Utilization of waste biomass of Poa pratensis for green s and its application in detection of Mn2+ and Fe3+

Chemosphere

286, 131764

DOI: 10.1016/j.chemosphere.2021.131764

Citation Report

#	Article	IF	Citations
1	A multi-channel array for metal ions discrimination with animal bones derived biomass carbon dots as sensing units. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 424, 113638.	3.9	16
2	Carbon dots as a new fluorescent nanomaterial with switchable sensing potential and its sustainable deployment for metal sensing applications. Materials Letters, 2022, 309, 131372.	2.6	15
3	Morus nigra-derived hydrophilic carbon dots for the highly selective and sensitive detection of ferric ion in aqueous media and human colon cancer cell imaging. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 635, 128073.	4.7	14
4	Heavy metal ion detection using green precursor derived carbon dots. IScience, 2022, 25, 103816.	4.1	59
5	Detection of Fe3+ and Hg2+ ions through photoluminescence quenching of carbon dots derived from urea and bitter tea oil residue. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 272, 120963.	3.9	7
6	Preparation and Characterization of Photoluminescent Graphene Quantum Dots from Watermelon Rind Waste for the Detection of Ferric Ions and Cellular Bio-Imaging Applications. Nanomaterials, 2022, 12, 702.	4.1	13
7	A Review on the Use of Biochar Derived Carbon Quantum Dots Production for Sensing Applications. Chemosensors, 2022, 10, 117.	3.6	20
8	Sustainable fabrication of N-doped carbon quantum dots and their applications in fluorescent inks, Fe (III) detection and fluorescent films. Inorganic Chemistry Communication, 2022, 140, 109387.	3.9	10
9	Valorisation of bio-derived fluorescent carbon dots for metal sensing, DNA binding and bioimaging. Chemosphere, 2022, 298, 134128.	8.2	13
10	Sustainable Synthesis of N/S-Doped Porous Carbon from Waste-Biomass as Electroactive Material for Energy Harvesting. Catalysts, 2022, 12, 436.	3.5	13
11	Facile and Green Synthesis of Highly Fluorescent Carbon Quantum Dots from Water Hyacinth for the Detection of Ferric Iron and Cellular Imaging. Nanomaterials, 2022, 12, 1528.	4.1	14
12	N-Doped Carbon Dots as Fluorescent â€œTurn-Offâ€•Nanosensors for Ascorbic Acid and Fe³⁺ Detection. ACS Applied Nano Materials, 2022, 5, 7268-7277.	5.0	34
13	A facile fluorescence platform for chromium and ascorbic acid detection based on â€œon-off-onâ€• strategy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 278, 121343.	3.9	7
14	A dual-channel â€œonâ€“offâ€“onâ€•fluorescent probe for the detection and discrimination of Fe³⁺ and Hg²⁺ in piggery feed and swine wastewater. Analytical Methods, 2022, 14, 2318-2328.	2.7	6
15	Analysis of Mn2+ and Zn2+ Ions in Macroalgae with Heteroelement-Doped Carbon-Based Fluorescent Probe. Biosensors, 2022, 12, 359.	4.7	2
16	Solvothermal production of tea residue derived carbon dots by the pretreatment of choline chloride/urea and its application for cadmium detection. Industrial Crops and Products, 2022, 184, 115085.	5.2	12
17	Ag@CDs nanohybrid: Fabrication, design of a multi-mode chemosensory probe for selective Fe3+ detection and logic gate operation. Chemosphere, 2022, 303, 135090.	8.2	13
18	Response surface methodology optimization for the synthesis of N, S-codoped carbon dots and its application for tetracyclines detection. Chemosphere, 2022, 303, 135145.	8.2	10

#	Article	IF	Citations
19	Hydrogen bonding-mediated assembly of carbon dot@Zr-based metal organic framework as a multifunctional fluorescence sensor for chlortetracycline, pH and temperature detection. New Journal of Chemistry, 2022, 46, 13021-13029.	2.8	4
20	Target-oriented synthesis of high synthetic yield carbon dots by waxberry for optical dual-mode and smartphone imaging detection of morin. Materials Letters, 2022, 324, 132673.	2.6	4
21	Green synthesis of carbon dots using expired agar for a label-free fluorescence signal-amplified detection of ferric ion utilizing oxalate functionalization. Materials Advances, 2022, 3, 6307-6315.	5.4	2
22	Quercetin conjugated fluorescent nitrogen-doped carbon dots for targeted cancer therapy application. Soft Matter, 2022, 18, 5645-5653.	2.7	14
23	Facile synthesis of novel molybdenum disulfide decorated banana peel porous carbon electrode for hydrogen evolution reaction. Chemosphere, 2022, 307, 135712.	8.2	15
24	A Review on Carbon Dots: Synthesis, Characterization and Its Application in Optical Sensor for Environmental Monitoring. Nanomaterials, 2022, 12, 2365.	4.1	21
25	Development of carbon dots sensor dipstick from sugarcane bagasse agricultural waste toward all-cellulose-derived tetracycline sensor. Journal of Materials Research and Technology, 2022, 19, 4697-4707.	5.8	6
26	Lotus-biowaste derived sulfur/nitrogen-codoped porous carbon as an eco-friendly electrocatalyst for clean energy harvesting. Environmental Research, 2022, 214, 113910.	7.5	14
27	Natural and Engineered Nanomaterials for the Identification of Heavy Metal Ionsâ€"A Review. Nanomaterials, 2022, 12, 2665.	4.1	8
28	Green Synthesis of Multicolor Emissive Nitrogen-Doped Carbon Dots for Bioimaging of Human Cancer Cells. Journal of Cluster Science, 2023, 34, 1583-1594.	3.3	13
29	Ultrasound-assisted synthesis of europium doped BPO4 nanoparticles; a new approach for Zn2+ (aq) detection. Food and Chemical Toxicology, 2022, , 113373.	3.6	0
30	Green synthesis of carbon dots from elm seeds via hydrothermal method for Fe3+ detection and cell imaging. Inorganic Chemistry Communication, 2022, 144, 109837.	3.9	7
32	Evaluation of Antimicrobial and Antibiofilm Activity of Citrus medica Fruit Juice Based Carbon Dots against Pseudomonas aeruginosa. ACS Omega, 2022, 7, 36227-36234.	3.5	14
33	A Highly Sensitive Ag/MG-CQDs/ZnO NP Ultraviolet Photodetector. IEEE Sensors Journal, 2022, 22, 21635-21641.	4.7	3
34	Boxâ€"Behnken Design Optimizing Sugarcane Bagasse-Based Nitrogen-Doped Carbon Quantum Dots Preparation and Application in Ferric Ion Detection. Chemosensors, 2022, 10, 453.	3.6	2
35	Synthesis of N,S co-doped carbon dots for fluorescence turn-on detection of Fe2+ and Al3+ in a wide pH range. Journal of Molecular Liquids, 2022, 368, 120663.	4.9	4
36	Glutathione assisting the waste tobacco leaf to synthesize versatile biomass-based carbon dots for simultaneous detection and efficient removal of mercury ions. Journal of Environmental Chemical Engineering, 2022, 10, 108718.	6.7	7
37	Synthesis and enhancement of carbon quantum dots from Mopan persimmons for Fe3+ sensing and anti-counterfeiting applications. Chemical Engineering Journal, 2023, 453, 139906.	12.7	39

#	Article	IF	Citations
38	Novel highly selective fluorescence sensing strategy for Mercury(â…¡) in water based on nitrogen-doped carbon quantum dots. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2023, 286, 122010.	3.9	11
39	Green conversion of excess sludge to N-Ca self-doping sustainable carbon quantum dots with remarkable fluorescence enhancement and residual heavy metal reduction. Journal of Environmental Chemical Engineering, 2022, 10, 108934.	6.7	4
40	Sustainable Synthesis of Bright Fluorescent Nitrogen-Doped Carbon Dots from Terminalia chebula for In Vitro Imaging. Molecules, 2022, 27, 8085.	3.8	4
41	Recent advances in the synthesis of carbon dots from renewable biomass by high-efficient hydrothermal and microwave green approaches. Current Opinion in Green and Sustainable Chemistry, 2023, 40, 100742.	5.9	15
42	Biomass-Derived Carbon Dots and Their Sensing Applications. Nanomaterials, 2022, 12, 4473.	4.1	10
43	Chitosan Schiff base for the spectrofluorimetric analysis of E-waste toxins: Pentabromophenol, Fe3+, and Cu2+ ions. Cellulose, 2023, 30, 1381-1397.	4.9	5
44	Advances in Ultra-small Fluorescence Nanoprobes for Detection of Metal Ions, Drugs, Pesticides and Biomarkers. Journal of Fluorescence, 2023, 33, 775-798.	2.5	15
45	Red emissive carbon dots with an ultra-large Stokes shift for the multi-channel detection of pesticides. New Journal of Chemistry, 2023, 47, 3290-3296.	2.8	1
46	Blue Fluorescent Nitrogenâ€Doped Carbon Dots for the Specific Detection of Mn ²⁺. ChemistrySelect, 2023, 8, .	1.5	2
47	Natural Nitrogen-Doped Carbon Dots Obtained from Hydrothermal Carbonization of Chebulic Myrobalan and Their Sensing Ability toward Heavy Metal Ions. Sensors, 2023, 23, 787.	3.8	8
48	Bioâ€Derived Fluorescent Carbon Dots for Metal Sensing and DNA Binding Applications. ChemistrySelect, 2023, 8, .	1.5	2
49	Papaya peel waste carbon dots/reduced graphene oxide nanocomposite: From photocatalytic decomposition of methylene blue to antimicrobial activity. Journal of Bioresources and Bioproducts, 2023, 8, 162-175.	20.5	15
50	High fluorescent nitrogenÂâˆ’Âdoped carbon dots derived from Sanghuangporus lonicericola for detecting tetracyclines in aquaculture water and rat serum samples. Microchemical Journal, 2023, 189, 108517.	4.5	8
51	Cynodon dactylon derived fluorescent N-doped carbon dots: Implications of photocatalytic and biological applications. Surfaces and Interfaces, 2023, 38, 102812.	3.0	5
52	Crayfish shells-derived carbon dots as a fluorescence sensor for the selective detection of 4-nitrophenol. Food and Agricultural Immunology, 2023, 34, 36-47.	1.4	6
53	Fluorescence Turns on-off-on Sensing of Ferric Ion and L-Ascorbic Acid by Carbon Quantum Dots. Journal of Food Quality, 2023, 2023, 1-9.	2.6	5
54	Preparation and performance study of dye-based carbon quantum dots. Inorganic Chemistry Communication, 2023, 150, 110541.	3.9	3
55	Multi-applications of carbon dots and polydopamine-coated carbon dots for Fe3+ detection, bioimaging, dopamine assay and photothermal therapy. , 2023, 18, .		6

#	Article	IF	Citations
56	Insight into the differences in carbon dots prepared from fish scales using conventional hydrothermal and microwave methods. Environmental Science and Pollution Research, 2023, 30, 54616-54627.	5.3	3
57	An Overview on Carbon Quantum Dots Optical and Chemical Features. Molecules, 2023, 28, 2772.	3.8	18
58	Fluorescent and Biocompatible Nitrogen and Sulfur Co-Doped Carbon Nanodot as an Ocular Fundus Angiography Imaging Agent. Journal of Fluorescence, 0, , .	2.5	1
59	State-of-the-art of biomass-derived carbon dots: Preparation, properties, and applications. Chinese Chemical Letters, 2024, 35, 108423.	9.0	22
60	Solvatochromism as a Novel Tool to Enumerate the Optical and Luminescence Properties of Plastic Waste Derived Carbon Nanodots and Their Activated Counterparts. Nanomaterials, 2023, 13, 1398.	4.1	0
61	Fluorescent N-doped carbon quantum dots: A selective detection of Fe3+ and understanding its mechanism. Chemical Physics Letters, 2023, 825, 140574.	2.6	3
62	Synthesis and Application of Carbon Quantum Dots Derived from Carbon Black in Bioimaging. Journal of Fluorescence, 2024, 34, 213-226.	2.5	1
63	Biomass-derived carbon quantum dot: â€œOnâ€“off-onâ€•fluorescent sensor for rapid detection of multi-metal ions and green photocatalytic CO2 reduction in water. Biomass Conversion and Biorefinery, 0, , .	4.6	1
64	A portable smartphone-assisted digital image fluorimetry for analysis of methiocarb pesticide in vegetables: Nitrogen-doped carbon quantum dots as a sensing probe. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2023, 299, 122824.	3.9	2
65	Biomass derived diverse carbon nanostructure for electrocatalysis, energy conversion and storage. Carbon, 2023, 211, 118105.	10.3	20
66	Assessment of biomass-derived carbon dots as highly sensitive and selective templates for the sensing of hazardous ions. Nanoscale, 2023, 15, 16241-16267.	5.6	17
67	Non-spherical gold nanoparticles enhanced fluorescence of carbon dots for norovirus-like particles detection. Journal of Biological Engineering, 2023, 17, .	4.7	2
68	One-step green synthesis of inâ€“situ functionalized carbon quantum dots from Tagetes patula flowers: Applications as a fluorescent probe for detecting Fe3+ ions and as an antifungal agent. Journal of Photochemistry and Photobiology A: Chemistry, 2023, 442, 114779.	3.9	9
69	Synthesis of glutamine-based green emitting carbon quantum dots as a fluorescent nanoprobe for the determination of iron (Fe3+) in Solanum tuberrosum (potato). Heliyon, 2023, 9, e15904.	3.2	3
70	Nitrogen-doped carbon dots: Recent developments in its fluorescent sensor applications. Environmental Research, 2023, 231, 116046.	7.5	17
71	Rapid and sensitive determination of Piroxicam by N-doped carbon dots prepared by plant soot. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2023, 299, 122833.	3.9	0
72	Synthesis of Up-Conversion Fluorescence N-Doped Carbon Dots with High Selectivity and Sensitivity for Detection of Cu2+ Ions. Crystals, 2023, 13, 812.	2.2	2
73	Polymer dots loaded fabric as quenching florescence sensor for selective detection of gold. Journal of Industrial and Engineering Chemistry, 2023, 125, 117-126.	5.8	1

#	Article	IF	Citations
74	Oxytetracycline-derived carbon dots as a fluorescent switch in trace ferric ion sensing. New Journal of Chemistry, 2023, 47, 11919-11927.	2.8	0
75	Biomass solvothermal treatment methodologies to obtain carbon quantum dots: A systematic review. Talanta Open, 2023, 8, 100244.	3.7	5
76	The function-oriented precursor selection for the preparation of carbon dots. Nano Research, 2023, 16, 11221-11249.	10.4	5
77	Highly fluorescent nitrogen-doped graphene quantum dots (N-GQDs) synthesized from Pennisetum purpureum for selective and sensitive detection of Fe³⁺ ions. Materials Research Express, 2023, 10, 075603.	1.6	1
78	Dual metal ion (Fe3+ and As3+) sensing and cell bioimaging using fluorescent carbon quantum dots synthesised from Cynodon dactylon. Chemosphere, 2023, 339, 139638.	8.2	7
80	A review on the synthesis, properties, and applications of biomass derived carbon dots. Inorganic Chemistry Communication, 2023, 156, 111223.	3.9	7
81	Green synthesis of biomass derived carbon dots via microwave-assisted method for selective detection of Fe3+ ions in an aqueous medium. Inorganic Chemistry Communication, 2023, 157, 111348.	3.9	4
82	A highly sensitive fluorescence nanosensor for determination of amikacin antibiotics using composites of carbon quantum dots and gold nanoparticles. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2024, 305, 123466.	3.9	1
83	Synthesis and applications of carbon quantum dots derived from biomass waste: a review. Environmental Chemistry Letters, 2023, 21, 3393-3424.	16.2	8
84	Photoluminescence and Supercapacitive Properties of Carbon Dots Nanoparticles: A Review. Journal of Metastable and Nanocrystalline Materials, 0, 37, 1-22.	0.1	2
85	Green synthesis of boron-doped carbon dots from Chinese herbal residues for Fe3+ sensing, anti-counterfeiting, and photodegradation applications. Journal of Cleaner Production, 2023, 422, 138577.	9.3	3
86	Heteroatom-engineered multicolor lignin carbon dots enabling bimodal fluorescent off-on detection of metal-ions and glutathione. International Journal of Biological Macromolecules, 2023, 253, 126714.	7.5	2
87	Multifunctional carbon dots originated from waste garlic peel for rapid sensing of heavy metals and fluorescent imaging of 2D and 3D spheroids cultured fibroblast cells. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2024, 304, 123422.	3.9	1
88	Carbon-Dot-Decorated Silver and Gold Nanocomposites for Antibacterial Activity and Degradation of Organic Dyes. ACS Applied Nano Materials, 2023, 6, 18100-18112.	5.0	1
89	Facile synthesis of surface functionalized fluorescent carbon quantum-dots for selective detection of ferric ions. Environmental Science: Nano, 0, , .	4.3	0
90	Red Fluorescent Carbon Nanoparticles Derived from Spinacia oleracea L.: A Versatile Tool for Bioimaging & Biomedical Applications. Materials Advances, 0, , .	5.4	0
91	Biomass derived green carbon dots for sensing applications of effective detection of metallic contaminants in the environment. Chemosphere, 2023, 345, 140471.	8.2	0
92	Hollow Nitrogen-Doped Carbon Spheres with Presiding Graphitic Nitrogen for Oxygen Reduction Reaction. Journal of the Electrochemical Society, 0, , .	2.9	0

#	Article	IF	Citations
93	Biogenic synthesis of Allium cepa derived magnetic carbon dots for enhanced photocatalytic degradation of methylene blue and rhodamine B dyes. Biomass Conversion and Biorefinery, 0, , .	4.6	4
94	Polyethylenimine-functionalized graphene quantum dots for Cd²⁺ ion adsorption. New Journal of Chemistry, 2023, 47, 20966-20975.	2.8	0
95	Carbon dots nanoparticles: A promising breakthrough in biosensing, catalysis, biomedical and authers applications. Nano Structures Nano Objects, 2024, 37, 101074.	3.5	1
96	A cross-linkable phthalonitrile derivative as a precursor to synthesize nitrogen-doped carbon nanodots for Ni ion detection. New Journal of Chemistry, 2023, 47, 22269-22275.	2.8	0
97	Nitrogen-doped carbon quantum dots from biomass as a FRET-based sensing platform for the selective detection of H₂O₂ and aspartic acid. , 2024, 2, 223-232.		4
98	Green synthesis of thiocyanate functionalized carbon quantum dots as a fast and sensitive turn-on fluorescent probe for ascorbic acid detection. Journal of Chemical Sciences, 2024, 136, .	1.5	1
99	Recent advancements towards the green synthesis of carbon quantum dots as an innovative and eco-friendly solution for metal ion sensing and monitoring. , 2024, 2, 11-36.		1
100	Rose Bengalâ€Đerived Carbon Quantum Dots as a Fluorescence Probe for the Highly Sensitive Detection of Fe³⁺ Ions. ChemistrySelect, 2023, 8, .	1.5	2
101	A PEDOT enhanced covalent organic framework (COF) fluorescent probe for in vivo detection and imaging of Fe3+. International Journal of Biological Macromolecules, 2024, 259, 129104.	7.5	1
102	A review on characterization of carbon quantum dots. , 2023, 61, 693-718.		1
103	Green synthesis capacitor of carbon quantum dots from Stachys euadenia. Environmental Progress and Sustainable Energy, 2024, 43, .	2.3	0
104	A sensitive sensor based on carbon dots for the determination of Fe³⁺ and ascorbic acid in foods. Analytical Methods, 2024, 16, 939-949.	2.7	0
105	Carbon nanodots synthesized from used tobacco molasses as promising selective probes for Fe (III) ion sensing. Materials Today Sustainability, 2024, 25, 100697.	4.1	0
106	Microflow Synthesis of Fluorescent Carbon Dots for Selective Co²⁺ Detection. Industrial & Engineering Chemistry Research, 2024, 63, 4420-4429.	3.7	0
107	Tuning Catalytic Attributes of Enzymes by Conjugation with Functionalized Carbon Dots. Topics in Catalysis, 0, , .	2.8	0
108	Zinc nitride quantum dots as an efficient probe for simultaneous fluorescence detection of Cu2+ and Mn2+ ions in water samples. Mikrochimica Acta, 2024, 191, .	5.0	0
109	Carbon dots-based dopamine sensors: Recent advances and challenges. Chinese Chemical Letters, 2024, , 109598.	9.0	0
110	Multi-functional ratiometric detection based on dual-emitting N-doped carbon dots. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2024, 313, 124149.	3.9	0

#	Article	IF	Citations
111	A facile synthetic strategy to simultaneously achieve ultra-wide PL redshift of carbon nanodots and their high selectivity and sensitivity for Mn2+ detection. Materials Today Chemistry, 2024, 37, 102001.	3.5	0
112	Composition analysis of Magnolia flower and their use for highly bright carbon dots. Industrial Crops and Products, 2024, 213, 118416.	5.2	0
113	Blinking Carbon Dots as a Super-resolution Imaging Probe. ACS Applied Materials & Interfaces, 2024, 16, 16003-16010.	8.0	0
114	Eco-Friendly Coffee Waste-Based Carbon Dots Coupled to ZnBi-Layered Double Hydroxide Heterojunction: Enhanced Control of Interfacial Charge Transfer for Highly Efficient Visible-Light Catalytic Activity. Journal of Chemistry, 2024, 2024, 1-14.	1.9	0