

Zhengbo Chen

List of Publications by Year in descending order

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101
papers

2,667
citations

159525

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233338

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102
all docs

102
docs citations

102
times ranked

3070
citing authors

#	ARTICLE	IF	CITATIONS
1	Cascade reaction system integrating nanozymes for colorimetric discrimination of organophosphorus pesticides. <i>Sensors and Actuators B: Chemical</i> , 2022, 350, 130810.	4.0	22
2	Construction of a colorimetric sensor array based on the coupling reaction to identify phenols. <i>Analytical Methods</i> , 2022, 14, 892-899.	1.3	2
3	A colorimetric sensor array for rapid discrimination of edible oil species based on a halogen ion exchange reaction between CsPbBr ₃ and iodide. <i>Analyst</i> , 2022, 147, 404-409.	1.7	3
4	CsPbBr ₃ and CsPbBr ₃ /SiO ₂ Nanocrystals as a Fluorescence Sensing Platform for High-Throughput Identification of Multiple Thiophene Sulfides. <i>Analytical Chemistry</i> , 2022, 94, 5946-5952.	3.2	15
5	High throughput sensing of multiple amino acids with differential pulse voltammetry measurement. <i>Analytical Biochemistry</i> , 2022, 647, 114684.	1.1	1
6	Colorimetric sensing strategy for detection of cysteine, phenol cysteine, and phenol based on synergistic doping of multiple heteroatoms into sponge-like Fe/NPC nanozymes. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 4217-4225.	1.9	5
7	MnO ₂ Nanosheet-Based colorimetric sensor Array: Toward identification of organophosphorus pesticides. <i>Microchemical Journal</i> , 2022, 181, 107758.	2.3	6
8	Visual detection of multiple antioxidants based on three chloroauric acid/Au-Ag nanocubes. <i>Mikrochimica Acta</i> , 2021, 188, 122.	2.5	2
9	New application of a traditional method: colorimetric sensor array for reducing sugars based on the in-situ formation of core-shell gold nanorod-coated silver nanoparticles by the traditional Tollens reaction. <i>Mikrochimica Acta</i> , 2021, 188, 142.	2.5	8
10	Amino Acid Detection with Bare Eyes Based on Two Different Concentrations of Iodides as Sensor Receptors. <i>Food Analytical Methods</i> , 2021, 14, 1927-1935.	1.3	3
11	Innovative Electrochemical Sensor Using TiO ₂ Nanomaterials to Detect Phosphopeptides. <i>Analytical Chemistry</i> , 2021, 93, 10635-10643.	3.2	29
12	A rapid reduction of Au(III) strategy for the colorimetric detection and discrimination of proteins. <i>Mikrochimica Acta</i> , 2021, 188, 249.	2.5	7
13	A Dual-Channel Sensor Array: Ultraviolet Absorption and Surface Potential Measurements for Discrimination of Amino Acids Based on Gold Nanorods. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 10963-10969.	3.2	1
14	Antioxidant Recognition by Colorimetric Sensor Array Based on Differential Etching of Gold Nanorods and Gold Nanopyramids. <i>ACS Applied Nano Materials</i> , 2021, 4, 8482-8490.	2.4	15
15	Colorimetric Sensors for Alkaloids Based on the Etching of Au@MnO ₂ Nanoparticles and MnO ₂ Nanostars. <i>ACS Applied Nano Materials</i> , 2021, 4, 8465-8472.	2.4	9
16	Visual sensing of flavonoids based on varying degrees of gold nanoparticle aggregation via linear discriminant analysis. <i>Sensors and Actuators B: Chemical</i> , 2021, 348, 130685.	4.0	4
17	Antioxidant identification using a colorimetric sensor array based on Co-N-C nanozyme. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 208, 112060.	2.5	15
18	Colorimetric determination of uric acid based on the suppression of oxidative etching of silver nanoparticles by chloroauric acid. <i>Mikrochimica Acta</i> , 2020, 187, 18.	2.5	17

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19	Gold nanoparticle-engineered electrochemical aptamer biosensor for ultrasensitive detection of thrombin. <i>Analytical Methods</i> , 2020, 12, 3729-3733.	1.3	23
20	Tungsten disulfide nanosheets-based colorimetric assay for glucose sensing. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 242, 118706.	2.0	10
21	Colorimetric identification of lanthanide ions based on two carboxylic acids as an artificial tongue. <i>Analyst, The</i> , 2020, 145, 3359-3363.	1.7	3
22	Single Atoms Anchored on Cobalt-Based Catalysts Derived from Hydrogels Containing Phthalocyanine toward the Oxygen Reduction Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 8338-8347.	3.2	21
23	Determining Alkaline Phosphatase Based on Core-Shell Gold@silver Nanocubes by Single-Particle Dark-Field Images. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4555-4560.	3.2	12
24	Colorimetric discriminatory array for detection and discrimination of antioxidants based on HAuCl ₄ ·3H ₂ O-tetramethylbenzidine. <i>Analyst, The</i> , 2020, 145, 5221-5225.	1.7	6
25	Chloroauric Acid/Silver Nanoparticle Colorimetric Sensors for Antioxidant Discrimination Based on a Honeycomb Ag-Au Nanostructure. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 3922-3928.	3.2	19
26	Colorimetric Differentiation of Flavonoids Based on Effective Reactivation of Acetylcholinesterase Induced by Different Affinities between Flavonoids and Metal Ions. <i>Analytical Chemistry</i> , 2020, 92, 3361-3365.	3.2	30
27	Colorimetric Differentiation of Multiple Oxidizing Anions Based on Two Core-Shell Au@Ag Nanoparticles with Different Morphologies as Array Recognition Elements. <i>Analytical Chemistry</i> , 2020, 92, 7123-7129.	3.2	21
28	Colorimetric sensor array for accurate detection and identification of antioxidants based on metal ions as sensor receptors. <i>Talanta</i> , 2020, 215, 120935.	2.9	13
29	Colorimetric adenosine assay based on the self-assembly of aptamer-functionalized gold nanorods. <i>Mikrochimica Acta</i> , 2019, 186, 587.	2.5	4
30	Colorimetric sensor assay for discrimination of proteins based on exonuclease I-triggered aggregation of DNA-functionalized gold nanoparticles. <i>Analyst, The</i> , 2019, 144, 4865-4870.	1.7	14
31	A Triple-Channel Colorimetric Sensor Array for Identification of Biothiols Based on Color RGB (Red/Green/Blue) as Signal Readout. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17482-17490.	3.2	27
32	Optical aptasensing of mercury(II) by using salt-induced and exonuclease I-induced gold nanoparticle aggregation under dark-field microscope observation. <i>Mikrochimica Acta</i> , 2019, 186, 729.	2.5	6
33	Highly sensitive colorimetric detection of glucose through glucose oxidase and Cu ²⁺ -catalyzed 3,3',5,5'-tetramethylbenzidine oxidation. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 213, 37-41.	2.0	13
34	Colorimetric Electronic Tongue for Rapid Discrimination of Antioxidants Based on the Oxidation Etching of Nanotriangular Silver by Metal Ions. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37371-37378.	4.0	28
35	A Chrono-Colorimetric Sensor Array for Differentiation of Catechins Based on Silver Nitrate-Induced Metallization of Gold Nanoparticles at Different Reaction Time Intervals. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17306-17312.	3.2	17
36	Heavy metal ion discrimination based on distinct interaction between single-stranded DNA and methylene blue. <i>Analytical Methods</i> , 2019, 11, 17-20.	1.3	5

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37	Ultrasensitive colorimetric detection of Hg ²⁺ ions based on enhanced catalytic performance of gold amalgam dispersed in channels of rose petals. <i>Analyst, The</i> , 2019, 144, 1205-1209.	1.7	6
38	Colorimetric detection of glutathione based on its inhibitory effect on the peroxidase-mimicking properties of WS2 nanosheets. <i>Mikrochimica Acta</i> , 2019, 186, 257.	2.5	22
39	Electronic-Tongue Colorimetric-Sensor Array for Discrimination and Quantitation of Metal Ions Based on Gold-Nanoparticle Aggregation. <i>Analytical Chemistry</i> , 2019, 91, 6315-6320.	3.2	51
40	Colorimetric Sensor Arrays for Antioxidant Discrimination Based on the Inhibition of the Oxidation Reaction between 3,3',5,5'-Tetramethylbenzidine and Hydrogen Peroxides. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 9504-9509.	4.0	53
41	A colorimetric sensor array for detection and discrimination of antioxidants based on Ag nanoshell deposition on gold nanoparticle surfaces. <i>Analyst, The</i> , 2019, 144, 6276-6282.	1.7	8
42	Colorimetric determination of nine metal ions based on the de-aggregation of papain-functionalized gold nanoparticles and using three chelating agents. <i>Mikrochimica Acta</i> , 2019, 186, 854.	2.5	5
43	Colorimetric and dark-field microscopic determination of cadmium(II) using unmodified gold nanoparticles and based on the formation of glutathione-cadmium(II) complexes. <i>Mikrochimica Acta</i> , 2019, 186, 37.	2.5	19
44	Fluorescent sensor array for discrimination of biothiols based on poly(thymine/cytosine)-templated copper nanoparticles. <i>Analytica Chimica Acta</i> , 2019, 1051, 147-152.	2.6	12
45	Colorimetric Detection of Thrombin Based on Intensity of Gold Nanoparticle Oligomers with Dark-Field Microscope. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6738-6745.	3.2	17
46	Target binding and DNA hybridization-induced gold nanoparticle aggregation for colorimetric detection of thrombin. <i>Sensors and Actuators B: Chemical</i> , 2018, 262, 733-738.	4.0	37
47	Determination of nickel(II) at nanomolar levels using iodide-responsive gold-copper nanoparticles as colorimetric probes. <i>Mikrochimica Acta</i> , 2018, 185, 88.	2.5	4
48	The aptamer-thrombin-aptamer sandwich complex-bridged gold nanoparticle oligomers for high-precision profiling of thrombin by dark field microscopy. <i>Analytica Chimica Acta</i> , 2018, 1028, 66-76.	2.6	14
49	Colorimetric detection of Hg(II) by measurement the color alterations from the "before" and "after" RGB images of etched triangular silver nanoplates. <i>Mikrochimica Acta</i> , 2018, 185, 235.	2.5	23
50	Colorimetric Sensor Array for Discrimination of Heavy Metal Ions in Aqueous Solution Based on Three Kinds of Thiols as Receptors. <i>Analytical Chemistry</i> , 2018, 90, 4770-4775.	3.2	87
51	Colorimetric aggregation based cadmium(II) assay by using triangular silver nanoplates functionalized with 1-amino-2-naphthol-4-sulfonate. <i>Mikrochimica Acta</i> , 2018, 185, 6.	2.5	20
52	Cationic polymer-based plasmonic sensor array that discriminates proteins. <i>Analyst, The</i> , 2018, 143, 5578-5582.	1.7	12
53	Colorimetric adenosine aptasensor based on DNA cycling amplification and salt-induced aggregation of gold nanoparticles. <i>Mikrochimica Acta</i> , 2018, 185, 488.	2.5	23
54	Iodide-Responsive Cu ⁶⁴ Au Nanoparticle-Based Colorimetric Sensor Array for Protein Discrimination. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15720-15726.	3.2	13

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55	Colorimetric detection of L-histidine based on the target-triggered self-cleavage of swing-structured DNA duplex-induced aggregation of gold nanoparticles. <i>Mikrochimica Acta</i> , 2018, 185, 452.	2.5	14
56	Aggregation-to-Deaggregation-Colorimetric Signal Amplification Strategy for Ag ⁺ Detection at the Femtomolar Level with Dark-Field Microscope Observation. <i>Analytical Chemistry</i> , 2018, 90, 11723-11727.	3.2	47
57	Colorimetric detection of DNA at the nanomolar level based on enzyme-induced gold nanoparticle de-aggregation. <i>Mikrochimica Acta</i> , 2018, 185, 301.	2.5	16
58	Colorimetric ultrasensitive detection of DNA based on the intensity of gold nanoparticles with dark-field microscopy. <i>Analyst</i> , 2018, 143, 4051-4056.	1.7	12
59	Protein Discrimination Using a Colorimetric Sensor Array Based on Gold Nanoparticle Aggregation Induced by Cationic Polymer. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 10751-10757.	3.2	26
60	Colorimetric Detection of Hg ²⁺ Based on the Growth of Aptamer-Coated AuNPs: The Effect of Prolonging Aptamer Strands. <i>Small</i> , 2017, 13, 1603370.	5.2	62
61	Iodide-responsive Cu@Au nanoparticle-based colorimetric assay for sensitive mercury (II) detection. <i>Sensors and Actuators B: Chemical</i> , 2017, 252, 663-670.	4.0	21
62	Colorimetric sensor array for protein discrimination based on different DNA chain length-dependent gold nanoparticles aggregation. <i>Biosensors and Bioelectronics</i> , 2017, 97, 332-337.	5.3	56
63	DNA-Catalytically Active Gold Nanoparticle Conjugates-Based Colorimetric Multidimensional Sensor Array for Protein Discrimination. <i>Analytical Chemistry</i> , 2017, 89, 556-559.	3.2	68
64	Y-Shaped DNA Duplex Structure-Triggered Gold Nanoparticle Dimers for Ultrasensitive Colorimetric Detection of Nucleic Acid with the Dark-Field Microscope. <i>Analytical Chemistry</i> , 2017, 89, 12850-12856.	3.2	40
65	Core-shell Cu@Au nanoparticles as an optical probe for ultrasensitive detection of chromium(VI) via an etching effect. <i>Mikrochimica Acta</i> , 2017, 184, 3817-3823.	2.5	16
66	Colorimetric determination of Hg(II) based on a visually detectable signal amplification induced by a Cu@Au-Hg trimetallic amalgam with peroxidase-like activity. <i>Mikrochimica Acta</i> , 2017, 184, 107-115.	2.5	30
67	Core-shell Cu@Au nanoparticles-based colorimetric aptasensor for the determination of lysozyme. <i>Talanta</i> , 2017, 163, 132-139.	2.9	27
68	Colorimetric detection of Hg ²⁺ based on target-mediated growth of gold nanoparticles. <i>Sensors and Actuators B: Chemical</i> , 2017, 241, 262-267.	4.0	38
69	Colorimetric visualization of Cu ²⁺ based on Cu ²⁺ -catalyzed reaction and the signal amplification induced by K ⁺ -aptamer-Cu ²⁺ complex. <i>Sensors and Actuators B: Chemical</i> , 2017, 241, 498-503.	4.0	15
70	Dual channel sensor for detection and discrimination of heavy metal ions based on colorimetric and fluorescence response of the AuNPs-DNA conjugates. <i>Biosensors and Bioelectronics</i> , 2016, 85, 414-421.	5.3	111
71	Shape transformation of Ag nanospheres to triangular Ag nanoplates: Hydrogen peroxide is a magic reagent. <i>Integrated Ferroelectrics</i> , 2016, 169, 22-28.	0.3	9
72	Colorimetric detection of lysozyme based on its effect on the growth of gold nanoparticles induced by the reaction of chloroauric acid and hydroxylamine. <i>Mikrochimica Acta</i> , 2016, 183, 3135-3141.	2.5	10

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73	Sensitive colorimetric detection of K(I) using catalytically active gold nanoparticles triggered signal amplification. <i>Biosensors and Bioelectronics</i> , 2016, 79, 749-757.	5.3	23
74	A sensitive Hg(II) colorimetric sensor based on synergistic catalytic effect of gold nanoparticles and Hg. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 686-691.	4.0	38
75	Silver nanoparticles with different morphologies: growth mechanism and stability. <i>Materials Research Innovations</i> , 2016, 20, 58-66.	1.0	4
76	Real Colorimetric Thrombin Aptasensor by Masking Surfaces of Catalytically Active Gold Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 102-108.	4.0	59
77	Application of triangular silver nanoplates for colorimetric detection of H ₂ O ₂ . <i>Sensors and Actuators B: Chemical</i> , 2015, 220, 314-317.	4.0	50
78	Aptasensor for electrochemical sensing of angiogenin based on electrode modified by cationic polyelectrolyte-functionalized graphene/gold nanoparticles composites. <i>Biosensors and Bioelectronics</i> , 2015, 65, 232-237.	5.3	48
79	A non-aggregation spectrometric determination for mercury ions based on gold nanoparticles and thiocyanuric acid. <i>Talanta</i> , 2015, 134, 603-606.	2.9	36
80	Gold nanoparticle based colorimetric probe for dopamine detection based on the interaction between dopamine and melamine. <i>Mikrochimica Acta</i> , 2015, 182, 1003-1008.	2.5	73
81	Superior fluorescent probe for detection of potassium ion. <i>Talanta</i> , 2015, 144, 247-251.	2.9	20
82	A facile label-free colorimetric sensor for Hg ²⁺ based on Hg-triangular silver nanoplates with amalgam-like structure. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 365-369.	4.0	25
83	Colorimetric Signal Amplification Assay for Mercury Ions Based on the Catalysis of Gold Amalgam. <i>Analytical Chemistry</i> , 2015, 87, 10963-10968.	3.2	57
84	Chitosan-functionalized gold nanoparticles for colorimetric detection of mercury ions based on chelation-induced aggregation. <i>Mikrochimica Acta</i> , 2015, 182, 611-616.	2.5	40
85	A highly sensitive colorimetric sensor for adrenaline detection based on organic molecules-functionalized gold nanoparticles. <i>Sensors and Actuators B: Chemical</i> , 2015, 207, 277-280.	4.0	23
86	A colorimetric aptamer biosensor based on cationic polymer and gold nanoparticles for the ultrasensitive detection of thrombin. <i>Biosensors and Bioelectronics</i> , 2014, 56, 46-50.	5.3	75
87	Nickel hydroxide nanocrystals-modified glassy carbon electrodes for sensitive l-histidine detection. <i>Electrochimica Acta</i> , 2014, 116, 258-262.	2.6	30
88	A simple colorimetric sensor for potassium ion based on DNA G-quadruplex conformation and salt-induced gold nanoparticles aggregation. <i>Analytical Methods</i> , 2014, 6, 8018-8021.	1.3	26
89	Aptasensor for label-free square-wave voltammetry detection of potassium ions based on gold nanoparticle amplification. <i>RSC Advances</i> , 2014, 4, 48671-48675.	1.7	10
90	Colorimetric detection of potassium ions using aptamer-functionalized gold nanoparticles. <i>Analytica Chimica Acta</i> , 2013, 787, 189-192.	2.6	60

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91	Tetrahexahedral Au nanocrystals/aptamer based ultrasensitive electrochemical biosensor. RSC Advances, 2013, 3, 14385.	1.7	13
92	A one-step electrochemical sensor for rapid detection of potassium ion based on structure-switching aptamer. Sensors and Actuators B: Chemical, 2013, 188, 1155-1157.	4.0	31
93	A reagentless signal-off architecture for electrochemical aptasensor for the detection of lysozyme. Electrochimica Acta, 2013, 111, 916-920.	2.6	32
94	Aptamer biosensor for label-free impedance spectroscopy detection of potassium ion based on DNA G-quadruplex conformation. Biosensors and Bioelectronics, 2013, 48, 108-112.	5.3	65
95	An electrochemical aptasensor based on the amplification of two kinds of gold nanocrystals for the assay of L-histidine with picomolar detection limit. Nanotechnology, 2013, 24, 295501.	1.3	6
96	Signal amplification architecture for electrochemical aptasensor based on network-like thiocyanuric acid/gold nanoparticle/ssDNA. Biosensors and Bioelectronics, 2012, 38, 37-42.	5.3	22
97	Electrochemical sensing of l-histidine based on structure-switching DNAzymes and gold nanoparticle-graphenenanosheet composites. Chemical Communications, 2011, 47, 5476-5478.	2.2	100
98	Electrochemical impedance spectroscopy detection of lysozyme based on electrodeposited gold nanoparticles. Talanta, 2011, 83, 1501-1506.	2.9	75
99	Electrochemical aptasensor for detection of copper based on a reagentless signal-on architecture and amplification by gold nanoparticles. Talanta, 2011, 85, 730-735.	2.9	51
100	Aptamer biosensor for label-free square-wave voltammetry detection of angiogenin. Biosensors and Bioelectronics, 2011, 30, 261-266.	5.3	39
101	Aptamer-based electrochemical approach to the detection of thrombin by modification of gold nanoparticles. Analytical and Bioanalytical Chemistry, 2010, 398, 563-570.	1.9	56