

Junfeng Zhai

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/201501/publications.pdf>

Version: 2024-02-01

73
papers

4,552
citations

136740

32
h-index

98622

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 Self-Powered Glucose Biosensor Based on Mediator-Free Hybrid Cu/Glucose Biofuel Cell for Flow Sensing of Glucose. <i>Electroanalysis</i> , 2022, 34, 1953-1960.	1.5	3
3	Recent advances in microbial fuel cell-based toxicity biosensors: Strategies for enhanced toxicity response. <i>Current Opinion in Electrochemistry</i> , 2022, 34, 100975.	2.5	10
4	A mediator-free self-powered glucose biosensor based on a hybrid glucose/MnO ₂ enzymatic biofuel cell. <i>Nano Research</i> , 2021, 14, 707-714.	5.8	20
5	A naked-eye readout self-powered electrochemical biosensor toward indoor formaldehyde: On-site detection and exposure risk warning. <i>Biosensors and Bioelectronics</i> , 2021, 177, 112975.	5.3	16
6	How to Identify the "LIVE/DEAD" States of Microbes Related to Biosensing. <i>ACS Sensors</i> , 2020, 5, 258-264.	4.0	9
7	A respiration substrate-less isolation method for acute toxicity assessment. <i>Chemosphere</i> , 2020, 244, 125511.	4.2	7
8	A Photoelectrochemical Fuel Cell Based on a CuO Photocathode for Sustainable Resources Utilization. <i>ChemElectroChem</i> , 2020, 7, 4649-4654.	1.7	0
9	Recent development of biofuel cell based self-powered biosensors. <i>Journal of Materials Chemistry B</i> , 2020, 8, 3393-3407.	2.9	65
10	A Self-Powered Biosensor with a Flake Electrochromic Display for Electrochemical and Colorimetric Formaldehyde Detection. <i>ACS Sensors</i> , 2019, 4, 2631-2637.	4.0	43
11	Water/Oxygen Circulation-Based Biophotoelectrochemical System for Solar Energy Storage and Release. <i>Journal of the American Chemical Society</i> , 2019, 141, 16416-16421.	6.6	21
12	Facile synthesis of Ni based metal-organic frameworks wrapped MnO ₂ nanowires with high performance toward electrochemical oxygen evolution reaction. <i>Talanta</i> , 2018, 186, 154-161.	2.9	24
13	Preparation, performance, and application of a stable, sensitive and cost-effective microelectrode array. <i>Talanta</i> , 2018, 188, 245-250.	2.9	6
14	Electrochemical fabrication of nanoporous gold electrodes in a deep eutectic solvent for electrochemical detections. <i>Chemical Communications</i> , 2018, 54, 8853-8856.	2.2	31
15	One-step synthesis of functional pNR/rGO composite as a building block for enhanced ascorbic acid biosensing. <i>Analytica Chimica Acta</i> , 2017, 981, 34-40.	2.6	12
16	Toxicity detection in water containing heavy metal ions with a self-powered microbial fuel cell-based biosensor. <i>Talanta</i> , 2017, 168, 210-216.	2.9	123
17	Small Microbial Three-Electrode Cell Based Biosensor for Online Detection of Acute Water Toxicity. <i>ACS Sensors</i> , 2017, 2, 1637-1643.	4.0	20
18	Single wearable sensing energy device based on photoelectric biofuel cells for simultaneous analysis of perspiration and illuminance. <i>Nanoscale</i> , 2017, 9, 11846-11850.	2.8	35

#	ARTICLE	IF	CITATIONS
19	A Nanoscale Multichannel Closed Bipolar Electrode Array for Electrochemiluminescence Sensing Platform. <i>Analytical Chemistry</i> , 2016, 88, 945-951.	3.2	92
20	Direct carbonization of cobalt-doped NH ₂ -MIL-53(Fe) for electrocatalysis of oxygen evolution reaction. <i>Nanoscale</i> , 2016, 8, 1033-1039.	2.8	93
21	An amperometric sensor for detection of tryptophan based on a pristine multi-walled carbon nanotube/graphene oxide hybrid. <i>Analyst, The</i> , 2015, 140, 5295-5300.	1.7	18
22	Biochemical oxygen demand measurement by mediator method in flow system. <i>Talanta</i> , 2015, 138, 36-39.	2.9	13
23	Polymerizable Ionic Liquid as Nitrogen-Doping Precursor for Co-N-C Catalyst with Enhanced Oxygen Reduction Activity. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 7984-7989.	1.8	36
24	Detecting total toxicity in water using a mediated biosensor system with flow injection. <i>Chemosphere</i> , 2015, 139, 109-116.	4.2	9
25	IL-derived N, S co-doped ordered mesoporous carbon for high-performance oxygen reduction. <i>Nanoscale</i> , 2015, 7, 11956-11961.	2.8	73
26	Porous CoP concave polyhedron electrocatalysts synthesized from metal-organic frameworks with enhanced electrochemical properties for hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21471-21477.	5.2	185
27	One-pot synthesis of 3-dimensional reduced graphene oxide-based hydrogel as support for microbe immobilization and BOD biosensor preparation. <i>Biosensors and Bioelectronics</i> , 2015, 63, 483-489.	5.3	42
28	Ionic liquid-induced three-dimensional macroassembly of graphene and its applications in electrochemical energy storage. <i>Nanoscale</i> , 2014, 6, 10077-10083.	2.8	26
29	A rapid and sensitive p-benzoquinone-mediated bioassay for determination of heavy metal toxicity in water. <i>Analyst, The</i> , 2013, 138, 3297.	1.7	29
30	A novel colorimetric biosensor for monitoring and detecting acute toxicity in water. <i>Analyst, The</i> , 2013, 138, 702-707.	1.7	27
31	Neutral red based colorimetric microorganism bioassay for direct toxicity assessment of toxic chemicals in water. <i>Analytical Methods</i> , 2012, 4, 3849.	1.3	7
32	Bifunctional fluorescent carbon nanodots: green synthesis via soy milk and application as metal-free electrocatalysts for oxygen reduction. <i>Chemical Communications</i> , 2012, 48, 9367.	2.2	630
33	Graphene oxide/polypyrrole nanocomposites: one-step electrochemical doping, coating and synergistic effect for energy storage. <i>Journal of Materials Chemistry</i> , 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. <i>Nanoscale</i> , 2011, 3, 2155.	2.8	50
35	Large-scale synthesis of coordination polymer microdendrites and their application as a sensing platform for fluorescent DNA detection. <i>RSC Advances</i> , 2011, 1, 725.	1.7	22
36	Highly sensitive and selective detection of silver(i) ion using nano-C60 as an effective fluorescent sensing platform. <i>Analyst, The</i> , 2011, 136, 2040.	1.7	28

#	ARTICLE	IF	CITATIONS
37	Carboxyl functionalized mesoporous polymer: A novel peroxidase-like catalyst for H ₂ O ₂ detection. <i>Analytical Methods</i> , 2011, 3, 1475.	1.3	43
38	Poly(2,3-diaminonaphthalene) microspheres as a novel quencher for fluorescence-enhanced nucleic acid detection. <i>Analyst</i> , The, 2011, 136, 2221.	1.7	15
39	Titanium silicalite-1 zeolite microparticles for enzymeless H ₂ O ₂ detection. <i>Analyst</i> , The, 2011, 136, 2037.	1.7	21
40	Sensitive and Selective Detection of Silver(I) Ion in Aqueous Solution Using Carbon Nanoparticles as a Cheap, Effective Fluorescent Sensing Platform. <i>Langmuir</i> , 2011, 27, 4305-4308.	1.6	144
41	Tetracyanoquinodimethane nanoparticles as an effective sensing platform for fluorescent nucleic acid detection. <i>Analytical Methods</i> , 2011, 3, 1051.	1.3	14
42	Acid-driven, microwave-assisted production of photoluminescent carbon nitride dots from N,N-dimethylformamide. <i>RSC Advances</i> , 2011, 1, 951.	1.7	81
43	A novel application of porphyrin nanoparticles as an effective fluorescent assay platform for nucleic acid detection. <i>RSC Advances</i> , 2011, 1, 36.	1.7	24
44	Preparation of photoluminescent carbon nitride dots from CCl ₄ and 1,2-ethylenediamine: a heat-treatment-based strategy. <i>Journal of Materials Chemistry</i> , 2011, 21, 11726.	6.7	179
45	Carbon nanoparticle for highly sensitive and selective fluorescent detection of mercury(II) ion in aqueous solution. <i>Biosensors and Bioelectronics</i> , 2011, 26, 4656-4660.	5.3	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. <i>Journal of Fluorescence</i> , 2011, 21, 1841-1846.	1.3	14
47	Coordination Polymer Nanobelts as an Effective Sensing Platform for Fluorescence-enhanced Nucleic Acid Detection. <i>Macromolecular Rapid Communications</i> , 2011, 32, 899-904.	2.0	28
48	Macromol. Rapid Commun. 12/2011. <i>Macromolecular Rapid Communications</i> , 2011, 32, .	2.0	0
49	Electrostatic-Assembly-Driven Formation of Supramolecular Rhombus Microparticles and Their Application for Fluorescent Nucleic Acid Detection. <i>PLoS ONE</i> , 2011, 6, e18958.	1.1	18
50	A membraneless biofuel cell powered by ethanol and alcoholic beverage. <i>Biosensors and Bioelectronics</i> , 2010, 26, 70-73.	5.3	52
51	Solution self-assembly-based route towards hexagonal microdisks at room temperature. <i>Inorganic Materials</i> , 2010, 46, 472-475.	0.2	1
52	A Facile and Controllable Strategy to Synthesize Au ⁰ /Ag Alloy Nanoparticles within Polyelectrolyte Multilayer Nanoreactors upon Thermal Reduction. <i>Langmuir</i> , 2010, 26, 6713-6719.	1.6	45
53	Temperature-dependent synthesis of CoPt hollow nanoparticles: from "nanochain" to "nanoring". <i>Chemical Communications</i> , 2010, 46, 1500-1502.	2.2	36
54	One-pot synthesis of monodispersed ZnS nanospheres with high antibacterial activity. <i>Journal of Materials Chemistry</i> , 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. <i>Journal of Physical Chemistry C</i> , 2010, 114, 803-807.	1.5	28
56	Controlled Synthesis of Large Area and Patterned Electrochemically Reduced Graphene Oxide Films. <i>Chemistry - A European Journal</i> , 2009, 15, 6116-6120.	1.7	739
57	One-Step Synthesis of Folic Acid Protected Gold Nanoparticles and Their Receptor-Mediated Intracellular Uptake. <i>Chemistry - A European Journal</i> , 2009, 15, 9868-9873.	1.7	75
58	Prussian Blue/Multiwalled Carbon Nanotube Hybrids: Synthesis, Assembly and Electrochemical Behavior. <i>Electroanalysis</i> , 2009, 21, 2207-2212.	1.5	68
59	Monodisperse, submicrometer-scale platinum colloidal spheres with high electrocatalytic activity. <i>Electrochemistry Communications</i> , 2009, 11, 258-261.	2.3	6
60	Direct dissolution of Au nanoparticles induced by potassium ferricyanide. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2009, 335, 207-210.	2.3	18
61	Ordered magnetic core-manganese oxide shell nanostructures and their application in water treatment. <i>Journal of Materials Chemistry</i> , 2009, 19, 7030.	6.7	110
62	Pt Nanoparticles Supported on TiO ₂ Colloidal Spheres with Nanoporous Surface: Preparation and Use as an Enhancing Material for Biosensing Applications. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13023-13028.	1.5	61
63	Fabrication of Iron Oxide Core/Gold Shell Submicrometer Spheres with Nanoscale Surface Roughness for Efficient Surface-Enhanced Raman Scattering. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7009-7014.	1.5	103
64	Rapid fabrication of Au nanoparticle films with the aid of centrifugal force. <i>Nanotechnology</i> , 2009, 20, 055609.	1.3	11
65	Magnetic control of bioelectrocatalytic processes based on assembled iron oxide particles. <i>Electrochemistry Communications</i> , 2008, 10, 1172-1175.	2.3	6
66	Ultrathin platinum-group metal coated hierarchical flowerlike gold microstructure: Electrochemical design and characterization. <i>Electrochimica Acta</i> , 2008, 53, 2776-2781.	2.6	19
67	Nanoelectrocatalyst Based on High-Density Au/Pt Hybrid Nanoparticles Supported on a Silica Nanosphere. <i>Chemistry - an Asian Journal</i> , 2008, 3, 1156-1162.	1.7	22
68	Facile Synthesis of Platinum Nanoelectrocatalyst with Urchinlike Morphology. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13372-13377.	1.5	49
69	Magnet-assisted assembly of 1-dimensional hollow PtCo nanomaterials on an electrode surface. <i>Journal of Materials Chemistry</i> , 2008, 18, 923.	6.7	32
70	Rapid Synthesis of Polyethylenimine-Protected Prussian Blue Nanocubes through a Thermal Process. <i>Inorganic Chemistry</i> , 2008, 47, 7071-7073.	1.9	47
71	A simple route to incorporate redox mediator into carbon nanotubes/Nafion composite film and its application to determine NADH at low potential. <i>Talanta</i> , 2007, 74, 132-139.	2.9	46
72	Electrochemical Designing of Au/Pt Core Shell Nanoparticles as Nanostructured Catalyst with Tunable Activity for Oxygen Reduction. <i>Electroanalysis</i> , 2007, 19, 506-509.	1.5	55

#	ARTICLE	IF	CITATIONS
73	Rotating minidisk“disk electrodes. <i>Electrochemistry Communications</i> , 2007, 9, 1434-1438.	2.3	10