Xu Han

List of Publications by Year
in descending order

65 papers	4,957 citations	87888 38 h-index	106344 65 g-index
68 all docs	68 docs citations	68 times ranked	5851 citing authors

#	Article	IF	Citations
1	Crossing the blood-brain barrier with nanoparticles. Journal of Controlled Release, 2018, 270, 290-303.	9.9	512
2	Carbon dots: Biomacromolecule interaction, bioimaging and nanomedicine. Coordination Chemistry Reviews, 2017, 343, 256-277.	18.8	312
3	Recent development of carbon quantum dots regarding their optical properties, photoluminescence mechanism, and core structure. Nanoscale, 2019, 11, 4634-4652.	5.6	301
4	Recent Developments of Carbon Dots in Biosensing: A Review. ACS Sensors, 2020, 5, 2724-2741.	7.8	266
5	Triple conjugated carbon dots as a nano-drug delivery model for glioblastoma brain tumors. Nanoscale, 2019, 11, 6192-6205.	5.6	184
6	Transferrin conjugated nontoxic carbon dots for doxorubicin delivery to target pediatric brain tumor cells. Nanoscale, 2016, 8, 16662-16669.	5.6	175
7	Cancer Targeting and Drug Delivery Using Carbon-Based Quantum Dots and Nanotubes. Molecules, 2018, 23, 378.	3.8	173
8	Nontoxic Carbon Dots Potently Inhibit Human Insulin Fibrillation. Chemistry of Materials, 2015, 27, 1764-1771.	6.7	167
9	Size-dependent photocatalytic activity of carbon dots with surface-state determined photoluminescence. Applied Catalysis B: Environmental, 2019, 248, 157-166.	20.2	165
10	Nanoparticle-mediated targeted drug delivery for breast cancer treatment. Biochimica Et Biophysica Acta: Reviews on Cancer, 2019, 1871, 419-433.	7.4	151
11	Recent Development of Cardiac Troponin I Detection. ACS Sensors, 2016, 1, 106-114.	7.8	131
12	A deep investigation into the structure of carbon dots. Carbon, 2021, 173, 433-447.	10.3	128
13	Carbon dots: promising biomaterials for bone-specific imaging and drug delivery. Nanoscale, 2017, 9, 17533-17543.	5.6	118
14	Polymers in Carbon Dots: A Review. Polymers, 2017, 9, 67.	4.5	112
15	Bone Tissue Engineering via Carbonâ€Based Nanomaterials. Advanced Healthcare Materials, 2020, 9, e1901495.	7.6	111
16	Crossing the bloodâ€“brainâ€“barrier with transferrin conjugated carbon dots: A zebrafish model study. Colloids and Surfaces B: Biointerfaces, 2016, 145, 251-256.	5.0	99
17	Method To Determine Protein Concentration in the Proteinâ€“Nanoparticle Conjugates Aqueous Solution Using Circular Dichroism Spectroscopy. Analytical Chemistry, 2015, 87, 6455-6459.	6.5	88
18	Nontoxic amphiphilic carbon dots as promising drug nanocarriers across the bloodâ€“brain barrier and inhibitors of Î²-amyloid. Nanoscale, 2019, 11, 22387-22397.	5.6	83

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19	Tryptophan carbon dots and their ability to cross the blood-brain barrier. Colloids and Surfaces B: Biointerfaces, 2019, 176, 488-493.	5.0	71
20	Carbon Dots: Diverse Preparation, Application, and Perspective in Surface Chemistry. Langmuir, 2019, 35, 9115-9132.	3.5	70
21	Polyethylene glycol (PEG) derived carbon dots: Preparation and applications. Applied Materials Today, 2020, 20, 100677.	4.3	69
22	Phenylenediamine-derived near infrared carbon dots: The kilogram-scale preparation, formation process, photoluminescence tuning mechanism and application as red phosphors. Carbon, 2022, 192, 198-208.	10.3	69
23	Preparation of polystyrene-supported Lewis acidic Fe(III) ionic liquid and its application in catalytic conversion of carbon dioxide. Tetrahedron, 2012, 68, 3835-3842.	1.9	68
24	Beam pen lithography as a new tool for spatially controlled photochemistry, and its utilization in the synthesis of multivalent glycan arrays. Chemical Science, 2014, 5, 2023.	7.4	65
25	Biocompatible and bloodâ€“brain barrier permeable carbon dots for inhibition of AÎ² fibrillation and toxicity, and BACE1 activity. Nanoscale, 2017, 9, 12862-12866.	5.6	64
26	Carbon Dots: A Future Bloodâ€“Brain Barrier Penetrating Nanomedicine and Drug Nanocarrier. International Journal of Nanomedicine, 2021, Volume 16, 5003-5016.	6.7	64
27	Carbon Nitride Dots: A Selective Bioimaging Nanomaterial. Bioconjugate Chemistry, 2019, 30, 111-123.	3.6	62
28	Toward a Rational Design to Regulate Î²-Amyloid Fibrillation for Alzheimerâ€™s Disease Treatment. ACS Chemical Neuroscience, 2018, 9, 198-210.	3.5	60
29	Interactions between Carbon Nanomaterials and Biomolecules. Journal of Oleo Science, 2016, 65, 1-7.	1.4	52
30	Photoluminescent Carbon Dots: A Mixture of Heterogeneous Fractions. ChemPhysChem, 2018, 19, 2589-2597.	2.1	49
31	Gelâ€like Carbon Dots: Characterization and their Potential Applications. ChemPhysChem, 2017, 18, 890-897.	2.1	48
32	Metformin derived carbon dots: Highly biocompatible fluorescent nanomaterials as mitochondrial targeting and blood-brain barrier penetrating biomarkers. Journal of Colloid and Interface Science, 2021, 592, 485-497.	9.4	47
33	Determination of the composition, encapsulation efficiency and loading capacity in protein drug delivery systems using circular dichroism spectroscopy. Analytica Chimica Acta, 2016, 937, 113-118.	5.4	46
34	Carbon dots and gold nanoparticles based immunoassay for detection of alpha-L-fucosidase. Analytica Chimica Acta, 2018, 1041, 114-121.	5.4	45
35	A resorcinarene for inhibition of AÎ² fibrillation. Chemical Science, 2017, 8, 2003-2009.	7.4	44
36	Photoinduced Electron Transfer in Carbon Dots with Long-Wavelength Photoluminescence. Journal of Physical Chemistry C, 2018, 122, 29507-29515.	3.1	44

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37	Nanoparticle-mediated approaches for Alzheimerâ€™s disease pathogenesis, diagnosis, and therapeutics. Journal of Controlled Release, 2019, 314, 125-140.	9.9	43
38	â€œDarkâ€•carbon dots specifically â€œlight-upâ€•calcified zebrafish bones. Journal of Materials Chemistry B, 2016, 4, 7398-7405.	5.8	42
39	Synthesis Mechanisms, Structural Models, and Photothermal Therapy Applications of Top-Down Carbon Dots from Carbon Powder, Graphite, Graphene, and Carbon Nanotubes. International Journal of Molecular Sciences, 2022, 23, 1456.	4.1	41
40	Facile Synthesis of â€œBoron-Dopedâ€•Carbon Dots and Their Application in Visible-Light-Driven Photocatalytic Degradation of Organic Dyes. Nanomaterials, 2020, 10, 1560.	4.1	40
41	Embedding Carbon Dots in Superabsorbent Polymers for Additive Manufacturing. Polymers, 2018, 10, 921.	4.5	39
42	Reactions in Elastomeric Nanoreactors Reveal the Role of Force on the Kinetics of the Huisgen Reaction on Surfaces. Journal of the American Chemical Society, 2014, 136, 10553-10556.	13.7	37
43	Direct conjugation of distinct carbon dots as Lego-like building blocks for the assembly of versatile drug nanocarriers. Journal of Colloid and Interface Science, 2020, 576, 412-425.	9.4	35
44	Drug delivery of memantine with carbon dots for Alzheimerâ€™s disease: bloodâ€“brain barrier penetration and inhibition of tau aggregation. Journal of Colloid and Interface Science, 2022, 617, 20-31.	9.4	35
45	Crossing the bloodâ€“brain barrier with carbon dots: uptake mechanism andin vivocargo delivery. Nanoscale Advances, 2021, 3, 3942-3953.	4.6	34
46	Carbohydrate nanotechnology: hierarchical assembly using nature's other information carrying biopolymers. Current Opinion in Biotechnology, 2015, 34, 41-47.	6.6	33
47	Photosynthesis Enhancement in Maize via Nontoxic Orange Carbon Dots. Journal of Agricultural and Food Chemistry, 2021, 69, 5446-5451.	5.2	29
48	Extended Charge Carrier Lifetimes in Hierarchical Donorâ€“Acceptor Supramolecular Polymer Films. Journal of Physical Chemistry C, 2015, 119, 19584-19589.	3.1	25
49	The use of nanotechnology to combat liver cancer: Progress and perspectives. Biochimica Et Biophysica Acta: Reviews on Cancer, 2021, 1876, 188621.	7.4	23
50	Gel-like carbon dots: A high-performance future photocatalyst. Journal of Colloid and Interface Science, 2021, 599, 519-532.	9.4	22
51	pH and redox triggered doxorubicin release from covalently linked carbon dots conjugates. Nanoscale, 2021, 13, 5507-5518.	5.6	22
52	Structure-activity relationship of carbon nitride dots in inhibiting Tau aggregation. Carbon, 2022, 193, 1-16.	10.3	20
53	Ultrasensitive Plasmonic Biosensors for Real-Time Parallel Detection of Alpha-L-Fucosidase and Cardiac-Troponin-I in Whole Human Blood. Analytical Chemistry, 2018, 90, 7795-7799.	6.5	15
54	The Investigation on Resorcinarenes towards either Inhibiting or Promoting Insulin Fibrillation. Chemistry - A European Journal, 2017, 23, 17903-17907.	3.3	14

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55	Rheology of a carbon dot gel. Inorganica Chimica Acta, 2017, 468, 119-124.	2.4	13
56	Fluorescent nanoparticles as tools in ecology and physiology. Biological Reviews, 2021, 96, 2392-2424.	10.4	13
57	Optimized Doxorubicin Chemotherapy for Diffuse Large B-cell Lymphoma Exploits Nanocarrier Delivery to Transferrin Receptors. Cancer Research, 2021, 81, 763-775.	0.9	13
58	Development of Red-Emissive Carbon Dots for Bioimaging through a Building Block Approach: Fundamental and Applied Studies. Bioconjugate Chemistry, 2022, 33, 226-237.	3.6	11
59	In vivo characterization of carbon dotsâ€“bone interactions: toward the development of bone-specific nanocarriers for drug delivery. Drug Delivery, 2021, 28, 1281-1289.	5.7	9
60	Quantification of Nucleic Acid Concentration in the Nanoparticle or Polymer Conjugates Using Circular Dichroism Spectroscopy. Analytical Chemistry, 2018, 90, 2255-2262.	6.5	8
61	Chalcones as Anti-Glioblastoma Stem Cell Agent Alone or as Nanoparticle Formulation Using Carbon Dots as Nanocarrier. Pharmaceutics, 2022, 14, 1465.	4.5	7
62	DFMO Carbon Dots for Treatment of Neuroblastoma and Bioimaging. ACS Applied Bio Materials, 2022, 5, 3300-3309.	4.6	6
63	Interactions between Graphene Oxide and Biomolecules from Surface Chemistry and Spectroscopy. ACS Symposium Series, 2015, , 43-64.	0.5	5
64	Drug Loading of Anthracycline Antibiotics on Carbon Dots Using Circular Dichroism Spectrometry. Analytical Chemistry, 2021, 93, 14773-14777.	6.5	5
65	Dual targeting nano-approaches for Alzheimer's disease etiology. Neural Regeneration Research, 2021, 16, 119.	3.0	4