Binesh Unnikrishnan

List of Publications by Year
in descending order

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47 papers	2,886 citations	201385 27 h-index	197535 49 g-index
50 all docs	50 docs citations	50 times ranked	4345 citing authors

#	Article	IF	Citations
1	A simple electrochemical approach to fabricate a glucose biosensor based on grapheneâ€“glucose oxidase biocomposite. Biosensors and Bioelectronics, 2013, 39, 70-75.	5.3	342
2	Graphene-based nanofiltration membranes for improving salt rejection, water flux and antifoulingâ€“A review. Desalination, 2018, 429, 119-133.	4.0	239
3	Excellent oxidation resistive MXene aqueous ink for micro-supercapacitor application. Energy Storage Materials, 2020, 25, 563-571.	9.5	235
4	Graphene oxide and carbon dots as broad-spectrum antimicrobial agents â€“ a minireview. Nanoscale Horizons, 2019, 4, 117-137.	4.1	204
5	A review on metal nanozyme-based sensing of heavy metal ions: Challenges and future perspectives. Journal of Hazardous Materials, 2021, 401, 123397.	6.5	152
6	Synthesis of Selfâ€Assembled Spermidineâ€Carbon Quantum Dots Effective against Multidrugâ€Resistant Bacteria. Advanced Healthcare Materials, 2016, 5, 2545-2554.	3.9	151
7	One-step synthesis of biofunctional carbon quantum dots for bacterial labeling. Biosensors and Bioelectronics, 2015, 68, 1-6.	5.3	141
8	High Amplification of the Antiviral Activity of Curcumin through Transformation into Carbon Quantum Dots. Small, 2019, 15, e1902641.	5.2	110
9	Solid-state synthesis of self-functional carbon quantum dots for detection of bacteria and tumor cells. Sensors and Actuators B: Chemical, 2016, 228, 465-470.	4.0	105
10	Carbon Dot-Mediated Synthesis of Manganese Oxide Decorated Graphene Nanosheets for Supercapacitor Application. ACS Sustainable Chemistry and Engineering, 2016, 4, 3008-3016.	3.2	104
11	Highly sensitive amperometric sensor for carbamazepine determination based on electrochemically reduced graphene oxideâ€“single-walled carbon nanotube composite film. Sensors and Actuators B: Chemical, 2012, 173, 274-280.	4.0	90
12	Electrochemically synthesized Ptâ€“MnO2 composite particles for simultaneous determination of catechol and hydroquinone. Sensors and Actuators B: Chemical, 2012, 169, 235-242.	4.0	83
13	Fluorescent Carbon Dots for Selective Labeling of Subcellular Organelles. ACS Omega, 2020, 5, 11248-11261.	1.6	78
14	Synergistically dual-functional nano eye-drops for simultaneous anti-inflammatory and anti-oxidative treatment of dry eye disease. Nanoscale, 2019, 11, 5580-5594.	2.8	66
15	Nitrite ion-induced fluorescence quenching of luminescent BSA-Au₂₅nanoclusters: mechanism and application. Analyst, The, 2014, 139, 2221-2228.	1.7	64
16	Highly adhesive carbon quantum dots from biogenic amines for prevention of biofilm formation. Chemical Engineering Journal, 2020, 386, 123913.	6.6	64
17	Visual detection of cyanide ions by membrane-based nanozyme assay. Biosensors and Bioelectronics, 2018, 102, 510-517.	5.3	61
18	Nanoparticle-based laser desorption/ionization mass spectrometric analysis of drugs and metabolites. Journal of Food and Drug Analysis, 2018, 26, 1215-1228.	0.9	49

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19	Detection of urinary spermine by using silver-gold/silver chloride nanozymes. Analytica Chimica Acta, 2018, 1009, 89-97.	2.6	44
20	Gold-Nanoparticles-Modified Cellulose Membrane Coupled with Laser Desorption/Ionization Mass Spectrometry for Detection of Iodide in Urine. ACS Applied Materials & Interfaces, 2013, 5, 9161-9166.	4.0	42
21	Nitrite determination at electrochemically synthesized polydiphenylamine-Pt composite modified glassy carbon electrode. Sensors and Actuators B: Chemical, 2013, 177, 887-892.	4.0	38
22	Controlled synthesis, characterization and photocatalytic activity of BiPO‹sub›4‹/sub› nanostructures with different morphologies. Materials Research Express, 2014, 1, 025023.	0.8	36
23	Functional gold nanoparticles coupled with laser desorption ionization mass spectrometry for bioanalysis. Analytical Methods, 2016, 8, 8123-8133.	1.3	36
24	Nanoparticle-Based LDI-MS Immunoassay for the Multiple Diagnosis of Viral Infections. ACS Sensors, 2019, 4, 1543-1551.	4.0	36
25	Graphene oxide membrane as an efficient extraction and ionization substrate for spray-mass spectrometric analysis of malachite green and its metabolite in fish samples. Analytica Chimica Acta, 2018, 1003, 42-48.	2.6	34
26	Detection of Arsenic(III) through Pulsed Laser-Induced Desorption/Ionization of Gold Nanoparticles on Cellulose Membranes. Analytical Chemistry, 2014, 86, 3167-3173.	3.2	32
27	Membrane-Based Assay for Iodide Ions Based on Anti-Leaching of Gold Nanoparticles. ACS Applied Materials & Interfaces, 2014, 6, 2576-2582.	4.0	31
28	Self-templated formation of aptamer-functionalized copper oxide nanorods with intrinsic peroxidase catalytic activity for protein and tumor cell detection. Sensors and Actuators B: Chemical, 2016, 227, 100-107.	4.0	25
29	Electrocatalytic CuBr@CuO nanoparticles based salivary glucose probes. Biosensors and Bioelectronics, 2021, 194, 113610.	5.3	21
30	Self-assembled, bivalent aptamers on graphene oxide as an efficient anticoagulant. Biomaterials Science, 2018, 6, 1882-1891.	2.6	19
31	Monitoring Thrombin Generation and Screening Anticoagulants through Pulse Laser-Induced Fragmentation of Biofunctional Nanogold on Cellulose Membranes. ACS Applied Materials & Interfaces, 2014, 6, 15253-15261.	4.0	15
32	Mesoporous manganese oxide/manganese ferrite nanopopcorns with dual enzyme mimic activities: A cascade reaction for selective detection of ketoses. Journal of Colloid and Interface Science, 2019, 541, 75-85.	5.0	15
33	Importance of Cobalt-Doping for the Preparation of Hollow CuBr/Co@CuO Nanocorals on Copper Foils with Enhanced Electrocatalytic Activity and Stability for Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2020, 8, 9794-9802.	3.2	13
34	Controlling morphology evolution of titanium oxideâ€“gold nanourchin for photocatalytic degradation of dyes and photoinactivation of bacteria in the infected wound. Journal of Colloid and Interface Science, 2021, 598, 260-273.	5.0	11
35	Carbon nanogels exert multipronged attack on resistant bacteria and strongly constrain resistance evolution. Journal of Colloid and Interface Science, 2022, 608, 1813-1826.	5.0	11
36	Evaluation of chemotherapeutic response in living cells using subcellular Organelleâ€'Selective amphipathic carbon dots. Biosensors and Bioelectronics, 2022, 211, 114362.	5.3	10

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37	Graphene impregnated with horseradish peroxidase multimer for the determination of hydrogen peroxide. Analytical Methods, 2012, 4, 3653.	1.3	9
38	Functional gold nanoparticles coupled with microporous membranes: a flow controlled assay for colorimetric visualization of proteins. Analyst, The, 2014, 139, 5977-5982.	1.7	9
39	Targeting nanocomposites with anti-oxidative/inflammatory/angiogenic activities for synergistically alleviating macular degeneration. Applied Materials Today, 2021, 24, 101156.	2.3	9
40	Thermally driven formation of polyphenolic carbonized nanogels with high anticoagulant activity from polysaccharides. Biomaterials Science, 2021, 9, 4679-4690.	2.6	9
41	Supramolecular Aptamers on Graphene Oxide for Efficient Inhibition of Thrombin Activity. Frontiers in Chemistry, 2019, 7, 280.	1.8	7
42	Membrane-based detection of lead ions in seawater, urine and drinking straws through laser desorption/ionization. Sensors and Actuators B: Chemical, 2014, 203, 880-886.	4.0	6
43	Carbon-based low-pressure filtration membrane for the dynamic disruption of bacteria from contaminated water. Water Research, 2022, 212, 118121.	5.3	6
44	Exploring molecular moieties on carbonized polymer dots from flavonoid glycosides with activity against enterovirus A71. Carbon, 2022, 192, 285-294.	5.4	6
45	Luminescent Gold Nanodots for Detection of Heavy Metal Ions, Proteins and Bacteria. ACS Symposium Series, 2013, , 23-38.	0.5	4
46	Pulse laser-induced generation of cluster codes from metal nanoparticles for immunoassay applications. APL Materials, 2017, 5, 053403.	2.2	4
47	Identification of Microalgae by Laser Desorption/Ionization Mass Spectrometry Coupled with Multiple Nanomatrices. Marine Biotechnology, 2016, 18, 283-292.	1.1	2