

Lin Liu

List of Publications by Year in descending order

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107
papers

4,219
citations

87723

38
h-index

128067

60
g-index

108
all docs

108
docs citations

108
times ranked

5026
citing authors

#	ARTICLE	IF	CITATIONS
1	Multistimuli-Responsive, Moldable Supramolecular Hydrogels Cross-Linked by Ultrafast Complexation of Metal Ions and Biopolymers. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7944-7948.	7.2	257
2	Highly sensitive and label-free electrochemical detection of microRNAs based on triple signal amplification of multifunctional gold nanoparticles, enzymes and redox-cycling reaction. <i>Biosensors and Bioelectronics</i> , 2014, 53, 399-405.	5.3	139
3	Electrochemical Detection of Amyloid- β Oligomers Based on the Signal Amplification of a Network of Silver Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 19303-19311.	4.0	123
4	Regenerable and Simultaneous Surface Plasmon Resonance Detection of $A\beta(1-40)$ and $A\beta(1-42)$ Peptides in Cerebrospinal Fluids with Signal Amplification by Streptavidin Conjugated to an N-Terminus-Specific Antibody. <i>Analytical Chemistry</i> , 2010, 82, 10151-10157.	3.2	117
5	Visual and fluorescent assays for selective detection of beta-amyloid oligomers based on the inner filter effect of gold nanoparticles on the fluorescence of CdTe quantum dots. <i>Biosensors and Bioelectronics</i> , 2016, 85, 625-632.	5.3	108
6	Direct electrochemistry of horseradish peroxidase on graphene-modified electrode for electrocatalytic reduction towards H ₂ O ₂ . <i>Electrochimica Acta</i> , 2011, 56, 1144-1149.	2.6	95
7	Metal-free selenosulfonylation of alkynes: rapid access to β -(seleno)vinyl sulfones via a cationic-species-induced pathway. <i>Green Chemistry</i> , 2017, 19, 1490-1493.	4.6	93
8	Boronic Acid-Based Approach for Separation and Immobilization of Glycoproteins and Its Application in Sensing. <i>International Journal of Molecular Sciences</i> , 2013, 14, 20890-20912.	1.8	90
9	Sandwich-type electrochemical biosensor for glycoproteins detection based on dual-amplification of boronic acid-gold nanoparticles and dopamine-gold nanoparticles. <i>Biosensors and Bioelectronics</i> , 2013, 43, 155-159.	5.3	88
10	Copper Redox Cycling in the Prion Protein Depends Critically on Binding Mode. <i>Journal of the American Chemical Society</i> , 2011, 133, 12229-12237.	6.6	86
11	Peroxodisulfate-mediated selenoamination of alkenes yielding amidoselenide-containing sulfamides and azoles. <i>Chemical Communications</i> , 2016, 52, 8471-8474.	2.2	85
12	Design of electrochemical biosensors with peptide probes as the receptors of targets and the inducers of gold nanoparticles assembly on electrode surface. <i>Sensors and Actuators B: Chemical</i> , 2017, 239, 834-840.	4.0	85
13	Competitive electrochemical immunoassay for detection of β -amyloid (1-42) and total β -amyloid peptides using p-aminophenol redox cycling. <i>Biosensors and Bioelectronics</i> , 2014, 51, 208-212.	5.3	83
14	Simple, sensitive and selective detection of dopamine using dithiobis(succinimidylpropionate)-modified gold nanoparticles as colorimetric probes. <i>Analyst</i> , 2012, 137, 3794.	1.7	82
15	Label-free and sensitive strategy for microRNAs detection based on the formation of boronate ester bonds and the dual-amplification of gold nanoparticles. <i>Biosensors and Bioelectronics</i> , 2013, 47, 461-466.	5.3	76
16	Electrochemical detection of β -amyloid peptides on electrode covered with N-terminus-specific antibody based on electrocatalytic O ₂ reduction by $A\beta(1-16)$ -heme-modified gold nanoparticles. <i>Biosensors and Bioelectronics</i> , 2013, 49, 231-235.	5.3	72
17	Amplified voltammetric detection of dopamine using ferrocene-capped gold nanoparticle/streptavidin conjugates. <i>Biosensors and Bioelectronics</i> , 2013, 41, 730-735.	5.3	72
18	An electrochemical microRNAs biosensor with the signal amplification of alkaline phosphatase and electrochemical-chemical redox cycling. <i>Analytica Chimica Acta</i> , 2015, 878, 95-101.	2.6	71

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19	Reaction Rates and Mechanism of the Ascorbic Acid Oxidation by Molecular Oxygen Facilitated by Cu(II)-Containing Amyloid- β^2 Complexes and Aggregates. <i>Journal of Physical Chemistry B</i> , 2010, 114, 4896-4903.	1.2	70
20	Aptasensors for the selective detection of alpha-synuclein oligomer by colorimetry, surface plasmon resonance and electrochemical impedance spectroscopy. <i>Sensors and Actuators B: Chemical</i> , 2017, 245, 87-94.	4.0	70
21	Electrostatic self-assembly for preparation of sulfonated graphene/gold nanoparticle hybrids and their application for hydrogen peroxide sensing. <i>Electrochimica Acta</i> , 2012, 85, 628-635.	2.6	67
22	Two-in-one polydopamine nanospheres for fluorescent determination of beta-amyloid oligomers and inhibition of beta-amyloid aggregation. <i>Sensors and Actuators B: Chemical</i> , 2017, 251, 359-365.	4.0	65
23	Nanomaterials-Based Colorimetric Immunoassays. <i>Nanomaterials</i> , 2019, 9, 316.	1.9	64
24	A sensitive and selective nitrite sensor based on a glassy carbon electrode modified with gold nanoparticles and sulfonated graphene. <i>Mikrochimica Acta</i> , 2013, 180, 821-827.	2.5	62
25	A signal-on electrochemical biosensor for evaluation of caspase-3 activity and cell apoptosis by the generation of molecular electrocatalysts on graphene electrode surface for water oxidation. <i>Sensors and Actuators B: Chemical</i> , 2019, 286, 415-420.	4.0	62
26	Peptide aptamer-based biosensor for the detection of human chorionic gonadotropin by converting silver nanoparticles-based colorimetric assay into sensitive electrochemical analysis. <i>Sensors and Actuators B: Chemical</i> , 2017, 243, 784-791.	4.0	59
27	Activity analysis of the carbodiimide-mediated amine coupling reaction on self-assembled monolayers by cyclic voltammetry. <i>Electrochimica Acta</i> , 2013, 89, 616-622.	2.6	58
28	Nanomaterials-Based Optical Techniques for the Detection of Acetylcholinesterase and Pesticides. <i>Sensors</i> , 2015, 15, 499-514.	2.1	58
29	Simple, sensitive and label-free electrochemical detection of microRNAs based on the in situ formation of silver nanoparticles aggregates for signal amplification. <i>Biosensors and Bioelectronics</i> , 2017, 94, 235-242.	5.3	57
30	The electrochemical determination of l-cysteine at a Ce-doped Mg-Al layered double hydroxide modified glassy carbon electrode. <i>Electrochimica Acta</i> , 2012, 70, 193-198.	2.6	54
31	Simple, rapid and label-free colorimetric assay for arsenic based on unmodified gold nanoparticles and a phytochelatin-like peptide. <i>Analytical Methods</i> , 2012, 4, 3937.	1.3	47
32	Electrochemical detection of amyloid- β^2 oligomer with the signal amplification of alkaline phosphatase plus electrochemical chemical redox cycling. <i>Journal of Electroanalytical Chemistry</i> , 2015, 754, 40-45.	1.9	47
33	Hierarchical Ni(OH) ₂ -MnO ₂ hollow spheres as an electrode material for high-performance supercapacitors. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3542-3551.	3.0	45
34	Multistimuli-Responsive, Moldable Supramolecular Hydrogels Cross-Linked by Ultrafast Complexation of Metal Ions and Biopolymers. <i>Angewandte Chemie</i> , 2015, 127, 8055-8059.	1.6	44
35	An ultrasensitive electrochemical miRNAs sensor based on miRNAs-initiated cleavage of DNA by duplex-specific nuclease and signal amplification of enzyme plus redox cycling reaction. <i>Sensors and Actuators B: Chemical</i> , 2015, 208, 137-142.	4.0	44
36	A robust Zn(II)/Na(I)-MOF decorated with [(OAc) ₂ (H ₂ O) ₂] _n ²ⁿ⁺ anions for the luminescence sensing of copper ions based on the inner filter effect. <i>Dalton Transactions</i> , 2018, 47, 7787-7794.	1.6	43

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37	Candle soot coated nickel foam for facile water and oil mixture separation. RSC Advances, 2014, 4, 7132.	1.7	41
38	Direct N-Methylation Reaction Using DMSO as One-Carbon Bridge: Convenient Access to Heterocycle-Containing β -Amino Ketones. Chemistry - an Asian Journal, 2015, 10, 536-539.	1.7	39
39	Protease Biosensor by Conversion of a Homogeneous Assay into a Surface-Tethered Electrochemical Analysis Based on Streptavidin-Biotin Interactions. ACS Sensors, 2021, 6, 1166-1173.	4.0	38
40	A retrievable, water-soluble and biocompatible fluorescent probe for recognition of Cu(II) and sulfide based on a peptide receptor. Talanta, 2015, 143, 307-314.	2.9	37
41	Two sensitive electrochemical strategies for the detection of protein kinase activity based on the 4-mercaptophenylboronic acid-induced in situ assembly of silver nanoparticles. Sensors and Actuators B: Chemical, 2017, 248, 178-186.	4.0	37
42	Glassy carbon electrode modified with 7,7,8,8-tetracyanoquinodimethane and graphene oxide triggered a synergistic effect: Low-potential amperometric detection of reduced glutathione. Biosensors and Bioelectronics, 2017, 96, 1-7.	5.3	37
43	Electrochemical-chemical-chemical redox cycling triggered by thiocholine and hydroquinone with ferrocenecarboxylic acid as the redox mediator. Electrochimica Acta, 2014, 139, 323-330.	2.6	36
44	Ferrocene-phenylalanine hydrogels for immobilization of acetylcholinesterase and detection of chlorpyrifos. Journal of Electroanalytical Chemistry, 2015, 746, 68-74.	1.9	35
45	Preparation of electrochemically reduced graphene oxide-modified electrode and its application for determination of p-aminophenol. Journal of Solid State Electrochemistry, 2012, 16, 2883-2889.	1.2	34
46	A novel Ag-calix[4]arene coordination polymer for the sensitive detection and efficient photodegradation of nitrobenzene in aqueous solution. Dalton Transactions, 2017, 46, 178-185.	1.6	34
47	A colorimetric strategy for assay of protease activity based on gold nanoparticle growth controlled by ascorbic acid and Cu(II)-coordinated peptide. Sensors and Actuators B: Chemical, 2018, 266, 246-254.	4.0	33
48	Oxidative C-S bond cleavage reaction of DMSO for C-N and C-C bond formation: new Mannich-type reaction for β -amino ketones. RSC Advances, 2015, 5, 3094-3097.	1.7	32
49	4-Mercaptophenylboronic acid-induced in situ formation of silver nanoparticle aggregates as labels on an electrode surface. Electrochemistry Communications, 2017, 74, 28-32.	2.3	32
50	Electrochemical sensing devices using ATCUN-Cu(II) complexes as electrocatalysts for water oxidation. Sensors and Actuators B: Chemical, 2018, 269, 189-194.	4.0	32
51	Electrochemical immunosensors with protease as the signal label for the generation of peptide-Cu(II) complexes as the electrocatalysts toward water oxidation. Sensors and Actuators B: Chemical, 2019, 291, 113-119.	4.0	32
52	Comparing the performances of electrochemical sensors using p-aminophenol redox cycling by different reductants on gold electrodes modified with self-assembled monolayers. Electrochimica Acta, 2013, 109, 348-354.	2.6	31
53	An electrochemical aptasensor for sensitive and selective detection of dopamine based on signal amplification of electrochemical-chemical redox cycling. Journal of Electroanalytical Chemistry, 2016, 775, 58-63.	1.9	31
54	A novel oxidation-reduction method for highly selective detection of cysteine over reduced glutathione based on synergistic effect of fully fluorinated cobalt phthalocyanine and ordered mesoporous carbon. Sensors and Actuators B: Chemical, 2019, 288, 180-187.	4.0	31

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55	A graphene oxide-based fluorescent platform for selective detection of amyloid- β oligomers. <i>Analytical Methods</i> , 2015, 7, 8727-8732.	1.3	29
56	Electrochemical glycoprotein aptasensors based on the in-situ aggregation of silver nanoparticles induced by 4-mercaptophenylboronic acid. <i>Mikrochimica Acta</i> , 2017, 184, 4393-4400.	2.5	28
57	Magnetic bead-based electrochemical and colorimetric assays of circulating tumor cells with boronic acid derivatives as the recognition elements and signal probes. <i>Talanta</i> , 2021, 221, 121640.	2.9	28
58	A simple and label-free electrochemical method for detection of beta-site amyloid precursor protein cleaving enzyme and screening of its inhibitor. <i>Sensors and Actuators B: Chemical</i> , 2015, 213, 111-115.	4.0	27
59	Impedimetric biosensor for assay of caspase-3 activity and evaluation of cell apoptosis using self-assembled biotin-phenylalanine network as signal enhancer. <i>Sensors and Actuators B: Chemical</i> , 2020, 320, 128436.	4.0	27
60	Electrochemical determination of glutathione based on an electrodeposited nickel oxide nanoparticles-modified glassy carbon electrode. <i>Analytical Methods</i> , 2013, 5, 1779.	1.3	25
61	Gold nanoparticles-based electrochemical method for the detection of protein kinase with a peptide-like inhibitor as the bioreceptor. <i>International Journal of Nanomedicine</i> , 2017, Volume 12, 1905-1915.	3.3	25
62	Ascorbic acid-triggered electrochemical "chemical" chemical redox cycling for design of enzyme-amplified electrochemical biosensors on self-assembled monolayer-covered gold electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2014, 731, 78-83.	1.9	24
63	Duplex-specific nuclease-based electrochemical biosensor for the detection of microRNAs by conversion of homogeneous assay into surface-tethered electrochemical analysis. <i>Analytica Chimica Acta</i> , 2021, 1149, 338199.	2.6	23
64	A Graphene Oxide-Based Fluorescent Method for the Detection of Human Chorionic Gonadotropin. <i>Sensors</i> , 2016, 16, 1699.	2.1	22
65	Colorimetric immunoassays based on pyrroloquinoline quinone-catalyzed generation of Fe(II)-ferrozine with tris(2-carboxyethyl)phosphine as the reducing reagent. <i>Sensors and Actuators B: Chemical</i> , 2020, 306, 127571.	4.0	22
66	Colorimetric and Electrochemical Methods for the Detection of SARS-CoV-2 Main Protease by Peptide-Triggered Assembly of Gold Nanoparticles. <i>Molecules</i> , 2022, 27, 615.	1.7	22
67	A signal-on electrochemical strategy for protease detection based on the formation of ATCUN-Cu(II). <i>Sensors and Actuators B: Chemical</i> , 2016, 232, 557-563.	4.0	21
68	Potential applications of SPR in early diagnosis and progression of Alzheimer's disease. <i>RSC Advances</i> , 2012, 2, 2200.	1.7	20
69	Anti-adsorption properties of gold nanoparticle/sulfonated graphene composites for simultaneous determination of dihydroxybenzene isomers. <i>Analytical Methods</i> , 2013, 5, 2536.	1.3	19
70	A graphene oxide-based fluorescent scheme for the determination of the activity of the β -site amyloid precursor protein (BACE1) and its inhibitors. <i>Mikrochimica Acta</i> , 2016, 183, 265-271.	2.5	19
71	Direct electrochemistry of glucose oxidase on sulfonated graphene/gold nanoparticle hybrid and its application to glucose biosensing. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 2487-2494.	1.2	18
72	Magnetic bead-based electrochemical and colorimetric methods for the detection of poly(ADP-ribose) polymerase-1 with boronic acid derivatives as the signal probes. <i>Sensors and Actuators B: Chemical</i> , 2021, 327, 128913.	4.0	18

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73	Electrochemical detection of telomerase in cancer cells based on the in-situ formation of streptavidin-biotin-DNA-biotin networks for signal amplification. <i>Sensors and Actuators B: Chemical</i> , 2021, 334, 129659.	4.0	18
74	Nanomaterials-Based Fluorimetric Methods for MicroRNAs Detection. <i>Materials</i> , 2015, 8, 2809-2829.	1.3	17
75	Electrochemical biosensors by in situ dissolution of self-assembled nanolabels into small monomers on electrode surface. <i>Sensors and Actuators B: Chemical</i> , 2020, 325, 128777.	4.0	17
76	Six-in-one peptide functionalized upconversion@polydopamine nanoparticle-based ratiometric fluorescence sensing platform for real-time evaluating anticancer efficacy through monitoring caspase-3 activity. <i>Sensors and Actuators B: Chemical</i> , 2021, 333, 129554.	4.0	17
77	Nanomaterials for Modulating the Aggregation of β -Amyloid Peptides. <i>Molecules</i> , 2021, 26, 4301.	1.7	17
78	A Colorimetric Enzyme-Linked Immunosorbent Assay with CuO Nanoparticles as Signal Labels Based on the Growth of Gold Nanoparticles In Situ. <i>Nanomaterials</i> , 2019, 9, 4.	1.9	15
79	Self-assembled biotin-phenylalanine nanoparticles for the signal amplification of surface plasmon resonance biosensors. <i>Mikrochimica Acta</i> , 2020, 187, 473.	2.5	15
80	A colorimetric method for determination of the prostate specific antigen based on enzyme-free cascaded signal amplification via peptide-copper(II) nanoparticles. <i>Mikrochimica Acta</i> , 2020, 187, 116.	2.5	14
81	A Graphene Oxide-Based Fluorescent Platform for Probing of Phosphatase Activity. <i>Nanomaterials</i> , 2016, 6, 20.	1.9	13
82	A Green-emitting Fluorescent Probe Based on a Benzothiazole Derivative for Imaging Biothiols in Living Cells. <i>Molecules</i> , 2019, 24, 411.	1.7	13
83	Surface plasmon resonance biosensor for the detection of miRNAs by combining the advantages of homogeneous reaction and heterogeneous detection. <i>Talanta</i> , 2021, 234, 122622.	2.9	13
84	Metallothioneins and Synthetic Metal Chelators as Potential Therapeutic Agents for Removal of Aberrant Metal Ions from Metal-Aβ Species. <i>Mini-Reviews in Medicinal Chemistry</i> , 2014, 14, 271-281.	1.1	13
85	Oxidase-mimicking peptide-copper complexes and their applications in sandwich affinity biosensors. <i>Analytica Chimica Acta</i> , 2022, 1214, 339965.	2.6	13
86	Electrochemical detection of kinase by converting homogeneous analysis into heterogeneous assay through avidin-biotin interaction. <i>Talanta</i> , 2021, 234, 122649.	2.9	12
87	Electrochemical Aptasensor for Determination of Mucin 1 by P-Aminophenol Redox Cycling. <i>Analytical Letters</i> , 2014, 47, 2431-2442.	1.0	11
88	Single-labeled peptide substrates for detection of protease activity based on the inherent fluorescence quenching ability of Cu ²⁺ . <i>Analytical Methods</i> , 2019, 11, 1248-1253.	1.3	11
89	Heterogeneous sensing of post-translational modification enzymes by integrating the advantage of homogeneous analysis. <i>Talanta</i> , 2022, 237, 122949.	2.9	11
90	Synthesis of Water-Dispersed Ferrocene/Phenylboronic Acid-Modified Bifunctional Gold Nanoparticles and the Application in Biosensing. <i>Materials</i> , 2014, 7, 5554-5564.	1.3	9

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91	Amplified voltammetric detection of glycoproteins using 4-mercaptophenylboronic acid/biotin-modified multifunctional gold nanoparticles as labels. <i>International Journal of Nanomedicine</i> , 2014, 9, 2619.	3.3	8
92	Competitive impedimetric aptasensors for detection of small molecule pollutants by the signal amplification of self-assembled biotin-phenylalanine nanoparticle networks. <i>Electrochemistry Communications</i> , 2020, 118, 106791.	2.3	8
93	In Situ Assembly of Nanomaterials and Molecules for the Signal Enhancement of Electrochemical Biosensors. <i>Nanomaterials</i> , 2021, 11, 3307.	1.9	8
94	A novel nanomachined flow channel glucose sensor based on an alumina membrane. <i>Analytical Methods</i> , 2013, 5, 7022.	1.3	7
95	<i>In situ</i> preparation of Au or Ag nanoparticles in the presence of hyperbranched poly(amidoamine)s with hydrophobic end-groups as nanoreactors and reductants. <i>Polymer Composites</i> , 2013, 34, 526-530.	2.3	7
96	A Benzothiazole-based Ratiometric Fluorescent Probe for Benzoyl Peroxide and Its Applications for Living Cells Imaging. <i>Analytical Sciences</i> , 2019, 35, 91-97.	0.8	7
97	Electrochemical Detection of Hydrogen Peroxide by Inhibiting the p-Benzenediboronic Acid-Triggered Assembly of Citrate-Capped Au/Ag Nanoparticles on Electrode Surface. <i>Materials</i> , 2017, 10, 40.	1.3	6
98	A Turn-On Fluorescent Probe for Sensitive Detection of Cysteine in a Fully Aqueous Environment and in Living Cells. <i>Journal of Analytical Methods in Chemistry</i> , 2018, 2018, 1-8.	0.7	6
99	Impedimetric Detection of MicroRNAs by the Signal Amplification of Streptavidin Induced In Situ Formation of Biotin Phenylalanine Nanoparticle Networks. <i>Journal of the Electrochemical Society</i> , 2020, 167, 117505.	1.3	6
100	A copper complex formed with neurokinin B: binding stoichiometry, redox properties, self-assembly and cytotoxicity. <i>Metallomics</i> , 2020, 12, 1802-1810.	1.0	5
101	Surface-tethered electrochemical biosensor for telomerase detection by integration of homogeneous extension and hybridization reactions. <i>Talanta</i> , 2023, 253, 123597.	2.9	5
102	Voltammetric Investigation of Zinc Release from Metallothioneins Modulated by the Glutathione Redox Couple and Separated with a Porous Membrane. <i>Electroanalysis</i> , 2008, 20, 2253-2258.	1.5	4
103	Electrochemical Immunosensors with PQQ-Decorated Carbon Nanotubes as Signal Labels for Electro-catalytic Oxidation of Tris(2-carboxyethyl)phosphine. <i>Nanomaterials</i> , 2021, 11, 1757.	1.9	4
104	Bismuth-Coated Reticulated Vitreous Carbon and Bismuth-Coated Glassy Carbon Electrodes for On-Line Coupling of ASV with ICP-MS. <i>Electroanalysis</i> , 2010, 22, 1476-1482.	1.5	3
105	Accurate determination of the thiol-to-metal ratio in metalloproteins by on-line combination of UV-vis spectrophotometry with electrochemistry. <i>RSC Advances</i> , 2012, 2, 8729.	1.7	2
106	Fluorescent Immunoassay with a Copper Polymer as the Signal Label for Catalytic Oxidation of O-Phenylenediamine. <i>Molecules</i> , 2022, 27, 3675.	1.7	2
107	Metal Release from and Sequestration by Metallothioneins Monitored by Electrochemistry and SPR. <i>Current Pharmaceutical Biotechnology</i> , 2011, 12, 847-852.	0.9	1