Ai-Lin Liu

List of Publications by Year
in descending order

72 papers	2,714 citations	186265 28 h-index	189892 50 g-index
74 all docs	74 docs citations	74 times ranked	3463 citing authors

#	Article	IF	Citations
1	In Situ Growth of Porous Platinum Nanoparticles on Graphene Oxide for Colorimetric Detection of Cancer Cells. Analytical Chemistry, 2014, 86, 2711-2718.	6.5	233
2	Fabrication of Water-Soluble, Green-Emitting Gold Nanoclusters with a 65% Photoluminescence Quantum Yield via Hostâ€“Guest Recognition. Chemistry of Materials, 2017, 29, 1362-1369.	6.7	209
3	Chitosan-stabilized platinum nanoparticles as effective oxidase mimics for colorimetric detection of acid phosphatase. Nanoscale, 2017, 9, 10292-10300.	5.6	187
4	Label-free electrochemical DNA biosensor for rapid detection of mutidrug resistance gene based on Au nanoparticles/toluidine blueâ€“graphene oxide nanocomposites. Sensors and Actuators B: Chemical, 2015, 207, 269-276.	7.8	144
5	Simultaneous voltammetric determination of norepinephrine, ascorbic acid and uric acid on polycalconcarboxylic acid modified glassy carbon electrode. Biosensors and Bioelectronics, 2008, 23, 1488-1495.	10.1	118
6	Methionine-directed fabrication of gold nanoclusters with yellow fluorescent emission for Cu2+ sensing. Biosensors and Bioelectronics, 2015, 65, 397-403.	10.1	116
7	pH-Sensitive gold nanoclusters: preparation and analytical applications for urea, urease, and urease inhibitor detection. Chemical Communications, 2015, 51, 7847-7850.	4.1	88
8	A nonenzymatic amperometric glucose sensor based on three dimensional nanostructure gold electrode. Sensors and Actuators B: Chemical, 2015, 212, 72-77.	7.8	82
9	Facile electrochemiluminescence sensing platform based on high-quantum-yield gold nanocluster probe for ultrasensitive glutathione detection. Biosensors and Bioelectronics, 2018, 105, 71-76.	10.1	74
10	A sandwich-type DNA biosensor based on electrochemical co-reduction synthesis of graphene-three dimensional nanostructure gold nanocomposite films. Analytica Chimica Acta, 2013, 767, 50-58.	5.4	71
11	Quaternized carbon quantum dots with broad-spectrum antibacterial activity for the treatment of wounds infected with mixed bacteria. Acta Biomaterialia, 2022, 138, 528-544.	8.3	70
12	An ammonia-based etchant for attaining copper nanoclusters with green fluorescence emission. Nanoscale, 2018, 10, 6467-6473.	5.6	62
13	Valence States Effect on Electrogenerated Chemiluminescence of Gold Nanocluster. ACS Applied Materials & Interfaces, 2017, 9, 14929-14934.	8.0	60
14	Bovine Serum Albumin-Based Probe Carrier Platform for Electrochemical DNA Biosensing. Analytical Chemistry, 2013, 85, 273-277.	6.5	54
15	Electrochemical biosensor based on nanoporous gold electrode for detection of PML/RARÎ± fusion gene. Biosensors and Bioelectronics, 2011, 26, 3812-3817.	10.1	50
16	Enzyme-amplified electrochemical biosensor for detection of PMLâ€“RARÎ± fusion gene based on hairpin LNA probe. Biosensors and Bioelectronics, 2011, 28, 277-283.	10.1	48
17	Detection EGFR exon 19 status of lung cancer patients by DNA electrochemical biosensor. Biosensors and Bioelectronics, 2016, 80, 411-417.	10.1	47
18	Levofloxacin-based carbon dots to enhance antibacterial activities and combat antibiotic resistance. Carbon, 2022, 186, 452-464.	10.3	47

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19	Label-free electrochemical immunosensor based on multi-functional gold nanoparticlesâ€“polydopamineâ€“thionineâ€“graphene oxide nanocomposites film for determination of alpha-fetoprotein. Journal of Electroanalytical Chemistry, 2014, 712, 89-95.	3.8	46
20	Facile and highly sensitive photoelectrochemical biosensing platform based on hierarchical architectured polydopamine/tungsten oxide nanocomposite film. Biosensors and Bioelectronics, 2019, 126, 1-6.	10.1	46
21	MoOx quantum dots with peroxidase-like activity on microfluidic paper-based analytical device for rapid colorimetric detection of H2O2 released from PC12 cells. Sensors and Actuators B: Chemical, 2020, 305, 127512.	7.8	46
22	Electrochemical Oxidation of Luteolin at a Glassy Carbon Electrode and Its Application in Pharmaceutical Analysis. Chemical and Pharmaceutical Bulletin, 2008, 56, 745-748.	1.3	45
23	Design of a sandwich-mode amperometric biosensor for detection of PML/RARÎ± fusion gene using locked nucleic acids on gold electrode. Biosensors and Bioelectronics, 2011, 26, 2870-2876.	10.1	45
24	Electrochemiluminescence sensor based on methionine-modified gold nanoclusters for highly sensitive determination of dopamine released by cells. Mikrochimica Acta, 2017, 184, 735-743.	5.0	45
25	Simple and effective label-free electrochemical immunoassay for carbohydrate antigen 19-9 based on polythionine-Au composites as enhanced sensing signals for detecting different clinical samples. International Journal of Nanomedicine, 2017, Volume 12, 3049-3058.	6.7	40
26	A novel nanocomposite matrix based on graphene oxide and ferrocene-branched organically modified solâ€“gel/chitosan for biosensor application. Journal of Solid State Electrochemistry, 2014, 18, 1941-1949.	2.5	34
27	Ultrasensitive Electrochemical Biosensor Developed by Probe Lengthening for Detection of Genomic DNA in Human Serum. Analytical Chemistry, 2019, 91, 4552-4558.	6.5	33
28	Electrochemical DNA biosensor based on aldehyde-agarose hydrogel modified glassy carbon electrode for detection of PML/RARa fusion gene. Sensors and Actuators B: Chemical, 2011, 160, 1458-1463.	7.8	31
29	Dual-probe electrochemical DNA biosensor based on the â€œYâ€•junction structure and restriction endonuclease assisted cyclic enzymatic amplification for detection of double-strand DNA of PML/RARÎ± related fusion gene. Biosensors and Bioelectronics, 2015, 71, 463-469.	10.1	29
30	Nitrogen-doped carbon dots as a ratiometric fluorescent probe for determination of the activity of acid phosphatase, for inhibitor screening, and for intracellular imaging. Mikrochimica Acta, 2019, 186, 558.	5.0	28
31	Fabrication and multifunctional properties of ultrasmall water-soluble tungsten oxide quantum dots. Chemical Communications, 2016, 52, 9534-9537.	4.1	27
32	A Sandwichâ€Type Electrochemical Biosensor for Detection of BCR/ABL Fusion Gene Using Locked Nucleic Acids on Gold Electrode. Electroanalysis, 2009, 21, 1159-1166.	2.9	25
33	Magnetic electrochemiluminescent immunoassay with quantum dots label for highly efficient detection of the tumor marker Î±-fetoprotein. Journal of Electroanalytical Chemistry, 2017, 785, 8-13.	3.8	23
34	Highly sensitive and rapid colorimetric sensing platform based on water-soluble WO x quantum dots with intrinsic peroxidase-like activity. Analytica Chimica Acta, 2017, 992, 128-134.	5.4	22
35	Dual-probe fluorescent biosensor based on T7 exonuclease-assisted target recycling amplification for simultaneous sensitive detection of microRNA-21 and microRNA-155. Analytical and Bioanalytical Chemistry, 2021, 413, 1605-1614.	3.7	22
36	Study of the electrochemical behavior of isorhamnetin on a glassy carbon electrode and its application. Talanta, 2008, 77, 314-318.	5.5	20

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37	Facile electrochemiluminescence sensing platform based on water-soluble tungsten oxide quantum dots for ultrasensitive detection of dopamine released by cells. Analytica Chimica Acta, 2019, 1065, 21-28.	5.4	19
38	Detection of femtomolar level osteosarcoma-related gene via a chronocoulometric DNA biosensor based on nanostructure gold electrode. International Journal of Nanomedicine, 2012, 7, 527.	6.7	18
39	One-pot green synthesis of mussel-inspired myoglobinâ€“gold nanoparticlesâ€“polydopamineâ€“graphene polymeric bionanocomposite for biosensor application. Journal of Electroanalytical Chemistry, 2016, 764, 104-109.	3.8	18
40	Fluorescent turn-off competitive immunoassay for biotin based on hydrothermally synthesized carbon dots. Mikrochimica Acta, 2017, 184, 907-914.	5.0	17
41	Paper-based 3D culture device integrated with electrochemical sensor for the on-line cell viability evaluation of amyloid-beta peptide induced damage in PC12â€cells. Biosensors and Bioelectronics, 2019, 144, 111686.	10.1	16
42	Genotyping of common EGFR mutations in lung cancer patients by electrochemical biosensor. Journal of Pharmaceutical and Biomedical Analysis, 2018, 150, 176-182.	2.8	15
43	Nanoporous gold electrode prepared from two-step square wave voltammetry (SWV) and its application for electrochemical DNA biosensing of lung resistance related protein (LRP) gene. Journal of Electroanalytical Chemistry, 2019, 840, 165-173.	3.8	14
44	Molecular beacon-based fluorescence biosensor for the detection of gene fragment and PCR amplification products related to chronic myelogenous leukemia. Analytical and Bioanalytical Chemistry, 2012, 402, 805-812.	3.7	13
45	A strategy for integrated pharmacokinetic study of cardiovascular herbal medicines based on chemiluminescence and HPLC-MS/MS assays: a case using Danshen injection. RSC Advances, 2017, 7, 13570-13583.	3.6	13
46	Electrochemical DNA biosensor based on grafting-to mode of terminal deoxynucleoside transferase-mediated extension. Biosensors and Bioelectronics, 2017, 98, 345-349.	10.1	13
47	An electrochemical biosensor for sensitive detection of nicotine-induced dopamine secreted by PC12 cells. Journal of Electroanalytical Chemistry, 2019, 832, 217-224.	3.8	13
48	Ethyl Acetate Extract of Selaginella doederleinii Hieron Induces Cell Autophagic Death and Apoptosis in Colorectal Cancer via PI3K-Akt-mTOR and AMPKÎ±-Signaling Pathways. Frontiers in Pharmacology, 2020, 11, 565090.	3.5	13
49	Synthesis of curcumin-quaternized carbon quantum dots with enhanced broad-spectrum antibacterial activity for promoting infected wound healing. Materials Science and Engineering C, 2022, 133, 112608.	7.3	13
50	Electrochemical biosensor for detection of PML/RARÎ± fusion gene based on eriochrome cyanine R film modified glassy carbon electrode. Electrochimica Acta, 2012, 69, 56-59.	5.2	12
51	Electrochemical immunosensor for detection of topoisomerase based on grapheneâ€“gold nanocomposites. Talanta, 2014, 125, 439-445.	5.5	12
52	2â€²-Fluoro ribonucleic acid modified DNA dual-probe sensing strategy for enzyme-amplified electrochemical detection of double-strand DNA of PML/RARÎ± related fusion gene. Biosensors and Bioelectronics, 2018, 112, 170-176.	10.1	12
53	Sensitive electrochemical immunosensor based on three-dimensional nanostructure gold electrode. International Journal of Nanomedicine, 2015, 10, 2219.	6.7	10
54	Pharmacokinetics, Tissue Distribution, and Human Serum Albumin Binding Properties of Delicaflavone, a Novel Anti-Tumor Candidate. Frontiers in Pharmacology, 2021, 12, 761884.	3.5	10

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55	Sepsis progression monitoring via human serum fibronectin detection based on sandwich-type electrochemical immunosensor. Analytica Chimica Acta, 2020, 1100, 225-231.	5.4	9
56	A DNA electrochemical biosensor based on homogeneous hybridization for the determination of Cryptococcus neoformans. Journal of Electroanalytical Chemistry, 2018, 827, 27-33.	3.8	8
57	Boosting the oxidase-like activity of platinum nanozyme in MBTH-TOOS chromogenic system for detection of trypsin and its inhibitor. Talanta, 2021, 234, 122647.	5.5	8
58	Enzyme-based E-RNA sensor array with a hairpin probe: Specific detection of gene mutation. Sensors and Actuators B: Chemical, 2013, 181, 227-233.	7.8	7
59	Detection of Epidermal Growth Factor Receptor Gene Status via a DNA Electrochemical Biosensor Based on Lambda Exonuclease-assisted Signal Amplification. Analytical Sciences, 2020, 36, 697-702.	1.6	7
60	A Polymer Film Modified Sensor for Voltammetric Determination of Uric Acid in the Presence of Ascorbic Acid and Its Application in Urine. Chemical and Pharmaceutical Bulletin, 2008, 56, 1665-1669.	1.3	6
61	Electrochemical method for monitoring the progress of polymerase chain reactions using Methylene blue as an indicator. Mikrochimica Acta, 2013, 180, 871-878.	5.0	6
62	DPPHÂ·â€“luminol chemiluminescence system and its application in the determination of scutellarin in pharmaceutical injections and rat plasma with flow injection analysis. Luminescence, 2017, 32, 588-595.	2.9	6
63	Development of an Electrochemical Sensing Technique for Rapid Genotyping of Hepatitis B Virus. Sensors, 2014, 14, 5611-5621.	3.8	5
64	Pharmacokinetics study of isorhamnetin in rat plasma by a sensitive electrochemical sensor based on reduced graphene oxide. RSC Advances, 2017, 7, 36728-36734.	3.6	5
65	Sensitive electrochemical cytosensor for highly specific detection of osteosarcoma 143B cells based on graphene-3D gold nanocomposites. Journal of Electroanalytical Chemistry, 2018, 824, 108-113.	3.8	5
66	Facilely prepared low-density DNA monolayerâ€“based electrochemical biosensor with high detection performance in human serum. Analytical and Bioanalytical Chemistry, 2019, 411, 2101-2109.	3.7	5
67	An electrochemical DNA sensor for detection of cytokeratin 19. Analytical Methods, 2013, 5, 2329.	2.7	4
68	Disclosing targets and pharmacological mechanisms of total bioflavonoids extracted from Selaginella doederleinii against non-small cell lung cancer by combination of network pharmacology and proteomics. Journal of Ethnopharmacology, 2022, 286, 114836.	4.1	4
69	Electrochemical monitoring the effect of drug intervention on PC12Âcell damage model cultured on paper-PLA 3D printed device. Analytica Chimica Acta, 2022, 1194, 339409.	5.4	4
70	Improving quantitative control and homogeneous distribution of samples on paper-based analytical devices via drop-on-demand inkjet printing. Analyst, The, 2019, 144, 4013-4023.	3.5	3
71	Tissue Distribution, Excretion, and Interaction With Human Serum Albumin of Total Bioflavonoid Extract From Selaginella doederleinii. Frontiers in Pharmacology, 2022, 13, 849110.	3.5	2
72	Chemiluminescent properties of a fluorescent SiCÂ·SiO_x composite. RSC Advances, 2016, 6, 86602-86606.	3.6	1