Jinhua Chen

List of Publications by Year
in descending order

109 papers	5,287 citations	94433 37 h-index	91884 69 g-index
110 all docs	110 docs citations	110 times ranked	6358 citing authors

#	Article	IF	Citations
1	Photoelectrochemical and quartz crystal microbalance dual-mode assay of protein tyrosine phosphatase 1B activity based on hollow CuO and TiO2 polyhedra. Sensors and Actuators B: Chemical, 2022, 353, 131179.	7.8	9
2	A label-free photoelectrochemical biosensor with ultra-low-background noise for lead ion assay based on the Cu2O-CuO-TiO2 heterojunction. Analytica Chimica Acta, 2022, 1195, 339456.	5.4	17
3	Highly Selective Photoelectrochemical Assay of Arsenate Based on Magnetic Co₃O₄â€“Fe₃O₄ Cubes and the Negative-Background Signal Strategy. Analytical Chemistry, 2022, 94, 1874-1881.	6.5	23
4	One-step integration of amorphous RuB_x and crystalline Ru nanoparticles into B/N-doped porous carbon polyhedra for robust electrocatalytic activity towards the HER in both acidic and basic media. Journal of Materials Chemistry A, 2022, 10, 4181-4190.	10.3	16
5	Zincâ€“Air Battery-Assisted Self-Powered PEC Sensors for Sensitive Assay of PTP1B Activity Based on Perovskite Quantum Dots Encapsulated in Vinyl-Functionalized Covalent Organic Frameworks. Analytical Chemistry, 2022, 94, 9844-9850.	6.5	27
6	A label-free photoelectrochemical biosensor with near-zero-background noise for protein kinase A activity assay based on porous ZrO2/CdS octahedra. Sensors and Actuators B: Chemical, 2021, 328, 129096.	7.8	29
7	Active site and intermediate modulation of 3D CoSe2 nanosheet array on Ni foam by Mo doping for high-efficiency overall water splitting in alkaline media. Chemical Engineering Journal, 2021, 417, 128055.	12.7	60
8	Peptide Cleavage-Mediated and Environmentally Friendly Photocurrent Polarity Switching System for Prostate-Specific Antigen Assay. Analytical Chemistry, 2021, 93, 1076-1083.	6.5	39
9	One-step hydrothermal synthesized 3D Pâ€“MoO3/FeCo LDH heterostructure electrocatalysts on Ni foam for high-efficiency oxygen evolution electrocatalysis. International Journal of Hydrogen Energy, 2021, 46, 12992-13000.	7.1	24
10	Sensitive Dual-Mode Biosensors for CYFRA21-1 Assay Based on the Dual-Signaling Electrochemical Ratiometric Strategy and â€œOnâ€“Offâ€“Onâ€•PEC Method. Analytical Chemistry, 2021, 93, 6801-6807.	6.5	74
11	A photocurrent-polarity-switching biosensor for highly selective assay of mucin 1 based on target-induced hemin transfer from ZrO2 hollow spheres to G-quadruplex nanowires. Biosensors and Bioelectronics, 2021, 192, 113547.	10.1	17
12	Highly Selective and Sensitive microRNA-210 Assay Based on Dual-Signaling Electrochemical and Photocurrent-Polarity-Switching Strategies. Analytical Chemistry, 2021, 93, 14272-14279.	6.5	39
13	A novel signal-off photoelectrochemical biosensor for M.SssI MTase activity assay based on GQDs@ZIF-8 polyhedra as signal quencher. Biosensors and Bioelectronics, 2020, 150, 111861.	10.1	53
14	Highly Selective and Sensitive Photoelectrochemical Sensing Platform for VEGF165 Assay Based on the Switching of Photocurrent Polarity of CdS QDs by Porous Cu₂O-CuO Flower. Analytical Chemistry, 2020, 92, 1189-1196.	6.5	99
15	CuOâ€“ZnO heterojunction derived from Cu2+-doped ZIF-8: A new photoelectric material for ultrasensitive PEC immunoassay of CA125 with near-zero background noise. Analytica Chimica Acta, 2020, 1099, 75-84.	5.4	35
16	DNA-linked CdSe QDs/AGQDs â€œZ-schemeâ€•system: Ultrasensitive and highly selective photoelectrochemical sensing platform with negative background signal. Sensors and Actuators B: Chemical, 2020, 305, 127480.	7.8	22
17	Sensitive photoelectrochemical assay of Pb²⁺ based on DNAzyme-induced disassembly of the â€œZ-schemeâ€•TiO₂/Au/CdS QDs system. Chemical Communications, 2020, 56, 8261-8264.	4.1	22
18	3D amorphous NiFe LDH nanosheets electrodeposited on in situ grown NiCoP@NC on nickel foam for remarkably enhanced OER electrocatalytic performance. Dalton Transactions, 2020, 49, 4896-4903.	3.3	32

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19	Spontaneous deposition of Ir nanoparticles on 2D siloxene as a high-performance HER electrocatalyst with ultra-low Ir loading. Chemical Communications, 2020, 56, 4824-4827.	4.1	39
20	Label-free and near-zero-background-noise photoelectrochemical assay of methyltransferase activity based on a Bi₂S₃/Ti₃C₂ Schottky junction. Chemical Communications, 2020, 56, 5799-5802.	4.1	40
21	Target-induced photocurrent-polarity switching: a highly selective and sensitive photoelectrochemical sensing platform. Chemical Communications, 2019, 55, 8939-8942.	4.1	16
22	Encapsulated Rh nanoparticles in N-doped porous carbon polyhedrons derived from ZIF-8 for efficient HER and ORR electrocatalysis. Electrochimica Acta, 2019, 326, 134982.	5.2	38
23	A sensitive photoelectrochemical assay of miRNA-155 based on a CdSe QDs//NPC-ZnO polyhedra photocurrent-direction switching system and target-triggered strand displacement amplification strategy. Chemical Communications, 2019, 55, 2182-2185.	4.1	43
24	A sensitive photoelectrochemical methyltransferase activity assay based on a novel â€œZ-schemeâ€•CdSe QD/afGQD heterojunction and multiple signal amplification strategies. Chemical Communications, 2019, 55, 8166-8169.	4.1	12
25	Low-cost high-performance hydrogen evolution electrocatalysts based on Pt-CoP polyhedra with low Pt loading in both alkaline and neutral media. Dalton Transactions, 2019, 48, 8920-8930.	3.3	29
26	A new photoelectrochemical immunosensor for ultrasensitive assay of prion protein based on hemin-induced photocurrent direction switching. Biosensors and Bioelectronics, 2019, 132, 55-61.	10.1	33
27	CoS2 hollow nanocubes derived from Co-Co Prussian blue analogue: High-performance electrode materials for supercapacitors. Journal of Electroanalytical Chemistry, 2019, 836, 30-37.	3.8	53
28	Facile solution synthesis of FeN_x atom clusters supported on nitrogen-enriched graphene carbon aerogels with superb electrocatalytic performance toward the oxygen reduction reaction. Journal of Materials Chemistry A, 2019, 7, 25557-25566.	10.3	29
29	Fe and S co-doped N-enriched hierarchical porous carbon polyhedron as efficient non-noble-metal electrocatalyst toward oxygen reduction reaction in both alkaline and acidic medium. Electrochimica Acta, 2019, 298, 570-579.	5.2	54
30	A new electrochemical immunoassay for prion protein based on hybridization chain reaction with hemin/G-quadruplex DNAzyme. Talanta, 2018, 182, 292-298.	5.5	23
31	A label-free and blocker-free photoelectrochemical strategy for highly sensitive caspase-3 assay. Chemical Communications, 2018, 54, 4830-4833.	4.1	24
32	High-performance non-enzymatic catalysts based on 3D hierarchical hollow porous Co3O4 nanododecahedras in situ decorated on carbon nanotubes for glucose detection and biofuel cell application. Analytical and Bioanalytical Chemistry, 2018, 410, 2019-2029.	3.7	12
33	A new electrochemical immunosensor for sensitive detection of prion based on Prussian blue analogue. Talanta, 2018, 179, 726-733.	5.5	34
34	N-doped porous carbon sheets derived from ZIF-8: Preparation and their electrochemical capacitive properties. Journal of Electroanalytical Chemistry, 2018, 810, 86-94.	3.8	37
35	A new photoelectrochemical aptasensor for prion assay based on cyclodextrin and Rhodamine B. Sensors and Actuators B: Chemical, 2018, 255, 2187-2193.	7.8	28
36	A novel photoelectrochemical immunosensor for prion protein based on CdTe quantum dots and glucose oxidase. Journal of Electroanalytical Chemistry, 2018, 829, 51-58.	3.8	7

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37	A new photoelectrochemical biosensor for ultrasensitive determination of nucleic acids based on a three-stage cascade signal amplification strategy. Analyst, The, 2018, 143, 2799-2806.	3.5	27
38	Co₃O₄â€“Au Polyhedra: A Multifunctional Signal Amplifier for Sensitive Photoelectrochemical Assay. Analytical Chemistry, 2018, 90, 9480-9486.	6.5	70
39	A new electrochemical aptasensor for sensitive assay of a protein based on the dual-signaling electrochemical ratiometric method and DNA walker strategy. Chemical Communications, 2018, 54, 10359-10362.	4.1	60
40	Synthesis of mesoporous Co(OH) 2 nanocubes derived from Prussian blue analogue and their electrocapacitive properties. Journal of Electroanalytical Chemistry, 2017, 788, 54-60.	3.8	18
41	Preparation of NiCoP Hollow Quasi-Polyhedra and Their Electrocatalytic Properties for Hydrogen Evolution in Alkaline Solution. ACS Applied Materials & Interfaces, 2017, 9, 5982-5991.	8.0	217
42	A sensitive electrochemical immunosensor for prion detection based on poly- Î² -cyclodextrin/gold nanoparticles/glassy carbon electrode. Sensors and Actuators B: Chemical, 2017, 250, 1-7.	7.8	37
43	Hierarchical porous carbon materials prepared by direct carbonization of Al-PCP as a Pt-catalyst support for the oxygen reduction reaction. New Journal of Chemistry, 2017, 41, 7432-7437.	2.8	3
44	Template-synthesis and electrochemical properties of urchin-like NiCoP electrocatalyst for hydrogen evolution reaction. Electrochimica Acta, 2017, 249, 301-307.	5.2	29
45	Triple-Helix Molecular Switch Electrochemical Ratiometric Biosensor for Ultrasensitive Detection of Nucleic Acids. Analytical Chemistry, 2017, 89, 8830-8835.	6.5	116
46	Nitrogen-Doped Porous Carbon-ZnO Nanopolyhedra Derived from ZIF-8: New Materials for Photoelectrochemical Biosensors. ACS Applied Materials & Interfaces, 2017, 9, 42482-42491.	8.0	130
47	Sensitive electrochemical assay of alkaline phosphatase activity based on TdT-mediated hemin/G-quadruplex DNAzyme nanowires for signal amplification. Biosensors and Bioelectronics, 2017, 87, 970-975.	10.1	77
48	Exonuclease IIIâ€“assisted cascade signal amplification strategy for label-free and ultrasensitive electrochemical detection of nucleic acids. Biosensors and Bioelectronics, 2017, 87, 732-736.	10.1	62
49	A label-free and cascaded dual-signaling amplified electrochemical aptasensing platform for sensitive prion assay. Biosensors and Bioelectronics, 2016, 85, 471-478.	10.1	24
50	A high-performance bioanode based on a nitrogen-doped short tubular carbon loaded Au nanoparticle co-immobilized mediator and glucose oxidase for glucose/O₂ biofuel cells. RSC Advances, 2016, 6, 29142-29148.	3.6	7
51	A novel electrochemical aptasensor for bisphenol A assay based on triple-signaling strategy. Biosensors and Bioelectronics, 2016, 79, 22-28.	10.1	72
52	An electrochemical biosensor for sensitive detection of Hg²⁺ based on exonuclease III-assisted target recycling and hybridization chain reaction amplification strategies. Analytical Methods, 2016, 8, 2106-2111.	2.7	21
53	Sensitive detection of bisphenol A based on a ratiometric electrochemical aptasensor. Canadian Journal of Chemistry, 2016, 94, 509-514.	1.1	9
54	Smart protein biogate as a mediator to regulate competitive host-guest interaction for sensitive ratiometric electrochemical assay of prion. Scientific Reports, 2015, 5, 16015.	3.3	30

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55	Carbon nanotubeâ€“ionic liquid composite gel based high-performance bioanode for glucose/O₂ biofuel cells. Analytical Methods, 2015, 7, 5060-5066.	2.7	8
56	One-pot synthesis of PtRh/Î²-CD-CNTs for methanol oxidation. International Journal of Hydrogen Energy, 2015, 40, 14866-14874.	7.1	15
57	Platinum Nanoparticles Encapsulated in Nitrogenâ€Doped Mesoporous Carbons as Methanolâ€Tolerant Oxygen Reduction Electrocatalysts. ChemElectroChem, 2015, 2, 404-411.	3.4	28
58	A new ratiometric electrochemical sensor for sensitive detection of bisphenol A based on poly-Î²-cyclodextrin/electroreduced graphene modified glassy carbon electrode. Journal of Electroanalytical Chemistry, 2015, 742, 97-103.	3.8	77
59	Synthesis and electrochemical capacitive properties of nitrogen-doped porous carbon micropolyhedra by direct carbonization of zeolitic imidazolate framework-11. Materials Research Bulletin, 2015, 66, 88-95.	5.2	51
60	A label-free electrochemical strategy for highly sensitive methyltransferase activity assays. Chemical Communications, 2015, 51, 5081-5084.	4.1	23
61	Ultrasonic cavitation assisted hydrogen implosion synthesis of Pt nanoparticles/nitrogen-doped graphene nanohybrid scrolls and their electrocatalytic oxidation of methanol. Ionics, 2015, 21, 1287-1294.	2.4	7
62	Ultrasensitive Electrochemical Detection of Nucleic Acids Based on the Dual-Signaling Electrochemical Ratiometric Method and Exonuclease III-Assisted Target Recycling Amplification Strategy. Analytical Chemistry, 2015, 87, 7291-7296.	6.5	143
63	Solid-state grinding/low-temperature calcining synthesis of carbon coated MnO₂ nanorods and their electrochemical capacitive property. New Journal of Chemistry, 2015, 39, 4731-4736.	2.8	12
64	A new amplified impedimetric aptasensor based on the electron transfer ability of Au nanoparticles and their affinity with aptamer. Journal of Electroanalytical Chemistry, 2015, 757, 243-249.	3.8	9
65	Synthesis of high-concentration B and N co-doped porous carbon polyhedra and their supercapacitive properties. RSC Advances, 2015, 5, 77527-77533.	3.6	15
66	A new electrochemical aptasensor based on electrocatalytic property of graphene toward ascorbic acid oxidation. Talanta, 2015, 134, 699-704.	5.5	13
67	A ratiometric electrochemical biosensor for sensitive detection of Hg 2+ based on thymineâ€“Hg 2+ â€“thymine structure. Analytica Chimica Acta, 2015, 853, 242-248.	5.4	111
68	Nanomaterials as signal amplification elements in DNA-based electrochemical sensing. Nano Today, 2014, 9, 197-211.	11.9	134
69	PtRu nanoparticles supported on nitrogen-doped polyhedral mesoporous carbons as electrocatalyst for methanol oxidation. Nanotechnology, 2014, 25, 135607.	2.6	21
70	Amplified impedimetric DNA sensor based on graphene oxideâ€“phenylboronic acid for sensitive detection of bleomycins. New Journal of Chemistry, 2014, 38, 2284.	2.8	12
71	Highly-selective electrochemical determination of catechol based on 3-aminophenylboronic acid-3,4,9,10-perylene tetracarboxylic acid functionalized carbon nanotubes modified electrode. Analytical Methods, 2014, 6, 718-724.	2.7	26
72	A ratiometric electrochemical aptasensor for sensitive detection of protein based on aptamerâ€“targetâ€“aptamer sandwich structure. Journal of Electroanalytical Chemistry, 2014, 732, 61-65.	3.8	32

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73	Electrochemical determination of bleomycins based on dual-amplification of 4-mercaptophenyl boronic acid-capped gold nanoparticles and dopamine-capped gold nanoparticles. Analytical Methods, 2014, 6, 6893.	2.7	10
74	A simple label-free electrochemical aptasensor for dopamine detection. RSC Advances, 2014, 4, 52250-52255.	3.6	45
75	Sensitive Electrochemical Aptasensor by Coupling â€œSignal-onâ€™â€™ and â€œSignal-offâ€™â€™ Strategies. Analytical Chemistry, 2013, 85, 8397-8402.	6.5	116
76	Self-assembly synthesis of a hierarchical structure using hollow nitrogen-doped carbon spheres as spacers to separate the reduced graphene oxide for simultaneous electrochemical determination of ascorbic acid, dopamine and uric acid. Analytical Methods, 2013, 5, 3591.	2.7	32
77	Sensitive electrochemical sensor of anthracene-9-carbonxylic acid using an electropolymerized film modified glassy carbon electrode. Analytical Methods, 2013, 5, 1881.	2.7	1
78	Simultaneous electrochemical detection of ascorbic acid, dopamine and uric acid based on nitrogen doped porous carbon nanopolyhedra. Journal of Materials Chemistry B, 2013, 1, 2742.	5.8	166
79	A New Dualâ€Signalling Electrochemical Sensing Strategy Based on Competitive Hostâ€“Guest Interaction of a Î²â€Cyclodextrin/Poly(Nâ€acetylaniline)/Grapheneâ€Modified Electrode: Sensitive Electrochemical Determination of Organic Pollutants. Chemistry - A European Journal, 2013, 19, 6368-6373.	3.3	45
80	Sensitive electrochemical detection of hydroxyl radical with biobarcode amplification. Analytica Chimica Acta, 2012, 756, 1-6.	5.4	40
81	Electrochemical sensor for naphthols based on gold nanoparticles/hollow nitrogen-doped carbon microsphere hybrids functionalized with SH-Î²-cyclodextrin. Analytica Chimica Acta, 2012, 723, 33-38.	5.4	58
82	Carbonization of ionic liquid polymer-functionalized carbon nanotubes for high dispersion of PtRu nanoparticles and their electrocatalytic oxidation of methanol. Journal of Materials Chemistry, 2012, 22, 13085.	6.7	33
83	Electropolymerization of pyrrole in ionic liquid microemulsion. Journal of Applied Polymer Science, 2012, 125, 2342-2347.	2.6	13
84	A Strategy for the High Dispersion of PtRu Nanoparticles onto Carbon Nanotubes and Their Electrocatalytic Oxidation of Methanol. Chemistry - A European Journal, 2012, 18, 1522-1527.	3.3	31
85	One-pot synthesis of highly dispersed palladium nanoparticles on acetylenic ionic liquid polymer functionalized carbon nanotubes for electrocatalytic oxidation of glucose. Journal of Solid State Electrochemistry, 2012, 16, 759-766.	2.5	24
86	High dispersion of platinumâ€“ruthenium nanoparticles on the 3,4,9,10-perylene tetracarboxylic acid-functionalized carbon nanotubes for methanol electro-oxidation. Chemical Communications, 2011, 47, 5253.	4.1	90
87	Supercapacitor based on graphene and ionic liquid electrolyte. Journal of Solid State Electrochemistry, 2011, 15, 2581-2585.	2.5	71
88	Noble metal nanoparticles/carbon nanotubes nanohybrids: Synthesis and applications. Nano Today, 2011, 6, 75-90.	11.9	344
89	Electrodeposition of gold nanoparticles from ionic liquid microemulsion. Colloid and Polymer Science, 2010, 288, 1097-1103.	2.1	28
90	Preparation of polyanilineâ€“tin dioxide composites and their application in methanol electro-oxidation. Journal of Solid State Electrochemistry, 2010, 14, 169-174.	2.5	34

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91	PMo12-functionalized Graphene nanosheet-supported PtRu nanocatalysts for methanol electro-oxidation. Journal of Solid State Electrochemistry, 2010, 14, 2267-2274.	2.5	38
92	Investigation on conductivity of mixed surfactants reverse microemulsion. Journal of Applied Electrochemistry, 2010, 40, 2033-2037.	2.9	5
93	Binding studies of <inf>L</inf>-tryptophan to human serum albumin with nanogold-structured sensor by piezoelectric quartz crystal impedance analysis. , 2010, , .		0
94	Functionalization of Carbon Nanotubes by an Ionicâ€Liquid Polymer: Dispersion of Pt and PtRu Nanoparticles on Carbon Nanotubes and Their Electrocatalytic Oxidation of Methanol. Angewandte Chemie - International Edition, 2009, 48, 4751-4754.	13.8	387
95	Electrochemical behavior of K4Fe(CN)6 in [bmim]PF6/TX-100/H2O based microemulsions. Journal of Applied Electrochemistry, 2009, 39, 1273-1278.	2.9	7
96	Catalytic graphitization of PAN-based carbon fibers by spontaneously deposited manganese oxides. Transition Metal Chemistry, 2009, 34, 559-563.	1.4	15
97	Impedimetric Aptasensor with Femtomolar Sensitivity Based on the Enlargement of Surface-Charged Gold Nanoparticles. Analytical Chemistry, 2009, 81, 739-745.	6.5	162
98	Sensitive Bifunctional Aptamer-Based Electrochemical Biosensor for Small Molecules and Protein. Analytical Chemistry, 2009, 81, 9972-9978.	6.5	108
99	Ethanol electrooxidation on platinum particles dispersed on poly(neutral red) film. Journal of Applied Electrochemistry, 2008, 38, 1665-1670.	2.9	5
100	Ethanol electrooxidation on Pt/ZSM-5 zeolite-C catalyst. Journal of Solid State Electrochemistry, 2008, 12, 237-243.	2.5	28
101	Research on electrochemical properties of nonaqueous ionic liquid microemulsions. Colloid and Polymer Science, 2008, 286, 1499-1504.	2.1	14
102	Neutral red as electron transfer mediator: enhanced electrocatalytic activity of platinum catalyst for methanol electro-oxidation. Journal of Solid State Electrochemistry, 2007, 11, 463-468.	2.5	24
103	Platinum Catalysts Prepared with Functional Carbon Nanotube Defects and Its Improved Catalytic Performance for Methanol Oxidation. Journal of Physical Chemistry B, 2006, 110, 11775-11779.	2.6	198
104	Electrochemical Behavior of MCF-7 Cells on Carbon Nanotube Modified Electrode and Application in Evaluating the Effect of 5-Fluorouracil. Electroanalysis, 2006, 18, 1179-1185.	2.9	20
105	Electroreduction of Î±-glucose on CNT/graphite electrode modified by Zn and Znâ€“Fe alloy. Journal of Solid State Electrochemistry, 2005, 9, 498-503.	2.5	16
106	Carbon Nanotubes-Based Amperometric Cholesterol Biosensor Fabricated Through Layer-by-Layer Technique. Electroanalysis, 2004, 16, 1992-1998.	2.9	101
107	The study of diffusion of media in the organic coating films by BAW admittance analysis. Journal of Applied Polymer Science, 1998, 70, 2283-2290.	2.6	1
108	The study of diffusion of solvents from the coating films during the curing process by bulk acoustic wave admittance analysis. Journal of Applied Polymer Science, 1997, 66, 563-571.	2.6	6

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109	Facilely Hierarchical Growth of N-Doped Carbon-Coated NiCo₂O₄ Nanowire Arrays on Ni Foam for Advanced Supercapacitor Electrodes. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	4