## Jing-Hua Chen

List of Publications by Year in descending order

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126907 138484 3,854 99 33 58 citations h-index papers

g-index 103 103 103 4456 times ranked docs citations citing authors all docs

#	Article	IF	CITATIONS
1	A visible and colorimetric aptasensor based on DNA-capped single-walled carbon nanotubes for detection of exosomes. Biosensors and Bioelectronics, 2017, 92, 8-15.	10.1	228
2	A Ratiometric Fluorescent Bioprobe Based on Carbon Dots and Acridone Derivate for Signal Amplification Detection Exosomal microRNA. Analytical Chemistry, 2018, 90, 8969-8976.	6.5	153
3	A ratiometric electrochemical biosensor for the exosomal microRNAs detection based on bipedal DNA walkers propelled by locked nucleic acid modified toehold mediate strand displacement reaction. Biosensors and Bioelectronics, 2018, 102, 33-40.	10.1	147
4	A paper-supported aptasensor based on upconversion luminescence resonance energy transfer for the accessible determination of exosomes. Biosensors and Bioelectronics, 2018, 102, 582-588.	10.1	123
5	A fluorescent aptasensor based on DNA-scaffolded silver-nanocluster for ochratoxin A detection. Biosensors and Bioelectronics, 2014, 57, 226-231.	10.1	122
6	Enzyme-Free and Label-Free Ultrasensitive Electrochemical Detection of Human Immunodeficiency Virus DNA in Biological Samples Based on Long-Range Self-Assembled DNA Nanostructures. Analytical Chemistry, 2012, 84, 8277-8283.	<b>6.</b> 5	120
7	An ultrasensitive electrochemical biosensor for detection of DNA species related to oral cancer based on nuclease-assisted target recycling and amplification of DNAzyme. Chemical Communications, 2011, 47, 8004.	4.1	110
8	Enzymatic Redesigning of Biologically Active Heparan Sulfate. Journal of Biological Chemistry, 2005, 280, 42817-42825.	3.4	109
9	Ultrasensitive electrochemical detection of cancer-associated circulating microRNA in serum samples based on DNA concatamers. Biosensors and Bioelectronics, 2013, 50, 132-136.	10.1	108
10	Colorimetric determination of sarcosine in urine samples of prostatic carcinoma by mimic enzyme palladium nanoparticles. Analytica Chimica Acta, 2014, 825, 63-68.	5.4	106
11	Using an Enzymatic Combinatorial Approach to Identify Anticoagulant Heparan Sulfate Structures. Chemistry and Biology, 2007, 14, 986-993.	6.0	98
12	Electrochemical Biosensor for Detection of BCR/ABL Fusion Gene Using Locked Nucleic Acids on 4-Aminobenzenesulfonic Acid-Modified Glassy Carbon Electrode. Analytical Chemistry, 2008, 80, 8028-8034.	<b>6.</b> 5	98
13	A signal-on fluorescent aptasensor based on Tb3+ and structure-switching aptamer for label-free detection of Ochratoxin A in wheat. Biosensors and Bioelectronics, 2013, 41, 704-709.	10.1	91
14	A signal amplification electrochemical aptasensor for the detection of breast cancer cell via free-running DNA walker. Biosensors and Bioelectronics, 2016, 85, 184-189.	10.1	80
15	A theoretical study on superalkali-doped nanocages: unique inorganic electrides with high stability, deep-ultraviolet transparency, and a considerable nonlinear optical response. Dalton Transactions, 2016, 45, 7500-7509.	3 <b>.</b> 3	78
16	A signal-on electrochemiluminescence aptamer biosensor for the detection of ultratrace thrombin based on junction-probe. Biosensors and Bioelectronics, 2011, 26, 2645-2650.	10.1	76
17	An ultrasensitive signal-on electrochemical aptasensor via target-induced conjunction of split aptamer fragments. Biosensors and Bioelectronics, 2010, 25, 996-1000.	10.1	74
18	A ratiometric electrochemical DNA biosensor for detection of exosomal MicroRNA. Talanta, 2020, 207, 120298.	5.5	74

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19	An immobilization-free electrochemical impedance biosensor based on duplex-specific nuclease assisted target recycling for amplified detection of microRNA. Biosensors and Bioelectronics, 2016, 75, 452-457.	10.1	73
20	Electrochemical aptasensor for the detection of vascular endothelial growth factor (VEGF) based on DNA-templated Ag/Pt bimetallic nanoclusters. Chinese Chemical Letters, 2016, 27, 920-926.	9.0	69
21	An ultrahighly sensitive and selective electrochemical DNA sensor via nicking endonuclease assisted current change amplification. Chemical Communications, 2010, 46, 5939.	4.1	57
22	Electrocatalytic Oxidation and Determination of Dopamine in the Presence of Ascorbic Acid and Uric Acid at a Poly (4-(2-Pyridylazo)-Resorcinol) Modified Glassy Carbon Electrode. Electroanalysis, 2007, 19, 612-615.	2.9	56
23	An ultrasensitive label-free electrochemical biosensor for microRNA-21 detection based on a $2\hat{a} \in \mathbb{R}^2$ -O-methyl modified DNAzyme and duplex-specific nuclease assisted target recycling. Chemical Communications, 2014, 50, 12375-12377.	4.1	54
24	Carbon nanotubes functionalized electrospun nanofibers formed 3D electrode enables highly strong ECL of peroxydisulfate and its application in immunoassay. Biosensors and Bioelectronics, 2014, 61, 575-578.	10.1	44
25	A nature-inspired colorimetric and fluorescent dual-modal biosensor for exosomes detection. Talanta, 2020, 214, 120851.	5.5	44
26	Biosynthesis of 3-O-sulfated heparan sulfate: unique substrate specificity of heparan sulfate 3-O-sulfotransferase isoform 5. Glycobiology, 2003, 13, 785-794.	2.5	42
27	Direct detection of circulating microRNAs in serum of cancer patients by coupling protein-facilitated specific enrichment and rolling circle amplification. Chemical Communications, 2014, 50, 3292-3295.	4.1	41
28	Label free electrochemical sensor for Pb2+ based on graphene oxide mediated deposition of silver nanoparticles. Electrochimica Acta, 2016, 187, 286-292.	5.2	40
29	Colorimetric detection of exosomal microRNA through switching the visible-light-induced oxidase mimic activity of acridone derivate. Biosensors and Bioelectronics, 2021, 173, 112834.	10.1	40
30	Stability and Nonlinear Optical Response of Alkalides that Contain a Completely Encapsulated Superalkali Cluster. ChemPhysChem, 2016, 17, 2672-2678.	2.1	39
31	Upconversion luminescence assay for the detection of the vascular endothelial growth factor, a biomarker for breast cancer. Mikrochimica Acta, 2016, 183, 3201-3208.	<b>5.</b> O	38
32	Hybridization biosensor using 2-nitroacridone as electrochemical indicator for detection of short DNA species of Chronic Myelogenous Leukemia. Biosensors and Bioelectronics, 2008, 24, 349-355.	10.1	35
33	A novel Tb3+-promoted G-quadruplex-hemin DNAzyme for the development of label-free visual biosensors. Biosensors and Bioelectronics, 2011, 26, 4053-4057.	10.1	35
34	Electrochemical bisphenol A sensor based on carbon nanohorns. Analytical Methods, 2013, 5, 3328.	2.7	33
35	A novel colorimetric sensor for Hg <sup>2+</sup> based on hybridization chain reaction and silver nanowire amplification. Chemical Communications, 2015, 51, 15043-15046.	4.1	33
36	Electrochemical aptasensor based on multidirectional hybridization chain reaction for detection of tumorous exosomes. Sensors and Actuators B: Chemical, 2021, 332, 129471.	7.8	33

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37	Hyaluronic acid and polyethylenimine self-assembled polyion complexes as pH-sensitive drug carrier for cancer therapy. Colloids and Surfaces B: Biointerfaces, 2015, 134, 81-87.	5.0	31
38	Numerous long single-stranded DNAs produced by dual amplification reactions for electrochemical detection of exosomal microRNAs. Biosensors and Bioelectronics, 2020, 169, 112555.	10.1	31
39	An aptasensor based on upconversion nanoparticles as LRET donors for the detection of exosomes. Sensors and Actuators B: Chemical, 2019, 298, 126900.	7.8	30
40	A tyrosinase-induced fluorescence immunoassay for detection of tau protein using dopamine-functionalized CulnS2/ZnS quantum dots. Analytical and Bioanalytical Chemistry, 2019, 411, 5277-5285.	3.7	30
41	Electrochemical genotyping and detection of single-nucleotide polymorphisms based on junction-probe containing 2′-deoxyinosine. Chemical Communications, 2010, 46, 6986.	4.1	29
42	A novel sensitive colorimetric sensor for Cu2+ based on in situ formation of fluorescent quantum dots with photocatalytic activity. Biosensors and Bioelectronics, 2017, 89, 866-870.	10.1	29
43	Aloe derived nanovesicle as a functional carrier for indocyanine green encapsulation and phototherapy. Journal of Nanobiotechnology, 2021, 19, 439.	9.1	29
44	A strategy for development of electrochemical DNA biosensor based on site-specific DNA cleavage of restriction endonuclease. Biosensors and Bioelectronics, 2010, 26, 144-148.	10.1	28
45	Enzymatic Extraction of Bioactive and Selfâ€Assembling Wool Keratin for Biomedical Applications. Macromolecular Bioscience, 2020, 20, e2000073.	4.1	27
46	Coinage metalides: a new class of excess electron compounds with high stability and large nonlinear optical responses. Physical Chemistry Chemical Physics, 2020, 22, 8476-8484.	2.8	26
47	Comparison of Curative Effect of Human Umbilical Cord-Derived Mesenchymal Stem Cells and Their Small Extracellular Vesicles in Treating Osteoarthritis. International Journal of Nanomedicine, 2021, Volume 16, 8185-8202.	6.7	26
48	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
49	Label-free fluorescent biosensor based on the target recycling and Thioflavin T-induced quadruplex formation for short DNA species of c-erbB-2 detection. Analytica Chimica Acta, 2014, 817, 42-47.	5.4	25
50	Quasi-Chalcogen Characteristics of Al <sub>12</sub> Be: A New Member of the Three-Dimensional Periodic Table. Journal of Physical Chemistry C, 2016, 120, 2464-2471.	3.1	25
51	A signal-on fluorescent aptasensor based on single-stranded DNA-sensitized luminescence of terbium (III) for label-free detection of breast cancer cells. Talanta, 2015, 138, 225-230.	5.5	23
52	An electrochemical microRNA biosensor based on protein p19 combining an acridone derivate as indicator and DNA concatamers for signal amplification. Electrochemistry Communications, 2015, 60, 185-189.	4.7	23
53	A DNA electrochemical biosensor based on triplex DNA-templated Ag/Pt nanoclusters for the detection of single-nucleotide variant. Talanta, 2020, 207, 120257.	5.5	23
54	Enzyme-free and label-free fluorescence sensor for the detection of liver cancer related short gene. Biosensors and Bioelectronics, 2015, 66, 399-404.	10.1	22

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55	A photoelectrochemical biosensor for determination of DNA based on flower rod-like zinc oxide heterostructures. Mikrochimica Acta, 2017, 184, 2541-2549.	5.0	22
56	On the Possibility of Using the Jellium Model as a Guide To Design Bimetallic Superalkali Cations. Chemistry - A European Journal, 2019, 25, 4358-4366.	3.3	21
57	An ultrasensitive fluorescence aptasensor for carcino-embryonic antigen detection based on fluorescence resonance energy transfer from upconversion phosphors to Au nanoparticles. Analytical Methods, 2018, 10, 1552-1559.	2.7	20
58	An electrochemical biosensor based on DNA "nano-bridge―for amplified detection of exosomal microRNAs. Chinese Chemical Letters, 2021, 32, 3474-3478.	9.0	20
59	Electrochemical Studies of the Interaction of 2â€Nitroacridone with DNA and Determination of DNA. Electroanalysis, 2007, 19, 1765-1772.	2.9	19
60	Heparosan based negatively charged nanocarrier for rapid intracellular drug delivery. International Journal of Pharmaceutics, 2014, 473, 493-500.	5.2	19
61	Decorating Zintl polyanions with alkali metal cations: A novel strategy to design superatom cations with low electron affinity. Journal of Alloys and Compounds, 2018, 740, 400-405.	5.5	19
62	A dual-modal aptasensor based on a multifunctional acridone derivate for exosomes detection. Analytica Chimica Acta, 2022, 1191, 339279.	5.4	19
63	Characterization of the structure of antithrombin-binding heparan sulfate generated by heparan sulfate 3-O-sulfotransferase 5. Biochimica Et Biophysica Acta - General Subjects, 2005, 1725, 190-200.	2.4	18
64	Electrochemical study of bergenin on a poly(4-(2-pyridylazo)-resorcinol) modified glassy carbon electrode and its determination in tablets and urine. Talanta, 2007, 72, 1805-1810.	5 <b>.</b> 5	18
65	A colorimetric sensor for acid phosphatase activity detection based on acridone derivative as visible-light-stimulated oxidase mimic. Analytica Chimica Acta, 2021, 1155, 338357.	5.4	18
66	On the potential of all-boron fullerene B40 as a carrier for anti-cancer drug nitrosourea. Journal of Molecular Liquids, 2021, 342, 117533.	4.9	18
67	Combination of lyophilized adipose-derived stem cell concentrated conditioned medium and polysaccharide hydrogel in the inhibition of hypertrophic scarring. Stem Cell Research and Therapy, 2021, 12, 23.	5.5	18
68	Label-free microRNA detection based on terbium and duplex-specific nuclease assisted target recycling. Analyst, The, 2015, 140, 5082-5089.	3.5	17
69	Theoretical characterization of a series of N5-based aromatic hyperhalogen anions. Dalton Transactions, 2015, 44, 19901-19908.	3.3	17
70	A universal locked nucleic acid-integrated X-shaped DNA probe design for amplified fluorescence detection of single-nucleotide variant. Sensors and Actuators B: Chemical, 2017, 241, 123-128.	7.8	17
71	Label-free fluorescent and electrochemical biosensors based on defective G-quadruplexes. Biosensors and Bioelectronics, 2018, 118, 1-8.	10.1	16
72	Construction of serum resistant micelles based on heparosan for targeted cancer therapy. Carbohydrate Polymers, 2014, 110, 135-141.	10.2	15

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73	Theoretical Study of the Substituent Effects on the Nonlinear Optical Properties of a Roomâ€√emperatureâ€Stable Organic Electride. ChemPhysChem, 2016, 17, 3907-3915.	2.1	15
74	ZnO flower-rod/g-C3N4-gold nanoparticle-based photoelectrochemical aptasensor for detection of carcinoembryonic antigen. Analytical and Bioanalytical Chemistry, 2018, 410, 6529-6538.	3.7	14
75	Acridone Derivate Simultaneously Featuring Multiple Functions and Its Applications. Analytical Chemistry, 2019, 91, 8406-8414.	6.5	14
76	DFT study on the adsorption of 5-fluorouracil on B $<$ sub $>$ 40 $<$ /sub $>$ , B $<$ sub $>$ 39 $<$ /sub $>$ M, and M@B $<$ sub $>$ 40 $<$ /sub $>$ (M = Mg, Al, Si, Mn, Cu, Zn). RSC Advances, 2021, 11, 39508-39517.	3.6	14
77	Dual-mode turn-on ratiometric fluorescence sensor based on carbon dots and CulnS2/ZnS quantum dots for detection of chlorotetracycline. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 270, 120851.	3.9	14
78	A DFT study on the adsorption behavior of antiviral Favipiravir drug on B N ( $n\hat{A}=\hat{A}12$ , 16, 20, and 24) nanocages: The size effect. Journal of Molecular Liquids, 2022, 360, 119388.	4.9	14
79	Fabrication of doxorubicin and heparin co-loaded microcapsules for synergistic cancer therapy. International Journal of Biological Macromolecules, 2014, 69, 554-560.	7.5	12
80	Ultraselective electrochemiluminescence biosensor based on locked nucleic acid modified toehold-mediated strand displacement reaction and junction-probe. Analyst, The, 2014, 139, 6109-6112.	3.5	12
81	Can Fluorinated Molecular Cages Be Utilized as Building Blocks of Hyperhalogens?. ChemPhysChem, 2016, 17, 1468-1474.	2.1	12
82	AÂnovel label-free and sensitive electrochemical biosensor for Hg2+ based on ligase-mediated formation of DNAzyme. Talanta, 2016, 161, 138-142.	5.5	11
83	A Fluorescence Inner-Filter Effect Based Sensing Platform for Turn-On Detection of Glutathione in Human Serum. Sensors, 2019, 19, 228.	3.8	10
84	A novel micro-fluidic biosensor for the rapid and sequence-specific detection of DNA with electrophoretic driving mode and laser-induced fluorescence detector. Microfluidics and Nanofluidics, 2013, 14, 145-152.	2.2	9
85	A upconversion luminescene biosensor based on dual-signal amplification for the detection of short DNA species of c-erbB-2 oncogene. Scientific Reports, 2016, 6, 24813.	3.3	9
86	A photoluminescent biosensor based on long-range self-assembled DNA cascades and upconversion nanoparticles for the detection of breast cancer-associated circulating microRNA in serum samples. RSC Advances, 2015, 5, 18008-18012.	3.6	8
87	Sensitive, Highly Stable, and Anti-Fouling Electrode with Hexanethiol and Poly-A Modification for Exosomal microRNA Detection. Analytical Chemistry, 2022, 94, 5382-5391.	6.5	8
88	Sensitive fluorescent detection of exosomal microRNA based on enzymes-assisted dual-signal amplification. Biosensors and Bioelectronics, 2022, 209, 114259.	10.1	8
89	Designing an alkali-metal-like superatom Ca <sub>3</sub> B for ambient nitrogen reduction to ammonia. Physical Chemistry Chemical Physics, 2021, 23, 18908-18915.	2.8	7
90	Small extracellular vesicles from human adipose-derived mesenchymal stromal cells: a potential promoter of fat graft survival. Stem Cell Research and Therapy, 2021, 12, 263.	5.5	6

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91	Construction of Photoelectrochemical DNA Biosensors Based on TiO2@Carbon Dots@Black Phosphorous Quantum Dots. Micromachines, 2021, 12, 1523.	2.9	6
92	Electrochemical Detection of Alpha-Fetoprotein Based on Black Phosphorus Nanosheets Modification with Iron Ions. Micromachines, 2022, 13, 673.	2.9	6
93	Codelivery of π–π Stacked Dual Anticancer Drugs Based on Aloe-Derived Nanovesicles for Breast Cancer Therapy. ACS Applied Materials & Interfaces, 2022, 14, 27686-27702.	8.0	6
94	On the Interaction between Superatom Al <sub>12</sub> Be and DNA Nucleobases/Base Pairs: Bonding Nature and Potential Applications in O <sub>2</sub> Activation and CO Oxidation. ACS Omega, 2020, 5, 15325-15334.	3.5	5
95	Detection of phospholipase A2 in serum based on LRET mechanism between upconversion nanoparticles and SYBR green I. Analytica Chimica Acta, 2021, 1143, 37-44.	5.4	5
96	Cisplatin under oriented external electric fields: A deeper insight into electrochemotherapy at the molecular level. International Journal of Quantum Chemistry, 2021, 121, e26578.	2.0	4
97	Upconversion luminescence–based aptasensor for the detection of thyroid-stimulating hormone in serum. Mikrochimica Acta, 2022, 189, 179.	5.0	4
98	Dual-mode detection of dopamine based on 0D/2D/2D CulnS2/ZnS quantum dot–black phosphorous nanosheet–TiO2 nanosheet nanocomposites. Analytical and Bioanalytical Chemistry, 2022, 414, 1829.	3.7	1
99	Theoretical investigation on the low-energy isomer identification, structural evolution, stability, and electronic properties of Al10–Be (xÂ= 1–9) nanoalloys. Journal of Molecular Graphics and Modelling, 2019, 87, 56-67.	2.4	0