

# Songnan Qu

## List of Publications by Year in descending order

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79  
papers

7,631  
citations

71102

41  
h-index

69250

77  
g-index

80  
all docs

80  
docs citations

80  
times ranked

7616  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Biocompatible Fluorescent Ink Based on Water-Soluble Luminescent Carbon Nanodots. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12215-12218.	13.8	1,050
2	Doping Lanthanide into Perovskite Nanocrystals: Highly Improved and Expanded Optical Properties. <i>Nano Letters</i> , 2017, 17, 8005-8011.	9.1	672
3	Toward Efficient Orange Emissive Carbon Nanodots through Conjugated $sp^{2\text{-domain}}$ Controlling and Surface Charges Engineering. <i>Advanced Materials</i> , 2016, 28, 3516-3521.	21.0	583
4	Full-Color Inorganic Carbon Dot Phosphors for White-Light-Emitting Diodes. <i>Advanced Optical Materials</i> , 2017, 5, 1700416.	7.3	360
5	Near-Infrared Excitation/Emission and Multiphoton-Induced Fluorescence of Carbon Dots. <i>Advanced Materials</i> , 2018, 30, e1705913.	21.0	349
6	In vivo theranostics with near-infrared-emitting carbon dots—highly efficient photothermal therapy based on passive targeting after intravenous administration. <i>Light: Science and Applications</i> , 2018, 7, 91.	16.6	289
7	Conquering Aggregation-Induced Solid-State Luminescence Quenching of Carbon Dots through a Carbon Dots-Triggered Silica Gelation Process. <i>Chemistry of Materials</i> , 2017, 29, 1779-1787.	6.7	242
8	Time-Dependent Phosphorescence Colors from Carbon Dots for Advanced Dynamic Information Encryption. <i>Advanced Materials</i> , 2021, 33, e2006781.	21.0	241
9	Ratiometric fluorescent nanosensor based on water soluble carbon nanodots with multiple sensing capacities. <i>Nanoscale</i> , 2013, 5, 5514.	5.6	219
10	Amplified Spontaneous Green Emission and Lasing Emission From Carbon Nanoparticles. <i>Advanced Functional Materials</i> , 2014, 24, 2689-2695.	14.9	206
11	Towards efficient solid-state photoluminescence based on carbon-nanodots and starch composites. <i>Nanoscale</i> , 2014, 6, 13076-13081.	5.6	193
12	Multilevel Data Encryption Using Thermal-Treatment Controlled Room Temperature Phosphorescence of Carbon Dot/Polyvinylalcohol Composites. <i>Advanced Science</i> , 2018, 5, 1800795.	11.2	173
13	Water-Triggered Luminescent “Nano-Bombs” Based on Supra-(Carbon Nanodots). <i>Advanced Materials</i> , 2015, 27, 1389-1394.	21.0	164
14	Quantum confined peptide assemblies with tunable visible to near-infrared spectral range. <i>Nature Communications</i> , 2018, 9, 3217.	12.8	122
15	Hydrogen Peroxide-Treated Carbon Dot Phosphor with a Bathochromic-Shifted, Aggregation-Enhanced Emission for Light-Emitting Devices and Visible Light Communication. <i>Advanced Science</i> , 2018, 5, 1800369.	11.2	119
16	Electrostatic Assembly Guided Synthesis of Highly Luminescent Carbon Nanodots@BaSO <sub>4</sub> Hybrid Phosphors with Improved Stability. <i>Small</i> , 2017, 13, 1602055.	10.0	118
17	Efficient Two-Dimensional Tin Halide Perovskite Light-Emitting Diodes via a Spacer Cation Substitution Strategy. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1120-1127.	4.6	97
18	Optical Properties of Carbon Dots in the Deep-Red to Near-Infrared Region Are Attractive for Biomedical Applications. <i>Small</i> , 2021, 17, e2102325.	10.0	93

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19	Carbon dots produced <i>via</i> space-confined vacuum heating: maintaining efficient luminescence in both dispersed and aggregated states. <i>Nanoscale Horizons</i> , 2019, 4, 388-395.	8.0	82
20	Highly Emissive Carbon Dots in Solid State and Their Applications in Light-Emitting Devices and Visible Light Communication. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9301-9308.	6.7	81
21	Brightly fluorescent red organic solids bearing boron-bridged "conjugated skeletons. <i>Journal of Materials Chemistry</i> , 2011, 21, 15298.	6.7	73
22	The work mechanism and sub-bandgap-voltage electroluminescence in inverted quantum dot light-emitting diodes. <i>Scientific Reports</i> , 2014, 4, 6974.	3.3	73
23	Thermally Activated Upconversion Near-Infrared Photoluminescence from Carbon Dots Synthesized via Microwave Assisted Exfoliation. <i>Small</i> , 2019, 15, e1905050.	10.0	70
24	Ratiometric fluorescent nanosensors for selective detecting cysteine with upconversion luminescence. <i>Biosensors and Bioelectronics</i> , 2016, 77, 124-130.	10.1	69
25	Ultraviolet-pumped white light emissive carbon dot based phosphors for light-emitting devices and visible light communication. <i>Nanoscale</i> , 2019, 11, 3489-3494.	5.6	61
26	In Vivo Tumor Photoacoustic Imaging and Photothermal Therapy Based on Supra-(Carbon Nanodots). <i>Advanced Healthcare Materials</i> , 2019, 8, e1800995.	7.6	61
27	Photo-Cross-Linkable Polymer Dots with Stable Sensitizer Loading and Amplified Singlet Oxygen Generation for Photodynamic Therapy. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 3419-3431.	8.0	56
28	Red carbon dots-based phosphors for white light-emitting diodes with color rendering index of 92. <i>Journal of Colloid and Interface Science</i> , 2018, 528, 281-288.	9.4	54
29	Synthesis of green emissive carbon dots@montmorillonite composites and their application for fabrication of light-emitting diodes and latent fingerprints markers. <i>Journal of Colloid and Interface Science</i> , 2019, 554, 344-352.	9.4	53
30	Cell-based fluorescent microsphere incorporated with carbon dots as a sensitive immunosensor for the rapid detection of Escherichia coli O157 in milk. <i>Biosensors and Bioelectronics</i> , 2021, 179, 113057.	10.1	52
31	On-Off switching of the phosphorescence signal in a carbon dot/polyvinyl alcohol composite for multiple data encryption. <i>Nanoscale</i> , 2019, 11, 14250-14255.	5.6	51
32	Realization of the Photostable Intrinsic Core Emission from Carbon Dots through Surface Deoxidation by Ultraviolet Irradiation. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3094-3100.	4.6	50
33	Narrow-bandwidth emissive carbon dots: A rising star in the fluorescent material family. , 2022, 4, 88-114.		49
34	Toward Strong Near-Infrared Absorption/Emission from Carbon Dots in Aqueous Media through Solvothermal Fusion of Large Conjugated Perylene Derivatives with Post-Surface Engineering. <i>Advanced Science</i> , 2022, 9, .	11.2	48
35	Preparation and application of carbon-nanodot@NaCl composite phosphors with strong green emission. <i>Journal of Colloid and Interface Science</i> , 2017, 497, 165-171.	9.4	47
36	A co-crystallization induced surface modification strategy with cyanuric acid modulates the bandgap emission of carbon dots. <i>Nanoscale</i> , 2020, 12, 10987-10993.	5.6	46

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37	Achieving 46% efficient white-light emissive carbon dot-based materials by enhancing phosphorescence for single-component white-light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2021, 9, 6796-6801.	5.5	46
38	Surface ionization-induced tunable dynamic phosphorescence colors from carbon dots on paper for dynamic multimode encryption. <i>Carbon</i> , 2022, 195, 191-198.	10.3	46
39	One step synthesis of efficient red emissive carbon dots and their bovine serum albumin composites with enhanced multi-photon fluorescence for in vivo bioimaging. <i>Light: Science and Applications</i> , 2022, 11, 113.	16.6	46
40	Highly Luminescent Carbon Nanoparticle-Based Materials: Factors Influencing Photoluminescence Quantum Yield. <i>Particle and Particle Systems Characterization</i> , 2014, 31, 1175-1182.	2.3	44
41	Vacuum-free transparent quantum dot light-emitting diodes with silver nanowire cathode. <i>Scientific Reports</i> , 2015, 5, 12499.	3.3	44
42	Carbon-Dots-Derived 3D Highly Nitrogen-Doped Porous Carbon Framework for High-Performance Lithium Ion Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9848-9856.	6.7	42
43	Regulation Mechanisms of Carbon Dots in the Development of Lettuce and Tomato. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 944-953.	6.7	42
44	Ultra-strong phosphorescence with 48% quantum yield from grinding treated thermal annealed carbon dots and boric acid composite. <i>SmartMat</i> , 2022, 3, 260-268.	10.7	42
45	Evolution from Lyotropic Liquid Crystal to Helical Fibrous Organogel of an Achiral Fluorescent Twin-Tapered Bi-1,3,4-oxadiazole Derivative. <i>Chemistry - A European Journal</i> , 2011, 17, 3512-3518.	3.3	39
46	Surface related intrinsic luminescence from carbon nanodots: solvent dependent piezochromism. <i>Nanoscale Horizons</i> , 2019, 4, 175-181.	8.0	38
47	Morphology Control of Luminescent Carbon Nanomaterials: From Dots to Rolls and Belts. <i>ACS Nano</i> , 2021, 15, 1579-1586.	14.6	35
48	Origin of Anisotropic Photoluminescence in Heteroatom-Doped Carbon Nanodots. <i>Advanced Optical Materials</i> , 2017, 5, 1601049.	7.3	34
49	Microwave-assisted <i>in situ</i> large scale synthesis of a carbon dots@g-C <sub>3</sub> N <sub>4</sub> composite phosphor for white light-emitting devices. <i>Materials Chemistry Frontiers</i> , 2020, 4, 517-523.	5.9	34
50	Enhanced Near-Infrared Emission from Carbon Dots by Surface Deprotonation. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 604-611.	4.6	34
51	Enhanced Fluorescence for Bioassembly by Environment-Switching Doping of Metal Ions. <i>Advanced Functional Materials</i> , 2020, 30, 1909614.	14.9	33
52	49.25% efficient cyan emissive sulfur dots <i>via</i> a microwave-assisted route. <i>RSC Advances</i> , 2020, 10, 17266-17269.	3.6	32
53	Two dimensional directed $\pi$ - $\pi$ interactions in a linear shaped bi-1,3,4-oxadiazole derivative to achieve organic single crystal with highly polarized fluorescence and amplified spontaneous emissions. <i>Journal of Materials Chemistry</i> , 2012, 22, 24605.	6.7	30
54	Carbon Dots for Intracellular pH Sensing with Fluorescence Lifetime Imaging Microscopy. <i>Nanomaterials</i> , 2020, 10, 604.	4.1	29

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55	Generating long-wavelength absorption bands with enhanced deep red fluorescence and photothermal performance in fused carbon dots aggregates. <i>Aggregate</i> , 2021, 2, e139.	9.9	28
56	Controllable molecular aggregation and fluorescence properties of 1,3,4-oxadiazole derivatives. <i>Journal of Materials Chemistry C</i> , 2015, 3, 11681-11688.	5.5	21
57	Microwave-Assisted Heating Method toward Multicolor Quantum Dot-Based Phosphors with Much Improved Luminescence. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 27160-27170.	8.0	21
58	Solution-processable carbon dots with efficient solid-state red/near-infrared emission. <i>Journal of Colloid and Interface Science</i> , 2022, 613, 547-553.	9.4	21
59	Near-infrared chemiluminescent carbon nanogels for oncology imaging and therapy. <i>SmartMat</i> , 2022, 3, 269-285.	10.7	20
60	Constructing virus-like SiO <sub>2</sub> /CeO <sub>2</sub> /VO <sub>2</sub> nanozymes for 1064 nm light-triggered mild-temperature photothermal therapy and nanozyme catalytic therapy. <i>Nanoscale</i> , 2022, 14, 361-372.	5.6	19
61	Toward highly fluorescence and ultralow-threshold amplified spontaneous emission in ordered solid state from twin-tapered bi-1,3,4-oxadiazole derivatives. <i>Journal of Materials Chemistry</i> , 2012, 22, 3875.	6.7	18
62	Organogels from unsymmetrical $\pi$ -conjugated 1,3,4-oxadiazole derivatives. <i>New Journal of Chemistry</i> , 2013, 37, 1454.	2.8	18
63	Efficiency Improvement of Organic Solar Cells via Introducing Combined Anode Buffer Layer To Facilitate Hole Extraction. <i>Journal of Physical Chemistry C</i> , 2016, 120, 13954-13962.	3.1	16
64	Aluminum-Based Surface Polymerization on Carbon Dots with Aggregation-Enhanced Luminescence. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4530-4536.	4.6	16
65	Highly efficient carbon dot-based room-temperature fluorescence-phosphorescence dual emitter. <i>Journal of Materials Chemistry C</i> , 2021, 9, 15577-15582.	5.5	15
66	Enhancing the Electron Transport, Quantum Yield, and Catalytic Performance of Carbonized Polymer Dots via Mn $\xi$ O Bridges. <i>Small</i> , 2022, 18, e2106863.	10.0	15
67	Polyetherimide functionalized carbon dots with enhanced red emission in aqueous solution for bioimaging. <i>Chinese Chemical Letters</i> , 2022, 33, 4111-4115.	9.0	15
68	Ultrafast Carrier Dynamics and Hot Electron Extraction in Tetrapod-Shaped CdSe Nanocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7938-7944.	8.0	14
69	Dramatically Enhanced Photoluminescence from Femtosecond Laser Induced Micro-Nanostructures on MAPbBr <sub>3</sub> Single Crystal Surface. <i>Advanced Optical Materials</i> , 2018, 6, 1800411.	7.3	14
70	Waveguide and ultralow-threshold amplified spontaneous emission in an aligned ordered solid state based on a highly fluorescent twin-tapered bi-1,3,4-oxadiazole derivative. <i>Chemical Communications</i> , 2011, 47, 4207.	4.1	13
71	Dual-encryption based on facilely synthesized supra-(carbon nanodots) with water-induced enhanced luminescence. <i>RSC Advances</i> , 2016, 6, 79620-79624.	3.6	11
72	Nitrogen and Sulfur Co-doped Carbon Dots Enhance Drought Resistance in Tomato and Mung Beans. <i>ACS Applied Bio Materials</i> , 2021, 4, 6093-6102.	4.6	11

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73	Theoretical study on molecular packing and electronic structure of bi-1,3,4-oxadiazole derivatives. RSC Advances, 2014, 4, 51942-51949.	3.6	7
74	Rational preparation of anti-water phosphorescent carbon-dots and flake C <sub>3</sub> N <sub>4</sub> composites through microwave-heating method for multiple data encryption. Journal of Luminescence, 2022, 248, 118928.	3.1	7
75	Spontaneous formation of a large area, aligned, ordered, $\pi$ -conjugated film with polarized fluorescence and an amplified spontaneous emission based on a liquid crystalline bi-1,3,4-oxadiazole derivative. RSC Advances, 2013, 3, 19104.	3.6	3
76	Gel Ability and Fluorescence-Enhanced Emission of a New Bi-1,3,4-Oxadiazole Derivative. Soft Materials, 2013, 11, 261-271.	1.7	2
77	Photoluminescence: Thermally Activated Upconversion Near-Infrared Photoluminescence from Carbon Dots Synthesized via Microwave Assisted Exfoliation (Small 50/2019). Small, 2019, 15, 1970288.	10.0	2
78	Carbon dot-based lasers. , 2019, , 1-15.		1
79	Enhancing the Electron Transport, Quantum Yield, and Catalytic Performance of Carbonized Polymer Dots via Mn <sup>2+</sup> /O Bridges (Small 13/2022). Small, 2022, 18, .	10.0	0