

Ronan Baron

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6722740/publications.pdf>

Version: 2024-02-01

41
papers

3,983
citations

201658

27
h-index

265191

42
g-index

44
all docs

44
docs citations

44
times ranked

4688
citing authors

#	ARTICLE	IF	CITATIONS
1	Growing Metal Nanoparticles by Enzymes. <i>Advanced Materials</i> , 2006, 18, 1109-1120.	21.0	398
2	Biocatalytic Growth of Au Nanoparticles: From Mechanistic Aspects to Biosensors Design. <i>Nano Letters</i> , 2005, 5, 21-25.	9.1	384
3	Dopamine-, L-DOPA-, Adrenaline-, and Noradrenaline-Induced Growth of Au Nanoparticles: Assays for the Detection of Neurotransmitters and of Tyrosinase Activity. <i>Analytical Chemistry</i> , 2005, 77, 1566-1571.	6.5	363
4	Integrated nanoparticle-biomolecule systems for biosensing and bioelectronics. <i>Biosensors and Bioelectronics</i> , 2007, 22, 1841-1852.	10.1	301
5	Elementary Arithmetic Operations by Enzymes: A Model for Metabolic Pathway Based Computing. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 1572-1576.	13.8	195
6	Reconstitution of Apo-Glucose Dehydrogenase on Pyrroloquinoline Quinone-Functionalized Au Nanoparticles Yields an Electrically Contacted Biocatalyst. <i>Journal of the American Chemical Society</i> , 2005, 127, 12400-12406.	13.7	193
7	Concatenated logic gates using four coupled biocatalysts operating in series. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 17160-17163.	7.1	186
8	Amperometric Gas Sensors as a Low Cost Emerging Technology Platform for Air Quality Monitoring Applications: A Review. <i>ACS Sensors</i> , 2017, 2, 1553-1566.	7.8	162
9	Logic Gates and Elementary Computing by Enzymes. <i>Journal of Physical Chemistry A</i> , 2006, 110, 8548-8553.	2.5	160
10	An electrochemical/photochemical information processing system using a monolayer-functionalized electrode. <i>Chemical Communications</i> , 2006, , 2147.	4.1	156
11	Biomolecule-nanoparticle hybrids as functional units for nanobiotechnology. <i>Chemical Communications</i> , 2007, , 323-332.	4.1	155
12	Hydrogen Peroxide Electroreduction at a Silver-Nanoparticle Array: Investigating Nanoparticle Size and Coverage Effects. <i>Journal of Physical Chemistry C</i> , 2009, 113, 9053-9062.	3.1	140
13	Design, fabrication, characterisation and application of nanoelectrode arrays. <i>Chemical Physics Letters</i> , 2008, 459, 1-17.	2.6	118
14	Magnetoswitchable Electrochemistry Gated by Alkyl-Chain-Functionalized Magnetic Nanoparticles: Control of Diffusional and Surface-Confined Electrochemical Processes. <i>Journal of the American Chemical Society</i> , 2005, 127, 4060-4070.	13.7	117
15	Particle Size and Surface Coverage Effects in the Stripping Voltammetry of Silver Nanoparticles: Theory and Experiment. <i>Journal of Physical Chemistry C</i> , 2008, 112, 17820-17827.	3.1	107
16	Hydrogen-Bonded CdS Nanoparticle Assemblies on Electrodes for Photoelectrochemical Applications. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 4010-4015.	13.8	79
17	Two coupled enzymes perform in parallel the AND and INHIBIT logic gate operations. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 989.	2.8	75
18	Voltammetry at Nanoparticle and Microparticle Modified Electrodes: Theory and Experiment. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17008-17014.	3.1	75

#	ARTICLE	IF	CITATIONS
19	The Hydrogen Evolution Reaction at a Silver Nanoparticle Array and a Silver Macroelectrode Compared: Changed Electrode Kinetics between the Macro- and Nanoscales. <i>Journal of Physical Chemistry C</i> , 2009, 113, 14852-14857.	3.1	61
20	Investigating the reactive sites and the anomalously large changes in surface pKa values of chemically modified carbon nanotubes of different morphologies. <i>Journal of Materials Chemistry</i> , 2007, 17, 2616.	6.7	52
21	Development of an Electrochemical Sensor Nanoarray for Hydrazine Detection Using a Combinatorial Approach. <i>Electroanalysis</i> , 2007, 19, 1062-1068.	2.9	52
22	Differentiating NO ₂ and O ₃ at Low Cost Air Quality Amperometric Gas Sensors. <i>ACS Sensors</i> , 2016, 1, 1291-1294.	7.8	43
23	Temperature-Dependent and Friction-Controlled Electrochemically Induced Shuttling Along Molecular Strings Associated with Electrodes. <i>ChemPhysChem</i> , 2005, 6, 2179-2189.	2.1	37
24	Electrochemical detection of arsenic on a gold nanoparticle array. <i>Russian Journal of Physical Chemistry A</i> , 2007, 81, 1443-1447.	0.6	33
25	Magnetically moveable bimetallic (nickel/silver) nanoparticle/carbon nanotube composites for methanol oxidation. <i>New Journal of Chemistry</i> , 2009, 33, 107-111.	2.8	32
26	Electrochemical Determination of Oxalate at Pyrolytic Graphite Electrodes. <i>Electroanalysis</i> , 2007, 19, 918-922.	2.9	29
27	The expansion/contraction of gold microparticles during voltammetrically induced amalgamation leads to mechanical instability. <i>New Journal of Chemistry</i> , 2007, 31, 2071.	2.8	25
28	Combinatorial electrochemistry using metal nanoparticles: From proof-of-concept to practical realisation for bromide detection. <i>Analytica Chimica Acta</i> , 2007, 590, 67-73.	5.4	25
29	Layered Hydrogen-Bonded Nucleotide-Functionalized CdS Nanoparticles for Photoelectrochemical Applications. <i>Small</i> , 2006, 2, 1178-1182.	10.0	23
30	Electrode reaction mechanisms for the reduction of tert-butyl peracetate, lauryl peroxide and dibenzoyl peroxide. <i>Electrochimica Acta</i> , 2006, 51, 1336-1341.	5.2	23
31	Modeling Diffusion Effects for a Stepwise Two-Electron Reduction Process at a Microelectrode: Study of the Reduction of <i>p</i> -Quaterphenyl in Tetrahydrofuran and Inference of Fast Comproportionation of the Dianion with the Neutral Parent Molecule. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16042-16050.	3.1	21
32	Ultrasonic Synthesis of Nickel Nanostructures on Glassy Carbon Microspheres and Their Application for Ethanol Electrooxidation. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 2719-2725.	0.9	19
33	Electrocatalytic reduction of tert-butyl hydroperoxide at iron electrodes. <i>Electrochimica Acta</i> , 2004, 49, 4841-4847.	5.2	17
34	Alkali Metal Reductions of Organic Molecules: Why Mediated Electron Transfer from Lithium Is Faster than Direct Reduction. <i>Journal of the American Chemical Society</i> , 2008, 130, 12256-12257.	13.7	17
35	Metallic Nanoparticles Deposited on Carbon Microspheres: Novel Materials for Combinatorial Electrochemistry and Electroanalysis. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 2274-2282.	0.9	17
36	Quantitative voltammetry of the reduction of methyl benzoate in THF reveals strong ion pairing of the radical anion with tetra <i>n</i> -butyl cations. <i>Journal of Physical Organic Chemistry</i> , 2009, 22, 247-253.	1.9	17

#	ARTICLE	IF	CITATIONS
37	Electrochemistry in tetrahydrofuran and at low temperature: protocol, procedures and methods. Journal of Physical Organic Chemistry, 2009, 22, 1136-1141.	1.9	8
38	Reproducible reduction signal of organic hydroperoxides at an in situ electrodeposited iron microelectrode, due to the reconstitution of the active surface of the electrode. Journal of Electroanalytical Chemistry, 2005, 576, 261-267.	3.8	6
39	The effect of ortho-substitution on the efficacy of biphenyls in mediating electron transfer from lithium. Tetrahedron, 2009, 65, 5377-5384.	1.9	6
40	A Novel Electrochemical Information Storage System Based on Stripping Voltammetry of Metals. ChemPhysChem, 2006, 7, 349-352.	2.1	1
41	Biocatalytic Growth of Nanoparticles for Sensors and Circuitry. , 0, , 99-121.		1