

Guy Denuault

List of Publications by Year in descending order

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61
papers

2,644
citations

201674

27
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182427

51
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62
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62
docs citations

62
times ranked

2600
citing authors

#	ARTICLE	IF	CITATIONS
1	Detection of Hydrogen Peroxide at Mesoporous Platinum Microelectrodes. <i>Analytical Chemistry</i> , 2002, 74, 1322-1326.	6.5	351
2	Scanning electrochemical microscopy - a new technique for the characterization and modification of surfaces. <i>Accounts of Chemical Research</i> , 1990, 23, 357-363.	15.6	314
3	Direct determination of diffusion coefficients by chronoamperometry at microdisk electrodes. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1991, 308, 27-38.	0.1	272
4	Scanning Electrochemical Microscopy (SECM): An Investigation of the Effects of Tip Geometry on Amperometric Tip Response. <i>Journal of Physical Chemistry B</i> , 1998, 102, 9946-9951.	2.6	238
5	Scanning electrochemical microscopy: theory and application of the transient (chronoamperometric) SECM response. <i>Analytical Chemistry</i> , 1991, 63, 1282-1288.	6.5	110
6	Development of a reliable microelectrode dissolved oxygen sensor. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 344-351.	7.8	68
7	Scanning electrochemical microscopy: Probing the ingress and egress of protons from a polyaniline film. <i>Journal of Electroanalytical Chemistry</i> , 1993, 354, 331-339.	3.8	67
8	Fabrication and Characterization of Nanostructured Pd Hydride pH Microelectrodes. <i>Analytical Chemistry</i> , 2006, 78, 265-271.	6.5	67
9	Scanning electrochemical microscope (SECM) study of the relationship between proton concentration and electronic charge as a function of ionic strength during the oxidation of polyaniline. <i>Journal of Electroanalytical Chemistry</i> , 1994, 379, 399-406.	3.8	63
10	Studies of the electrodeposition of platinum metal from a hexachloroplatinic acid bath. <i>Journal of Electroanalytical Chemistry</i> , 2009, 633, 327-332.	3.8	58
11	Mesoporous palladium—the surface electrochemistry of palladium in aqueous sodium hydroxide and the cathodic reduction of nitrite. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 3545.	2.8	55
12	Electrodeposition of highly ordered macroporous iridium oxide through self-assembled colloidal templates. <i>Journal of Materials Chemistry</i> , 2009, 19, 3855.	6.7	51
13	Scanning electrochemical microscopy (SECM): localized glucose oxidase immobilization via the direct electrochemical microspotting of polypyrrole-biotin films. <i>Electrochemistry Communications</i> , 2005, 7, 135-140.	4.7	48
14	Three-dimensional random walk simulations of diffusion controlled electrode processes: (I) A hemisphere, disc and growing hemisphere. <i>Journal of Electroanalytical Chemistry</i> , 1997, 433, 167-173.	3.8	46
15	Scanning electrochemical microscopy (SECM) study of pH changes at Pt electrode surfaces in Na ₂ SO ₄ solution (pH 4) under potential cycling conditions. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996, 92, 3791.	1.7	41
16	Steady-State Voltammetry for Hydroxide Ion Oxidation in Aqueous Solutions in the Absence of and with Varying Concentrations of Supporting Electrolyte. <i>Analytical Chemistry</i> , 1999, 71, 811-818.	6.5	40
17	The behavior of microdisk and microring electrodes. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1989, 263, 225-236.	0.1	39
18	An Instrument for Simultaneous EQCM Impedance and SECM Measurements. <i>Analytical Chemistry</i> , 2000, 72, 349-356.	6.5	39

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19	Electrochemical current-sensing atomic force microscopy in conductive solutions. <i>Nanotechnology</i> , 2013, 24, 115501.	2.6	34
20	A simple, experiment-based model of the initial self-discharge of lithium-sulphur batteries. <i>Journal of Power Sources</i> , 2016, 306, 323-328.	7.8	34
21	Scanning electrochemical microscopy (SECM): Study of the formation and reduction of oxides on platinum electrode surfaces in Na ₂ SO ₄ solution (pH = 7). <i>Journal of Electroanalytical Chemistry</i> , 1998, 443, 273-282.	3.8	33
22	Three-dimensional random walk simulation of diffusion controlled electrode processes: (II) Arrays of growing hemispheres. <i>Journal of Electroanalytical Chemistry</i> , 1997, 433, 175-180.	3.8	32
23	Detection of Hydroxide Ions in Aqueous Solutions by Steady-State Voltammetry. <i>Electroanalysis</i> , 2001, 13, 289-294.	2.9	32
24	Voltammetry of hydroxide ion in aqueous solutions on gold microelectrodes. <i>Journal of Electroanalytical Chemistry</i> , 1998, 449, 5-7.	3.8	30
25	Scanning Electrochemical Microscopy: Approach Curves for Sphere-Cap Scanning Electrochemical Microscopy Tips. <i>Analytical Chemistry</i> , 2007, 79, 2952-2956.	6.5	30
26	High Throughput Electrochemical Observation of Structural Phase Changes in LiFe _{1-x} Mn _x PO ₄ during Charge and Discharge. <i>Journal of the Electrochemical Society</i> , 2010, 157, A381.	2.9	30
27	Influence of the Surface Termination of Boron-Doped Diamond Electrodes on Oxygen Reduction in Basic Medium. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, G43.	2.2	29
28	Anion complexation and electrochemical behaviour of ferrocene-appended amido-pyrrole clefts. Electronic supplementary information (ESI) available: ¹ H and ¹³ C NMR spectra of 1 and 2, ¹ H NMR titrations of 1 and 2 with various putative anionic guests and with chloride following ferrocene CH resonances. See http://www.rsc.org/suppdata/nj/b2/b202989h/ . <i>New Journal of Chemistry</i> , 2002, 26, 811-813.	2.8	27
29	Steady-State Voltammetry of Hydroxide Ion Oxidation in Aqueous Solutions Containing Ammonia. <i>Analytical Chemistry</i> , 2002, 74, 3290-3296.	6.5	25
30	Calibrationless determination of cadmium, lead and copper in rain samples by stripping voltammetry at mercury microelectrodes. <i>Analytica Chimica Acta</i> , 2002, 452, 65-75.	5.4	25
31	A study of the preconcentration and stripping voltammetry of Pb(II) at carbon electrodes. <i>Analyst</i> , 2000, 125, 1135-1138.	3.5	24
32	Atomic Force Microscopy-Scanning Electrochemical Microscopy: Influence of Tip Geometry and Insulation Defects on Diffusion Controlled Currents at Conical Electrodes. <i>Analytical Chemistry</i> , 2011, 83, 2971-2977.	6.5	24
33	Scanning electrochemical microscopy (SECM) : study of the adsorption and desorption of hydrogen on platinum electrodes in Na ₂ SO ₄ solution (pH = 7). <i>Journal of Electroanalytical Chemistry</i> , 1996, 418, 99-107.	3.8	23
34	Steady state simulation of electrode processes with a new error bounded adaptive finite element algorithm. <i>Electrochemistry Communications</i> , 2003, 5, 647-656.	4.7	20
35	Mono- and bis-ferrocene 2,5-diamidopyrrole clefts: solid-state assembly, anion binding and electrochemical properties. <i>Polyhedron</i> , 2003, 22, 699-709.	2.2	19
36	Electrochemical analysis of nanostructured iron oxides using cyclic voltammetry and scanning electrochemical microscopy. <i>Electrochimica Acta</i> , 2016, 222, 1326-1334.	5.2	19

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37	Classical Experiments. , 2007, , 431-469.		14
38	Scanning electrochemical microscopy: Diffusion controlled approach curves for conical AFM-SECM tips. Electrochemistry Communications, 2013, 27, 29-33.	4.7	14
39	MD simulation of water at imperfect platinum surfaces: Part I structure. Journal of Electroanalytical Chemistry, 1997, 433, 153-159.	3.8	13
40	Scanning Electrochemical Microscopy: Using the Potentiometric Mode of SECM To Study the Mixed Potential Arising from Two Independent Redox Processes. Analytical Chemistry, 2013, 85, 8341-8346.	6.5	13
41	Sampled-Current Voltammetry at Microdisk Electrodes: Kinetic Information from Pseudo Steady State Voltammograms. Analytical Chemistry, 2014, 86, 9917-9923.	6.5	13
42	Nanostructured Pd Hydride Microelectrodes: In Situ Monitoring of pH Variations in a Porous Medium. Analytical Chemistry, 2014, 86, 5758-5765.	6.5	13
43	Gold-gold junction electrodes: the disconnection method. Chemical Record, 2012, 12, 143-148.	5.8	11
44	Field assessment of a new membrane-free microelectrode dissolved oxygen sensor for water column profiling. Limnology and Oceanography: Methods, 2008, 6, 180-189.	2.0	10
45	The Contribution of Microelectrodes to Electroanalytical Chemistry: From Reaction Mechanisms and Scanning Electrochemical Microscopy to Ocean Sensors. Israel Journal of Chemistry, 2010, 50, 374-381.	2.3	10
46	An Electrochemical Study of the Influence of <i>Marinobacter aquaeolei</i> on the Alteration of Hydrothermal Chalcopyrite (CuFeS_2) and Pyrite (FeS_2) under Circumneutral Conditions. Geomicrobiology Journal, 2014, 31, 373-382.	2.0	10
47	Oxygen as redox mediator in scanning electrochemical microscopy. Application to the study of localised acid attack of marble. Annali Di Chimica, 2002, 92, 153-61.	0.6	10
48	Electron tunnelling at the Pt(100) water interface. Journal of Electroanalytical Chemistry, 1997, 437, 37-44.	3.8	9
49	Sampled current voltammetry for kinetic studies on materials unsuitable for rotating discs or microelectrodes: Application to the oxygen reduction reaction in acidic medium. Electrochimica Acta, 2020, 362, 136946.	5.2	8
50	MD simulation of water at imperfect platinum surfaces. III. Hydrogen bonding. Journal of Electroanalytical Chemistry, 1998, 450, 159-164.	3.8	7
51	An Analytical Differential Resistance Pulse System Relying on a Time Shift Signal Analysis – Applications in Coulter Counting. ACS Sensors, 2019, 4, 2190-2195.	7.8	7
52	Generation and <i>In Situ</i> Electrochemical Detection of Transient Nanobubbles. Journal of Physical Chemistry C, 2020, 124, 7544-7549.	3.1	5
53	MD simulation of water at imperfect platinum surfaces: Part 2 electrostatics. Journal of Electroanalytical Chemistry, 1997, 433, 161-166.	3.8	4
54	Solid molybdenum nitride microdisc electrodes: Fabrication, characterisation, and application to the reduction of peroxodisulfate. Electrochimica Acta, 2019, 293, 184-190.	5.2	4

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55	The Influence of the Oxygen Reduction Reaction (ORR) on Pt Oxide Electrochemistry. ChemElectroChem, 2021, 8, 3525-3532.	3.4	4
56	The in situ electrochemical detection of microbubble oscillations during motion through a channel. Physical Chemistry Chemical Physics, 2019, 21, 24802-24807.	2.8	2
57	The electron transfer kinetics of adsorbed species derived by sampled current voltammetry. Journal of Electroanalytical Chemistry, 2021, 882, 115021.	3.8	2
58	Detection of Hydroxide Ions in Aqueous Solutions by Steady-State Voltammetry. Electroanalysis, 2001, 13, 289-294.	2.9	1
59	A Description of the Scanning Electrochemical Microscope (SECM) and of Its Applications. , 1995, , 69-82.		1
60	Au(001) Thin Films: Impact of Structure and Mosaicity on the Oxygen Reduction Reaction in Alkaline Medium. ACS Catalysis, 2022, 12, 1664-1676.	11.2	1
61	Potentiometric Probes. , 2001, , .		0