

Jalal Ghilane

List of Publications by Year in descending order

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218677

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times ranked

2357
citing authors

#	ARTICLE	IF	CITATIONS
1	Giant Plasmon Resonance Shift Using Poly(3,4-ethylenedioxythiophene) Electrochemical Switching. <i>Journal of the American Chemical Society</i> , 2010, 132, 10224-10226.	13.7	101
2	Metal/Polypyrrole Quasi-Reference Electrode for Voltammetry in Nonaqueous and Aqueous Solutions. <i>Analytical Chemistry</i> , 2006, 78, 6868-6872.	6.5	100
3	Microwave assisted synthesis of carbon dots in ionic liquid as metal free catalyst for highly selective production of hydrogen peroxide. <i>Carbon</i> , 2018, 130, 544-552.	10.3	94
4	Mass transport and heterogeneous electron transfer of a ferrocene derivative in a room-temperature ionic liquid. <i>Journal of Electroanalytical Chemistry</i> , 2009, 632, 88-96.	3.8	88
5	Conducting Ferrocene Monolayers on Nonconducting Surfaces. <i>Journal of the American Chemical Society</i> , 2008, 130, 2748-2749.	13.7	86
6	Grafting Oligothiophenes on Surfaces by Diazonium Electroreduction: A Step toward Ultrathin Junction with Well-Defined Metal/Oligomer Interface. <i>Journal of the American Chemical Society</i> , 2009, 131, 14920-14927.	13.7	76
7	Nernstian-Potential-Driven Redox-Targeting Reactions of Battery Materials. <i>CheM</i> , 2017, 3, 1036-1049.	11.7	73
8	Electrografting Polyaniline on Carbon through the Electroreduction of Diazonium Salts and the Electrochemical Polymerization of Aniline. <i>Journal of Physical Chemistry C</i> , 2008, 112, 16103-16109.	3.1	65
9	Scanning Electrochemical Microscopy in Unusual Solvents: An Inequality of Diffusion Coefficients Problem. <i>Analytical Chemistry</i> , 2007, 79, 7383-7391.	6.5	63
10	Facile Electrochemical Characterization of Core/Shell Nanoparticles. Ag Core/Ag ₂ O Shell Structures. <i>Nano Letters</i> , 2007, 7, 1406-1412.	9.1	62
11	Ionic Liquid Viscosity Effects on the Functionalization of Electrode Material through the Electroreduction of Diazonium. <i>Langmuir</i> , 2010, 26, 18542-18549.	3.5	62
12	Variations of Diffusion Coefficients of Redox Active Molecules in Room Temperature Ionic Liquids upon Electron Transfer. <i>Journal of Physical Chemistry B</i> , 2008, 112, 14952-14958.	2.6	50
13	Surface and Electrochemical Properties of Polymer Brush-Based Redox Poly(Ionic Liquid). <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 28316-28324.	8.0	48
14	Modification of carbon electrode in ionic liquid through the reduction of phenyl diazonium salt. Electrochemical evidence in ionic liquid. <i>Electrochemistry Communications</i> , 2008, 10, 1060-1063.	4.7	47
15	Indirect Reduction of Aryldiazonium Salts onto Cathodically Activated Platinum Surfaces: Formation of Metal-Organic Structures. <i>Langmuir</i> , 2005, 21, 6422-6429.	3.5	46
16	Electrochemical Switches Based on Ultrathin Organic Films: From Diode-like Behavior to Charge Transfer Transparency. <i>Journal of Physical Chemistry C</i> , 2008, 112, 18638-18643.	3.1	46
17	Electrografting and Controlled Surface Functionalization of Carbon Based Surfaces for Electroanalysis. <i>Electroanalysis</i> , 2016, 28, 13-26.	2.9	45
18	Electrosynthesis of well-organized nanoporous poly(3,4-ethylenedioxythiophene) by nanosphere lithography. <i>Electrochemistry Communications</i> , 2010, 12, 872-875.	4.7	39

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19	Formation of Mixed Organic Layers by Stepwise Electrochemical Reduction of Diazonium Compounds. <i>Journal of the American Chemical Society</i> , 2012, 134, 5476-5479.	13.7	39
20	Polymer Brushes Ionic Liquid as a Catalyst for Oxygen Reduction and Oxygen Evolution Reactions. <i>ACS Catalysis</i> , 2018, 8, 869-875.	11.2	38
21	Electrochemical oxidation of primary amine in ionic liquid media: Formation of organic layer attached to electrode surface. <i>Electrochemistry Communications</i> , 2010, 12, 246-249.	4.7	36
22	Host-Guest Complexation: A Convenient Route for the Electroreduction of Diazonium Salts in Aqueous Media and the Formation of Composite Materials. <i>Journal of the American Chemical Society</i> , 2010, 132, 1690-1698.	13.7	36
23	Grafting π -Conjugated Oligomers Incorporating 3,4-Ethylenedioxythiophene (EDOT) and Thiophene Units on Surfaces by Diazonium Electroreduction. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19218-19227.	3.1	35
24	Reactivity of Platinum Metal with Organic Radical Anions from Metal to Negative Oxidation States. <i>Journal of the American Chemical Society</i> , 2007, 129, 6654-6661.	13.7	28
25	Formation of negative oxidation states of platinum and gold in redox ionic liquid: Electrochemical evidence. <i>Electrochemistry Communications</i> , 2008, 10, 1205-1209.	4.7	27
26	Surface patterning based on nanosphere lithography and electroreduction of in situ generated diazonium cation. <i>Electrochemistry Communications</i> , 2012, 18, 20-23.	4.7	27
27	Oxidative and Stepwise Grafting of Dopamine Inner-Sphere Redox Couple onto Electrode Material: Electron Transfer Activation of Dopamine. <i>Analytical Chemistry</i> , 2013, 85, 11593-11601.	6.5	26
28	Formation of a Bifunctional Redox System Using Electrochemical Reduction of Platinum in Ferrocene Based Ionic Liquid and Its Reactivity with Aryldiazonium. <i>Journal of the American Chemical Society</i> , 2013, 135, 4722-4728.	13.7	26
29	When Electron Transfer Meets Electron Transport in Redox-Active Molecular Nanojunctions. <i>Journal of the American Chemical Society</i> , 2013, 135, 2108-2111.	13.7	26
30	Micro/Nano-Structured Polypyrrole Surfaces on Oxidizable Metals as Smart Electroswitchable Coatings. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10159-10164.	8.0	25
31	Multifunctional Indium Tin Oxide Electrode Generated by Unusual Surface Modification. <i>Scientific Reports</i> , 2016, 6, 36708.	3.3	25
32	Surface Modification of Halogenated Polymers. 7. Local Reduction of Poly(tetrafluoroethylene) and Poly(chlorotrifluoroethylene) by a Scanning Electrochemical Microscope in the Feedback Mode. <i>Journal of Physical Chemistry B</i> , 2004, 108, 6391-6397.	2.6	24
33	Spectroscopic Evidence of Platinum Negative Oxidation States at Electrochemically Reduced Surfaces. <i>Journal of Physical Chemistry C</i> , 2007, 111, 5701-5707.	3.1	23
34	Microelectrodes modification through the reduction of aryl diazonium and their use in scanning electrochemical microscopy (SECM). <i>Electrochemistry Communications</i> , 2009, 11, 647-650.	4.7	22
35	Determining Li ⁺ -Coupled Redox Targeting Reaction Kinetics of Battery Materials with Scanning Electrochemical Microscopy. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 491-496.	4.6	22
36	Recent Advances in the Development of Organic and Organometallic Redox Shuttles for Lithium-Ion Redox Flow Batteries. <i>ChemSusChem</i> , 2020, 13, 2142-2159.	6.8	22

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37	Cathodic Modifications of Platinum Surfaces in Organic Solvent: Reversibility and Cation Type Effects. <i>Journal of Physical Chemistry B</i> , 2005, 109, 14925-14931.	2.6	21
38	Nitrogen doped carbon dots embedded in poly(ionic liquid) as high efficient metal-free electrocatalyst for oxygen reduction reaction. <i>Catalysis Today</i> , 2019, 335, 381-387.	4.4	20
39	Scanning Electrochemical Microscopy Investigations of Monolayers Bound to p-Type Silicon Substrates. <i>Analytical Chemistry</i> , 2006, 78, 6019-6025.	6.5	19
40	Grafting of imidazolium ion-terminated layer using electrochemical reduction of diazonium: Redox active counter anion exchange within the layer. <i>Electrochemistry Communications</i> , 2013, 27, 73-76.	4.7	19
41	The Ksar Ghilane 002 shergottite – The 100th registered Martian meteorite fragment. <i>Meteoritics and Planetary Science</i> , 2013, 48, 493-513.	1.6	18
42	Medium Effects on the Nucleation and Growth Mechanisms during the Redox Switching Dynamics of Conducting Polymers: Case of Poly(3,4-ethylenedioxythiophene). <i>Journal of Physical Chemistry B</i> , 2011, 115, 205-216.	2.6	17
43	In situ EC-AFM imaging of cathodic modifications of platinum surfaces performed in dimethylformamide. <i>Electrochemistry Communications</i> , 2004, 6, 188-192.	4.7	15
44	Electrochemical Fabrication of Highly Stable Redox-Active Nanojunctions. <i>Analytical Chemistry</i> , 2011, 83, 9709-9714.	6.5	14
45	Plasmon-Induced Conductance Switching of an Electroactive Conjugated Polymer Nanojunction. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 27817-27824.	8.0	14
46	Electrochemical Growth of Metallic Nanoparticles onto Immobilized Polymer Brush Ionic Liquid as a Hybrid Electrocatalyst for the Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38265-38275.	8.0	14
47	Surface Initiated Immobilization of Molecules Contained in an Ionic Liquid Framework. <i>Analytical Chemistry</i> , 2016, 88, 1017-1021.	6.5	12
48	Redox monomer ionic liquid based on quaternary ammonium: From electrochemistry to polymer brushes. <i>Electrochemistry Communications</i> , 2017, 82, 25-29.	4.7	12
49	Facile electrochemical generation of polyoxyethyl-vinyllogous tetrathiafulvalene films. <i>Electrochemistry Communications</i> , 2007, 9, 677-682.	4.7	10
50	Electrochemical investigation of thin PEDOT film above an insulating substrate using scanning electrochemical microscopy. <i>Electrochemistry Communications</i> , 2009, 11, 2304-2307.	4.7	10
51	Scanning electrochemical microscopy for the fabrication of copper nanowires: Atomic contacts with quantized conductance, and molecular adsorption effect. <i>Electrochimica Acta</i> , 2012, 83, 7-12.	5.2	10
52	Electrochemical immobilization of redox active molecule based ionic liquid. <i>Electrochemistry Communications</i> , 2015, 58, 65-68.	4.7	10
53	Effect of the Support Nanostructure (Nanofibers and Nanotubes) on the Photoelectrochemical Performance of TiO ₂ -CdO@CdS Semiconducting Architectures. <i>Journal of the Electrochemical Society</i> , 2017, 164, H286-H292.	2.9	10
54	The Effect of Heteroatom Doping on Nickel Cobalt Oxide Electrocatalysts for Oxygen Evolution and Reduction Reactions. <i>ChemPlusChem</i> , 2020, 85, 1710-1718.	2.8	10

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55	Oxidative Grafting of a Redox-Molecule-Based Ionic Liquid onto an Electrode Surface: Anion Exchange within a Layer. <i>ChemElectroChem</i> , 2014, 1, 1467-1470.	3.4	9
56	Surface functionalization of ferrocene based ionic liquid onto carbon surface using stepwise grafting. <i>Journal of Electroanalytical Chemistry</i> , 2014, 713, 28-31.	3.8	8
57	Approaching the Frontier Between Fiber Devices and Single Molecule Devices in Redox Gated Junction. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21278-21285.	3.1	8
58	Surface functionalization with redox active molecule-based imidazolium via click chemistry. <i>Electrochemistry Communications</i> , 2016, 70, 13-17.	4.7	8
59	Copper Nanowires through Oriented Mesoporous Silica: A Step towards Protected and Parallel Atomic Switches. <i>Scientific Reports</i> , 2017, 7, 17752.	3.3	7
60	Immobilization of molecule-based ionic liquids: a promising approach to improve electrocatalyst performance towards the hydrogen evolution reaction. <i>New Journal of Chemistry</i> , 2022, 46, 454-464.	2.8	7
61	Platinum/poly(N-ferrocenylmethyl-N-allylimidazolium bromide) quasi-reference electrode for electrochemistry in non-aqueous and ionic liquid solutions. <i>Electrochemistry Communications</i> , 2016, 73, 5-9.	4.7	6
62	Electrochemical generation of stable copper nanowires with quantized conductance in DNA media. <i>Electrochemistry Communications</i> , 2011, 13, 272-274.	4.7	5
63	Local electrochemical reactivity of single layer graphene deposited on flexible and transparent plastic film using scanning electrochemical microscopy. <i>Carbon</i> , 2018, 130, 566-573.	10.3	5
64	Electrochemistry of bi-redox ionic liquid from solution to bi-functional carbon surface. <i>Electrochimica Acta</i> , 2020, 354, 136689.	5.2	5
65	Electrografting of conductive oligomers and polymers using diazonium electroreduction. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2014, 5, 015001.	1.5	4
66	Electrochemical synthesis and the functionalization of few layer graphene in ionic liquid and redox ionic liquid. <i>Science China Chemistry</i> , 2018, 61, 598-603.	8.2	4
67	YNixMn1-xO3 thin films by pulsed laser deposition: Structure and magnetic properties. <i>Thin Solid Films</i> , 2006, 510, 275-279.	1.8	3
68	Formation of Metallic Nanowires via Electrochemistry in Aqueous Surfactant Media. <i>Journal of Physical Chemistry C</i> , 2011, 115, 549-553.	3.1	3
69	Electrochemical Investigation of Thin PANI Film onto Insulating Substrate Using Scanning Electrochemical Microscopy. <i>ECS Transactions</i> , 2009, 25, 89-95.	0.5	2
70	Cyclic voltammetry and galvanostatic effect on prepared Polypyrrole/Ni _{0.3} Co _{2.7} O ₄ for O ₂ electrocatalysis. <i>Materials Research Express</i> , 2019, 6, 125097.	1.6	2
71	Metallic nanoparticles growth on ionic layer grafted onto glassy carbon for hydrogen evolution reaction. <i>Journal of Molecular Liquids</i> , 2021, 341, 117433.	4.9	2
72	Redox-active Immobilized Ionic Liquids and Polymer Ionic Liquids. <i>RSC Smart Materials</i> , 2017, , 225-261.	0.1	0