Ya-Ping Sun

List of Publications by Year
in descending order

130 papers	24,256 citations	19636 61 h-index	15716 125 g-index
138 all docs	138 docs citations	138 times ranked	20172 citing authors

#	Article	IF	Citations
1	Quantum-Sized Carbon Dots for Bright and Colorful Photoluminescence. Journal of the American Chemical Society, 2006, 128, 7756-7757.	6.6	4,049
2	Carbon Dots for Multiphoton Bioimaging. Journal of the American Chemical Society, 2007, 129, 11318-11319.	6.6	1,968
3	Functionalized Carbon Nanotubes:â€‰ Properties and Applications. Accounts of Chemical Research, 2002, 35, 1096-1104.	7.6	1,560
4	Carbon Dots for Optical Imaging in Vivo. Journal of the American Chemical Society, 2009, 131, 11308-11309.	6.6	1,341
5	Carbon Dots as Nontoxic and High-Performance Fluorescence Imaging Agents. Journal of Physical Chemistry C, 2009, 113, 18110-18114.	1.5	829
6	Advances toward bioapplications of carbon nanotubes. Journal of Materials Chemistry, 2004, 14, 527.	6.7	827
7	Strong Luminescence of Solubilized Carbon Nanotubes. Journal of the American Chemical Society, 2000, 122, 5879-5880.	6.6	729
8	Carbon â€œquantumâ€•dots for optical bioimaging. Journal of Materials Chemistry B, 2013, 1, 2116.	2.9	708
9	Photoluminescence Properties of Graphene versus Other Carbon Nanomaterials. Accounts of Chemical Research, 2013, 46, 171-180.	7.6	693
10	Photoinduced electron transfers with carbon dots. Chemical Communications, 2009, , 3774.	2.2	687
11	Carbon Quantum Dots and Applications in Photocatalytic Energy Conversion. ACS Applied Materials & Interfaces, 2015, 7, 8363-8376.	4.0	613
12	Design and fabrication of carbon dots for energy conversion and storage. Chemical Society Reviews, 2019, 48, 2315-2337.	18.7	552
13	Bandgapâ€Łike Strong Fluorescence in Functionalized Carbon Nanoparticles. Angewandte Chemie - International Edition, 2010, 49, 5310-5314.	7.2	549
14	Carbon Nanoparticles as Visible-Light Photocatalysts for Efficient CO₂ Conversion and Beyond. Journal of the American Chemical Society, 2011, 133, 4754-4757.	6.6	546
15	Selective Interactions of Porphyrins with Semiconducting Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2004, 126, 1014-1015.	6.6	426
16	Polymer/Boron Nitride Nanocomposite Materials for Superior Thermal Transport Performance. Angewandte Chemie - International Edition, 2012, 51, 6498-6501.	7.2	356
17	Advances in Bioapplications of Carbon Nanotubes. Advanced Materials, 2009, 21, 139-152.	11.1	348
18	Effect of Injection Routes on the Biodistribution, Clearance, and Tumor Uptake of Carbon Dots. ACS Nano, 2013, 7, 5684-5693.	7.3	332

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19	Carbon-based quantum dots for fluorescence imaging of cells and tissues. RSC Advances, 2014, 4, 10791.	1.7	298
20	Doped Carbon Nanoparticles as a New Platform for Highly Photoluminescent Dots. Journal of Physical Chemistry C, 2008, 112, 18295-18298.	1.5	288
21	Toward quantitatively fluorescent carbon-based â€œquantumâ€•dots. Nanoscale, 2011, 3, 2023.	2.8	264
22	Carbon Dots as Potent Antimicrobial Agents. Theranostics, 2020, 10, 671-686.	4.6	241
23	Toward Structurally Defined Carbon Dots as Ultracompact Fluorescent Probes. ACS Nano, 2014, 8, 4522-4529.	7.3	218
24	Visible-Light-Activated Bactericidal Functions of Carbon â€œQuantumâ€•Dots. ACS Applied Materials & Interfaces, 2016, 8, 10761-10766.	4.0	206
25	Defunctionalization of Functionalized Carbon Nanotubes. Nano Letters, 2001, 1, 439-441.	4.5	191
26	Solubilization of boron nitride nanotubes. Chemical Communications, 2005, , 3670.	2.2	188
27	Organization of Polymers onto Carbon Nanotubes:â€‰ A Route to Nanoscale Assembly. Nano Letters, 2001, 1, 423-427.	4.5	170
28	Competitive Performance of Carbon â€œQuantumâ€•Dots in Optical Bioimaging. Theranostics, 2012, 2, 295-301.	4.6	167
29	Facile fabrication of ultrathin graphene papers for effective electromagnetic shielding. Journal of Materials Chemistry C, 2014, 2, 5057-5064.	2.7	159
30	Functionalized carbon nanotubes for polymeric nanocomposites. Journal of Materials Chemistry, 2007, 17, 1143.	6.7	153
31	Carbon dots of different composition and surface functionalization: cytotoxicity issues relevant to fluorescence cell imaging. Experimental Biology and Medicine, 2011, 236, 1231-1238.	1.1	152
32	Fullerene-Styrene Random Copolymers. Novel Optical Properties. Macromolecules, 1995, 28, 3744-3746.	2.2	149
33	Carbon â€œQuantumâ€•Dots for Fluorescence Labeling of Cells. ACS Applied Materials & Interfaces, 2015, 7, 19439-19445.	4.0	149
34	Preparation of Silver Nanoparticles via Rapid Expansion of Water in Carbon Dioxide Microemulsion into Reductant Solution. Langmuir, 2001, 17, 5707-5710.	1.6	141
35	Preparations of Nickel, Cobalt, and Iron Nanoparticles through the Rapid Expansion of Supercritical Fluid Solutions (RESS) and Chemical Reduction. Chemistry of Materials, 1999, 11, 7-9.	3.2	131
36	Functionalized carbon nanoparticles: Syntheses and applications in optical bioimaging and energy conversion. Coordination Chemistry Reviews, 2016, 320-321, 66-81.	9.5	122

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37	Boron Nitride Nanomaterials for Thermal Management Applications. ChemPhysChem, 2015, 16, 1339-1346.	1.0	119
38	Versatility with carbon dots â€“ from overcooked BBQ to brightly fluorescent agents and photocatalysts. RSC Advances, 2013, 3, 15604.	1.7	108
39	Diminished Band-Gap Transitions of Single-Walled Carbon Nanotubes in Complexation with Aromatic Molecules. Journal of the American Chemical Society, 2004, 126, 10234-10235.	6.6	101
40	Super-resolution fluorescence imaging of biocompatible carbon dots. Nanoscale, 2014, 6, 8617.	2.8	97
41	Characteristic Excitation Wavelength Dependence of Fluorescence Emissions in Carbon â€œQuantumâ€• Dots. Journal of Physical Chemistry C, 2017, 121, 28180-28186.	1.5	93
42	Metal-coated nanoscale TiO2 catalysts for enhanced CO2 photoreduction. Green Chemistry, 2005, 7, 667.	4.6	88
43	Efficient Fluorescence Quenching in Carbon Dots by Surface-Doped Metals - Disruption of Excited State Redox Processes and Mechanistic Implications. Langmuir, 2012, 28, 16141-16147.	1.6	86
44	Functionalization of Carbon Nanotubes with Derivatized Polyimide. Macromolecules, 2005, 38, 7670-7675.	2.2	85
45	Carbon Dotsâ€™ Antiviral Functions Against Noroviruses. Scientific Reports, 2017, 7, 519.	1.6	84
46	Polymer/carbon nanocomposites for enhanced thermal transport properties â€“ carbon nanotubes versus graphene sheets as nanoscale fillers. Journal of Materials Chemistry, 2012, 22, 17133.	6.7	77
47	Photophysical and Nonlinear Optical Properties of [60]Fullerene Derivatives. Journal of Physical Chemistry A, 1998, 102, 5520-5528.	1.1	76
48	Functionalized Carbon Nanotubes with Tethered Pyrenes:â€‰ Synthesis and Photophysical Properties. Journal of Physical Chemistry B, 2004, 108, 11447-11453.	1.2	76
49	Antibacterial effects of carbon dots in combination with other antimicrobial reagents. PLoS ONE, 2017, 12, e0185324.	1.1	75
50	Improving photoreduction of CO2 with homogeneously dispersed nanoscale TiO2 catalysts. Chemical Communications, 2004, , 1234.	2.2	74
51	Polymeric Nanoparticles from Rapid Expansion of Supercritical Fluid Solution. Chemistry - A European Journal, 2005, 11, 1366-1373.	1.7	74
52	Enhanced fluorescence properties of carbon dots in polymer films. Journal of Materials Chemistry C, 2016, 4, 6967-6974.	2.7	74
53	Boron Nitride Nanosheet-Anchored Pdâ€“Fe Coreâ€“Shell Nanoparticles as Highly Efficient Catalysts for Suzukiâ€“Miyaura Coupling Reactions. ACS Applied Materials & Interfaces, 2017, 9, 2469-2476.	4.0	73
54	Protein-Protected Nanoparticles from Rapid Expansion of Supercritical Solution into Aqueous Solution. Journal of Physical Chemistry B, 2002, 106, 11178-11182.	1.2	71

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55	The dominant role of surface functionalization in carbon dots’ photo-activated antibacterial activity . International Journal of Nanomedicine, 2019, Volume 14, 2655-2665.	3.3	69
56	Correlation of carbon dots' light-activated antimicrobial activities and fluorescence quantum yield. RSC Advances, 2017, 7, 30177-30184.	1.7	68
57	Preparation and Characterization of Fullereneâˆ’Styrene Copolymers. Macromolecules, 1996, 29, 8441-8448.	2.2	67
58	Visible-Light Photoconversion of Carbon Dioxide into Organic Acids in an Aqueous Solution of Carbon Dots. Langmuir, 2014, 30, 8631-8636.	1.6	67
59	Carbon Nanoparticles as Chromophores for Photon Harvesting and Photoconversion. ChemPhysChem, 2011, 12, 3604-3608.	1.0	64
60	Modified facile synthesis for quantitatively fluorescent carbon dots. Carbon, 2017, 122, 389-394.	5.4	63
61	Functionalization of Carbon Nanoparticles and Defunctionalizationâ€”Toward Structural and Mechanistic Elucidation of Carbon â€œQuantumâ€•Dots. Journal of Physical Chemistry C, 2016, 120, 25604-25611.	1.5	60
62	Photophysical and Electron-Transfer Properties of Mono- and Multiple-Functionalized Fullerene Derivatives. Journal of Physical Chemistry B, 2000, 104, 4625-4632.	1.2	58
63	Luminescence anisotropy of functionalized carbon nanotubes in solution. Chemical Physics Letters, 2002, 351, 349-353.	1.2	57
64	A PHOTOPHYSICAL STUDY OF SOLVATOCHROMIC PROBE 6â€PROPIONYLâ€Z(N,Nâ€DIMETHYLAMINO)NAPHTHALENE (PRODAN) IN SOLUTION. Photochemistry and Photobiology, 1993, 58, 499-505.	1.3	55
65	Aqueous compatible boron nitride nanosheets for high-performance hydrogels. Nanoscale, 2016, 8, 4260-4266.	2.8	55
66	Poly(N-vinyl carbazole)-functionalized single-walled carbon nanotubes: Synthesis, characterization, and nanocomposite thin films. Polymer, 2005, 46, 8634-8640.	1.8	48
67	Carbon Dots: Zero-Dimensional Carbon Allotrope with Unique Photoinduced Redox Characteristics. ACS Omega, 2020, 5, 965-971.	1.6	47
68	Carbon dots for energy conversion applications. Journal of Applied Physics, 2019, 125, .	1.1	46
69	Polymeric Nanofibers from Rapid Expansion of Supercritical Solution. Industrial & Engineering Chemistry Research, 2005, 44, 4594-4598.	1.8	45
70	Photoactivatable carbon nanodots for cancer therapy. Applied Physics Letters, 2013, 103, .	1.5	44
71	Synergistic photoactivated antimicrobial effects of carbon dots combined with dye photosensitizers. International Journal of Nanomedicine, 2018, Volume 13, 8025-8035.	3.3	44
72	Host-Guest Carbon Dots for Enhanced Optical Properties and Beyond. Scientific Reports, 2015, 5, 12354.	1.6	42

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73	Photoexcited state properties and antibacterial activities of carbon dots relevant to mechanistic features and implications. Carbon, 2020, 170, 137-145.	5.4	42
74	Optical limiting properties of mono- and multiple-functionalized fullerene derivatives. Journal of Chemical Physics, 2000, 112, 4221-4230.	1.2	39
75	Photoinduced Intramolecular nâ˜Ï€* Electron Transfer in Aminofullerene Derivatives. Journal of Physical Chemistry A, 1998, 102, 7580-7590.	1.1	37
76	Reverse Sternâ€“Volmer behavior for luminescence quenching in carbon nanoparticles. Canadian Journal of Chemistry, 2011, 89, 104-109.	0.6	37
77	Photoexcited state properties of carbon dots from thermally induced functionalization of carbon nanoparticles. Journal of Materials Chemistry C, 2016, 4, 10554-10561.	2.7	37
78	Solute and Solvent Dependencies of Intermolecular Interactions in Different Density Regions in Supercritical Fluids. A Generalization of the Threeâ€Densityâ€Region Solvation Mechanism. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 976-984.	0.9	36
79	A new approach in functionalization of carbon nanoparticles for optoelectronically relevant carbon dots and beyond. Carbon, 2019, 141, 553-560.	5.4	36
80	CYTOTOXICITY EVALUATIONS OF FLUORESCENT CARBON NANOPARTICLES. Nano LIFE, 2010, 01, 153-161.	0.6	35
81	Magnetotransport in transparent single-wall carbon nanotube networks. Physical Review B, 2007, 76, .	1.1	34
82	Systematic Comparison of Carbon Dots from Different Preparationsâ€”Consistent Optical Properties and Photoinduced Redox Characteristics in Visible Spectrum and Structural and Mechanistic Implications. Journal of Physical Chemistry C, 2018, 122, 21667-21676.	1.5	34
83	Hostâ€“guest carbon dots as high-performance fluorescence probes. Journal of Materials Chemistry C, 2017, 5, 6328-6335.	2.7	28
84	Electroluminescence of carbon â€˜quantumâ€™ dots â€“ From materials to devices. Chemical Physics Letters, 2014, 613, 40-44.	1.2	27
85	Carbon dots for highly effective photodynamic inactivation of multidrug-resistant bacteria. Materials Advances, 2020, 1, 321-325.	2.6	27
86	Boron Nitride Nanosheets from Different Preparations and Correlations with Their Material Properties. Industrial & Engineering Chemistry Research, 2019, 58, 18644-18653.	1.8	25
87	Nanoscale metal sulfides in perfluorinated ionomer membranes. Journal of Materials Chemistry, 2000, 10, 2081-2084.	6.7	24
88	Dispersion of high-quality boron nitride nanosheets in polyethylene for nanocomposites of superior thermal transport properties. Nanoscale Advances, 2020, 2, 2507-2513.	2.2	24
89	On the myth of â€œred/near-IR carbon quantum dotsâ€•from thermal processing of specific colorless organic precursors. Nanoscale Advances, 2021, 3, 4186-4195.	2.2	23
90	Non-linear absorptions in pendant [60]fullereneâ€“polystyrene polymers. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1965-1969.	1.7	22

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91	Light-weight nanocomposite materials with enhanced thermal transport properties. Nanotechnology Reviews, 2012, 1, 363-376.	2.6	22
92	Steady-state and time-resolved fluorescence studies on interactions of carbon â€œquantumâ€•dots with nitrotoluenes. Inorganica Chimica Acta, 2017, 468, 300-307.	1.2	22
93	Fullerene-Centered Macromolecules as Unimolecular Micellar Structures. Chemistry of Materials, 2000, 12, 2073-2075.	3.2	21
94	Preparation of Bulk¹³C-Enriched Graphene Materials. Journal of Nanomaterials, 2010, 2010, 1-5.	1.5	20
95	Carbon Dots. , 2020, , .		20
96	Carbon dioxide photoconversion driven by visible-light excitation of small carbon nanoparticles in various configurations. Chemical Physics Letters, 2015, 634, 122-128.	1.2	18
97	Zero-Dimensional Carbon Allotropesâ€”Carbon Nanoparticles Versus Fullerenes in Functionalization by Electronic Polymers for Different Optical and Redox Properties. ACS Omega, 2018, 3, 5685-5691.	1.6	18
98	Preparation and optical properties of magnetic carbon/iron oxide hybrid dots. RSC Advances, 2017, 7, 41304-41310.	1.7	17
99	Carbon dot incorporated multi-walled carbon nanotube coated filters for bacterial removal and inactivation. RSC Advances, 2018, 8, 8292-8301.	1.7	17
100	Effects of carbon dots surface functionalities on cellular behaviors â€“ Mechanistic exploration for opportunities in manipulating uptake and translocation. Colloids and Surfaces B: Biointerfaces, 2019, 181, 48-57.	2.5	17
101	Carbon dots versus nano-carbon/organic hybrids â€“ dramatically different behaviors in fluorescence sensing of metal cations with structural and mechanistic implications. Nanoscale Advances, 2021, 3, 2316-2324.	2.2	16
102	Evaluation of Commercial â€œCarbon Quantum Dotsâ€•Sample on Origins of Red Absorption and Emission Features. Journal of Carbon Research, 2019, 5, 70.	1.4	15
103	Carbon dots for effective photodynamic inactivation of virus. RSC Advances, 2020, 10, 33944-33954.	1.7	15
104	Concentration and medium dependencies in optical limiting of organic dyes. Physical Chemistry Chemical Physics, 2004, 6, 703.	1.3	14
105	Preparation, Characterization, and Evaluation of Immuno Carbon Nanotubes. Mikrochimica Acta, 2006, 152, 249-254.	2.5	13
106	Highâ€Performance Red/Nearâ€IR Carbon Dots as Fluorescence Probes for Tumor Imaging In Vivo. ChemistrySelect, 2018, 3, 6374-6381.	0.7	13
107	Systematic Toxicity Evaluations of High-Performance Carbon â€œQuantumâ€•Dots. Journal of Nanoscience and Nanotechnology, 2019, 19, 2130-2137.	0.9	13
108	Carbon â€œquantumâ€•dots for bioapplications. Experimental Biology and Medicine, 2022, 247, 300-309.	1.1	13

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109	Hybrid carbon dots platform enabling opportunities for desired optical properties and redox characteristics by-design. Chemical Physics Letters, 2019, 724, 8-12.	1.2	12
110	Photoactivated Carbon Dots for Inactivation of Foodborne Pathogens Listeria and Salmonella. Applied and Environmental Microbiology, 2021, 87, e0104221.	1.4	12
111	Advances in Studies of Boron Nitride Nanosheets and Nanocomposites for Thermal Transport and Related Applications. ChemPhysChem, 2022, 23, .	1.0	12
112	Facile and Effective Post-Production Separation of Single-Walled Carbon Nanotubes with Paired Aromatic Molecules: A Molecular Tweezers Approach. Journal of Physical Chemistry C, 2012, 116, 6800-6804.	1.5	11
113	Carbonâ€“TiO₂ hybrid dots in different configurations â€“ optical properties, redox characteristics, and mechanistic implications. New Journal of Chemistry, 2018, 42, 10798-10806.	1.4	10
114	Visible Light-Activated Carbon Dots for Inhibiting Biofilm Formation and Inactivating Biofilm-Associated Bacterial Cells. Frontiers in Bioengineering and Biotechnology, 2021, 9, 786077.	2.0	7
115	Photoexcited State Properties of Poly(9-vinylcarbazole)-Functionalized Carbon Dots in Solution versus in Nanocomposite Films: Implications for Solid-State Optoelectronic Devices. ACS Applied Nano Materials, 2022, 5, 2820-2827.	2.4	7
116	Supercritical fluid processing of boron nitride nanosheets for polymeric nanocomposites of superior thermal transport properties. Journal of Supercritical Fluids, 2021, 167, 105035.	1.6	6
117	Similar Behavior Between Polyfullerenes and Charged Polymers. Extreme Polyelectrolyte Effects in Gel Permeation Chromatography Studies. Fullerenes, Nanotubes, and Carbon Nanostructures, 1997, 5, 1579-1591.	0.6	5
118	Inactivation of Vesicular Stomatitis Virus with Light-Activated Carbon Dots and Mechanistic Implications. ACS Applied Bio Materials, 2022, 5, 3158-3166.	2.3	5
119	Carbon nanotube-assisted capturing of bacterial pathogens. RSC Advances, 2015, 5, 91246-91253.	1.7	4
120	Application of Paramagnetic Relaxation Reagents in Characterization of Fullerene Derivatives. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 1046-1048.	0.9	3
121	Thermal Conductive Materials Based on Carbon Nanotubes and Graphene Nanosheets. World Scientific Series on Carbon Nanoscience, 2011, , 755-786.	0.1	3
122	Electronic Structure, Photophysics, and Photochemistry of Polysilanes. ACS Symposium Series, 1993, , 131-154.	0.5	2
123	Towards nanostructured boron nitride films. Journal of Materials Science: Materials in Electronics, 2017, 28, 9048-9055.	1.1	2
124	Nanoscale Carbon Allotropes. , 2020, , 7-46.		2
125	Optical and photodynamic properties of carbon/TiO2 hybrid dots in different nanoscale configurations. Chemical Physics Letters, 2020, 743, 137208.	1.2	1
126	Photoactivated carbon dots inducing bacterial functional and molecular alterations. Materials Advances, 0, , .	2.6	1

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127	Cell-penetration efficiency of PEGylated multi-walled carbon nanotubes is dependent on cell types. , 2010, , .		0
128	Fluorinated Templates for Energy-Related Nanomaterials and Applications. ACS Symposium Series, 2011, , 103-125.	0.5	0
129	Other Syntheses: Popular Methods and Issues. , 2020, , 109-130.		0
130	Carbon Hybrid Dots. , 2020, , 165-190.		0