials Chemistry C, 2022, 10, 2333-2348.	2.7	23
53	Enhanced electrochemical evolution of oxygen by using nanoflowers made from a gold and iridium oxide composite. Mikrochimica Acta, 2012, 178, 107-114.	2.5	22
54	Aptamer-Based K ⁺ Sensor: Process of Aptamer Transforming into G-Quadruplex. Journal of Physical Chemistry B, 2016, 120, 6606-6611.	1.2	22

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55	Template-free solution growth of highly regular, crystal orientation-ordered C ₆₀ nanorod bundles. Journal of Materials Chemistry, 2010, 20, 953-956.	6.7	21
56	Synthesis of red fluorescent graphene quantum dot-europium complex composites as a viable bioimaging platform. Mikrochimica Acta, 2016, 183, 2605-2613.	2.5	21
57	Investigation of Na ⁺ and K ⁺ Competitively Binding with a G-Quadruplex and Discovery of a Stable K ⁺ –Na ⁺ -Quadruplex. Journal of Physical Chemistry B, 2019, 123, 5405-5411.	1.2	20
58	Electrodeposition and electrocatalytic properties of platinum nanoparticles on multi-walled carbon nanotubes: effect of the deposition conditions. Mikrochimica Acta, 2007, 158, 327-334.	2.5	19
59	Electrochemical synthesis of sulfur-doped graphene sheets for highly efficient oxygen reduction. Science China Chemistry, 2015, 58, 417-424.	4.2	19
60	Buffer species-dependent catalytic activity of Cu-Adenine as a laccase mimic for constructing sensor array to identify multiple phenols. Analytica Chimica Acta, 2022, 1204, 339725.	2.6	18
61	Controlled calcination of ZnSe and ZnTe nanospheres to prepare visible-light catalysts with enhanced photostability and photoactivity. Journal of Materials Science, 2016, 51, 11021-11037.	1.7	16
62	Systematic truncating of aptamers to create high-performance graphene oxide (GO)-based aptasensors for the multiplex detection of mycotoxins. Analyst, The, 2019, 144, 3826-3835.	1.7	16
63	Plasmonic Hot Hole Extraction from CuS Nanodisks Enables Significant Acceleration of Oxygen Evolution Reactions. Journal of Physical Chemistry Letters, 2021, 12, 7988-7996.	2.1	14
64	Insights into the Competition between K ⁺ and Pb ²⁺ Binding to a G-Quadruplex and Discovery of a Novel K ⁺ â€"Pb ²⁺ â€"Quadruplex Intermediate. Journal of Physical Chemistry B, 2018, 122, 9382-9388.	1.2	13
65	Precursor reactivity differentiation for single-step preparation of Ag2Se@Ag2S core–shell nanocrystals with distinct absorption and emission properties enabling sensitive near-infrared photodetection. Journal of Materials Science, 2018, 53, 11355-11366.	1.7	13
66	Growing Carbon Quantum Dots for Optoelectronic Devices. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2018, 34, 1250-1263.	2.2	13
67	Gold nanoclusters electrodeposited on multi-walled carbon nanotubes: enhanced electrocatalytic activity of hemoglobin. Journal of Solid State Electrochemistry, 2014, 18, 1099-1109.	1.2	12
68	Diameter- and Length-controlled Synthesis of Ultrathin ZnS Nanowires and Their Size-Dependent UV Absorption Properties, Photocatalytical Activities and Band-Edge Energy Levels. Nanomaterials, 2019, 9, 220.	1.9	12
69	One-pot and high-yield preparation of ultrathin \hat{l}^2 -PbO nanowires and nanosheets for high-capacity positive electrodes in lead-acid batteries. Journal of Alloys and Compounds, 2020, 831, 154845.	2.8	12
70	Highly Efficient and Stable Full-Color Random Lasing Emission Based on Carbon Quantum Dots. Acta Chimica Sinica, 2018, 76, 460.	0.5	12
71	Electrochemical detection of benzo(a)pyrene in acetonitrile–water binary medium. Talanta, 2015, 138, 46-51.	2.9	11
72	A novel dual-emission fluorescent nanohybrid containing silica nanoparticles and gold nanoclusters for ratiometric determination of cysteine based on turn-on fluorescence strategy. New Journal of Chemistry, 2018, 42, 10092-10099.	1.4	11

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73	Gramâ€Scale Synthesis of Highly Efficient Rareâ€Earthâ€Elementâ€Free Red/Green/Blue Solidâ€State Bandgap Fluorescent Carbon Quantum Rings for White Lightâ€Emitting Diodes. Angewandte Chemie, 2021, 133, 16479-16484.	1.6	11
74	Ag@SiO2 nanoparticles performing as a nanoprobe for selective analysis of 2-aminoanthracene in wastewater samples via metal-enhanced fluorescence. Talanta, 2019, 200, 242-248.	2.9	10
75	Synergistic tuning of oxygen vacancies and d-band centers of ultrathin cobaltous dihydroxycarbonate nanowires for enhanced electrocatalytic oxygen evolution. Nanoscale, 2020, 12, 11735-11745.	2.8	10
76	Threeâ€dimensional Porous Palladium Foamâ€like Nanostructures as Electrocatalysts for Glucose Biofuel Cells. Energy Technology, 2016, 4, 249-255.	1.8	6
77	Synthesis and Electrochemical Studies of Novel Electron Donors—BEDT-TTF Fused withp-Dimethoxybenzene and Hydroquinone. Synthetic Communications, 2000, 30, 835-848.	1.1	5
78	Lightâ€Emitting Diodes: Bright Multicolor Bandgap Fluorescent Carbon Quantum Dots for Electroluminescent Lightâ€Emitting Diodes (Adv. Mater. 3/2017). Advanced Materials, 2017, 29, .	11.1	5
79	AuPt Nanoparticles Clusters on MWCNTs with Enhanced Electrocatalytic Activity for Methanol Oxidation. Catalysts, 2018, 8, 669.	1.6	5
80	Electrochemistry of the films of a novel class C60 covalently linked PPV derivative: Electrochemical quartz crystal microbalance study in acetonitrile solutions of tetra-n-butylammonium cations. Journal of Applied Polymer Science, 2002, 86, 2737-2741.	1.3	4
81	Monolayer single crystal two-dimensional quantum dots via ultrathin cutting and exfoliating. Science China Materials, 2020, 63, 1046-1053.	3.5	3
82	å应釜的原ç†ã€œ"뽜〜³¨æ"뺋项åŠåº"用. Chinese Science Bulletin, 2022, , .	0.4	1
83	Electrochemistry of Sc3N@C78 embedded in didodecyldimethylammonium bromide films in aqueous solution. Mikrochimica Acta, 2009, 165, 45-52.	2.5	0
84	Fluorescent Graphene Quantum Dots for Bioimaging. Frontiers in Nanobiomedical Research, 2017, , 97-113.	0.1	0
85	Fluorescent Graphene Quantum Dots for Bioimaging. Frontiers in Nanobiomedical Research, 2017, , 97-113.	0.1	0