

A Universal Strategy for Activating the Multicolor Room Carbon Dots in a Boric Acid Matrix

Angewandte Chemie - International Edition

58, 7278-7283

DOI: [10.1002/anie.201814629](https://doi.org/10.1002/anie.201814629)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Carbon Dots in a Matrix: Energy Transfer Enhanced Room-Temperature Red Phosphorescence. <i>Angewandte Chemie</i> , 2019, 131, 18614-18619.	1.6	23
2	Carbon Dots in a Matrix: Energy Transfer Enhanced Room-Temperature Red Phosphorescence. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18443-18448.	7.2	125
3	Lifetime-tunable room-temperature phosphorescence of polyaniline carbon dots in adjustable polymer matrices. <i>Nanoscale</i> , 2019, 11, 18311-18319.	2.8	62
4	Template-Modulated Afterglow of Carbon Dots in Zeolites: Room-Temperature Phosphorescence and Thermally Activated Delayed Fluorescence. , 2019, 1, 58-63.		92
5	Rational Design of Oxygen-Enriched Carbon Dots with Efficient Room-Temperature Phosphorescent Properties and High-Tech Security Protection Application. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19918-19924.	3.2	47
6	Carbon Dots with Dual-Emissive, Robust, and Aggregation-Induced Room-Temperature Phosphorescence Characteristics. <i>Angewandte Chemie</i> , 2020, 132, 1279-1285.	1.6	18
7	Carbon Dots with Dual-Emissive, Robust, and Aggregation-Induced Room-Temperature Phosphorescence Characteristics. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1263-1269.	7.2	198
8	The phosphorescence property of carbon dots presenting as powder, embedded in filter paper and dispersed in solid solution. <i>Journal of Luminescence</i> , 2020, 218, 116851.	1.5	20
9	Afterglow of carbon dots: mechanism, strategy and applications. <i>Materials Chemistry Frontiers</i> , 2020, 4, 386-399.	3.2	137
10	Spectroscopic studies of the optical properties of carbon dots: recent advances and future prospects. <i>Materials Chemistry Frontiers</i> , 2020, 4, 472-488.	3.2	79
11	Theory-Guided Defect Tuning through Topochemical Reactions for Accelerated Discovery of UVC Persistent Phosphors. <i>Advanced Optical Materials</i> , 2020, 8, 1901727.	3.6	20
12	Carbon dots derived fluorescent nanosensors as versatile tools for food quality and safety assessment: A review. <i>Trends in Food Science and Technology</i> , 2020, 95, 149-161.	7.8	141
13	Full-color fluorescent carbon quantum dots. <i>Science Advances</i> , 2020, 6, .	4.7	344
14	Carbonized Polymer Dots with Tunable Room-Temperature Phosphorescence Lifetime and Wavelength. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38593-38601.	4.0	90
15	Rapid and highly sensitive visual detection of oxalate for metabolic assessment of urolithiasis via selective recognition reaction of CdTe quantum dots. <i>Journal of Materials Chemistry B</i> , 2020, 8, 7677-7684.	2.9	18
16	Water-soluble boron carbon oxynitride dots with excellent solid-state fluorescence and ultralong room-temperature phosphorescence. <i>Nano Research</i> , 2020, 13, 3261-3267.	5.8	34
17	Carbon Dots: A New Type of Carbon-Based Nanomaterial with Wide Applications. <i>ACS Central Science</i> , 2020, 6, 2179-2195.	5.3	793
18	Ultralong lifetime and efficient room temperature phosphorescent carbon dots through multi-confinement structure design. <i>Nature Communications</i> , 2020, 11, 5591.	5.8	202

#	ARTICLE	IF	CITATIONS
19	A rapid <i>in situ</i> synthesis of wide-spectrum CD@BaCl ₂ phosphors <i>via</i> anti-solvent recrystallization for white LEDs. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 4845-4853.	3.0	8
20	Carbon-Based Quantum Dots with Solid-State Photoluminescent: Mechanism, Implementation, and Application. <i>Small</i> , 2020, 16, e2004621.	5.2	141
21	Carbon Dots in Porous Materials: Host-Guest Synergy for Enhanced Performance. <i>Angewandte Chemie</i> , 2020, 132, 19558-19570.	1.6	12
22	Tunable dual fluorescence emissions with high photoluminescence quantum yields modulated by Na ion dispersion method for purely solid state N-doped carbon dots. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 397, 112548.	2.0	14
23	Strongly Luminescent Composites Based on Carbon Dots Embedded in a Nanoporous Silicate Glass. <i>Nanomaterials</i> , 2020, 10, 1063.	1.9	15
24	Recent Advances in Energy Conversion Applications of Carbon Dots: From Optoelectronic Devices to Electrocatalysis. <i>Small</i> , 2020, 16, e2001295.	5.2	113
25	Visible-Light-Excited Room Temperature Phosphorescent Carbon Dots. <i>Nanomaterials</i> , 2020, 10, 464.	1.9	28
26	Carbon dots with tunable dual emissions: from the mechanism to the specific imaging of endoplasmic reticulum polarity. <i>Nanoscale</i> , 2020, 12, 6852-6860.	2.8	50
27	Photo-Stimulated Polychromatic Room Temperature Phosphorescence of Carbon Dots. <i>Small</i> , 2020, 16, e2001909.	5.2	125
28	Water-induced ultralong room temperature phosphorescence by constructing hydrogen-bonded networks. <i>Nano Research</i> , 2020, 13, 875-881.	5.8	51
29	Color-tunable ultralong organic room temperature phosphorescence from a multicomponent copolymer. <i>Nature Communications</i> , 2020, 11, 944.	5.8	278
30	Matrix-Free and Highly Efficient Room-Temperature Phosphorescence Carbon Dots towards Information Encryption and Decryption. <i>Chemistry - an Asian Journal</i> , 2020, 15, 1281-1284.	1.7	25
31	A visible-light-excited afterglow achieved by carbon dots from rhodamine B fixed in boron oxide. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4557-4563.	2.7	53
32	New route to strong, long-lived room-temperature phosphorescence using organic phosphor guest-friendly matrices [Al(DMSO) ₆] ₃ (X=Cl ⁻ , Br ⁻). <i>Dyes and Pigments</i> , 2020, 177, 108323.	2.0	5
33	Aggregation-Induced Room-Temperature Phosphorescence Obtained from Water-Dispersible Carbon Dot-Based Composite Materials. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 10791-10800.	4.0	96
34	Visible-Light-Excited Ultralong-Lifetime Room Temperature Phosphorescence Based on Nitrogen-Doped Carbon Dots for Double Anticounterfeiting. <i>Advanced Optical Materials</i> , 2020, 8, 1901557.	3.6	71
35	Achieving red room temperature afterglow carbon dots in composite matrices through chromophore conjugation degree controlling. <i>Journal of Luminescence</i> , 2020, 223, 117267.	1.5	15
36	Multiresponsive Luminescence Materials: Richer Color Than Chameleon Materials. <i>Advanced Optical Materials</i> , 2020, 8, 2000007.	3.6	14

#	ARTICLE	IF	CITATIONS
37	Plasmonic nanopapers: flexible, stable and sensitive multiplex PUF tags for unclonable anti-counterfeiting applications. <i>Nanoscale</i> , 2020, 12, 9471-9480.	2.8	60
38	Colour-tunable ultralong-lifetime room temperature phosphorescence with external heavy-atom effect in boron-doped carbon dots. <i>Chemical Engineering Journal</i> , 2021, 420, 127647.	6.6	101
39	Facile access to photo-switchable, dynamic-optical, multi-colored and solid-state materials from carbon dots and cellulose for photo-rewritable paper and advanced anti-counterfeiting. <i>Chemical Engineering Journal</i> , 2021, 406, 126794.	6.6	50
40	Insights into photoluminescence mechanisms of carbon dots: advances and perspectives. <i>Science Bulletin</i> , 2021, 66, 839-856.	4.3	288
41	Highly efficient room-temperature phosphorescent materials with a heavy-atom effect of bromine. <i>New Journal of Chemistry</i> , 2021, 45, 4930-4933.	1.4	3
43	Luminescence anti-counterfeiting: From elementary to advanced. <i>Aggregate</i> , 2021, 2, 20-34.	5.2	224
44	Recent advances in persistent luminescence based on molecular hybrid materials. <i>Chemical Society Reviews</i> , 2021, 50, 5564-5589.	18.7	331
45	Recent advances in room temperature phosphorescent carbon dots: preparation, mechanism, and applications. <i>Journal of Materials Chemistry C</i> , 2021, 9, 4425-4443.	2.7	61
46	A green-synthesized phosphorescent carbon dot composite for multilevel anti-counterfeiting. <i>Nanoscale Advances</i> , 2021, 3, 4536-4540.	2.2	18
47	Self-exothermic reaction driven large-scale synthesis of phosphorescent carbon nanodots. <i>Nano Research</i> , 2021, 14, 2231-2240.	5.8	41
48	The Progress of Circularly Polarized Luminescence in Chiral Purely Organic Materials. <i>Advanced Photonics Research</i> , 2021, 2, 2000136.	1.7	51
49	Carbon Dot [~] NaCl Crystals for White-Light Generation and Fabry-Perot Lasing. <i>Chemistry - an Asian Journal</i> , 2021, 16, 783-792.	1.7	8
50	Afterglow Carbon Dots: From Fundamentals to Applications. <i>Research</i> , 2021, 2021, .	2.8	30
51	Modulating Emission of Nonconventional Luminophores from Nonemissive to Fluorescence and Room-Temperature Phosphorescence <i>via</i> Dehydration-Induced Through-Space Conjugation. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1413-1420.	2.1	26
52	Lifetime-Engineered Carbon Nanodots for Time Division Duplexing. <i>Advanced Science</i> , 2021, 8, 2003433.	5.6	54
53	Construction and Multifunctional Applications of Visible-Light-Excited Multicolor Long Afterglow Carbon Dots/Boron Oxide Composites. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 4477-4486.	3.2	54
54	Time-Dependent Phosphorescence Colors from Carbon Dots for Advanced Dynamic Information Encryption. <i>Advanced Materials</i> , 2021, 33, e2006781.	11.1	241
55	Blue-to-green manipulation of carbon dots from fluorescence to ultralong room-temperature phosphorescence for high-level anti-counterfeiting. <i>Chinese Chemical Letters</i> , 2021, 32, 3907-3910.	4.8	27

#	ARTICLE	IF	CITATIONS
56	Thermally Driven Amorphous to Crystalline Phase Transition of Carbonized Polymer Dots for Multicolor Room-Temperature Phosphorescence. <i>Advanced Optical Materials</i> , 2021, 9, 2100421.	3.6	38
57	Combinations of Superior Inorganic Phosphors for Level-Tunable Information Hiding and Encoding. <i>Advanced Optical Materials</i> , 2021, 9, 2100281.	3.6	37
58	Carbon dots-based room-temperature phosphorescent test strip: Visual and convenient water detection in organic solvents. <i>Dyes and Pigments</i> , 2021, 189, 109226.	2.0	22
59	Boron carbon oxyphosphide heterostructured nanodots with phosphate tunable emission for switchable dual detection channels of 6-mercaptopurine assay. <i>Talanta</i> , 2021, 226, 122067.	2.9	9
60	A micro-wave strategy for synthesizing room temperature phosphorescent materials. <i>Chinese Chemical Letters</i> , 2022, 33, 243-246.	4.8	14
61	Hydrothermal Synthesis of Zinc-Doped Silica Nanospheres Simultaneously Featuring Stable Fluorescence and Long-Lived Room-Temperature Phosphorescence. <i>Angewandte Chemie</i> , 2021, 133, 15618-15624.	1.6	4
62	Hydrothermal Synthesis of Zinc-Doped Silica Nanospheres Simultaneously Featuring Stable Fluorescence and Long-Lived Room-Temperature Phosphorescence. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15490-15496.	7.2	22
63	Fluorescent carbon dots in solid-state: From nanostructures to functional devices. <i>Progress in Solid State Chemistry</i> , 2021, 62, 100295.	3.9	67
64	Large scale synthesis of red emissive carbon dots powder by solid state reaction for fingerprint identification. <i>Chinese Chemical Letters</i> , 2021, 32, 1953-1956.	4.8	70
65	Lifetime-tunable green room temperature phosphorescence of carbon dots by the multi-step modification. <i>Optics Express</i> , 2021, 29, 41014.	1.7	5
66	Reversible and color-variable afterglow luminescence of carbon dots triggered by water for multi-level encryption and decryption. <i>Chemical Engineering Journal</i> , 2021, 415, 128999.	6.6	48
67	Lignin Nanoparticles: Promising Sustainable Building Blocks of Photoluminescent and Haze Films for Improving Efficiency of Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 33536-33545.	4.0	13
68	Multiemissive Room-Temperature Phosphorescent Carbon Dots@ZnAl ₂ O ₄ Composites by Inorganic Defect Triplet-State Energy Transfer. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 34705-34713.	4.0	34
69	Tuning Organic Room-Temperature Phosphorescence through the Confinement Effect of Inorganic Micro/Nanostructures. <i>Small Structures</i> , 2021, 2, 2100044.	6.9	43
70	Facile Synthesis of Matrix-Free Room-Temperature Phosphorescent Nitrogen-Doped Carbon Dots and Their Application as Security Inks. <i>Macromolecular Materials and Engineering</i> , 2021, 306, 2100339.	1.7	9
71	Phosphorescent carbon dots: Microstructure design, synthesis and applications. <i>New Carbon Materials</i> , 2021, 36, 649-664.	2.9	31
72	Synthesis of carbon dots@Mg(OH) ₂ solid-state composites with blue, red emitting for horticultural application. <i>Journal of Alloys and Compounds</i> , 2021, 873, 159663.	2.8	9
73	Optical Properties of Carbon Dots in the Deep-Red to Near-Infrared Region Are Attractive for Biomedical Applications. <i>Small</i> , 2021, 17, e2102325.	5.2	93

#	ARTICLE	IF	CITATIONS
74	Study on the Origin of Fluorescence by Using Dual-Emission Carbon Dots. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18543-18551.	1.5	17
75	Boron nitride dots In-situ embedded in a B2O3 matrix with the long lifetime Room-Temperature phosphorescence in dry and wet states. <i>Chemical Engineering Journal</i> , 2021, 417, 129175.	6.6	31
76	Recent advances in synthesis and applications of room temperature phosphorescence carbon dots. <i>Talanta</i> , 2021, 231, 122350.	2.9	26
77	Modulating Triplet Excited-State Energy in Phosphorescent Carbon Dots for Information Encryption and Anti-Counterfeiting. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 43241-43246.	4.0	33
78	Sustainable Silk-Derived Multimode Carbon Dots. <i>Small</i> , 2021, 17, e2103623.	5.2	21
79	Near-Infrared-Excited Multicolor Afterglow in Carbon Dots-Based Room-Temperature Afterglow Materials. <i>Angewandte Chemie</i> , 2021, 133, 22427-22433.	1.6	8
80	Near-Infrared-Excited Multicolor Afterglow in Carbon Dots-Based Room-Temperature Afterglow Materials. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22253-22259.	7.2	73
81	Color-Tunable Long-Lived Room-Temperature Phosphorescence in a Coordination Polymer Based on a Nonaromatic Ligand and Its Phosphor/Coordination Polymer-Doped Systems. <i>Chemistry of Materials</i> , 2021, 33, 7272-7282.	3.2	19
82	Green and Near-Infrared Dual-Mode Afterglow of Carbon Dots and Their Applications for Confidential Information Readout. <i>Nano-Micro Letters</i> , 2021, 13, 198.	14.4	53
83	Achieving room temperature phosphorescence in aqueous phase through rigidifying the triplet state and information encryption. <i>Applied Surface Science</i> , 2021, 566, 150726.	3.1	18
84	Visible-light excitable thermally activated delayed fluorescence in aqueous solution from F, N-doped carbon dots confined in silica nanoparticles. <i>Chemical Engineering Journal</i> , 2021, 426, 130728.	6.6	55
85	Ultralong-lived room temperature phosphorescence from N and P codoped self-protective carbonized polymer dots for confidential information encryption and decryption. <i>Journal of Materials Chemistry C</i> , 2021, 9, 4847-4853.	2.7	44
86	Aggregation-induced room temperature phosphorescent carbonized polymer dots with wide-range tunable lifetimes for optical multiplexing. <i>Journal of Materials Chemistry C</i> , 2021, 9, 6781-6788.	2.7	27
87	Surface chemical functionality of carbon dots: influence on the structure and energy storage performance of the layered double hydroxide. <i>RSC Advances</i> , 2021, 11, 10785-10793.	1.7	3
88	Hydrothermal synthesis of blue-green emitting carbon dots based on the liquid products of biodegradation of coal. <i>International Journal of Energy Research</i> , 2021, 45, 9396-9407.	2.2	10
89	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.	2.7	46
90	Carbon Dots in Porous Materials: Host-Guest Synergy for Enhanced Performance. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19390-19402.	7.2	94
91	Chiral carbon dots-based nanosensors for Sn(II) detection and lysine enantiomers recognition. <i>Sensors and Actuators B: Chemical</i> , 2020, 319, 128265.	4.0	69

#	ARTICLE	IF	CITATIONS
92	Highly efficient carbon dot-based room-temperature fluorescenceâ€“phosphorescence dual emitter. <i>Journal of Materials Chemistry C</i> , 2021, 9, 15577-15582.	2.7	15
93	Energy Transfer Mediated Enhancement of Roomâ€“Temperature Phosphorescence of Carbon Dots Embedded in Matrixes. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	38
94	Carbon Dotsâ€“inâ€“EuAPOâ€“5 Zeolite: Tripleâ€“Emission for Multilevel Luminescence Antiâ€“Counterfeiting. <i>Small</i> , 2021, 17, e2103374.	5.2	47
95	Selective Ligand Sensitization of Lanthanide Nanoparticles for Multilevel Information Encryption with Excellent Durability. <i>Analytical Chemistry</i> , 2021, 93, 14317-14322.	3.2	6
96	Room-temperature phosphorescence based on chitosan carbon dots for trace water detection in organic solvents and anti-counterfeiting application. <i>Dyes and Pigments</i> , 2022, 197, 109923.	2.0	20
97	A multilevel fluorometric biosensor based on boric acid embedded in carbon dots to detect intracellular and serum glucose. <i>Sensors and Actuators B: Chemical</i> , 2022, 350, 130898.	4.0	18
98	Toward phosphorescent and delayed fluorescent carbon quantum dots for next-generation electroluminescent displays. <i>Journal of Materials Chemistry C</i> , 2022, 10, 2333-2348.	2.7	23
99	Self-quenching-resistant solid-state carbon dots for mechanism and applications. <i>Mikrochimica Acta</i> , 2021, 188, 412.	2.5	17
100	Deep-Blue Room-Temperature Phosphorescent Carbon Dots/Silica Microparticles from a Single Raw Material. <i>Langmuir</i> , 2021, 37, 13187-13193.	1.6	19
101	Ultraâ€“strong phosphorescence with 48% quantum yield from grinding treated thermal annealed carbon dots and boric acid composite. <i>SmartMat</i> , 2022, 3, 260-268.	6.4	42
102	Phosphorescence Tuning of Fluorine, Oxygen-Codoped Carbon Dots by Substrate Engineering. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 16262-16269.	3.2	38
103	Tailored Fabrication of Carbon Dot Composites with Fullâ€“Color Ultralong Roomâ€“Temperature Phosphorescence for Multidimensional Encryption. <i>Advanced Science</i> , 2022, 9, e2103833.	5.6	100
104	White Light Afterglow in Carbon Dots Achieved via Synergy between the Roomâ€“Temperature Phosphorescence and the Delayed Fluorescence. <i>Small</i> , 2022, 18, e2105415.	5.2	44
105	Employing metformin-directed carbon dots with room-temperature phosphorescent towards the dual-channel detection of L-tryptophan. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 210, 112236.	2.5	10
106	Si-assisted N, P Co-doped room temperature phosphorescent carbonized polymer Dots: Information Encryption, graphic Anti-counterfeiting and biological imaging. <i>Journal of Colloid and Interface Science</i> , 2022, 609, 279-288.	5.0	35
107	Sulfuric-acid-mediated synthesis strategy for multi-colour aggregation-induced emission fluorescent carbon dots: Application in anti-counterfeiting, information encryption, and rapid cytoplasmic imaging. <i>Journal of Colloid and Interface Science</i> , 2022, 612, 650-663.	5.0	31
108	The light of carbon dots: From mechanism to applications. <i>Matter</i> , 2022, 5, 110-149.	5.0	374
109	Confining Carboxylized Carbon Nanotube for Phosphorescence Afterglow with Optical Memory Plasticity. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	3

#	ARTICLE	IF	CITATIONS
110	Carboxylate-Induced RTP Based on Gelatin for Anticounterfeiting. Particle and Particle Systems Characterization, 2022, 39, .	1.2	9
111	Long-Lived Color-Tunable Room-Temperature Phosphorescence of Boron-Doped Carbon Dots. Langmuir, 2022, 38, 2287-2293.	1.6	29
112	Endowing matrix-free carbon dots with color-tunable ultralong phosphorescence by self-doping. Chemical Science, 2022, 13, 4406-4412.	3.7	51
113	Construction of coral-like architectures of boron-containing compounds: coral-like boric acid and its application performances. CrystEngComm, 2022, 24, 2383-2387.	1.3	1
114	Highly Efficient and Stable Deep-Blue Room Temperature Phosphorescence Via Through-Space Conjugation. SSRN Electronic Journal, 0, , .	0.4	0
115	AlCl ₃ -promoted growth of alkylated carbon dots with an enhanced nonlinear optical response. Journal of Materials Chemistry C, 2022, 10, 5576-5581.	2.7	3
116	Regulation between the Delayed Fluorescence and Room-Temperature Phosphorescence of Matrix-Free Carbon Dots with the Position of the Carboxyl Substituent on the Benzene Ring. Journal of Physical Chemistry C, 2022, 126, 3540-3548.	1.5	18
117	One-step Synthesis of Biomass-Based Carbon Dots for Detection of Metal Ions and Cell Imaging. Frontiers in Energy Research, 2022, 10, .	1.2	3
118	Cascade Resonance Energy Transfer for the Construction of Nanoparticles with Multicolor Long Afterglow in Aqueous Solutions for Information Encryption and Bioimaging. Advanced Optical Materials, 2022, 10, .	3.6	43
119	Achieving blue water-dispersed room-temperature phosphorescence of carbonized polymer dots through nano-compositing with mesoporous silica. Chinese Chemical Letters, 2022, 33, 4213-4218.	4.8	15
120	Room Temperature Phosphorescence of Chlorine Doped Carbon Nitride Dots. Frontiers in Chemistry, 2022, 10, 812602.	1.8	5
121	Carbon Dots Confined in Silica Nanoparticles for Triplet-to-Singlet Förster Resonance Energy-Transfer-Induced Delayed Fluorescence. ACS Applied Nano Materials, 2022, 5, 5168-5175.	2.4	11
122	Highly efficient and stable deep-blue room temperature phosphorescence via through-space conjugation. Chemical Engineering Journal, 2022, 442, 136179.	6.6	23
123	Green Synthesis of Phosphorescent Carbon Dots for Anticounterfeiting and Information Encryption. Sensors, 2022, 22, 2944.	2.1	11
124	Multi-Functional Hydrogels Simultaneously Featuring Strong Fluorescence, Ultralong Phosphorescence, and Excellent Self-Healing Properties and Their Use for Advanced Anti-counterfeiting. Analytical Chemistry, 2022, 94, 7264-7271.	3.2	10
125	Modulating the Carbonization Degree of Carbon Dots for Multicolor Afterglow Emission. ACS Applied Materials & Interfaces, 2022, 14, 22363-22371.	4.0	33
126	Fast photostimulus-responsive ultralong room-temperature phosphorescence behaviour of benzoic acid derivatives@boric acid. Journal of Materials Chemistry C, 2022, 10, 8806-8814.	2.7	6
127	Lignin fractionation-inspired carbon dots to enable trimodule fluorescent sensing of pH, silver ion and cysteine. Industrial Crops and Products, 2022, 185, 115127.	2.5	7

#	ARTICLE	IF	CITATIONS
128	Quadruple Anticounterfeiting Encryption: Anion-Modulated Forward and Reverse Excitation-Dependent Multicolor Afterglow in Two-Component Ionic Crystals. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 30246-30255.	4.0	23
129	Carbon Dots in Hydroxy Fluorides: Achieving Multicolor Long-Wavelength Room-Temperature Phosphorescence and Excellent Stability via Crystal Confinement. <i>Nano Letters</i> , 2022, 22, 5127-5136.	4.5	46
130	Nearly Unity Quantum Yield Persistent Room Temperature Phosphorescence from Heavy Atom-Free Rigid Inorganic/Organic Hybrid Frameworks. <i>Angewandte Chemie</i> , 0, , .	1.6	0
131	Self-Matrix N-Doped Room Temperature Phosphorescent Carbon Dots Triggered by Visible and Ultraviolet Light Dual Modes. <i>Nanomaterials</i> , 2022, 12, 2210.	1.9	14
132	Nearly Unity Quantum Yield Persistent Room-Temperature Phosphorescence from Heavy Atom-Free Rigid Inorganic/Organic Hybrid Frameworks. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	41
133	Phosphorus and Nitrogen Codoped Carbonized Polymer Dots with Multicolor Room Temperature Phosphorescence for Anticounterfeiting Painting. <i>Langmuir</i> , 2022, 38, 8304-8311.	1.6	10
134	Boric Acid-Activated Room-Temperature Phosphorescence and Thermally Activated Delayed Fluorescence for Efficient Solid-State Photoluminescence Materials. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	17
135	Prepared carbon dots from wheat straw for detection of Cu ²⁺ in cells and zebrafish and room temperature phosphorescent anti-counterfeiting. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 281, 121597.	2.0	14
136	Enabling Dual Phosphorescence by Locating a Flexible Ligand in Zn-Based Hybrid Frameworks. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 6975-6980.	2.1	11
137	Calcination-controlled fabrication of carbon dots@zeolite composites with multicolor fluorescence and phosphorescence. <i>Nano Research</i> , 2022, 15, 9454-9460.	5.8	14
138	Carbon dots-based delayed fluorescent materials: Mechanism, structural regulation and application. <i>IScience</i> , 2022, 25, 104884.	1.9	17
139	Efficient blue TADF-type organic afterglow material via boric acid-assisted confinement. <i>Chemical Communications</i> , 2022, 58, 11418-11421.	2.2	4
140	Water-enhanced high-efficiency persistent room-temperature phosphorescence materials for temperature sensing via crystalline transformation. <i>Journal of Materials Chemistry C</i> , 2022, 10, 13210-13216.	2.7	8
141	Ultrabroad-band, white light emission from carbon dot-based materials with hybrid fluorescence/phosphorescence for single component white light-emitting diodes. <i>Chinese Chemical Letters</i> , 2023, 34, 107794.	4.8	5
142	Color-tunable and high-quantum-yield afterglow of carbon dots by covalent fixation. <i>Journal of Luminescence</i> , 2022, 252, 119399.	1.5	5
143	Triphenylamine derivatives functionalized di-ureasil hybrids for information encipherment. <i>Chemical Engineering Journal Advances</i> , 2022, 12, 100411.	2.4	1
144	Novel visible-light-excited afterglow rose-bengal-derived carbon dots and their applications. <i>Journal of Luminescence</i> , 2022, 252, 119370.	1.5	4
145	Solid-State Luminescent Materials with Multiple Emission Colors and Near-Unity Quantum Yield. <i>Chemistry - A European Journal</i> , 2023, 29, .	1.7	1

#	ARTICLE	IF	CITATIONS
146	Fabrication of Orange Fluorescent Boron-Doped Graphene Quantum Dots for Al ³⁺ Ion Detection. <i>Molecules</i> , 2022, 27, 6771.	1.7	7
147	Generation of color-controllable room-temperature phosphorescence via luminescent center engineering and in-situ immobilization. <i>Chinese Chemical Letters</i> , 2023, 34, 107950.	4.8	0
148	The Emerging Development of Multicolor Carbon Dots. <i>Small</i> , 2022, 18, .	5.2	82
149	Applications of Carbon Dots in Electrochemical Energy Storage. <i>ACS Applied Electronic Materials</i> , 2022, 4, 5144-5164.	2.0	8
150	Ultra-stable dual-color phosphorescence Carbon-Dot@Silica material for advanced anti-counterfeiting. <i>Dyes and Pigments</i> , 2022, 208, 110827.	2.0	6
151	A sequential dual-lock strategy for generation of room-temperature phosphorescence of boron doped carbon dots for dynamic anti-counterfeiting. <i>Journal of Colloid and Interface Science</i> , 2023, 632, 129-139.	5.0	17
152	One-step large-scale fabricating aggregation-induced emission carbon dots with strong solid-state fluorescence emission. <i>Materials Today Chemistry</i> , 2022, 26, 101255.	1.7	8
153	Water friendly room temperature phosphorescence doped materials prepared via metal organic framework matrix transformation. <i>Dyes and Pigments</i> , 2023, 210, 110959.	2.0	5
154	Engineered full-color-emissive lignin carbon dots enable selectively fluorescent sensing of metal ions. <i>Industrial Crops and Products</i> , 2023, 192, 116116.	2.5	6
155	The preparation, optical properties and applications of carbon dots derived from phenylenediamine. <i>Microchemical Journal</i> , 2023, 185, 108299.	2.3	9
156	Luminescent materials derived from biomass resources. <i>Coordination Chemistry Reviews</i> , 2023, 477, 214951.	9.5	10
157	Rational Design of Covalent Bond Engineered Encapsulation Structure toward Efficient, Long-Lived Multicolored Phosphorescent Carbon Dots. <i>Small</i> , 2023, 19, .	5.2	35
158	In Situ Confining Citric Acid-Derived Carbon Dots for Full-Color Room-Temperature Phosphorescence. <i>Small</i> , 2023, 19, .	5.2	23
159	A Molecular Engineering Strategy for Achieving Blue Phosphorescent Carbon Dots with Outstanding Efficiency above 50%. <i>Advanced Materials</i> , 2023, 35, .	11.1	54
160	Spatial effect and resonance energy transfer for the construction of carbon dots composites with long-lived multicolor afterglow for advanced anticounterfeiting. <i>Chinese Chemical Letters</i> , 2023, 34, 108070.	4.8	6
161	Color-tunable and ultralong organic room temperature phosphorescence from poly(acrylic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5 1960-1970.	2.7	3
162	Deep-blue thermally activated delayed fluorescence carbon dots with ultralong lifetime. <i>Nanoscale</i> , 2023, 15, 3337-3344.	2.8	13
163	Multicolor-Emissive Carbon Dots for White-Light-Emitting Diodes and Room-Temperature Phosphorescence. <i>ACS Applied Nano Materials</i> , 2023, 6, 918-929.	2.4	15

#	ARTICLE	IF	CITATIONS
164	Recent Progress in Inorganic Afterglow Materials: Mechanisms, Persistent Luminescent Properties, Modulating Methods, and Bioimaging Applications. <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	27
165	Long-Lived Dynamic Room Temperature Phosphorescence from Carbon Dots Based Materials. <i>Small</i> , 2023, 19, .	5.2	32
166	Multiple Stimuli-Response Polychromatic Carbon Dots for Advanced Information Encryption and Safety. <i>Small</i> , 2023, 19, .	5.2	22
167	Modulating Emission of Organic Emitters from Fluorescence to Red Afterglow through Boric Acid-Assisted Energy Transfer. <i>Journal of Physical Chemistry C</i> , 2023, 127, 682-688.	1.5	2
168	Rationally Designed Matrix-Free Carbon Dots with Wavelength-Tunable Room-Temperature Phosphorescence. <i>Chemistry - an Asian Journal</i> , 2023, 18, .	1.7	2
169	High Color Stability Blue-to-Violet Room Temperature Phosphorescent Carbon Dot Composites with Ultralong Lifetime for Information Encryption. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 1809-1819.	3.2	21
170	Nanomaterials and artificial intelligence in anti-counterfeiting. , 2023, , 361-398.		0
171	Switching between Fluorescence and Room Temperature Phosphorescence in Carbon Dots: Key Role of Heteroatom Functionalities. <i>Journal of Physical Chemistry C</i> , 2023, 127, 2430-2439.	1.5	7
172	Polymer-Structure-Induced Room-Temperature Phosphorescence of Carbon Dot Materials. <i>Small Structures</i> , 2023, 4, .	6.9	30
173	Photo-stimuli responsive phosphorescence from carbon dots in porous gelatin. <i>Journal of Luminescence</i> , 2023, 257, 119725.	1.5	2
174	Achieving purple light excitable high-efficiency temperature-responsive dual- and single-mode afterglow in carbon dots. <i>Carbon</i> , 2023, 208, 365-373.	5.4	29
175	Hydrogen bonds and space restriction promoting long-lived room-temperature phosphorescence and its application for white light-emitting diodes. <i>Journal of Colloid and Interface Science</i> , 2023, 639, 78-86.	5.0	12
176	Proximate white light-long phosphor emission and a photoelectrochemical probe from boron defects engineered carbon-nitride nanosheets. <i>Materials Today Sustainability</i> , 2023, 22, 100366.	1.9	1
177	Room temperature phosphorescence based on nitrogen-phosphorus co-doped carbonized polymer dots for information encryption. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 668, 131456.	2.3	5
178	Ultra-long room temperature phosphorescence carbon dots-based composites with high environmental stability. <i>Journal of Luminescence</i> , 2023, 259, 119834.	1.5	4
179	Multiple-color room-temperature phosphorescence regulated by graphitization and carbonyls. <i>Chemical Engineering Journal</i> , 2023, 459, 141635.	6.6	2
180	A Deeper Understanding of H ₂ Evolution Entirely from Water via Diborane Hydrolysis. , 2023, 5, 783-797.		7
181	Reaction Time-Controlled Synthesis of Multicolor Carbon Dots for White Light-Emitting Diodes. <i>ACS Applied Nano Materials</i> , 2023, 6, 2478-2490.	2.4	15

#	ARTICLE	IF	CITATIONS
182	Shallow Traps in Carbon Nitride Quantum Dots to Achieve 6.47 s Ultralong Lifetime and Wavelength-Tunable Room Temperature Phosphorescence. <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	11
183	Recent Advances of Carbon Dots with Afterglow Emission. <i>Small</i> , 2023, 19, .	5.2	31
184	Evolution and fabrication of carbon dot-based room temperature phosphorescence materials. <i>Chemical Science</i> , 2023, 14, 3705-3729.	3.7	41
185	Aggregation-induced color fine-tunable carbon dot phosphorescence covering from green to near-infrared for advanced information encryption. <i>Chemical Engineering Journal</i> , 2023, 462, 142339.	6.6	18
186	An Overview on Carbon Quantum Dots Optical and Chemical Features. <i>Molecules</i> , 2023, 28, 2772.	1.7	18
187	Modulating Emission of Boric Acid into Highly Efficient and Color-Tunable Afterglow via Dehydration-Induced Through-Space Conjugation. <i>Advanced Science</i> , 2023, 10, .	5.6	11
188	Boron Dopants in Red-Emitting B and N Co-Doped Carbon Quantum Dots Enable Targeted Imaging of Lysosomes. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 17045-17053.	4.0	16
189	Tough, Reprocessable, and Recyclable Dynamic Covalent Polymers with Ultrastable Long-Lived Room-Temperature Phosphorescence. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	3
190	Tough, Reprocessable, and Recyclable Dynamic Covalent Polymers with Ultrastable Long-Lived Room-Temperature Phosphorescence. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	25
191	Polythiophene Derivatives Carbonized Polymer Dots: Aggregation Induced ^{sc} Solid-State ^{sc} Fluorescence Emission ^{sup} ^{sc} . <i>Chinese Journal of Chemistry</i> , 2023, 41, 1950-1956.	2.6	9
192	Mechanical Force-Induced Color-Variable Luminescence of Carbon Dots in Boric Acid Matrix. <i>Molecules</i> , 2023, 28, 3388.	1.7	0
193	Microwave-Assisted Synthesis of Room Temperature Long Persistent Luminescent Materials and Their Imaging Applications. <i>Crystals</i> , 2023, 13, 705.	1.0	0
194	Room Temperature Phosphorescence Carbon Dots: Preparations, Regulations, and Applications. <i>Small</i> , 2023, 19, .	5.2	22
217	The emergence and prospects of carbon dots with solid-state photoluminescence for light-emitting diodes. <i>Materials Horizons</i> , 0, , .	6.4	1
222	The afterglow of carbon dots shining in inorganic matrices. <i>Materials Horizons</i> , 2024, 11, 113-133.	6.4	2
241	Recent advances in red-emissive carbon dots and their biomedical applications. <i>Materials Chemistry Frontiers</i> , 2024, 8, 930-955.	3.2	0
251	Optical properties and applications of zero-dimensional carbon nanomaterials. , 2024, , 153-183.		0