Junfeng Zhai

List of Publications by Year
in descending order

73 papers	4,552 citations	136950 32 h-index	98798 67 g-index
73 all docs	73 docs citations	73 times ranked	7295 citing authors

#	Article	IF	Citations
1	Biosensors: Microbial Sensors. , 2023, , 405-419.		1
2	A Selfâ€powered Glucose Biosensor Based on Mediatorâ€free Hybrid Cu/Glucose Biofuel Cell for Flow Sensing of Glucose. Electroanalysis, 2022, 34, 1953-1960.	2.9	3
3	Recent advances in microbial fuel cell-based toxicity biosensors: Strategies for enhanced toxicity response. Current Opinion in Electrochemistry, 2022, 34, 100975.	4.8	10
4	A mediator-free self-powered glucose biosensor based on a hybrid glucose/MnO2 enzymatic biofuel cell. Nano Research, 2021, 14, 707-714.	10.4	20
5	A naked-eye readout self-powered electrochemical biosensor toward indoor formaldehyde: On-site detection and exposure risk warning. Biosensors and Bioelectronics, 2021, 177, 112975.	10.1	16
6	How to Identify the â€œLIVE/DEADâ€•States of Microbes Related to Biosensing. ACS Sensors, 2020, 5, 258-264.	7.8	9
7	A respiration substrate-less isolation method for acute toxicity assessment. Chemosphere, 2020, 244, 125511.	8.2	7
8	A Photoelectrochemical Fuel Cell Based on a CuO Photocathode for Sustainable Resources Utilization. ChemElectroChem, 2020, 7, 4649-4654.	3.4	0
9	Recent development of biofuel cell based self-powered biosensors. Journal of Materials Chemistry B, 2020, 8, 3393-3407.	5.8	65
10	A Self-Powered Biosensor with a Flake Electrochromic Display for Electrochemical and Colorimetric Formaldehyde Detection. ACS Sensors, 2019, 4, 2631-2637.	7.8	43
11	Water/Oxygen Circulation-Based Biophotoelectrochemical System for Solar Energy Storage and Release. Journal of the American Chemical Society, 2019, 141, 16416-16421.	13.7	21
12	Facile synthesis of Ni based metal-organic frameworks wrapped MnO2 nanowires with high performance toward electrochemical oxygen evolution reaction. Talanta, 2018, 186, 154-161.	5.5	24
13	Preparation, performance, and application of a stable, sensitive and cost-effective microelectrode array. Talanta, 2018, 188, 245-250.	5.5	6
14	Electrochemical fabrication of nanoporous gold electrodes in a deep eutectic solvent for electrochemical detections. Chemical Communications, 2018, 54, 8853-8856.	4.1	31
15	One-step synthesis of functional pNR/rGO composite as a building block for enhanced ascorbic acid biosensing. Analytica Chimica Acta, 2017, 981, 34-40.	5.4	12
16	Toxicity detection in water containing heavy metal ions with a self-powered microbial fuel cell-based biosensor. Talanta, 2017, 168, 210-216.	5.5	123
17	Small Microbial Three-Electrode Cell Based Biosensor for Online Detection of Acute Water Toxicity. ACS Sensors, 2017, 2, 1637-1643.	7.8	20
18	Single wearable sensing energy device based on photoelectric biofuel cells for simultaneous analysis of perspiration and illuminance. Nanoscale, 2017, 9, 11846-11850.	5.6	35

#	Article	IF	Citations
19	A Nanoscale Multichannel Closed Bipolar Electrode Array for Electrochemiluminescence Sensing Platform. Analytical Chemistry, 2016, 88, 945-951.	6.5	92
20	Direct carbonization of cobalt-doped NH₂-MIL-53(Fe) for electrocatalysis of oxygen evolution reaction. Nanoscale, 2016, 8, 1033-1039.	5.6	93
21	An amperometric sensor for detection of tryptophan based on a pristine multi-walled carbon nanotube/graphene oxide hybrid. Analyst, The, 2015, 140, 5295-5300.	3.5	18
22	Biochemical oxygen demand measurement by mediator method in flow system. Talanta, 2015, 138, 36-39.	5.5	13
23	Polymerizable Ionic Liquid as Nitrogen-Doping Precursor for Coâ€“Nâ€“C Catalyst with Enhanced Oxygen Reduction Activity. Industrial & Engineering Chemistry Research, 2015, 54, 7984-7989.	3.7	36
24	Detecting total toxicity in water using a mediated biosensor system with flow injection. Chemosphere, 2015, 139, 109-116.	8.2	9
25	IL-derived N, S co-doped ordered mesoporous carbon for high-performance oxygen reduction. Nanoscale, 2015, 7, 11956-11961.	5.6	73
26	Porous CoP concave polyhedron electrocatalysts synthesized from metalâ€“organic frameworks with enhanced electrochemical properties for hydrogen evolution. Journal of Materials Chemistry A, 2015, 3, 21471-21477.	10.3	185
27	One-pot synthesis of 3-dimensional reduced graphene oxide-based hydrogel as support for microbe immobilization and BOD biosensor preparation. Biosensors and Bioelectronics, 2015, 63, 483-489.	10.1	42
28	Ionic liquid-induced three-dimensional macroassembly of graphene and its applications in electrochemical energy storage. Nanoscale, 2014, 6, 10077-10083.	5.6	26
29	A rapid and sensitive p-benzoquinone-mediated bioassay for determination of heavy metal toxicity in water. Analyst, The, 2013, 138, 3297.	3.5	29
30	A novel colorimetric biosensor for monitoring and detecting acute toxicity in water. Analyst, The, 2013, 138, 702-707.	3.5	27
31	Neutral red based colorimetric microorganism bioassay for direct toxicity assessment of toxic chemicals in water. Analytical Methods, 2012, 4, 3849.	2.7	7
32	Bifunctional fluorescent carbon nanodots: green synthesis via soy milk and application as metal-free electrocatalysts for oxygen reduction. Chemical Communications, 2012, 48, 9367.	4.1	630
33	Graphene oxide/polypyrrole nanocomposites: one-step electrochemical doping, coating and synergistic effect for energy storage. Journal of Materials Chemistry, 2012, 22, 6300.	6.7	293
34	Nano-C60 as a novel, effective fluorescent sensing platform for mercury(ii) ion detection at critical sensitivity and selectivity. Nanoscale, 2011, 3, 2155.	5.6	50
35	Large-scale synthesis of coordination polymer microdendrites and their application as a sensing platform for fluorescent DNA detection. RSC Advances, 2011, 1, 725.	3.6	22
36	Highly sensitive and selective detection of silver(i) ion using nano-C60 as an effective fluorescent sensing platform. Analyst, The, 2011, 136, 2040.	3.5	28

#	Article	IF	Citations
37	Carboxyl functionalized mesoporous polymer: A novel peroxidase-like catalyst for H2O2 detection. Analytical Methods, 2011, 3, 1475.	2.7	43
38	Poly(2,3-diaminonaphthalene) microspheres as a novel quencher for fluorescence-enhanced nucleic acid detection. Analyst, The, 2011, 136, 2221.	3.5	15
39	Titanium silicalite-1 zeolite microparticles for enzymeless H2O2 detection. Analyst, The, 2011, 136, 2037.	3.5	21
40	Sensitive and Selective Detection of Silver(I) Ion in Aqueous Solution Using Carbon Nanoparticles as a Cheap, Effective Fluorescent Sensing Platform. Langmuir, 2011, 27, 4305-4308.	3.5	144
41	Tetracyanoquinodimethane nanoparticles as an effective sensing platform for fluorescent nucleic acid detection. Analytical Methods, 2011, 3, 1051.	2.7	14
42	Acid-driven, microwave-assisted production of photoluminescent carbon nitride dots from N,N-dimethylformamide. RSC Advances, 2011, 1, 951.	3.6	81
43	A novel application of porphyrin nanoparticles as an effective fluorescent assay platform for nucleic acid detection. RSC Advances, 2011, 1, 36.	3.6	24
44	Preparation of photoluminescent carbon nitride dots from CCl4 and 1,2-ethylenediamine: a heat-treatment-based strategy. Journal of Materials Chemistry, 2011, 21, 11726.	6.7	179
45	Carbon nanoparticle for highly sensitive and selective fluorescent detection of mercury(II) ion in aqueous solution. Biosensors and Bioelectronics, 2011, 26, 4656-4660.	10.1	156
46	Fluorescence-Enhanced Potassium Ions Detection Based on Inherent Quenching Ability of Deoxyguanosines and K+-Induced Conformational Transition of G-Rich ssDNA from Duplex to G-Quadruplex Structures. Journal of Fluorescence, 2011, 21, 1841-1846.	2.5	14
47	Coordination Polymer Nanobelts as an Effective Sensing Platform for Fluorescenceâ€enhanced Nucleic Acid Detection. Macromolecular Rapid Communications, 2011, 32, 899-904.	3.9	28
48	Macromol. Rapid Commun. 12/2011. Macromolecular Rapid Communications, 2011, 32, .	3.9	0
49	Electrostatic-Assembly-Driven Formation of Supramolecular Rhombus Microparticles and Their Application for Fluorescent Nucleic Acid Detection. PLoS ONE, 2011, 6, e18958.	2.5	18
50	A membraneless biofuel cell powered by ethanol and alcoholic beverage. Biosensors and Bioelectronics, 2010, 26, 70-73.	10.1	52
51	Solution self-assembly-based route towards hexagonal microdisks at room temperature. Inorganic Materials, 2010, 46, 472-475.	0.8	1
52	A Facile and Controllable Strategy to Synthesize Auâ^'Ag Alloy Nanoparticles within Polyelectrolyte Multilayer Nanoreactors upon Thermal Reduction. Langmuir, 2010, 26, 6713-6719.	3.5	45
53	Temperature-dependent synthesis of CoPt hollow nanoparticles: from â€œnanochainâ€•to â€œnanoringâ€• Chemical Communications, 2010, 46, 1500-1502.	4.1	36
54	One-pot synthesis of monodispersed ZnS nanospheres with high antibacterial activity. Journal of Materials Chemistry, 2010, 20, 9215.	6.7	57

#	Article	IF	Citations
55	Fluorescence Spectroelectrochemistry of Multilayer Film Assembled CdTe Quantum Dots Controlled by Applied Potential in Aqueous Solution. Journal of Physical Chemistry C, 2010, 114, 803-807.	3.1	28
56	Controlled Synthesis of Largeâ€Area and Patterned Electrochemically Reduced Graphene Oxide Films. Chemistry - A European Journal, 2009, 15, 6116-6120.	3.3	739
57	Oneâ€Step Synthesis of Folic Acid Protected Gold Nanoparticles and Their Receptorâ€Mediated Intracellular Uptake. Chemistry - A European Journal, 2009, 15, 9868-9873.	3.3	75
58	Prussian Blue/Multiwalled Carbon Nanotube Hybrids: Synthesis, Assembly and Electrochemical Behavior. Electroanalysis, 2009, 21, 2207-2212.	2.9	68
59	Monodisperse, submicrometer-scale platinum colloidal spheres with high electrocatalytic activity. Electrochemistry Communications, 2009, 11, 258-261.	4.7	6
60	Direct dissolution of Au nanoparticles induced by potassium ferricyanide. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 335, 207-210.	4.7	18
61	Ordered magnetic coreâ€“manganese oxide shell nanostructures and their application in water treatment. Journal of Materials Chemistry, 2009, 19, 7030.	6.7	110
62	Pt Nanoparticles Supported on TiO₂ Colloidal Spheres with Nanoporous Surface: Preparation and Use as an Enhancing Material for Biosensing Applications. Journal of Physical Chemistry C, 2009, 113, 13023-13028.	3.1	61
63	Fabrication of Iron Oxide Core/Gold Shell Submicrometer Spheres with Nanoscale Surface Roughness for Efficient Surface-Enhanced Raman Scattering. Journal of Physical Chemistry C, 2009, 113, 7009-7014.	3.1	103
64	Rapid fabrication of Au nanoparticle films with the aid of centrifugal force. Nanotechnology, 2009, 20, 055609.	2.6	11
65	Magnetic control of bioelectrocatalytic processes based on assembled iron oxide particles. Electrochemistry Communications, 2008, 10, 1172-1175.	4.7	6
66	Ultrathin platinum-group metal coated hierarchical flowerlike gold microstructure: Electrochemical design and characterization. Electrochimica Acta, 2008, 53, 2776-2781.	5.2	19
67	Nanoelectrocatalyst Based on Highâ€Density Au/Pt Hybrid Nanoparticles Supported on a Silica Nanosphere. Chemistry - an Asian Journal, 2008, 3, 1156-1162.	3.3	22
68	Facile Synthesis of Platinum Nanoelectrocatalyst with Urchinlike Morphology. Journal of Physical Chemistry C, 2008, 112, 13372-13377.	3.1	49
69	Magnet-assisted assembly of 1-dimensional hollow PtCo nanomaterials on an electrode surface. Journal of Materials Chemistry, 2008, 18, 923.	6.7	32
70	Rapid Synthesis of Polyethylenimine-Protected Prussian Blue Nanocubes through a Thermal Process. Inorganic Chemistry, 2008, 47, 7071-7073.	4.0	47
71	A simple route to incorporate redox mediator into carbon nanotubes/Nafion composite film and its application to determine NADH at low potential. Talanta, 2007, 74, 132-139.	5.5	46
72	Electrochemical Designing of Au/Pt Core Shell Nanoparticles as Nanostructured Catalyst with Tunable Activity for Oxygen Reduction. Electroanalysis, 2007, 19, 506-509.	2.9	55

#	Article	IF	Citations
73	Rotating minidiskâ€“disk electrodes. Electrochemistry Communications, 2007, 9, 1434-1438.	4.7	10