Sheng-Liang Hu

List of Publications by Year
in descending order

101 papers	3,409 citations	172207 29 h-index	161609 54 g-index
102 all docs	102 docs citations	102 times ranked	3756 citing authors

#	Article	IF	Citations
1	Combining carbon dots with WO3-x nanodots for utilizing the full spectrum of solar radiation in photocatalysis. Chemical Engineering Journal, 2022, 428, 131139.	6.6	31
2	A bifunctional nanozyme of carbon dots-mediated Co9S8 formation. Journal of Colloid and Interface Science, 2022, 608, 1348-1354.	5.0	6
3	Solar-irradiated carbon dots as high-density hot spots in sponge for high-efficiency cleanup of viscous crude oil spill. Journal of Materials Chemistry A, 2022, 10, 585-592.	5.2	28
4	Fabrication of high-performance graphene oxide/CuO/Cu2O film-coated copper foam for interfacial solar-driven water evaporation. Journal of Materials Science, 2022, 57, 3322-3336.	1.7	9
5	Rational construction of densely packed Si/MXene composite microspheres enables favorable sodium storage. Rare Metals, 2022, 41, 1626-1636.	3.6	20
6	High reaction activity enables carbon dots to construct multicomponent nanocomposites with superior catalytic performance. Inorganic Chemistry Frontiers, 2022, 9, 1761-1769.	3.0	5
7	Bottom-up synthesized crystalline boron quantum dots with nonvolatile memory effects through one-step hydrothermal polymerization of ammonium pentaborane and boric acid. CrystEngComm, 2022, 24, 3469-3474.	1.3	5
8	Carbon dot-boosted catalytic activity of CaO₂ by tuning visible light conversion. Journal of Materials Chemistry A, 2022, 10, 7792-7799.	5.2	13
9	Electrochemical oxidation reconstructs graphene oxides on sponge for unprecedentedly high solar water evaporation. Carbon, 2022, 194, 267-273.	5.4	17
10	Graphitic carbon nitride modified with trace-level copper and carbon dots exhibits excellent photo-Fenton catalytic activity with low consumption of H2O2. Ceramics International, 2022, 48, 17960-17968.	2.3	4
11	Chemical treatment of biomass wastes as carbon dot carriers for solar-driven water purification. Journal of Colloid and Interface Science, 2022, 621, 33-40.	5.0	18
12	A carbonized carbon dot-modified starch aerogel for efficient solar-powered water evaporation. Journal of Materials Chemistry A, 2022, 10, 11712-11720.	5.2	19
13	Hierarchical Poreâ€Gradient Silica Aerogel Balancing Heat and Water Management for Efficient Solarâ€Driven Water Evaporation. Advanced Sustainable Systems, 2022, 6, .	2.7	4
14	Electricityâ€Boosted Solarâ€toâ€Vapor Conversion upon Fiberâ€Supported CDs@CuS for Rapidly Vaporizing Seawater. Solar Rrl, 2022, 6, .	3.1	8
15	Richly electron-deficient BC_xO_{3â^'x} anodes with enhanced reaction kinetics for sodium/potassium-ion batteries. Materials Chemistry Frontiers, 2022, 6, 1882-1894.	3.2	4
16	Carbon dioxide derived carbonized polymer dots for multicolor light-emitting diodes. Green Chemistry, 2021, 23, 422-429.	4.6	29
17	Boosting adsorption of heavy metal ions in wastewater through solar-driven interfacial evaporation of chemically-treated carbonized wood. Science of the Total Environment, 2021, 759, 144317.	3.9	38
18	Triggering photocatalytic activity of carbon dot-based nanocomposites by a self-supplying peroxide. Journal of Materials Chemistry A, 2021, 9, 8991-8997.	5.2	13

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19	Crystalline borophene quantum dots and their derivative boron nanospheres. Materials Advances, 2021, 2, 3269-3273.	2.6	20
20	Boosting chemoselective reduction of 4-nitrostyrene via photoinduced energetic electrons from in situ formed Cu nanoparticles on carbon dots. Green Chemistry, 2021, 23, 2938-2943.	4.6	13
21	Clusteringâ€Induced White Light Emission from Carbonized Polymer Dots. Advanced Photonics Research, 2021, 2, 2000161.	1.7	8
22	Hydroxypropylmethyl Cellulose Modified with Carbon Dots Exhibits Light-Responsive and Reversible Optical Switching. ACS Applied Materials & Interfaces, 2021, 13, 12375-12382.	4.0	17
23	A Gelationâ€Stabilized Strategy toward Photothermal Architecture Design for Highly Efficient Solar Water Evaporation. Solar Rrl, 2021, 5, 2100133.	3.1	27
24	Integrating biphase Î³- and Î±-Fe2O3 with carbon dots as a synergistic nanozyme with easy recycle and high catalytic activity. Applied Surface Science, 2021, 545, 148987.	3.1	10
25	Clusteringâ€Induced White Light Emission from Carbonized Polymer Dots. Advanced Photonics Research, 2021, 2, 2170016.	1.7	0
26	Interaction Promotes the Formation and Photothermal Conversion of Carbon Dots/Polydopamine Composite for Solarâ€Driven Water Evaporation. Advanced Materials Interfaces, 2021, 8, 2100332.	1.9	15
27	Secondary granulation-assisted CVD growth of WS2, TiS2 and NbS2 crystals. Functional Materials Letters, 2021, 14, 2151029.	0.7	1
28	Lattice-Coupled Si/MXene Confined by Hard Carbon for Fast Sodium-Ion Conduction. ACS Applied Energy Materials, 2021, 4, 7268-7277.	2.5	29
29	Assembling carbon dots on vertically aligned acetate fibers as ideal salt-rejecting evaporators for solar water purification. Chemical Engineering Journal, 2021, 421, 129822.	6.6	57
30	Origin of sonocatalytic activity of fluorescent carbon dots. Carbon, 2021, 184, 102-108.	5.4	16
31	Incorporating quantum-sized boron dots into 3D cross-linked rGO skeleton to enable the activity of boron anode for favorable lithium storage. Chemical Engineering Journal, 2021, 425, 130659.	6.6	16
32	Atomic Feâ€“N₅ catalytic sites embedded in N-doped carbon as a highly efficient oxygen electrocatalyst for zincâ€“air batteries. Materials Chemistry Frontiers, 2021, 5, 8127-8137.	3.2	13
33	Allâ€inâ€One Solar Interfacial Evaporation System with Highly Effective Heat Management and Water Collection. Solar Rrl, 2021, 5, .	3.1	8
34	Molybdenum Selenide/Porous Carbon Nanomaterial Heterostructures with Remarkably Enhanced Light-Boosting Peroxidase-like Activities. ACS Applied Materials & Interfaces, 2021, 13, 54274-54283.	4.0	4
35	Solar-accelerated chemoselective hydrogenation of 4-nitrostyrene to 4-vinylaniline with carbon dot-induced Cu over Cu₃P in the absence of any sacrificial reagent. Journal of Materials Chemistry A, 2021, 9, 25374-25380.	5.2	10
36	Dynamic restructuring of carbon dots/copper oxide supported on mesoporous hydroxyapatite brings exceptional catalytic activity in the reduction of 4-nitrophenol. Applied Catalysis B: Environmental, 2020, 263, 118299.	10.8	62

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37	A Cu2O-CDs-Cu three component catalyst for boosting oxidase-like activity with hot electrons. Chemical Engineering Journal, 2020, 382, 122484.	6.6	41
38	Available photo-charging integrated device constructed with dye-sensitized solar cells and lithium-ion battery. New Journal of Chemistry, 2020, 44, 791-796.	1.4	14
39	Making a cup of carbon dots for ratiometric and colorimetric fluorescent detection of Cu2+ ions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 586, 124233.	2.3	28
40	Green, energy-efficient preparation of CDs-embedded BiPO4 heterostructure for better light harvesting and conversion. Chemical Engineering Journal, 2020, 391, 123551.	6.6	7
41	One step synthesis of N-doped carbon dots/hydroxyapatite:Eu,Gd composite with dual-emissive and solid-state photoluminescence. Applied Surface Science, 2020, 508, 144862.	3.1	12
42	Highly improved mechanical performances of polyvinyl butyral through fluorescent carbon dots. Materials Letters, 2020, 280, 128537.	1.3	7
43	Boosting photocatalytic activity through in-situ phase transformation of bismuth-based compounds on carbon dots and quantification analysis of intrinsically reactive species in photocatalysis. Carbon, 2020, 165, 175-184.	5.4	20
44	PbTe nanodots confined on ternary B2O3/BC2O/C nanosheets as electrode for efficient sodium storage. Journal of Power Sources, 2020, 461, 228110.	4.0	16
45	A study on the dynamic behavior of macromolecular suspension flow in micro-channel under thermal gradient using energy-conserving dissipative particle dynamics simulation. Microfluidics and Nanofluidics, 2020, 24, 1.	1.0	4
46	Highly microporous SbPO₄/BC_x hybrid anodes for sodium-ion batteries. Materials Advances, 2020, 1, 206-214.	2.6	12
47	Carbon dots-stabilized Cu4O3 for a multi-responsive nanozyme with exceptionally high activity. Chemical Engineering Journal, 2020, 394, 125045.	6.6	43
48	Cerium-mediated photooxidation for tuning pH-dependent oxidase-like activity. Chemical Engineering Journal, 2020, 397, 125471.	6.6	26
49	A review on the preparation and applications of coal-based fluorescent carbon dots. New Carbon Materials, 2020, 35, 646-666.	2.9	22
50	Dependence of photocatalytic performance on interfacial reaction in carbon dots/mesoporous hydroxyapatite nanocomposites. Micro and Nano Letters, 2020, 15, 106-109.	0.6	1
51	3D-carbon dots decorated black TiO2 nanotube Array@Ti foam with enhanced photothermal and photocatalytic activities. Ceramics International, 2019, 45, 17512-17520.	2.3	26
52	Self-assembly carbon dots for powerful solar water evaporation. Carbon, 2019, 149, 556-563.	5.4	109
53	Nitrogen-doped carbon dots encapsulated in the mesoporous channels of SBA-15 with solid-state fluorescence and excellent stability. Nanoscale, 2019, 11, 7247-7255.	2.8	34
54	TiCr alloy anodization for Cr-doped TiO₂ nanotube array with improved photocatalytic activity. Materials Research Express, 2019, 6, 075014.	0.8	9

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55	Facile Synthesis of Carbon Dots@2D MoS₂ Heterostructure with Enhanced Photocatalytic Properties. Inorganic Chemistry, 2019, 58, 5746-5752.	1.9	31
56	Fluorine-free superhydrophobic carbon-based coatings on the concrete. Materials Letters, 2019, 244, 31-34.	1.3	33
57	Electronic and photocatalytic properties of modified MoS2/graphene quantum dots heterostructures: A computational study. Applied Surface Science, 2019, 473, 70-76.	3.1	14
58	Rapid cancer diagnosis by highly fluorescent carbon nanodots-based imaging. Analytical and Bioanalytical Chemistry, 2019, 411, 967-972.	1.9	30
59	Airâ€“water interface solar heating using titanium gauze coated with reduced TiO2 nanotubes. Journal of Materials Science, 2018, 53, 9742-9754.	1.7	16
60	Loading sulfur and nitrogen co-doped carbon dots onto g-C₃N₄ nanosheets for an efficient photocatalytic reduction of 4-nitrophenol. Dalton Transactions, 2018, 47, 6435-6443.	1.6	22
61	Carbon dot powders for photocatalytic reduction of quinones. Materials Letters, 2018, 218, 221-224.	1.3	10
62	MIL-125 and NH₂-MIL-125 Modified TiO₂ Nanotube Array as Efficient Photocatalysts for Pollute Degradation. Chemistry Letters, 2018, 47, 711-714.	0.7	12
63	Carbonâ€Dotâ€Based Heterojunction for Engineering Bandâ€Edge Position and Photocatalytic Performance. Small, 2018, 14, e1803447.	5.2	53
64	In-situ incorporation of carbon dots into mesoporous nickel boride for regulating photocatalytic activities. Carbon, 2018, 137, 484-492.	5.4	42
65	Cross-Linked Nanohybrid Polymer Electrolytes With POSS Cross-Linker for Solid-State Lithium Ion Batteries. Frontiers in Chemistry, 2018, 6, 186.	1.8	20
66	A simple, scalable approach for combining carbon dots with hexagonal nanoplates of nickel-based compounds for efficient photocatalytic reduction. Dalton Transactions, 2018, 47, 12694-12701.	1.6	3
67	Highly microporous graphite-like BC_xO_{3â”x}/C nanospheres for anode materials of lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 2835-2843.	5.2	25
68	Cu_{1.8}S-Passivated carbon dots for enhancing photocatalytic activity. Chemical Communications, 2017, 53, 2343-2346.	2.2	32
69	Full-colour carbon dots: from energy-efficient synthesis to concentration-dependent photoluminescence properties. Chemical Communications, 2017, 53, 3074-3077.	2.2	164
70	TiO₂ nanotube array with â€œmulti-layerâ€•walled structure and its vulnerability to water. Functional Materials Letters, 2017, 10, 1750019.	0.7	1
71	Hybrid carbon dot/Ni 3 S 2 architecture supported on nickel foam for effective light collection and conversion. Chemical Engineering Journal, 2017, 321, 608-613.	6.6	20
72	Fluoride doped SrTiO₃/TiO₂ nanotube arrays with a double layer walled structure for enhanced photocatalytic properties and bioactivity. RSC Advances, 2017, 7, 49759-49768.	1.7	14

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73	Doubleâ€Walled ZrO₂ Nanotube Array: Preparation and Enhanced Photocatalytic Activity. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700239.	0.8	4
74	Dual photoluminescence centers from inorganic-salt-functionalized carbon dots for ratiometric pH sensing. Journal of Materials Chemistry C, 2017, 5, 9849-9853.	2.7	46
75	Carbon dots with concentration-tunable multicolored photoluminescence for simultaneous detection of Fe3+ and Cu2+ ions. Sensors and Actuators B: Chemical, 2017, 253, 928-933.	4.0	90
76	A solid reaction towards in situ hybridization of carbon dots and conjugated polymers for enhanced light absorption and conversion. Chemical Communications, 2017, 53, 9426-9429.	2.2	25
77	Hydroxyapatite/N-doped carbon dots/Ag₃PO₄ composite for improved visible-light photocatalytic performance. RSC Advances, 2017, 7, 30191-30198.	1.7	18
78	Multicolour Emission States from Charge Transfer between Carbon Dots and Surface Molecules. Materials, 2017, 10, 165.	1.3	20
79	Tailoring surface charge distribution of carbon dots through heteroatoms for enhanced visible-light photocatalytic activity. Carbon, 2016, 105, 484-489.	5.4	64
80	A facile and green method towards coal-based fluorescent carbon dots with photocatalytic activity. Applied Surface Science, 2016, 378, 402-407.	3.1	139
81	A chemical method for identifying the photocatalytic active sites on carbon dots. Carbon, 2016, 103, 391-393.	5.4	35
82	Tuning Optical Properties and Photocatalytic Activities of Carbon-based â€œQuantum Dotsâ€•Through their Surface Groups. Chemical Record, 2016, 16, 219-230.	2.9	72
83	Tunable Photoluminescence Across the Entire Visible Spectrum from Carbon Dots Excited by White Light. Angewandte Chemie, 2015, 127, 3013-3017.	1.6	29
84	Self-assembly of fluorescent carbon dots in a N,N-dimethylmethanamide solution via Schiff base reaction. Nanoscale, 2015, 7, 4372-4376.	2.8	12
85	Tunable Photoluminescence Across the Entire Visible Spectrum from Carbon Dots Excited by White Light. Angewandte Chemie - International Edition, 2015, 54, 2970-2974.	7.2	546
86	Chlorine-functionalized carbon dots for highly efficient photodegradation of pollutants under visible-light irradiation. Applied Surface Science, 2015, 355, 774-777.	3.1	22
87	Enhanced performance of Fe³⁺ detection via fluorescence resonance energy transfer between carbon quantum dots and Rhodamine B. RSC Advances, 2014, 4, 41069-41075.	1.7	47
88	Tailoring surface groups of carbon quantum dots to improve photoluminescence behaviors. Applied Surface Science, 2014, 301, 156-160.	3.1	54
89	Carbon-Dot-Loaded Alginate Gels as Recoverable Probes: Fabrication and Mechanism of Fluorescent Detection. Langmuir, 2013, 29, 12615-12621.	1.6	39
90	Modulation and effects of surface groups on photoluminescence and photocatalytic activity of carbon dots. Nanoscale, 2013, 5, 11665.	2.8	174

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91	Preparation and optical properties of phthalocyanineâ€“carbon dot blends. RSC Advances, 2013, 3, 21447.	1.7	10
92	Chemical Regulation of Carbon Quantum Dots from Synthesis to Photocatalytic Activity. Chemistry - an Asian Journal, 2013, 8, 1035-1041.	1.7	152
93	Oneâ€Step Synthesis of Graphitic Nanoplatelets that are Decorated with Luminescent Carbon Nanoparticles as New Opticalâ€Limiting Materials. Chemistry - an Asian Journal, 2012, 7, 2711-2717.	1.7	10
94	Formation and nonlinear optical properties of carbon nanospindles from laser ablation. CrystEngComm, 2012, 14, 4243.	1.3	6
95	Simultaneous synthesis of luminescent carbon nanoparticles and carbon nanocages by laser ablation of carbon black suspension and their optical limiting properties. Journal of Materials Chemistry, 2012, 22, 1957-1961.	6.7	47
96	Understanding the effects of the structures on the energy gaps in carbon nanoparticles from laser synthesis. Journal of Materials Chemistry, 2012, 22, 12053.	6.7	20
97	Synthesis and size control of carbon quantum dots by tailoring laser parameters. , 2011, , .		3
98	Laser synthesis and size tailor of carbon quantum dots. Journal of Nanoparticle Research, 2011, 13, 7247-7252.	0.8	139
99	Theoretical analysis of the formation of face-centered cubic Si nanocrystals by magnetron sputtering. Applied Physics Letters, 2011, 99, .	1.5	5
100	Thermodynamics of face-centered-cubic silicon nucleation at the nanoscale from laser ablation. Journal of Physics Condensed Matter, 2011, 23, 205302.	0.7	4
101	Prediction of Formation of Cubic Boron Nitride Nanowires inside Silicon Nanotubes. Journal of Physical Chemistry C, 2010, 114, 19941-19945.	1.5	5