Zhong-Feng Gao

List of Publications by Year
in descending order

49	1,760	186254 28	276858 41
papers	citations	h-index	g-index

50	50	50	2517
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Superwettable Biosensor for Disease Biomarker Detection. Frontiers in Bioengineering and Biotechnology, 2022, 10, 872984.	4.1	3
2	Feeding Alginate-Coated Liquid Metal Nanodroplets to Silkworms for Highly Stretchable Silk Fibers. Nanomaterials, 2022, 12, 1177.	4.1	3
3	Label-Free Resonance Rayleigh Scattering Amplification for Lipopolysaccharide Detection and Logical Circuit by CRISPR/Cas12a-Driven Guanine Nanowire Assisted Non-Cross-Linking Hybridization Chain Reaction. Analytical Chemistry, 2022, 94, 6371-6379.	6.5	16
4	Bio-inspired Superwettable Surface for the Detection of Cancer Biomarker: A Mini Review. Technology in Cancer Research and Treatment, 2022, 21, 153303382211106.	1.9	0
5	Cu2+ enhanced fluorescent Ag nanoclusters with tunable emission from red to yellow and the application for Ag+ sensing. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 252, 119484.	3.9	19
6	Ultrasensitive photoelectrochemical platform with micro-emulsion-based p-type hollow silver iodide enabled by low solubility product (K sp) for H2S sensing. Nanotechnology, 2021, 32, 415501.	2.6	1
7	pH-Responsive DNA Motif: From Rational Design to Analytical Applications. Frontiers in Chemistry, 2021, 9, 732770.	3.6	7
8	Photothermal-induced partial Leidenfrost superhydrophobic surface as ultrasensitive surface-enhanced Raman scattering platform for the detection of neonicotinoid insecticides. Sensors and Actuators B: Chemical, 2021, 348, 130728.	7.8	17
9	Visual Detection of Adenosine Triphosphate by Taylor Rising: A Simple Pointâ€ofâ€Care Testing Method Based on Rolling Circle Amplification. ChemBioChem, 2021, 22, 3431-3436.	2.6	3
10	Recent Advances in Photocatalysis Based on Bioinspired Superwettabilities. ACS Catalysis, 2021, 11, 14751-14771.	11.2	59
11	Manipulating the hydrophobicity of DNA as a universal strategy for visual biosensing. Nature Protocols, 2020, 15, 316-337.	12.0	19
12	Two-dimensional metal carbides and nitrides (MXenes): preparation, property, and applications in cancer therapy. Nanophotonics, 2020, 9, 2125-2145.	6.0	61
13	Visual detection of the prostate specific antigen via a sandwich immunoassay and by using a superwettable chip coated with pH-responsive silica nanoparticles. Mikrochimica Acta, 2019, 186, 550.	5.0	7
14	Rapid preparation of polydopamine coating as a multifunctional hair dye. RSC Advances, 2019, 9, 20492-20496.	3.6	34
15	Ratiometric immunoassays built from synergistic photonic absorption of size-diverse semiconducting MoS2 nanostructures. Materials Horizons, 2019, 6, 563-570.	12.2	38
16	Highly hydrophobic ZIF-8 particles and application for oil-water separation. Separation and Purification Technology, 2018, 206, 186-191.	7.9	128
17	Naked-eye point-of-care testing platform based on a pH-responsive superwetting surface: toward the non-invasive detection of glucose. NPG Asia Materials, 2018, 10, 177-189.	7.9	57
18	Turn-on fluorescent sensor for the detection of glucose using manganese dioxideâ^'phenol formaldehyde resin nanocomposite. Talanta, 2018, 180, 12-17.	5.5	19

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19	Controlling Droplet Motion on an Organogel Surface by Tuning the Chain Length of DNA and Its Biosensing Application. CheM, 2018, 4, 2929-2943.	11.7	42
20	Biological and chemical sensing applications based on special wettable surfaces. TrAC - Trends in Analytical Chemistry, 2018, 108, 183-194.	11.4	30
21	Amperometric biosensor for microRNA based on the use of tetrahedral DNA nanostructure probes and guanine nanowire amplification. Mikrochimica Acta, 2017, 184, 2597-2604.	5.0	46
22	A selective and sensitive optical sensor for dissolved ammonia detection via agglomeration of fluorescent Ag nanoclusters and temperature gradient headspace single drop microextraction. Biosensors and Bioelectronics, 2017, 91, 155-161.	10.1	44
23	Bio-friendly Maillard reaction fluorescent products from glutathione and ascorbic acid for the rapid and label-free detection of Fe3+in living cells. Journal of Materials Chemistry B, 2017, 5, 707-713.	5.8	8
24	Sensitive detection of HIV gene by coupling exonuclease III-assisted target recycling and guanine nanowire amplification. Sensors and Actuators B: Chemical, 2017, 238, 1017-1023.	7.8	38
25	The pH-switchable agglomeration and dispersion behavior of fluorescent Ag nanoclusters and its applications in urea and glucose biosensing. NPG Asia Materials, 2016, 8, e335-e335.	7.9	30
26	Green light-emitting polyepinephrine-based fluorescent organic dots and its application in intracellular metal ions sensing. Biosensors and Bioelectronics, 2016, 83, 134-141.	10.1	41
27	Thiazole orange as a fluorescent probe: Label-free and selective detection of silver ions based on the structural change of i-motif DNA at neutral pH. Talanta, 2016, 156-157, 141-146.	5.5	32
28	Ligating Dopamine as Signal Trigger onto the Substrate via Metal-Catalyst-Free Click Chemistry for â€œSignal-Onâ€•Photoelectrochemical Sensing of Ultralow MicroRNA Levels. Analytical Chemistry, 2016, 88, 11444-11449.	6.5	76
29	A label-free electrochemical sensor for detection of mercury(II) ions based on the direct growth of guanine nanowire. Journal of Hazardous Materials, 2016, 308, 173-178.	12.4	21
30	A potential fluorescent probe: Maillard reaction product from glutathione and ascorbic acid for rapid and label-free dual detection of Hg2+ and biothiols. Biosensors and Bioelectronics, 2016, 81, 473-479.	10.1	37
31	Ultrasensitive Label-Free Resonance Rayleigh Scattering Aptasensor for Hg²⁺ Using Hg²⁺-Triggered Exonuclease III-Assisted Target Recycling and Growth of G-Wires for Signal Amplification. Analytical Chemistry, 2016, 88, 1385-1390.	6.5	114
32	Guanine nanowire based amplification strategy: Enzyme-free biosensing of nucleic acids and proteins. Biosensors and Bioelectronics, 2016, 78, 351-357.	10.1	30
33	Fluorometric detection of mutant DNA oligonucleotide based on toehold strand displacement-driving target recycling strategy and exonuclease III-assisted suppression. Biosensors and Bioelectronics, 2016, 77, 40-45.	10.1	46
34	A regenerated electrochemical biosensor for label-free detection of glucose and urea based on conformational switch of i-motif oligonucleotide probe. Analytica Chimica Acta, 2015, 897, 10-16.	5.4	20
35	Enhanced Emission of Polyethyleneimine-Coated Copper Nanoclusters and Their Solvent Effect. Journal of Physical Chemistry C, 2015, 119, 27173-27177.	3.1	41
36	A sensitive and selective electrochemical biosensor for detection of mercury(II) ions based on nicking endonuclease-assisted signal amplification. Sensors and Actuators B: Chemical, 2015, 210, 290-296.	7.8	35

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37	Multidimensional Optical Sensing Platform for Detection of Heparin and Reversible Molecular Logic Gate Operation Based on the Phloxine B/Polyethyleneimine System. Analytical Chemistry, 2015, 87, 1575-1581.	6.5	74
38	Boolean-logic-based nano-platform for competitive detection of biomacromolecules, surfactants, and explosives. Sensors and Actuators B: Chemical, 2015, 210, 225-231.	7.8	3
39	Sensitive mutant DNA biomarker detection based on magnetic nanoparticles and nicking endonuclease assisted fluorescence signal amplification. RSC Advances, 2015, 5, 20020-20024.	3.6	9
40	A regenerative electrochemical biosensor for mercury(II) by using the insertion approach and dual-hairpin-based amplification. Journal of Hazardous Materials, 2015, 295, 63-69.	12.4	17
41	Diverse States and Properties of Polymer Nanoparticles and Gel Formed by Polyethyleneimine and Aldehydes and Analytical Applications. Analytical Chemistry, 2015, 87, 8679-8686.	6.5	33
42	Detection of mercury ions (II) based on non-cross-linking aggregation of double-stranded DNA modified gold nanoparticles by resonance Rayleigh scattering method. Biosensors and Bioelectronics, 2015, 65, 360-365.	10.1	67
43	Highly selective and sensitive electrochemical biosensor for ATP based on the dual strategy integrating the cofactor-dependent enzymatic ligation reaction with self-cleaving DNAzyme-amplified electrochemical detection. Biosensors and Bioelectronics, 2015, 63, 14-20.	10.1	65
44	Ultrasensitive and selective signal-on electrochemical DNA detection via exonuclease III catalysis and hybridization chain reaction amplification. Biosensors and Bioelectronics, 2015, 63, 153-158.	10.1	40
45	Fluorescent detection of hydrogen peroxide and glucose with polyethyleneimine-templated Cu nanoclusters. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 118, 315-320.	3.9	93
46	Utilizing polyethyleneimine-capped silver nanoclusters as a new fluorescence probe for Sudan Iâ€“IV sensing in ethanol based on fluorescence resonance energy transfer. Sensors and Actuators B: Chemical, 2014, 193, 730-736.	7.8	49
47	A sensitive electrochemical method based on Fenton-induced DNA oxidation for detection of hydroxyl radical. Analytical Methods, 2014, 6, 6536.	2.7	15
48	Detection of Single-Nucleotide Polymorphisms Using an ONâ€“OFF Switching of Regenerated Biosensor Based on a Locked Nucleic Acid-Integrated and Toehold-Mediated Strand Displacement Reaction. Analytical Chemistry, 2014, 86, 2543-2548.	6.5	60
49	Rapid assembly of ssDNA on gold electrode surfaces at low pH and high salt concentration conditions. RSC Advances, 2013, 3, 12334.	3.6	13