Jian-Rong Zhang

List of Publications by Citations

89 papers	4,357 citations	34 h-index	64 g-index
93 ext. papers	5,030 ext. citations	10.6 avg, IF	5.77 L-index

#	Paper	IF	Citations
89	A Facile Microwave Avenue to Electrochemiluminescent Two-Color Graphene Quantum Dots. *Advanced Functional Materials*, **2012**, 22, 2971-2979	15.6	670
88	Fabrication of Graphene Quantum Dots Composites for Sensitive Electrogenerated Chemiluminescence Immunosensing. *Advanced Functional Materials*, **2011**, 21, 869-878	15.6	287
87	Nanostructured material-based biofuel cells: recent advances and future prospects. *Chemical Society Reviews*, **2017**, 46, 1545-1564	58.5	199
86	One-pot synthesis of aptamer-functionalized silver nanoclusters for cell-type-specific imaging. *Analytical Chemistry*, **2012**, 84, 4140-6	7.8	174
85	Enhanced Photoelectrochemical Immunosensing Platform Based on CdSeTe@CdS:Mn Core-Shell Quantum Dots-Sensitized TiO2 Amplified by CuS Nanocrystals Conjugated Signal Antibodies. *Analytical Chemistry*, **2016**, 88, 3392-9	7.8	156
84	Living and Conducting: Coating Individual Bacterial Cells with In Situ Formed Polypyrrole. *Angewandte Chemie - International Edition*, **2017**, 56, 10516-10520	16.4	146
83	Fabrication of gold nanoparticles on bilayer graphene for glucose electrochemical biosensing. *Journal of Materials Chemistry*, **2011**, 21, 7604		132
82	Sensitive electrochemical detection of telomerase activity using spherical nucleic acids gold nanoparticles triggered mimic-hybridization chain reaction enzyme-free dual signal amplification. *Analytical Chemistry*, **2015**, 87, 3019-26	7.8	131
81	Near-Infrared Photothermally Activated DNAzyme-Gold Nanoshells for Imaging Metal Ions in Living Cells. *Angewandte Chemie - International Edition*, **2017**, 56, 6798-6802	16.4	125
80	Polyaniline networks grown on graphene nanoribbons-coated carbon paper with a synergistic effect for high-performance microbial fuel cells. *Journal of Materials Chemistry A*, **2013**, 1, 12587	13	121
79	A new signal amplification strategy of photoelectrochemical immunoassay for highly sensitive interleukin-6 detection based on TiO2/CdS/CdSe dual co-sensitized structure. *Biosensors and Bioelectronics*, **2014**, 59, 45-53	11.8	107
78	"Signal-on" photoelectrochemical biosensor for sensitive detection of human T-Cell lymphotropic virus type II DNA: dual signal amplification strategy integrating enzymatic amplification with terminal deoxynucleotidyl transferase-mediated extension. *Analytical Chemistry*, **2015**, 87, 4949-56	7.8	101
77	Single gold@silver nanoprobes for real-time tracing the entire autophagy process at single-cell level. *Journal of the American Chemical Society*, **2015**, 137, 1903-8	16.4	95
76	Cathode Photoelectrochemical Immunosensing Platform Integrating Photocathode with Photoanode. *Analytical Chemistry*, **2016**, 88, 10352-10356	7.8	86
75	Toward the early evaluation of therapeutic effects: an electrochemical platform for ultrasensitive detection of apoptotic cells. *Analytical Chemistry*, **2011**, 83, 7902-9	7.8	74
74	Bacteria-Affinity 3D Macroporous Graphene/MWCNTs/Fe3O4 Foams for High-Performance Microbial Fuel Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 16170-7	9.5	72
73	Ultrasensitive photoelectrochemical immunoassay for CA19-9 detection based on CdSe@ZnS quantum dots sensitized TiO2NWs/Au hybrid structure amplified by quenching effect of Ab2@V(2+) conjugates. *Biosensors and Bioelectronics*, **2016**, 77, 339-46	11.8	68

72	Dynamically imaging collision electrochemistry of single electrochemiluminescence nano-emitters. *Chemical Science*, **2018**, 9, 6167-6175	9.4	61
71	A Graphene/Poly(3,4-ethylenedioxythiophene) Hybrid as an Anode for High-Performance Microbial Fuel Cells. *ChemPlusChem*, **2013**, 78, 823-829	2.8	59
70	Design of an enzymatic biofuel cell with large power output. *Journal of Materials Chemistry A*, **2015**, 3, 11511-11516	13	51
69	Microwave-Assisted In Situ Synthesis of Graphene/PEDOT Hybrid and Its Application in Supercapacitors. *ChemPlusChem*, **2013**, 78, 227-234	2.8	50
68	Inkjet-printed porous polyaniline gel as an efficient anode for microbial fuel cells. *Journal of Materials Chemistry A*, **2016**, 4, 14555-14559	13	49
67	An Improved Strategy for High-Quality Cesium Bismuth Bromine Perovskite Quantum Dots with Remarkable Electrochemiluminescence Activities. *Analytical Chemistry*, **2019**, 91, 8607-8614	7.8	45
66	A highly sensitive fluorescence assay for 2,4,6-trinitrotoluene using amine-capped silicon quantum dots as a probe. *Analytical Methods*, **2015**, 7, 1732-1737	3.2	45
65	Evaluation of intracellular telomerase activity through cascade DNA logic gates. *Chemical Science*, **2017**, 8, 174-180	9.4	45
64	Nitrogen-doped hollow carbon nanospheres for high-energy-density biofuel cells and self-powered sensing of microRNA-21 and microRNA-141. *Nano Energy*, **2018**, 44, 95-102	17.1	44
63	Ultrasensitive self-powered cytosensor. *Nano Energy*, **2016**, 19, 541-549	17.1	43
62	Bioapplications of DNA nanotechnology at the solid-liquid interface. *Chemical Society Reviews*, **2019**, 48, 4892-4920	58.5	42
61	Aptamer-functionalized silver nanoclusters-mediated cell type-specific siRNA delivery and tracking. *Chemical Science*, **2013**, 4, 3514	9.4	41
60	Electrode Materials Engineering in Electrocatalytic CO Reduction: Energy Input and Conversion Efficiency. *Advanced Materials*, **2020**, 32, e1903796	24	40
59	Signal-on Photoelectrochemical Aptasensor for Adenosine Triphosphate Detection Based on Sensitization Effect of CdS:(bpy)2(dcbpy) Nanocomposites. *Journal of Physical Chemistry C*, **2016**, 120, 15657-15665	3.8	38
58	Bio-Coreactant-Enhanced Electrochemiluminescence Microscopy of Intracellular Structure and Transport. *Angewandte Chemie - International Edition*, **2021**, 60, 4907-4914	16.4	36
57	Hydrogen Evolution Reaction Monitored by Electrochemiluminescence Blinking at Single-Nanoparticle Level. *Nano Letters*, **2020**, 20, 5008-5016	11.5	35
56	A nitrogen-doped graphene/gold nanoparticle/formate dehydrogenase bioanode for high power output membrane-less formic acid/O2 biofuel cells. *Analyst, The*, **2015**, 140, 1822-6	5	34
55	Sustainable and Self-Enhanced Electrochemiluminescent Ternary Suprastructures Derived from CsPbBr3 Perovskite Quantum Dots. *Advanced Functional Materials*, **2019**, 29, 1902533	15.6	33

54	NADH dehydrogenase-like behavior of nitrogen-doped graphene and its application in NAD(+)-dependent dehydrogenase biosensing. *Biosensors and Bioelectronics*, **2014**, 62, 170-6	11.8	33
53	In situ formation of large pore silica-MnO nanocomposites with H/HO sensitivity for O-elevated photodynamic therapy and potential MR imaging. *Chemical Communications*, **2018**, 54, 2962-2965	5.8	32
52	N,S-doped carbon dots as dual-functional modifiers to boost bio-electricity generation of individually-modified bacterial cells. *Nano Energy*, **2019**, 63, 103875	17.1	32
51	Tuning Sn3O4 for CO2 reduction to formate with ultra-high current density. *Nano Energy*, **2020**, 77, 105296	17.1	32
50	A ternary hybrid of carbon nanotubes/graphitic carbon nitride nanosheets/gold nanoparticles used as robust substrate electrodes in enzyme biofuel cells. *Chemical Communications*, **2015**, 51, 14735-8	5.8	30
49	Ultrasensitive self-powered cytosensors based on exogenous redox-free enzyme biofuel cells as point-of-care tools for early cancer diagnosis. *Chemical Communications*, **2015**, 51, 16763-6	5.8	30
48	A Targeted DNAzyme-Nanocomposite Probe Equipped with Built-in Zn(2+) Arsenal for Combined Treatment of Gene Regulation and Drug Delivery. *Scientific Reports*, **2016**, 6, 22737	4.9	29
47	A glucose/O fuel cell-based self-powered biosensor for probing a drug delivery model with self-diagnosis and self-evaluation. *Chemical Science*, **2018**, 9, 8482-8491	9.4	28
46	Imaging the transient heat generation of individual nanostructures with a mechanoresponsive polymer. *Nature Communications*, **2017**, 8, 1498	17.4	27
45	Steady-State Electrochemiluminescence at Single Semiconductive Titanium Dioxide Nanoparticles for Local Sensing of Single Cells. *Analytical Chemistry*, **2019**, 91, 1121-1125	7.8	27
44	An"ON-OFF" switchable power output of enzymatic biofuel cell controlled by thermal-sensitive polymer. *Biosensors and Bioelectronics*, **2015**, 74, 142-9	11.8	26
43	Graphene/Fe O Nanocomposites as Efficient Anodes to Boost the Lifetime and Current Output of Microbial Fuel Cells. *Chemistry - an Asian Journal*, **2017**, 12, 308-313	4.5	25
42	Manganese-doped ZnS quantum dots as a phosphorescent probe for use in the bi-enzymatic determination of organophosphorus pesticides. *Mikrochimica Acta*, **2014**, 181, 1591-1599	5.8	23
41	Graphene/Au composites as an anode modifier for improving electricity generation in Shewanella-inoculated microbial fuel cells. *Analytical Methods*, **2015**, 7, 4640-4644	3.2	22
40	ELECTROCHEMICAL BEHAVIOR OF AMORPHOUS HYDROUS RUTHENIUM OXIDE/ACTIVE CARBON COMPOSITE ELECTRODES FOR SUPER-CAPACITOR. *International Journal of Modern Physics B*, **2002**, 16, 4479-4483	1.1	22
39	Core/Satellite Structured Fe3O4/Au Nanocomposites Incorporated with Three-Dimensional Macroporous Graphene Foam as a High-Performance Anode for Microbial Fuel Cells. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1311-1318	8.3	22
38	Living and Conducting: Coating Individual Bacterial Cells with In Situ Formed Polypyrrole. *Angewandte Chemie*, **2017**, 129, 10652-10656	3.6	21
37	Coupling a DNA-Based Machine with Glucometer Readouts for Amplified Detection of Telomerase Activity in Cancer Cells. *Scientific Reports*, **2016**, 6, 23504	4.9	21

36	Highly luminescent glutathione-capped ZnS : Mn/ZnS core/shell doped quantum dots for targeted mannosyl groups expression on the cell surface. *Analytical Methods*, **2013**, 5, 5929	3.2	20
35	Acid-degradable gadolinium-based nanoscale coordination polymer: A potential platform for targeted drug delivery and potential magnetic resonance imaging. *Nano Research*, **2018**, 11, 929-939	10	19
34	Light-Driven Nano-oscillators for Label-Free Single-Molecule Monitoring of MicroRNA. *Nano Letters* , **2018**, 18, 3759-3765	11.5	18
33	Ultrasensitive cathode photoelectrochemical immunoassay based on TiO photoanode-enhanced 3D CuO nanowire array photocathode and signal amplification by biocatalytic precipitation. *Analytica Chimica Acta*, **2018**, 1027, 33-40	6.6	18
32	Capture and selective release of multiple types of circulating tumor cells using smart DNAzyme probes. *Chemical Science*, **2020**, 11, 1948-1956	9.4	16
31	Differential pulse voltammetric indirect determination of aluminium in drinking waters, blood, urine, hair, and medicament samples using L-dopa under alkaline conditions. *Analyst, The*, **2000**, 125, 1299-302	5	16
30	A Fe3O4□arbon nanofiber/gold nanoparticle hybrid for enzymatic biofuel cells with larger power output. *Journal of Materials Chemistry A*, **2017**, 5, 11026-11031	13	15
29	Highly Efficient Photoelectrochemical Reduction of CO at Low Applied Voltage Using 3D Co-Pi/BiVO/SnO Nanosheet Array Photoanodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 26024-26031	9.5	15
28	Efficient Blood-toleration Enzymatic Biofuel Cell Protection of an Enzyme Catalyst. *ACS Applied Materials & Interfaces*, **2020**, 12, 41429-41436	9.5	15
27	Visible-light-enhanced power generation in microbial fuel cells coupling with 3D nitrogen-doped graphene. *Chemical Communications*, **2017**, 53, 9967-9970	5.8	14
26	Synthesis and characterization of a highly stable poly (3,4-ethylenedioxythiophene)-gold nanoparticles composite film and its application to electrochemical dopamine sensors. *RSC Advances*, **2014**, 4, 8415-8420	3.7	13
25	Bio-Coreactant-Enhanced Electrochemiluminescence Microscopy of Intracellular Structure and Transport. *Angewandte Chemie*, **2021**, 133, 4957-4964	3.6	13
24	Highly sensitive fluorescence quantification of intracellular telomerase activity by repeat G-rich DNA enhanced silver nanoclusters. *Journal of Materials Chemistry B*, **2018**, 6, 4583-4591	7.3	13
23	Highly luminescent and biocompatible near-infrared core-shell CdSeTe/CdS/C quantum dots for probe labeling tumor cells. *Talanta*, **2016**, 146, 209-15	6.2	11
22	Electrogenerated Chemiluminescence in Submicrometer Wells for Very High-Density Biosensing. *Analytical Chemistry*, **2020**, 92, 578-582	7.8	11
21	Enzymatic Biofuel Cell: Opportunities and Intrinsic Challenges in Futuristic Applications. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100031	1.6	11
20	Plasmon-enhanced cathodic reduction for accelerating electricity generation in visible-light-assisted microbial fuel cells. *Nano Energy*, **2019**, 57, 94-100	17.1	11
19	Catalytic route electrochemiluminescence microscopy of cell membranes with nitrogen-doped carbon dots as nano-coreactants. *Chemical Communications*, **2021**, 57, 2168-2171	5.8	11

18	Electrocatalytic CO2 Reduction: Electrode Materials Engineering in Electrocatalytic CO2 Reduction: Energy Input and Conversion Efficiency (Adv. Mater. 27/2020). *Advanced Materials*, **2020**, 32, 2070202	24	10
17	Self-assembled Mn-doped ZnSe quantum dot–methyl viologen nanohybrids as an OFF–ON fluorescent probe for time-resolved fluorescence detection of tiopronin. *Analytical Methods*, **2013**, 5, 4321	3.2	10
16	Quantitative Detection and Imaging of Multiple Biological Molecules in Living Cells for Cell Screening. *ACS Sensors*, **2020**, 5, 1149-1157	9.2	9
15	Superior efficient rechargeable lithium–air batteries using a bifunctional biological enzyme catalyst. *Energy and Environmental Science*, **2020**, 13, 144-151	35.4	9
14	Fermi level-tuned optics of graphene for attocoulomb-scale quantification of electron transfer at single gold nanoparticles. *Nature Communications*, **2019**, 10, 3849	17.4	8
13	Layer-by-layer assembly of Au and CdS nanoparticles on the surface of bacterial cells for photo-assisted bioanodes in microbial fuel cells. *Journal of Materials Chemistry B*, **2021**, 9, 1638-1646	7.3	7
12	Visualization of an Accelerated Electrochemical Reaction under an Enhanced Electric Field. *Research*, **2021**, 2021, 1742919	7.8	6
11	A Course of Hands-On Nanopore Experiments for Undergraduates: Single-Molecule Detection with Portable Electrochemical Instruments. *Journal of Chemical Education*, **2020**, 97, 4345-4354	2.4	4
10	Trifunctional modification of individual bacterial cells for magnet-assisted bioanodes with high performance in microbial fuel cells. *Journal of Materials Chemistry A*, **2020**, 8, 24515-24523	13	3
9	Improved Current-Monitoring Method for Low Electroosmotic Flow Measurement in Modified Microchip. *Chromatographia*, **2009**, 69, 897-901	2.1	2
8	Layer-by-layer construction of in situ formed polypyrrole and bacterial cells as capacitive bioanodes for paper-based microbial fuel cells. *Journal of Materials Chemistry A*,	13	2
7	Self-assembled nanomaterials for biosensing and therapeutics: recent advances and challenges. *Analyst, The*, **2021**, 146, 2807-2817	5	2
6	CRISPR System-Linked Self-Assembling Nanoplatforms for Inspection and Screening of Gastric Cancer Stem Cells. *Small*, **2021**, e2104622	11	2
5	Advances in the enzymatic biofuel cell powered sensing systems for tumor diagnosis and regulation. *TrAC - Trends in Analytical Chemistry*, **2021**, 146, 116476	14.6	1
4	formed N-containing copper nanoparticles: a high-performance catalyst toward carbon monoxide electroreduction to multicarbon products with high faradaic efficiency and current density.. *Nanoscale*, **2022**, 14, 7262-7268	7.7	1
3	Simultaneous and Spatial Quantification of Telomerase Activity and DNA Methylation in Living Cells by a Deformable Satellite Nanocapsule. *CCS Chemistry*, **2021**, 3, 1231-1244	7.2	0
2	Label-Free Probing of Electron Transfer Kinetics of Single Microbial Cells on a Single-Layer Graphene via Structural Color Microscopy. *Nano Letters*, **2021**, 21, 7823-7830	11.5	0
1	Rücktitelbild: Living and Conducting: Coating Individual Bacterial Cells with In Situ Formed Polypyrrole (Angew. Chem. 35/2017). *Angewandte Chemie*, **2017**, 129, 10744-10744	3.6	