

Jian-Rong Zhang

List of Publications by Year in descending order

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91
papers

5,663
citations

81889

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76898

74
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93
all docs

93
docs citations

93
times ranked

7018
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in the enzymatic biofuel cell powered sensing systems for tumor diagnosis and regulation. <i>TrAC - Trends in Analytical Chemistry</i> , 2022, 146, 116476.	11.4	9
2	Direct Formation of Colloidal All-Inorganic Metal Nanocrystals from Magic-Size Clusters. <i>ACS Applied Materials & Interfaces</i> , 2022, , .	8.0	5
3	Layer-by-layer construction of <i>in situ</i> formed polypyrrole and bacterial cells as capacitive bioanodes for paper-based microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4915-4925.	10.3	16
4	CRISPR System-Linked Self-Assembling Nanoplatfoms for Inspection and Screening of Gastric Cancer Stem Cells. <i>Small</i> , 2022, 18, e2104622.	10.0	7
5	<i>in situ</i> formed N-containing copper nanoparticles: a high-performance catalyst toward carbon monoxide electroreduction to multicarbon products with high faradaic efficiency and current density. <i>Nanoscale</i> , 2022, 14, 7262-7268.	5.6	10
6	Damage-Free and Time-Saving Platform Integrated by a Flow Membrane Separation Device and a Dual-Target Biofuel Cell-Based Biosensor for Continuous Sorting and Detection of Exosomes and Host Cells in Human Serum. <i>Analytical Chemistry</i> , 2022, 94, 7722-7730.	6.5	3
7	Bio-Coreactant-Enhanced Electrochemiluminescence Microscopy of Intracellular Structure and Transport. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4907-4914.	13.8	96
8	Bio-Coreactant-Enhanced Electrochemiluminescence Microscopy of Intracellular Structure and Transport. <i>Angewandte Chemie</i> , 2021, 133, 4957-4964.	2.0	23
9	Layer-by-layer assembly of Au and CdS nanoparticles on the surface of bacterial cells for photo-assisted bioanodes in microbial fuel cells. <i>Journal of Materials Chemistry B</i> , 2021, 9, 1638-1646.	5.8	18
10	Self-assembled nanomaterials for biosensing and therapeutics: recent advances and challenges. <i>Analyst</i> , The, 2021, 146, 2807-2817.	3.5	9
11	Catalytic route electrochemiluminescence microscopy of cell membranes with nitrogen-doped carbon dots as nano-coreactants. <i>Chemical Communications</i> , 2021, 57, 2168-2171.	4.1	37
12	Visualization of an Accelerated Electrochemical Reaction under an Enhanced Electric Field. <i>Research</i> , 2021, 2021, 1742919.	5.7	18
13	Simultaneous and Spatial Quantification of Telomerase Activity and DNA Methylation in Living Cells by a Deformable Satellite Nanocapsule. <i>CCS Chemistry</i> , 2021, 3, 1231-1244.	7.8	3
14	Enzymatic Biofuel Cell: Opportunities and Intrinsic Challenges in Futuristic Applications. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100031.	5.8	38
15	Label-Free Probing of Electron Transfer Kinetics of Single Microbial Cells on a Single-Layer Graphene via Structural Color Microscopy. <i>Nano Letters</i> , 2021, 21, 7823-7830.	9.1	3
16	Electrode Materials Engineering in Electrocatalytic CO ₂ Reduction: Energy Input and Conversion Efficiency. <i>Advanced Materials</i> , 2020, 32, e1903796.	21.0	87
17	Core/Satellite Structured Fe ₃ O ₄ /Au Nanocomposites Incorporated with Three-Dimensional Macroporous Graphene Foam as a High-Performance Anode for Microbial Fuel Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1311-1318.	6.7	47
18	Superior efficient rechargeable lithium-air batteries using a bifunctional biological enzyme catalyst. <i>Energy and Environmental Science</i> , 2020, 13, 144-151.	30.8	13

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19	Electrogenerated Chemiluminescence in Submicrometer Wells for Very High-Density Biosensing. <i>Analytical Chemistry</i> , 2020, 92, 578-582.	6.5	18
20	Tuning Sn ₃ O ₄ for CO ₂ reduction to formate with ultra-high current density. <i>Nano Energy</i> , 2020, 77, 105296.	16.0	65
21	A Course of Hands-On Nanopore Experiments for Undergraduates: Single-Molecule Detection with Portable Electrochemical Instruments. <i>Journal of Chemical Education</i> , 2020, 97, 4345-4354.	2.3	8
22	Efficient Blood-toleration Enzymatic Biofuel Cell <i>via</i> In Situ Protection of an Enzyme Catalyst. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 41429-41436.	8.0	28
23	Hydrogen Evolution Reaction Monitored by Electrochemiluminescence Blinking at Single-Nanoparticle Level. <i>Nano Letters</i> , 2020, 20, 5008-5016.	9.1	66
24	Quantitative Detection and Imaging of Multiple Biological Molecules in Living Cells for Cell Screening. <i>ACS Sensors</i> , 2020, 5, 1149-1157.	7.8	11
25	Electrocatalytic CO ₂ Reduction: Electrode Materials Engineering in Electrocatalytic CO ₂ Reduction: Energy Input and Conversion Efficiency (<i>Adv. Mater.</i> 27/2020). <i>Advanced Materials</i> , 2020, 32, 2070202.	21.0	25
26	Capture and selective release of multiple types of circulating tumor cells using smart DNAzyme probes. <i>Chemical Science</i> , 2020, 11, 1948-1956.	7.4	30
27	Trifunctional modification of individual bacterial cells for magnet-assisted bioanodes with high performance in microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24515-24523.	10.3	13
28	Bioapplications of DNA nanotechnology at the solid-liquid interface. <i>Chemical Society Reviews</i> , 2019, 48, 4892-4920.	38.1	68
29	N,S-doped carbon dots as dual-functional modifiers to boost bio-electricity generation of individually-modified bacterial cells. <i>Nano Energy</i> , 2019, 63, 103875.	16.0	57
30	Fermi level-tuned optics of graphene for attocoulomb-scale quantification of electron transfer at single gold nanoparticles. <i>Nature Communications</i> , 2019, 10, 3849.	12.8	14
31	Highly Efficient Photoelectrochemical Reduction of CO ₂ at Low Applied Voltage Using 3D Co-Pi/BiVO ₄ /SnO ₂ Nanosheet Array Photoanodes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26024-26031.	8.0	41
32	An Improved Strategy for High-Quality Cesium Bismuth Bromine Perovskite Quantum Dots with Remarkable Electrochemiluminescence Activities. <i>Analytical Chemistry</i> , 2019, 91, 8607-8614.	6.5	66
33	Sustainable and Self-Enhanced Electrochemiluminescent Ternary Suprastructures Derived from CsPbBr ₃ Perovskite Quantum Dots. <i>Advanced Functional Materials</i> , 2019, 29, 1902533.	14.9	50
34	Plasmon-enhanced cathodic reduction for accelerating electricity generation in visible-light-assisted microbial fuel cells. <i>Nano Energy</i> , 2019, 57, 94-100.	16.0	15
35	Steady-State Electrochemiluminescence at Single Semiconductive Titanium Dioxide Nanoparticles for Local Sensing of Single Cells. <i>Analytical Chemistry</i> , 2019, 91, 1121-1125.	6.5	42
36	<i>In situ</i> formation of large pore silica-MnO ₂ nanocomposites with H ⁺ /H ₂ O ₂ sensitivity for O ₂ -elevated photodynamic therapy and potential MR imaging. <i>Chemical Communications</i> , 2018, 54, 2962-2965.	4.1	36

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37	Acid-degradable gadolinium-based nanoscale coordination polymer: A potential platform for targeted drug delivery and potential magnetic resonance imaging. <i>Nano Research</i> , 2018, 11, 929-939.	10.4	22
38	Nitrogen-doped hollow carbon nanospheres for high-energy-density biofuel cells and self-powered sensing of microRNA-21 and microRNA-141. <i>Nano Energy</i> , 2018, 44, 95-102.	16.0	72
39	A glucose/O ₂ fuel cell-based self-powered biosensor for probing a drug delivery model with self-diagnosis and self-evaluation. <i>Chemical Science</i> , 2018, 9, 8482-8491.	7.4	36
40	Highly sensitive fluorescence quantification of intracellular telomerase activity by repeat G-rich DNA enhanced silver nanoclusters. <i>Journal of Materials Chemistry B</i> , 2018, 6, 4583-4591.	5.8	14
41	Light-Driven Nano-oscillators for Label-Free Single-Molecule Monitoring of MicroRNA. <i>Nano Letters</i> , 2018, 18, 3759-3765.	9.1	27
42	Ultrasensitive cathode photoelectrochemical immunoassay based on TiO ₂ photoanode-enhanced 3D Cu ₂ O nanowire array photocathode and signal amplification by biocatalytic precipitation. <i>Analytica Chimica Acta</i> , 2018, 1027, 33-40.	5.4	26
43	Dynamically imaging collision electrochemistry of single electrochemiluminescence nano-emitters. <i>Chemical Science</i> , 2018, 9, 6167-6175.	7.4	83
44	Nanostructured material-based biofuel cells: recent advances and future prospects. <i>Chemical Society Reviews</i> , 2017, 46, 1545-1564.	38.1	258
45	A Fe ₃ O ₄ @carbon nanofiber/gold nanoparticle hybrid for enzymatic biofuel cells with larger power output. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11026-11031.	10.3	18
46	Near-Infrared Photothermally Activated DNAzyme@Gold Nanoshells for Imaging Metal Ions in Living Cells. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6798-6802.	13.8	177
47	Living and Conducting: Coating Individual Bacterial Cells with In-Situ Formed Polypyrrole. <i>Angewandte Chemie</i> , 2017, 129, 10652-10656.	2.0	38
48	Living and Conducting: Coating Individual Bacterial Cells with In-Situ Formed Polypyrrole. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10516-10520.	13.8	206
49	Graphene/Fe ₃ O ₄ Nanocomposites as Efficient Anodes to Boost the Lifetime and Current Output of Microbial Fuel Cells. <i>Chemistry - an Asian Journal</i> , 2017, 12, 308-313.	3.3	35
50	Living and Conducting: Coating Individual Bacterial Cells with In-Situ Formed Polypyrrole (Angew. Chem. 35/2017). <i>Angewandte Chemie</i> , 2017, 129, 10744-10744.	2.0	0
51	Visible-light-enhanced power generation in microbial fuel cells coupling with 3D nitrogen-doped graphene. <i>Chemical Communications</i> , 2017, 53, 9967-9970.	4.1	16
52	Imaging the transient heat generation of individual nanostructures with a mechanoresponsive polymer. <i>Nature Communications</i> , 2017, 8, 1498.	12.8	38
53	Evaluation of intracellular telomerase activity through cascade DNA logic gates. <i>Chemical Science</i> , 2017, 8, 174-180.	7.4	56
54	Inkjet-printed porous polyaniline gel as an efficient anode for microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14555-14559.	10.3	64

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55	Coupling a DNA-Based Machine with Glucometer Readouts for Amplified Detection of Telomerase Activity in Cancer Cells. <i>Scientific Reports</i> , 2016, 6, 23504.	3.3	22
56	Cathode Photoelectrochemical Immunosensing Platform Integrating Photocathode with Photoanode. <i>Analytical Chemistry</i> , 2016, 88, 10352-10356.	6.5	118
57	A Targeted DNAzyme-Nanocomposite Probe Equipped with Built-in Zn ²⁺ Arsenal for Combined Treatment of Gene Regulation and Drug Delivery. <i>Scientific Reports</i> , 2016, 6, 22737.	3.3	33
58	Bacteria-Affinity 3D Macroporous Graphene/MWCNTs/Fe ₃ O ₄ Foams for High-Performance Microbial Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16170-16177.	8.0	96
59	Enhanced Photoelectrochemical Immunosensing Platform Based on CdSeTe@CdS:Mn Core-Shell Quantum Dots-Sensitized TiO ₂ Amplified by CuS Nanocrystals Conjugated Signal Antibodies. <i>Analytical Chemistry</i> , 2016, 88, 3392-3399.	6.5	174
60	Ultrasensitive photoelectrochemical immunoassay for CA19-9 detection based on CdSe@ZnS quantum dots sensitized TiO ₂ NWs/Au hybrid structure amplified by quenching effect of Ab ₂ @V ²⁺ conjugates. <i>Biosensors and Bioelectronics</i> , 2016, 77, 339-346.	10.1	84
61	Highly luminescent and biocompatible near-infrared core-shell CdSeTe/CdS/C quantum dots for probe labeling tumor cells. <i>Talanta</i> , 2016, 146, 209-215.	5.5	13
62	Signal-on Photoelectrochemical Aptasensor for Adenosine Triphosphate Detection Based on Sensitization Effect of CdS:Mn@Ru(bpy) ₂ (dcbpy) Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15657-15665.	3.1	44
63	Ultrasensitive self-powered cytosensor. <i>Nano Energy</i> , 2016, 19, 541-549.	16.0	52
64	Design of an enzymatic biofuel cell with large power output. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11511-11516.	10.3	60
65	A nitrogen-doped graphene/gold nanoparticle/formate dehydrogenase bioanode for high power output membrane-less formic acid/O ₂ biofuel cells. <i>Analyst</i> , The, 2015, 140, 1822-1826.	3.5	39
66	Sensitive Electrochemical Detection of Telomerase Activity Using Spherical Nucleic Acids Gold Nanoparticles Triggered Mimic-Hybridization Chain Reaction Enzyme-Free Dual Signal Amplification. <i>Analytical Chemistry</i> , 2015, 87, 3019-3026.	6.5	153
67	Single Gold@Silver Nanoprobes for Real-Time Tracing the Entire Autophagy Process at Single-Cell Level. <i>Journal of the American Chemical Society</i> , 2015, 137, 1903-1908.	13.7	111
68	A highly sensitive fluorescence assay for 2,4,6-trinitrotoluene using amine-capped silicon quantum dots as a probe. <i>Analytical Methods</i> , 2015, 7, 1732-1737.	2.7	60
69	A ternary hybrid of carbon nanotubes/graphitic carbon nitride nanosheets/gold nanoparticles used as robust substrate electrodes in enzyme biofuel cells. <i>Chemical Communications</i> , 2015, 51, 14735-14738.	4.1	34
70	An OFF-switchable power output of enzymatic biofuel cell controlled by thermal-sensitive polymer. <i>Biosensors and Bioelectronics</i> , 2015, 74, 142-149.	10.1	32
71	Graphene/Au composites as an anode modifier for improving electricity generation in <i>Shewanella</i> -inoculated microbial fuel cells. <i>Analytical Methods</i> , 2015, 7, 4640-4644.	2.7	33
72	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. <i>Analytical Chemistry</i> , 2015, 87, 4949-4956.	6.5	108

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73	Ultrasensitive self-powered cytosensors based on exogenous redox-free enzyme biofuel cells as point-of-care tools for early cancer diagnosis. <i>Chemical Communications</i> , 2015, 51, 16763-16766.	4.1	36
74	A new signal amplification strategy of photoelectrochemical immunoassay for highly sensitive interleukin-6 detection based on TiO ₂ /CdS/CdSe dual co-sensitized structure. <i>Biosensors and Bioelectronics</i> , 2014, 59, 45-53.	10.1	128
75	Synthesis and characterization of a highly stable poly (3,4-ethylenedioxythiophene)-gold nanoparticles composite film and its application to electrochemical dopamine sensors. <i>RSC Advances</i> , 2014, 4, 8415-8420.	3.6	13
76	NADH dehydrogenase-like behavior of nitrogen-doped graphene and its application in NAD ⁺ -dependent dehydrogenase biosensing. <i>Biosensors and Bioelectronics</i> , 2014, 62, 170-176.	10.1	35
77	Manganese-doped ZnS quantum dots as a phosphorescent probe for use in the bi-enzymatic determination of organophosphorus pesticides. <i>Mikrochimica Acta</i> , 2014, 181, 1591-1599.	5.0	24
78	Polyaniline networks grown on graphene nanoribbons-coated carbon paper with a synergistic effect for high-performance microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12587.	10.3	138
79	Aptamer-functionalized silver nanoclusters-mediated cell type-specific siRNA delivery and tracking. <i>Chemical Science</i> , 2013, 4, 3514.	7.4	43
80	A Graphene/Poly(3,4-ethylenedioxythiophene) Hybrid as an Anode for High-Performance Microbial Fuel Cells. <i>ChemPlusChem</i> , 2013, 78, 823-829.	2.8	77
81	Self-assembled Mn-doped ZnSe quantum dot-methyl viologen nanohybrids as an OFF-ON fluorescent probe for time-resolved fluorescence detection of tiopronin. <i>Analytical Methods</i> , 2013, 5, 4321.	2.7	12
82	Highly luminescent glutathione-capped ZnS:Mn/ZnS core/shell doped quantum dots for targeted mannosyl groups expression on the cell surface. <i>Analytical Methods</i> , 2013, 5, 5929.	2.7	21
83	Microwave-Assisted In-Situ Synthesis of Graphene/PEDOT Hybrid and Its Application in Supercapacitors. <i>ChemPlusChem</i> , 2013, 78, 227-234.	2.8	61
84	One-Pot Synthesis of Aptamer-Functionalized Silver Nanoclusters for Cell-Type-Specific Imaging. <i>Analytical Chemistry</i> , 2012, 84, 4140-4146.	6.5	188
85	A Facile Microwave Avenue to Electrochemiluminescent Two-Color Graphene Quantum Dots. <i>Advanced Functional Materials</i> , 2012, 22, 2971-2979.	14.9	768
86	Toward the Early Evaluation of Therapeutic Effects: An Electrochemical Platform for Ultrasensitive Detection of Apoptotic Cells. <i>Analytical Chemistry</i> , 2011, 83, 7902-7909.	6.5	77
87	Fabrication of gold nanoparticles on bilayer graphene for glucose electrochemical biosensing. <i>Journal of Materials Chemistry</i> , 2011, 21, 7604.	6.7	141
88	Fabrication of Graphene-Quantum Dots Composites for Sensitive Electrogenerated Chemiluminescence Immunosensing. <i>Advanced Functional Materials</i> , 2011, 21, 869-878.	14.9	303
89	Improved Current-Monitoring Method for Low Electroosmotic Flow Measurement in Modified Microchip. <i>Chromatographia</i> , 2009, 69, 897-901.	1.3	2
90	ELECTROCHEMICAL BEHAVIOR OF AMORPHOUS HYDROUS RUTHENIUM OXIDE/ACTIVE CARBON COMPOSITE ELECTRODES FOR SUPER-CAPACITOR. <i>International Journal of Modern Physics B</i> , 2002, 16, 4479-4483.	2.0	23

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91	Differential pulse voltammetric indirect determination of aluminium in drinking waters, blood, urine, hair, and medicament samples using l-dopa under alkaline conditions. <i>Analyst, The</i> , 2000, 125, 1299-1302.	3.5	22