Shouxin Liu

List of Publications by Year
in descending order

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115 papers	9,040 citations	46984 47 h-index	42364 92 g-index
118 all docs	118 docs citations	118 times ranked	10283 citing authors

#	Article	IF	Citations
1	Mesoporous materials for energy conversion and storage devices. Nature Reviews Materials, 2016, 1, .	23.3	1,031
2	Simple and Green Synthesis of Nitrogenâ€Doped Photoluminescent Carbonaceous Nanospheres for Bioimaging. Angewandte Chemie - International Edition, 2013, 52, 8151-8155.	7.2	430
3	Biomass-derived nitrogen-doped carbon quantum dots: highly selective fluorescent probe for detecting Fe3+ ions and tetracyclines. Journal of Colloid and Interface Science, 2019, 539, 332-341.	5.0	424
4	Efficient Cleavage of Ligninâ€"Carbohydrate Complexes and Ultrafast Extraction of Lignin Oligomers from Wood Biomass by Microwaveâ€Assisted Treatment with Deep Eutectic Solvent. ChemSusChem, 2017, 10, 1692-1700.	3.6	354
5	Multiple hydrogen bond coordination in three-constituent deep eutectic solvents enhances lignin fractionation from biomass. Green Chemistry, 2018, 20, 2711-2721.	4.6	323
6	Naturalâ€Productâ€Derived Carbon Dots: From Natural Products to Functional Materials. ChemSusChem, 2018, 11, 11-24.	3.6	278
7	A Universal Strategy for Activating the Multicolor Roomâ€Temperature Afterglow of Carbon Dots in a Boric Acid Matrix. Angewandte Chemie - International Edition, 2019, 58, 7278-7283.	7.2	266
8	An overview of the synthesis of ordered mesoporous materials. Chemical Communications, 2013, 49, 943-946.	2.2	263
9	A Dynamic Gel with Reversible and Tunable Topological Networks and Performances. Matter, 2020, 2, 390-403.	5.0	216
10	Highly Flexible and Conductive Cellulose-Mediated PEDOT:PSS/MWCNT Composite Films for Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 13213-13222.	4.0	214
11	High Performance, Flexible, Solidâ€State Supercapacitors Based on a Renewable and Biodegradable Mesoporous Cellulose Membrane. Advanced Energy Materials, 2017, 7, 1700739.	10.2	202
12	Enhanced Biological Photosynthetic Efficiency Using Lightâ€Harvesting Engineering with Dualâ€Emissive Carbon Dots. Advanced Functional Materials, 2018, 28, 1804004.	7.8	189
13	Hydrothermal synthesis of nitrogen-doped carbon quantum dots from microcrystalline cellulose for the detection of Fe³⁺ ions in an acidic environment. RSC Advances, 2017, 7, 44144-44153.	1.7	177
14	Efficient Cleavage of Strong Hydrogen Bonds in Cotton by Deep Eutectic Solvents and Facile Fabrication of Cellulose Nanocrystals in High Yields. ACS Sustainable Chemistry and Engineering, 2017, 5, 7623-7631.	3.2	161
15	Polyvinyl Alcohol/Silk Fibroin/Borax Hydrogel Ionotronics: A Highly Stretchable, Self-Healable, and Biocompatible Sensing Platform. ACS Applied Materials & Interfaces, 2019, 11, 23632-23638.	4.0	154
16	N,S-self-doped carbon quantum dots from fungus fibers for sensing tetracyclines and for bioimaging cancer cells. Materials Science and Engineering C, 2019, 105, 110132.	3.8	132
17	Designing Hybrid Chiral Photonic Films with Circularly Polarized Room-Temperature Phosphorescence. ACS Nano, 2020, 14, 11130-11139.	7.3	130
18	Fabrication, characteristics and applications of carbon materials with different morphologies and porous structures produced from wood liquefaction: A review. Chemical Engineering Journal, 2019, 364, 226-243.	6.6	125

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19	Hydrothermal synthesis of nitrogen and boron co-doped carbon quantum dots for application in acetone and dopamine sensors and multicolor cellular imaging. Sensors and Actuators B: Chemical, 2019, 281, 34-43.	4.0	119
20	Production of Nanocellulose Using Hydrated Deep Eutectic Solvent Combined with Ultrasonic Treatment. ACS Omega, 2019, 4, 8539-8547.	1.6	112
21	Luminescent Transparent Wood Based on Lignin-Derived Carbon Dots as a Building Material for Dual-Channel, Real-Time, and Visual Detection of Formaldehyde Gas. ACS Applied Materials & Interfaces, 2020, 12, 36628-36638.	4.0	112
22	Multifunctional chiral nematic cellulose nanocrystals/glycerol structural colored nanocomposites for intelligent responsive films, photonic inks and iridescent coatings. Journal of Materials Chemistry C, 2018, 6, 5391-5400.	2.7	103
23	Far-Red Carbon Dots as Efficient Light-Harvesting Agents for Enhanced Photosynthesis. ACS Applied Materials & Interfaces, 2020, 12, 21009-21019.	4.0	102
24	Novel Quercetin Aggregationâ€Induced Emission Luminogen (AIEgen) with Excitedâ€State Intramolecular Proton Transfer for In Vivo Bioimaging. Advanced Functional Materials, 2018, 28, 1706196.	7.8	100
25	Solar-powered nanostructured biopolymer hygroscopic aerogels for atmospheric water harvesting. Nano Energy, 2021, 80, 105569.	8.2	99
26	Deep Eutectic Solvent-Assisted In Situ Wood Delignification: A Promising Strategy To Enhance the Efficiency of Wood-Based Solar Steam Generation Devices. ACS Applied Materials & Interfaces, 2019, 11, 26032-26037.	4.0	97
27	Carbon Dots as a Promising Green Photocatalyst for Free Radical and ATRPâ€Based Radical Photopolymerization with Blue LEDs. Angewandte Chemie - International Edition, 2020, 59, 3166-3171.	7.2	95
28	Coating of Wood with Fe₂O₃-Decorated Carbon Nanotubes by One-Step Combustion for Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2021, 13, 22845-22854.	4.0	93
29	Nanocellulose-Enabled, All-Nanofiber, High-Performance Supercapacitor. ACS Applied Materials & Interfaces, 2019, 11, 5919-5927.	4.0	91
30	Hydrothermal carbonization of carboxymethylcellulose: One-pot preparation of conductive carbon microspheres and water-soluble fluorescent carbon nanodots. Chemical Engineering Journal, 2015, 266, 112-120.	6.6	89
31	Melanin-Inspired Design: Preparing Sustainable Photothermal Materials from Lignin for Energy Generation. ACS Applied Materials & Interfaces, 2021, 13, 7600-7607.	4.0	87
32	Seeking Brightness from Nature: J-Aggregation-Induced Emission in Cellulolytic Enzyme Lignin Nanoparticles. ACS Sustainable Chemistry and Engineering, 2018, 6, 3169-3175.	3.2	80
33	Tunable Upconverted Circularly Polarized Luminescence in Cellulose Nanocrystal Based Chiral Photonic Films. ACS Applied Materials & Interfaces, 2019, 11, 23512-23519.	4.0	79
34	Assembling semiconductor quantum dots in hierarchical photonic cellulose nanocrystal films: circularly polarized luminescent nanomaterials as optical coding labels. Journal of Materials Chemistry C, 2019, 7, 13794-13802.	2.7	79
35	Overview of cellulose-based flexible materials for supercapacitors. Journal of Materials Chemistry A, 2021, 9, 7278-7300.	5.2	77
36	Preparation of Carbon Dots for Cellular Imaging by the Molecular Aggregation of Cellulolytic Enzyme Lignin. Langmuir, 2017, 33, 5786-5795.	1.6	75

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37	Woodâ€Derived Carbon Materials and Lightâ€Emitting Materials. Advanced Materials, 2021, 33, e2000596.	11.1	75
38	Characterization of products from hydrothermal carbonization of pine. Bioresource Technology, 2017, 244, 78-83.	4.8	72
39	Highly activated porous carbon with 3D microspherical structure and hierarchical pores as greatly enhanced cathode material for high-performance supercapacitors. Journal of Power Sources, 2018, 391, 162-169.	4.0	72
40	Hydrothermal synthesis of green fluorescent nitrogen doped carbon dots for the detection of nitrite and multicolor cellular imaging. Analytica Chimica Acta, 2019, 1090, 133-142.	2.6	64
41	Seeking value from biomass materials: preparation of coffee bean shell-derived fluorescent carbon dots via molecular aggregation for antioxidation and bioimaging applications. Materials Chemistry Frontiers, 2018, 2, 1269-1275.	3.2	62
42	Nature-inspired design: p- toluenesulfonic acid-assisted hydrothermally engineered wood for solar steam generation. Nano Energy, 2020, 78, 105322.	8.2	61
43	Nitrogen and copper (II) co-doped carbon dots for applications in ascorbic acid determination by non-oxidation reduction strategy and cellular imaging. Talanta, 2020, 210, 120649.	2.9	56
44	Stimuli-responsive cellulose paper materials. Carbohydrate Polymers, 2019, 210, 350-363.	5.1	55
45	One-step hydrothermal synthesis of fluorescent nanocrystalline cellulose/carbon dot hydrogels. Carbohydrate Polymers, 2017, 175, 7-17.	5.1	54
46	In Situ Green Synthesis of Nitrogen-Doped Carbon-Dot-Based Room-Temperature Phosphorescent Materials for Visual Iron Ion Detection. ACS Sustainable Chemistry and Engineering, 2019, 7, 18801-18809.	3.2	52
47	Ultralight carbon aerogel with tubular structures and N-containing sandwich-like wall from kapok fibers for supercapacitor electrode materials. Journal of Power Sources, 2019, 438, 227030.	4.0	50
48	Thermal-insulating, flame-retardant and mechanically resistant aerogel based on bio-inspired tubular cellulose. Composites Part B: Engineering, 2021, 220, 108997.	5.9	47
49	Fluorescent thermochromic wood-based composite phase change materials based on aggregation-induced emission carbon dots for visual solar-thermal energy conversion and storage. Chemical Engineering Journal, 2021, 424, 130426.	6.6	47
50	Molecular Glue Strategy: Large-Scale Conversion of Clustering-Induced Emission Luminogen to Carbon Dots. ACS Applied Materials & Interfaces, 2019, 11, 19301-19307.	4.0	44
51	Distinct Sustainable Carbon Nanodots Enable Free Radical Photopolymerization, Photoâ€ATRP and Photoâ€CuAAC Chemistry. Angewandte Chemie - International Edition, 2021, 60, 10983-10991.	7.2	44
52	â€œIrregularâ€•aggregation-induced emission luminogens. Coordination Chemistry Reviews, 2020, 418, 213358.	9.5	44
53	Constructing CeO₂/nitrogen-doped carbon quantum dot/g-C₃N₄ heterojunction photocatalysts for highly efficient visible light photocatalysis. Nanoscale, 2020, 12, 19112-19120.	2.8	43
54	PVA-Coated Fluorescent Carbon Dot Nanocapsules as an Optical Amplifier for Enhanced Photosynthesis of Lettuce. ACS Sustainable Chemistry and Engineering, 2020, 8, 3938-3949.	3.2	41

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55	Producing long afterglow by cellulose confinement effect: A wood-inspired design for sustainable phosphorescent materials. Carbon, 2021, 171, 946-952.	5.4	41
56	Isolating High Antimicrobial Ability Lignin From Bamboo Kraft Lignin by Organosolv Fractionation. Frontiers in Bioengineering and Biotechnology, 2021, 9, 683796.	2.0	41
57	Promoting the Growth of Mung Bean Plants through Uptake and Light Conversion of NaYF₄:Yb,Er@CDs Nanocomposites. ACS Sustainable Chemistry and Engineering, 2020, 8, 9751-9762.	3.2	40
58	Natural Quercetin AIEgen Composite Film with Antibacterial and Antioxidant Properties for in Situ Sensing of Al³⁺ Residues in Food, Detecting Food Spoilage, and Extending Food Storage Times. ACS Applied Bio Materials, 2018, 1, 636-642.	2.3	39
59	Recent development in food emulsion stabilized by plant-based cellulose nanoparticles. Current Opinion in Colloid and Interface Science, 2021, 56, 101512.	3.4	38
60	Tunable Water Delivery in Carbon-Coated Fabrics for High-Efficiency Solar Vapor Generation. ACS Applied Materials & Interfaces, 2019, 11, 46938-46946.	4.0	36
61	Sustainable Carbon Dot-Based AIEgens: Promising Light-Harvesting Materials for Enhancing Photosynthesis. ACS Sustainable Chemistry and Engineering, 2021, 9, 4139-4145.	3.2	35
62	A porous carbon foam prepared from liquefied birch sawdust. Journal of Materials Science, 2012, 47, 1977-1984.	1.7	34
63	Seeking brightness from nature: Sustainable carbon dots-based AIEgens with tunable emission wavelength from natural rosin. Chemical Engineering Journal, 2021, 413, 127457.	6.6	34
64	Effect of reaction temperature on properties of carbon nanodots and their visible-light photocatalytic degradation of tetracyline. RSC Advances, 2015, 5, 75711-75721.	1.7	33
65	Biomass-derived solar-to-thermal materials: promising energy absorbers to convert light to mechanical motion. Journal of Materials Chemistry A, 2019, 7, 4002-4008.	5.2	32
66	Pentosan-derived water-soluble carbon nano dots with substantial fluorescence: Properties and application as a photosensitizer. Applied Surface Science, 2014, 315, 66-72.	3.1	31
67	Wood-Inspired Compressible, Mesoporous, and Multifunctional Carbon Aerogel by a Dual-Activation Strategy from Cellulose. ACS Sustainable Chemistry and Engineering, 2020, 8, 11114-11122.	3.2	31
68	Biomass-derived tubular carbon materials: progress in synthesis and applications. Journal of Materials Chemistry A, 2021, 9, 13822-13850.	5.2	31
69	Self-assembly of single-crystal ZnO nanorod arrays on flexible activated carbon fibers substrates and the superior photocatalytic degradation activity. Applied Surface Science, 2020, 513, 145878.	3.1	30
70	Compressible, anisotropic lamellar cellulose-based carbon aerogels enhanced by carbon dots for superior energy storage and water deionization. Carbohydrate Polymers, 2021, 252, 117209.	5.1	30
71	Multi-walled carbon nanotubes/carbon foam nanocomposites derived from biomass for CO2 capture and supercapacitor applications. Fuel, 2021, 305, 121622.	3.4	30
72	Natural phenolic compoundâ€“iron complexes: sustainable solar absorbers for wood-based solar steam generation devices. RSC Advances, 2020, 10, 1152-1158.	1.7	28

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73	Sustainable Afterglow Roomâ€Temperature Phosphorescence Emission Materials Generated Using Natural Phenolics. Angewandte Chemie - International Edition, 2022, 61, .	7.2	28
74	High-Performance Supercapacitor Device with Ultrathick Electrodes Fabricated from All-Cellulose-Based Carbon Aerogel. Energy & Fuels, 2021, 35, 8295-8302.	2.5	27
75	Solar-powered â€œpumpâ€•for uranium recovery from seawater. Chemical Engineering Journal, 2021, 416, 129486.	6.6	27
76	Electroless decoration of macroscale foam with nickel nano-spikes: A scalable route toward efficient catalyst electrodes. Electrochemistry Communications, 2016, 65, 39-43.	2.3	26
77	ZnO nanorod arrays assembled on activated carbon fibers for photocatalytic degradation: Characteristics and synergistic effects. Chemosphere, 2020, 261, 127731.	4.2	26
78	Moisture-indicating cellulose aerogels for multiple atmospheric water harvesting cycles driven by solar energy. Journal of Materials Chemistry A, 2021, 9, 24650-24660.	5.2	26
79	Exploring the Circular Polarization Capacity from Chiral Cellulose Nanocrystal Films for a Photoâ€Controlled Chiral Helix of Supramolecular Polymers. Angewandte Chemie - International Edition, 2022, 61, .	7.2	26
80	â€œCellulose Spacerâ€•Strategy: Anti-Aggregation-Caused Quenching Membrane for Mercury Ion Detection and Removal. ACS Sustainable Chemistry and Engineering, 2019, 7, 15182-15189.	3.2	25
81	Green Extraction of Six Phenolic Compounds from Rattan (Calamoideae faberii) with Deep Eutectic Solvent by Homogenate-Assisted Vacuum-Cavitation Method. Molecules, 2019, 24, 113.	1.7	25
82	Ultra-small amorphous carbon dots: preparation, photoluminescence properties, and their application as TiO2 photosensitizers. Journal of Materials Science, 2019, 54, 5280-5293.	1.7	24
83	Fluorescent Poly(vinyl alcohol) Films Containing Chlorogenic Acid Carbon Nanodots for Food Monitoring. ACS Applied Nano Materials, 2020, 3, 7611-7620.	2.4	23
84	Carbon dots confined in 3D polymer network: Producing robust room temperature phosphorescence with tunable lifetimes. Chinese Chemical Letters, 2022, 33, 783-787.	4.8	21
85	Sustainable afterglow materials from lignin inspired by wood phosphorescence. Cell Reports Physical Science, 2021, 2, 100542.	2.8	21
86	The role of fluorescent carbon dots in crops: Mechanism and applications. SmartMat, 2022, 3, 208-225.	6.4	21
87	A nanocomposite probe consisting of carbon quantum dots and phosphotungstic acid for fluorometric determination of chromate(VI) with improved selectivity. Mikrochimica Acta, 2018, 185, 470.	2.5	20
88	GC-MS Study of the Chemical Components of Different Aquilaria sinensis (Lour.) Gilgorgans and Agarwood from Different Asian Countries. Molecules, 2018, 23, 2168.	1.7	20
89	Carbon spheres derived from biomass residue via ultrasonic spray pyrolysis for supercapacitors. Materials Chemistry and Physics, 2018, 219, 461-467.	2.0	20
90	Adsorption Separation of Cr(VI) from a Water Phase Using Multiwalled Carbon Nanotube-Immobilized Ionic Liquids. ACS Omega, 2020, 5, 22827-22839.	1.6	19

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91	Hierarchically tunable porous carbon spheres derived from larch sawdust and application for efficiently removing Cr (â...¢) and Pb (â...¡). Materials Chemistry and Physics, 2015, 155, 52-58.	2.0	18
92	Organosilane-functionalized carbon quantum dots and their applications to â€œon-off-onâ€• fluorometric determination of chromate and ascorbic acid, and in white light-emitting devices. Mikrochimica Acta, 2019, 186, 516.	2.5	18
93	Alternate Ultrasound/Microwave Digestion for Deep Eutectic Hydro-distillation Extraction of Essential Oil and Polysaccharide from Schisandra chinensis (Turcz.) Baill. Molecules, 2019, 24, 1288.	1.7	18
94	Hierarchical porous graphene oxide/carbon foam nanocomposites derived from larch for enhanced CO2 capture and energy storage performance. Journal of CO2 Utilization, 2021, 52, 101666.	3.3	18
95	Kohlenstoffâ€Nanopunkte als Photokatalysatoren fÃ¼r die freie radikalische und ATRPâ€basierte radikalische Photopolymerisation mit blauen LEDs. Angewandte Chemie, 2020, 132, 3192-3197.	1.6	16
96	Hydrothermal synthesis of nitrogen-doped carbon quantum dots from lignin for formaldehyde determination. RSC Advances, 2021, 11, 29178-29185.	1.7	16
97	Facile fabrication of hollow and honeycomb-like carbon spheres from liquefied larch sawdust via ultrasonic spray pyrolysis. Materials Letters, 2015, 157, 135-138.	1.3	15
98	Catalysis Preparation of Biodiesel from Waste Schisandra chinensis Seed Oil with the Ionic Liquid Immobilized in a Magnetic Catalyst: Fe₃O₄@SiO₂@[C4mim]HSO₄. ACS Omega, 2021, 6, 7896-7909.	1.6	14
99	Sensitive Mechanofluorochromic Carbon Dotâ€Based AIEgens: Promising Reporting Components for Selfâ€Sensing Plastics. Advanced Optical Materials, 2021, 9, 2101092.	3.6	14
100	Integrating photon up- and down-conversion to produce efficient light-harvesting materials for enhancing natural photosynthesis. Journal of Materials Chemistry A, 2021, 9, 24308-24314.	5.2	13
101	Lignin Nanoparticles: Promising Sustainable Building Blocks of Photoluminescent and Haze Films for Improving Efficiency of Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 33536-33545.	4.0	13
102	Hierarchical porous carbon spheres derived from larch sawdust via spray pyrolysis and soft-templating method for supercapacitors. SN Applied Sciences, 2019, 1, 1.	1.5	12
103	Multipurpose Solar-Thermal Hydrogel Platform for Desalination of Seawater and Subsequent Collection of Atmospheric Water. ACS ES&T Water, 2023, 3, 1740-1746.	2.3	8
104	Constructing ultra-stable photothermal plastics assisted by carbon dots with photocaged reactivity. Matter, 2022, 5, 2864-2881.	5.0	8
105	Carbon nanocasting in ion-track etched polycarbonate membranes. Materials Letters, 2017, 187, 56-59.	1.3	7
106	Boosting solar-thermal-electric conversion of thermoelectrochemical cells by construction of a carboxymethylcellulose-interpenetrated polyacrylamide network. Journal of Materials Chemistry A, 2022, 10, 7785-7791.	5.2	7
107	Sustainable Afterglow Roomâ€Temperature Phosphorescence Emission Materials Generated Using Natural Phenolics. Angewandte Chemie, 2022, 134, .	1.6	7
108	Facile Control of the Porous Structure of Larch-Derived Mesoporous Carbons via Self-Assembly for Supercapacitors. Materials, 2017, 10, 1330.	1.3	6

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109	Preparation of a Smart and Portable Film for in Situ Sensing of Iron Microcorrosion. ACS Applied Materials & Interfaces, 2018, 10, 4981-4985.	4.0	6
110	Synthesis of nickel-incorporated larch-based carbon membranes with controllable porous structure for gas separation. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	5
111	Flexible, Electrically Conductive, Nanostructured, Asymmetric Aerogel Films for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 59174-59184.	4.0	5
112	Verschiedene nachhaltige Kohlenstoffnanopunkte fÃ¼r die freie radikalische Photopolymerisation, die Photoâ€ATRP und die Photoâ€CuACC Chemie. Angewandte Chemie, 2021, 133, 11078-11087.	1.6	4
113	Repurposing lignin to generate functional afterglow paper. Cell Reports Physical Science, 2022, 3, 100867.	2.8	3
114	Exploring the circular polarization capacity from chiral cellulose nanocrystal films for photoâ€controlled chiral helix of supramolecular polymers. Angewandte Chemie, 0, , .	1.6	2
115	RÃ¼cktitelbild: Verschiedene nachhaltige Kohlenstoffnanopunkte fÃ¼r die freie radikalische Photopolymerisation, die Photoâ€ATRP und die Photoâ€CuACC Chemie (Angew. Chem. 19/2021). Angewandte Chemie, 2021, 133, 11096-11096.	1.6	0