Shu-Feng Liu

List of Publications by Year in descending order

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113	4,928	39	65
papers	citations	h-index	g-index
113	113	113	5381
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Integrated biogeography of planktonic and sedimentary bacterial communities in the Yangtze River. Microbiome, 2018, 6, 16.	4.9	208
2	Highly sensitive and selective turn-on fluorescent chemosensor for Pb2+ and Hg2+ based on a rhodamine–phenylurea conjugate. Chemical Communications, 2010, 46, 3765.	2.2	185
3	Label-Free and Ultrasensitive Electrochemical Detection of Nucleic Acids Based on Autocatalytic and Exonuclease III-Assisted Target Recycling Strategy. Analytical Chemistry, 2013, 85, 2282-2288.	3.2	160
4	Readily Reusable Electrochemical DNA Hybridization Biosensor Based on the Interaction of DNA with Single-Walled Carbon Nanotubes. Analytical Chemistry, 2009, 81, 6006-6012.	3.2	159
5	Exonuclease III-Aided Autocatalytic DNA Biosensing Platform for Immobilization-Free and Ultrasensitive Electrochemical Detection of Nucleic Acid and Protein. Analytical Chemistry, 2014, 86, 4008-4015.	3.2	155
6	Determination of Physiological Thiols by Electrochemical Detection with Piazselenole and Its Application in Rat Breast Cancer Cells 4T-1. Journal of the American Chemical Society, 2008, 130, 10846-10847.	6.6	134
7	Enhancement of DNA immobilization and hybridization on gold electrode modified by nanogold aggregates. Biosensors and Bioelectronics, 2005, 21, 789-795.	5.3	125
8	Development of an electrochemical DNA biosensor with a high sensitivity of fM by dendritic gold nanostructure modified electrode. Biosensors and Bioelectronics, 2011, 26, 2619-2625.	5.3	121
9	Synthesis of self-assembled phytic acid-MXene nanocomposites via a facile hydrothermal approach with elevated dye adsorption capacities. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 589, 124468.	2.3	118
10	Simultaneous nitrification, denitrification and phosphorus removal in a sequencing batch reactor (SBR) under low temperature. Chemosphere, 2019, 229, 132-141.	4.2	116
11	Homogeneous electrochemical aptamer-based ATP assay with signal amplification by exonuclease III assisted target recycling. Chemical Communications, 2013, 49, 2335.	2.2	113
12	Electrochemical DNA biosensor for the detection of DNA hybridization with the amplification of Au nanoparticles and CdS nanoparticles. Bioelectrochemistry, 2009, 75, 37-43.	2.4	109
13	Comammox <i>Nitrospira</i> within the Yangtze River continuum: community, biogeography, and ecological drivers. ISME Journal, 2020, 14, 2488-2504.	4.4	106
14	Amplified Detection of T4 Polynucleotide Kinase Activity by the Coupled λ Exonuclease Cleavage Reaction and Catalytic Assembly of Bimolecular Beacons. Analytical Chemistry, 2014, 86, 884-890.	3.2	105
15	Facile Synthesis of Ag/Pd Nanoparticle - Loaded Poly(ethylene imine) Composite Hydrogels with Highly Efficient Catalytic Reduction of 4-Nitrophenol. ACS Omega, 2020, 5, 3725-3733.	1.6	103
16	Label-free colorimetric assay for base excision repair enzyme activity based on nicking enzyme assisted signal amplification. Biosensors and Bioelectronics, 2014, 54, 598-602.	5.3	92
17	Electrochemical DNA biosensor fabrication with hollow gold nanospheres modified electrode and its enhancement in DNA immobilization and hybridization. Biosensors and Bioelectronics, 2010, 25, 1640-1645.	5.3	90
18	Fabrication of CS/GA/RGO/Pd composite hydrogels for highly efficient catalytic reduction of organic pollutants. RSC Advances, 2020, 10, 15091-15097.	1.7	90

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19	Simultaneous electrochemical determination of dopamine and ascorbic acid using AuNPs@polyaniline core–shell nanocomposites modified electrode. Talanta, 2012, 89, 136-141.	2.9	86
20	Carbon-nanotube-modified glassy carbon electrode for simultaneous determination of dopamine, ascorbic acid and uric acid: The effect of functional groups. Sensors and Actuators B: Chemical, 2012, 171-172, 1132-1140.	4.0	85
21	Enzyme-free and ultrasensitive electrochemical detection of nucleic acids by target catalyzed hairpin assembly followed with hybridization chain reaction. Biosensors and Bioelectronics, 2013, 49, 472-477.	5. 3	82
22	Electrochemical behavior and determination of rutin on a pyridinium-based ionic liquid modified carbon paste electrode. Journal of Pharmaceutical and Biomedical Analysis, 2008, 48, 1326-1331.	1.4	75
23	Direct electrochemistry of single-stranded DNA on an ionic liquid modified carbon paste electrode. Electrochemistry Communications, 2008, 10, 298-301.	2.3	70
24	A cascade autocatalytic strand displacement amplification and hybridization chain reaction event for label-free and ultrasensitive electrochemical nucleic acid biosensing. Biosensors and Bioelectronics, 2018, 113, 1-8.	5. 3	70
25	Highly sensitive fluorescence detection of target DNA by coupling exonuclease-assisted cascade target recycling and DNAzyme amplification. Biosensors and Bioelectronics, 2015, 63, 99-104.	5.3	68
26	Electrochemistry of hemoglobin entrapped in a Nafion/nano-ZnO film on carbon ionic liquid electrode. Bioelectrochemistry, 2009, 74, 295-300.	2.4	67
27	Transcriptional activity and diversity of comammox bacteria as a previously overlooked ammonia oxidizing prokaryote in full-scale wastewater treatment plants. Science of the Total Environment, 2019, 656, 717-722.	3.9	66
28	A hierarchical Co–Fe LDH rope-like nanostructure: facile preparation from hexagonal lyotropic liquid crystals and intrinsic oxidase-like catalytic activity. Journal of Materials Chemistry B, 2013, 1, 1263.	2.9	65
29	Programmable Mg ²⁺ -dependent DNAzyme switch by the catalytic hairpin DNA assembly for dual-signal amplification toward homogeneous analysis of protein and DNA. Chemical Communications, 2015, 51, 7364-7367.	2.2	64
30	Electrochemical synthesis of gold nanostructure modified electrode and its development in electrochemical DNA biosensor. Biosensors and Bioelectronics, 2011, 30, 151-157.	5 . 3	58
31	Development of an electrochemical ascorbic acid sensor based on the incorporation of a ferricyanide mediator with a polyelectrolyte–calcium carbonate microsphere. Electrochimica Acta, 2010, 55, 838-843.	2.6	54
32	Ultrasensitive electrochemical DNAzyme sensor for lead ion based on cleavage-induced template-independent polymerization and alkaline phosphatase amplification. Biosensors and Bioelectronics, 2016, 83, 33-38.	5 . 3	54
33	The influence of gold nanoparticle modified electrode on the structure of mercaptopropionic acid self-assembly monolayer. Electrochimica Acta, 2005, 51, 427-431.	2.6	53
34	Enzyme-free and label-free ultrasensitive electrochemical detection of DNA and adenosine triphosphate by dendritic DNA concatamer-based signal amplification. Biosensors and Bioelectronics, 2014, 56, 12-18.	5. 3	47
35	Self-assembled functional components-doped conductive polypyrrole composite hydrogels with enhanced electrochemical performances. RSC Advances, 2020, 10, 10546-10551.	1.7	45
36	Development of electrochemical DNA biosensor based on gold nanoparticle modified electrode by electroless deposition. Bioelectrochemistry, 2010, 79, 37-42.	2.4	44

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37	Potential application of aerobic denitrifying bacterium Pseudomonas aeruginosa PCN-2 in nitrogen oxides (NOx) removal from flue gas. Journal of Hazardous Materials, 2016, 318, 571-578.	6.5	44
38	Self-assembled copper/cobalt-containing polypyrrole hydrogels for highly efficient ORR electrocatalysts. Journal of Molecular Liquids, 2020, 298, 112010.	2.3	44
39	Facile Synthesis of Self-Assembled NiFe Layered Double Hydroxide-Based Azobenzene Composite Films with Photoisomerization and Chemical Gas Sensor Performances. ACS Omega, 2020, 5, 3689-3698.	1.6	44
40	Exonuclease III-Powered Self-Propelled DNA Machine for Distinctly Amplified Detection of Nucleic Acid and Protein. Analytical Chemistry, 2020, 92, 9764-9771.	3.2	39
41	Effects of ZnO nanoparticles on aerobic denitrification by strain Pseudomonas stutzeri PCN-1. Bioresource Technology, 2017, 239, 21-27.	4.8	38
42	Highly Sensitive and Selective Uric Acid Biosensor Based on Direct Electron Transfer of Hemoglobin-encapsulated Chitosan-modified Glassy Carbon Electrode. Analytical Sciences, 2009, 25, 1013-1017.	0.8	37
43	Sensitive colorimetric visualization of dihydronicotinamide adenine dinucleotide based on anti-aggregation of gold nanoparticles via boronic acid–diol binding. Biosensors and Bioelectronics, 2012, 35, 443-446.	5.3	37
44	Universal Dynamic DNA Assembly-Programmed Surface Hybridization Effect for Single-Step, Reusable, and Amplified Electrochemical Nucleic Acid Biosensing. Analytical Chemistry, 2017, 89, 3108-3115.	3.2	37
45	Facile preparation of self-assembled chitosan-based composite hydrogels with enhanced adsorption performances. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 598, 124860.	2.3	36
46	A novel electrochemical biosensor for label-free detection of uracil DNA glycosylase activity based on enzyme-catalyzed removal of uracil bases inducing strand release. Electrochimica Acta, 2013, 113, 514-518.	2.6	32
47	Highly sensitive detection of T4 polynucleotide kinase activity by coupling split DNAzyme and ligation-triggered DNAzyme cascade amplification. Biosensors and Bioelectronics, 2014, 55, 225-230.	5.3	32
48	Proximity recognition and polymerase-powered DNA walker for one-step and amplified electrochemical protein analysis. Biosensors and Bioelectronics, 2019, 128, 104-112.	5.3	32
49	Genomic insights into metabolic potentials of two simultaneous aerobic denitrification and phosphorus removal bacteria, Achromobacter sp. GAD3 and Agrobacterium sp. LAD9. FEMS Microbiology Ecology, 2018, 94, .	1.3	31
50	Nickel/Cobalt-Containing polypyrrole hydrogel-derived approach for efficient ORR electrocatalyst. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 586, 124221.	2.3	31
51	Label-free, isothermal and ultrasensitive electrochemical detection of DNA and DNA 3′-phosphatase using a cascade enzymatic cleavage strategy. Chemical Communications, 2015, 51, 176-179.	2.2	30
52	Etched PtCu nanowires as a peroxidase mimic for colorimetric determination of hydrogen peroxide. Mikrochimica Acta, 2019, 186, 186.	2.5	28
53	Comparison of Ïfâ€fÏ€â€Hole Tetrel Bonds between TH ₃ F/F ₂ TO and H ₂ CX (X=O, S, Se). ChemPhysChem, 2019, 20, 627-635.	1.0	28
54	Langmuir-Blodgett films of two chiral perylene bisimide-based molecules: Aggregation and supramolecular chirality. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 591, 124563.	2.3	28

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55	Carbene triel bonds between TrR 3 (Tr = B, Al) and Nâ€heterocyclic carbenes. International Journal of Quantum Chemistry, 2019, 119, e25867.	1.0	27
56	Response of microbial nitrogen transformation processes to antibiotic stress in a drinking water reservoir. Science of the Total Environment, 2021, 797, 149119.	3.9	27
57	Tetrel Bond between 6-OTX3-Fulvene and NH3: Substituents and Aromaticity. Molecules, 2019, 24, 10.	1.7	26
58	Influence of gold nanoparticle modified electrode on the mediation reduction of ferricyanide by methylene blue. Journal of Electroanalytical Chemistry, 2007, 602, 55-60.	1.9	25
59	A label-free and signal-on electrochemiluminescence strategy for sensitive amyloid-beta assay. Biosensors and Bioelectronics, 2019, 141, 111438.	5. 3	25
60	Synergistic and diminutive effects between triel bond and regium bond: Attractive interactions between $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	1.7	25
61	A label-free and colorimetric turn-on assay for coralyne based on coralyne-induced formation of peroxidase-mimicking split DNAzyme. Analyst, The, 2013, 138, 4728.	1.7	24
62	Amplified detection of T4 polynucleotide kinase activity based on a î»-exonuclease cleavage-induced DNAzyme releasing strategy. Sensors and Actuators B: Chemical, 2014, 192, 157-163.	4.0	24
63	Facile preparation of black phosphorus-based rGO-BP-Pd composite hydrogels with enhanced catalytic reduction of 4-nitrophenol performances for wastewater treatment. Journal of Molecular Liquids, 2020, 310, 113083.	2.3	22
64	Electrochemical biosensor based on the interaction between copper(II) complex with 4,5-diazafluorene-9-one and bromine ligands and deoxyribonucleic acid. Electrochimica Acta, 2008, 53, 2870-2876.	2.6	21
65	Rapid and cost-effective detection of sequence-specific DNA by monitoring the electrochemical response of $2\hat{a} \in \mathbb{Z}^2$ -deoxyguanosine $5\hat{a} \in \mathbb{Z}^2$ -triphosphate in a PCR sample. Analyst, The, 2008, 133, 1729.	1.7	20
66	Triggered activity of a nicking endonuclease for mercuric(ii) ion-mediated duplex-like DNA cleavage. Chemical Communications, 2011, 47, 6347.	2.2	20
67	Reduced Graphene Oxide-Zirconium Dioxide–Thionine Nanocomposite Integrating Recognition, Amplification, and Signaling for an Electrochemical Assay of Protein Kinase Activity and Inhibitor Screening. ACS Applied Bio Materials, 2018, 1, 1557-1565.	2.3	20
68	Fabrication of Hydrogels via Host–Guest Polymers as Highly Efficient Organic Dye Adsorbents for Wastewater Treatment. ACS Omega, 2020, 5, 5470-5479.	1.6	20
69	Minimization of N2O Emission through Intermittent Aeration in a Sequencing Batch Reactor (SBR): Main Behavior and Mechanism. Water (Switzerland), 2021, 13, 210.	1.2	20
70	Nucleic acid biosensor for DNA hybridization detection using rutin–Cu as an electrochemical indicator. Electrochimica Acta, 2009, 54, 1564-1569.	2.6	19
71	Amplified detection of DNA by an analyte-induced Y-shaped junction probe assembly followed with a nicking endonuclease-mediated autocatalytic recycling process. Chemical Communications, 2013, 49, 7947.	2.2	19
72	DNAzyme-guided polymerization of aniline for ultrasensitive electrochemical detection of nucleic acid with bio-bar codes-initiated rolling circle amplification. Sensors and Actuators B: Chemical, 2014, 190, 384-388.	4.0	19

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73	Ultrasensitive electrochemical detection of nucleic acid by coupling an autonomous cascade target replication and enzyme/gold nanoparticle-based post-amplification. Biosensors and Bioelectronics, 2016, 80, 208-214.	5.3	19
74	Comparison of Ïfâ€hole and Ï€â€hole tetrel bonds in complexes of borazine with TH ₃ F and F ₂ TO/H ₂ TO (T = C, Si, Ge). International Journal of Quantum Chemistry, 2019, 119, e25910.	1.0	19
75	In-situ expressions of comammox Nitrospira along the Yangtze River. Water Research, 2021, 200, 117241.	5.3	18
76	Surface modification of platinum quartz crystal microbalance by controlled electroless deposition of gold nanoparticles and its enhancing effect on the HS-DNA immobilization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 257-258, 57-62.	2.3	17
77	Determination of surfactant molecular volume by atomic force microscopy. Colloid Journal, 2006, 68, 784-787.	0.5	17
78	g-C3N4-heme bound to amyloid \hat{l}^2 peptides: In-situ generation of the secondary co-reactant for dual-enhanced electrochemiluminescence assay of amyloid \hat{l}^2 detection. Electrochimica Acta, 2020, 361, 137096.	2.6	17
79	Ultrasensitive Electrochemical DNA Biosensor Fabrication by Coupling an Integral Multifunctional Zirconia-Reduced Graphene Oxide-Thionine Nanocomposite and Exonuclease I-Assisted Cleavage. Frontiers in Chemistry, 2020, 8, 521.	1.8	17
80	Development of an electrochemical DNA biosensor with the DNA immobilization based on in situ generation of dithiocarbamate ligands. Bioelectrochemistry, 2012, 88, 30-35.	2.4	16
81	Responsive hairpin DNA aptamer switch to program the strand displacement reaction for the enhanced electrochemical assay of ATP. Analyst, The, 2015, 140, 5877-5880.	1.7	15
82	Affinity Binding-Induced Hg2+ Release and Quantum Dot Doping for General, Label-Free, and Homogenous Fluorescence Protein Assay. ACS Sensors, 2018, 3, 1401-1408.	4.0	15
83	Responsive methylene blue release from lanthanide coordination polymer for label-free, immobilization-free and sensitive electrochemical alkaline phosphatase activity assay. Analyst, The, 2019, 144, 5971-5979.	1.7	15
84	Copper atalyzed Homocoupling of Alkyl Halides in the Presence of Samarium. Asian Journal of Organic Chemistry, 2019, 8, 858-862.	1.3	15
85	Black phosphorous quantum dots for signal-on cathodic photoelectrochemical aptasensor monoitoring amyloid \hat{l}^2 peptide. Analytica Chimica Acta, 2022, 1189, 339200.	2.6	15
86	Different spatiotemporal dynamics, ecological drivers and assembly processes of bacterial, archaeal and fungal communities in brackish-saline groundwater. Water Research, 2022, 214, 118193.	5.3	15
87	DNA Electrochemical Sensor Based on PbSe Nanoparticle for the Sensitive Detection of CaMV35S Gene Sequence. Chinese Journal of Analytical Chemistry, 2008, 36, 874-878.	0.9	13
88	Voltammetric study of fullerene C60 and fullerene C60 nanotubes with sandwich method. Synthetic Metals, 2009, 159, 419-423.	2.1	13
89	Label-free electrochemical nucleic acid biosensing by tandem polymerization and cleavage-mediated cascade target recycling and DNAzyme amplification. Biosensors and Bioelectronics, 2016, 77, 818-823.	5. 3	13
90	Label-free, non-enzymatic and ultrasensitive electrochemical nucleic acid biosensing by tandem DNA-fueled target recycling and hybridization chain reaction. Sensors and Actuators B: Chemical, 2017, 244, 450-457.	4.0	13

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91	Facile synthesis of cobalt phosphide nanoparticles as highly active electrocatalysts for hydrogen evolution reaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 600, 124925.	2.3	13
92	Catalytic Hairpin Assemblyâ€Programmed DNA Threeâ€Way Junction for Enzymeâ€Free and Amplified Electrochemical Detection of Target DNA. Chemistry - an Asian Journal, 2015, 10, 1903-1908.	1.7	12
93	Allosteric kissing complex-based electrochemical biosensor for sensitive, regenerative and versatile detection of proteins. Biosensors and Bioelectronics, 2018, 105, 42-48.	5.3	12
94	Immuno-DNA binding directed template-free DNA extension and enzyme catalysis for sensitive electrochemical DNA methyltransferase activity assay and inhibitor screening. Analyst, The, 2020, 145, 3064-3072.	1.7	11
95	A programmable Y-shaped junction scaffold-mediated modular and cascade amplification strategy for the one-step, isothermal and ultrasensitive detection of target DNA. Chemical Communications, 2015, 51, 17756-17759.	2.2	10
96	Fuel strand-powered self-propelled electrochemical DNA machine for enzyme-free and distinctly amplified detection of nucleic acid with tunable performance. Biosensors and Bioelectronics, 2021, 171, 112706.	5.3	10
97	Electrochemical DNA biosensor for the detection of interaction between di[azino-di(5,6-azafluorene)-κ2-NN′]dichlormanganous and DNA. Sensors and Actuators B: Chemical, 2008, 133, 582-587.	4.0	9
98	Exonuclease-Catalyzed Methylene Blue Releasing and Enriching onto a Dodecanethiol Monolayer for an Immobilization-Free and Highly Sensitive Electrochemical Nucleic Acid Biosensor. Langmuir, 2017, 33, 5099-5107.	1.6	9
99	An autocatalytic DNA machine with autonomous target recycling and cascade circular exponential amplification for one-pot, isothermal and ultrasensitive nucleic acid detection. Chemical Communications, 2016, 52, 11108-11111.	2.2	8
100	A catalytic DNA circuit-programmed and enzyme-powered autonomous DNA machine for nucleic acid detection. Analyst, The, 2019, 144, 5923-5927.	1.7	8
101	Responsive surface bioaffinity binding to construct flexible and sensitive electrochemical aptasensors. Analyst, The, 2019, 144, 2130-2137.	1.7	8
102	Atomic force microscopy visualization of the DNA network and molecular morphological transition on a mica surface. Thin Solid Films, 2008, 516, 7555-7559.	0.8	7
103	Response of an aerobic denitrifier to titanium dioxide nanoparticles exposure. Environmental Technology (United Kingdom), 2020, 41, 1446-1454.	1.2	7
104	An Integral Recognition and Signaling for Electrochemical Assay of Protein Kinase Activity and Inhibitor by Reduced Graphene Oxide-Polydopamine-Silver Nanoparticle-Ti4+ Nanocomposite. Frontiers in Bioengineering and Biotechnology, 2020, 8, 603083.	2.0	7
105	Fabrication, Characterization, and Application of †Sandwich†Type†Electrode Based on Single†Walled Carbon Nanotubes and Room Temperature Ionic Liquid. Electroanalysis, 2008, 20, 1909-1916.	1.5	6
106	Electrochemical sensing platform based on covalent immobilization of thionine onto gold electrode surface via diazotization-coupling reaction. Talanta, 2010, 83, 205-209.	2.9	6
107	Systematic study of the substitution effect on the tetrel bond between 1,4-diazabicyclo[2.2.2]octane and TH ₃ X. RSC Advances, 2019, 9, 18459-18466.	1.7	6
108	Simultaneous nitrogen and carbon removal in a single biological aerated filter by the bioaugmentation with heterotrophic-aerobic nitrogen removal bacteria. Environmental Technology (United Kingdom), 2021, 42, 3716-3724.	1.2	6

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109	Assembled molecular beacon-based self-propelled DNA machine for enzyme-free and distinctly amplified nucleic acid detection. Sensors and Actuators B: Chemical, 2021, 339, 129877.	4.0	6
110	Quantum Dot Doping-Induced Photoluminescence for Facile, Label-Free, and Sensitive Pyrophosphatase Activity Assay and Inhibitor Screening. Nanomaterials, 2019, 9, 111.	1.9	5
111	A Modular Nanoswitch for Mixâ€nndâ€Detect Protein Assay Based on Bindingâ€Induced Cascade Dissociation of Kissing Complex. ChemBioChem, 2018, 19, 716-722.	1.3	3
112	Electrochemical DNA Scaffold-Based Sensing Platform for Multiple Modes of Protein Assay and a Keypad Lock System. Analytical Chemistry, 2022, 94, 8317-8326.	3.2	3
113	Morphology of surfactant–polymer complexes on mica substrate visualized by atomic force microscopy. Canadian Journal of Chemistry, 2006, 84, 1557-1562.	0.6	1