

Rafael Andreu

List of Publications by Year in descending order

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82
papers

1,452
citations

393982

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83
docs citations

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times ranked

1310
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#	ARTICLE	IF	CITATIONS
1	Direct electron transfer from graphite and functionalized gold electrodes to T1 and T2/T3 copper centers of bilirubin oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 1364-1369.	0.5	140
2	Desorption of Spontaneously Adsorbed and Electrochemically Readsorbed 2-Mercaptoethanesulfonate on Au(111). <i>Langmuir</i> , 1996, 12, 5696-5703.	1.6	107
3	The mechanism of the reduction of Zn(II) from NaClO ₄ base electrolyte solutions at the DME. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1982, 134, 101-115.	0.3	92
4	Direct Electron Transfer Kinetics in Horseradish Peroxidase Electrocatalysis. <i>Journal of Physical Chemistry B</i> , 2007, 111, 469-477.	1.2	69
5	Discreteness-of-Charge Effects at Molecular Films Containing Acid/Base Groups. <i>The Journal of Physical Chemistry</i> , 1994, 98, 12753-12758.	2.9	64
6	Determination of the Potential of Zero Charge of Au(111) Modified with Thiol Monolayers. <i>Analytical Chemistry</i> , 2007, 79, 6473-6479.	3.2	64
7	Influence of Spatial Redox Distribution on the Electrochemical Behavior of Electroactive Self-Assembled Monolayers. <i>Journal of Physical Chemistry B</i> , 2001, 105, 9557-9568.	1.2	50
8	Role of Ion Pairing in Double-Layer Effects at Self-Assembled Monolayers Containing a Simple Redox Couple. <i>Journal of Physical Chemistry B</i> , 1997, 101, 2884-2894.	1.2	46
9	A Kinetic Model for the Reductive Desorption of Self-Assembled Thiol Monolayers. <i>Langmuir</i> , 2001, 17, 3273-3280.	1.6	38
10	Discreteness of Charge and Ion Association Effects on Electroactive Self-Assembled Monolayers. <i>Langmuir</i> , 1997, 13, 5189-5196.	1.6	36
11	An Isotropic Model for Micellar Systems: Application to Sodium Dodecyl Sulfate Solutions. <i>Langmuir</i> , 2001, 17, 314-322.	1.6	30
12	Enzyme-like activity of cobalt-MOF nanosheets for hydrogen peroxide electrochemical sensing. <i>Sensors and Actuators B: Chemical</i> , 2022, 368, 132129.	4.0	30
13	Experimental Study of the Interplay between Long-Range Electron Transfer and Redox Probe Permeation at Self-Assembled Monolayers: Evidence for Potential-Induced Ion Gating. <i>Journal of the American Chemical Society</i> , 2005, 127, 6476-6486.	6.6	29
14	Formation and Reductive Desorption of Mercaptohexanol Monolayers on Mercury. <i>Journal of Physical Chemistry B</i> , 2001, 105, 5477-5488.	1.2	28
15	Kinetic Analysis of Wired Enzyme Electrodes. Application to Horseradish Peroxidase Entrapped in a Redox Polymer Matrix. <i>Journal of Physical Chemistry B</i> , 2003, 107, 6629-6643.	1.2	24
16	Highly sensitive, stable and selective hydrogen peroxide amperometric biosensors based on peroxidases from different sources wired by Os-polymer: A comparative study. <i>Solid State Ionics</i> , 2018, 314, 178-186.	1.3	23
17	Quantitative characterization of desorptive stripping voltammograms complicated by surface dimerization reactions. Application to the reductive desorption of thiols from mercury. <i>Journal of Electroanalytical Chemistry</i> , 2000, 482, 18-31.	1.9	21
18	Chemical Reactivity and Electrochemistry of Metal-Metal-Bonded Zincocenes. <i>Inorganic Chemistry</i> , 2011, 50, 6361-6371.	1.9	21

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19	The catalysis of the reduction of Zn(II) ions by iodide ions. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1984, 171, 139-155.	0.3	19
20	Intermolecular interactions in electroactive thiol monolayers probed by linear scan voltammetry. <i>Current Opinion in Electrochemistry</i> , 2017, 1, 22-26.	2.5	19
21	The reduction of Cr(III) in concentrated aqueous electrolytes at a DME. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1986, 210, 111-126.	0.3	18
22	Kinetic salt effects in intramolecular electron transfer. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1990, 86, 937-940.	1.7	17
23	Electrochemical formation and electron transfer through self-assembled monolayers of 4-mercaptophenol on mercury. <i>Journal of Electroanalytical Chemistry</i> , 2005, 582, 179-190.	1.9	17
24	Proton Transfer Voltammetry at Electrodes Modified with Acid Thiol Monolayers. <i>Analytical Chemistry</i> , 2012, 84, 5778-5786.	3.2	17
25	Folding and Unfolding in the Blue Copper Protein Rusticyanin: Role of the Oxidation State. <i>Bioinorganic Chemistry and Applications</i> , 2007, 2007, 1-9.	1.8	16
26	Potentiostatic infrared titration of 11-mercaptoundecanoic acid monolayers. <i>Electrochemistry Communications</i> , 2014, 45, 13-16.	2.3	16
27	Super-Nernstian Shifts of Interfacial Proton-Coupled Electron Transfers: Origin and Effect of Noncovalent Interactions. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15586-15592.	1.5	16
28	Potential of zero charge as a sensitive probe for the titration of ionizable self-assembled monolayers. <i>Electrochemistry Communications</i> , 2008, 10, 1548-1550.	2.3	15
29	Interprotein Coupling Enhances the Electrocatalytic Efficiency of Tobacco Peroxidase Immobilized at a Graphite Electrode. <i>Analytical Chemistry</i> , 2015, 87, 10807-10814.	3.2	15
30	Influence of Adsorption/Diffusion Coupling on Surface Voltammetric Waves. First Stages of 2-Mercaptoethanesulfonate Oxidative Adsorption on Gold. <i>Langmuir</i> , 1999, 15, 1842-1852.	1.6	14
31	Influence of temperature on the reduction kinetics of Zn ²⁺ at a mercury electrode. <i>Journal of Electroanalytical Chemistry</i> , 2003, 552, 247-259.	1.9	14
32	Fenton-like Inactivation of Tobacco Peroxidase Electrocatalysis at Negative Potentials. <i>ACS Catalysis</i> , 2016, 6, 7452-7457.	5.5	14
33	An automatic system for the measurement of dropping mercury electrode impedances. <i>Electroanalysis</i> , 1991, 3, 377-383.	1.5	13
34	A SNIPTIRS Study of the Double Layer at a Gold Electrode in Dimethylacetamide. <i>The Journal of Physical Chemistry</i> , 1995, 99, 6760-6762.	2.9	13
35	Numerical simulation of desorption transients at electrodes on the basis of non-linear adsorption isotherms. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996, 92, 3701-3708.	1.7	13
36	Physical contact between cytochrome c1 and cytochrome c increases the driving force for electron transfer. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2020, 1861, 148277.	0.5	13

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37	Immobilizing redox enzymes at mesoporous and nanostructured electrodes. <i>Current Opinion in Electrochemistry</i> , 2021, 26, 100658.	2.5	13
38	Reorientation of Thiols during 2D Self-Assembly: Interplay between Steric and Energetic Factors. <i>Langmuir</i> , 2010, 26, 2914-2923.	1.6	12
39	Improvement of alternariol monomethyl ether detection at gold electrodes modified with a dodecanethiol self-assembled monolayer. <i>Journal of Electroanalytical Chemistry</i> , 2004, 570, 209-217.	1.9	11
40	Adsorption of cinnamaldehyde at the mercury-water interface. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1984, 178, 305-319.	0.3	10
41	Onset of Crystalline Order in 1-Nonanethiol Monolayers Deposited from Solution. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6166-6169.	7.2	10
42	Generalization of the UDCA theory and its application to the analysis of the ion-free layer thickness. <i>Journal of Electroanalytical Chemistry</i> , 1993, 358, 49-62.	1.9	9
43	On the simultaneous evaluation of charge transfer kinetics and adsorption: reduction of parabanic acid in low acidity xM HCl + (2 \hat{a} ' x)M LiCl mixtures. <i>Journal of Electroanalytical Chemistry</i> , 1994, 366, 105-125.	1.9	9
44	Ion size effects in the Hurwitz-Parsons analysis. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1989, 260, 417-423.	0.3	8
45	The role of the metal in determining electrosorption valency in the case of strong molecular adsorption at the electrode solution interface. <i>Journal of Electroanalytical Chemistry</i> , 1996, 401, 231-235.	1.9	8
46	Electro-oxidation of altertoxin I (ATX-I) at gold electrodes modified by dodecanethiol self-assembled monolayers. <i>Journal of Electroanalytical Chemistry</i> , 2007, 605, 118-124.	1.9	8
47	Influence of tryptophan mutation on the direct electron transfer of immobilized tobacco peroxidase. <i>Electrochimica Acta</i> , 2020, 351, 136465.	2.6	8
48	Keto-enol tautomerism in the electrochemical reduction of parabanic acid. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1990, 290, 191-202.	0.3	7
49	Influence of solution acidity on the adsorption and charge transfer kinetics of parabanic acid reduction. <i>Journal of Electroanalytical Chemistry</i> , 1995, 390, 115-126.	1.9	7
50	Voltammetry of Surface Electrodimerization Processes. Application to the Oxidation of Adsorbed 2-Mercaptoethyl Ether on Mercury. <i>Langmuir</i> , 1999, 15, 1480-1490.	1.6	7
51	Voltammetry of Surface Redox Processes Perturbed by Dimerization and Adsorption of the Products. <i>Journal of the Electrochemical Society</i> , 2002, 149, E45.	1.3	7
52	Accurate Analytical Expressions for Stripping Voltammetry in the Henry Adsorption Limit. <i>Analytical Chemistry</i> , 2011, 83, 6401-6409.	3.2	7
53	Analytical Expressions for Proton Transfer Voltammetry: Analogy to Surface Redox Voltammetry with Frumkin Interactions. <i>Analytical Chemistry</i> , 2013, 85, 4475-4482.	3.2	7
54	Temperature-Driven Changeover in the Electron-Transfer Mechanism of a Thermophilic Plastocyanin. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 910-914.	2.1	7

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55	The Fe (III)/Fe(II) redox couple as a probe of immobilized tobacco peroxidase: Effect of the immobilization protocol. <i>Electrochimica Acta</i> , 2019, 299, 55-61.	2.6	7
56	Electrochemical reduction of benzil in strongly acid and alkaline media. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1991, 316, 133-142.	0.3	6
57	A comparative study of the interphase between mercury and aqueous solutions of mono-, di- and trivalent chlorides. <i>Journal of Electroanalytical Chemistry</i> , 1992, 322, 133-151.	1.9	6
58	Voltammetry of surface redox processes perturbed by a father-son reaction. <i>Electrochimica Acta</i> , 2000, 45, 3087-3097.	2.6	6
59	Structural and functional insights into lysine acetylation of cytochrome <i>c</i> using mimetic point mutants. <i>FEBS Open Bio</i> , 2021, 11, 3304-3323.	1.0	6
60	A comparative study of the adsorption of La ³⁺ and Al ³⁺ at the mercury/aqueous electrolyte interphase. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1989, 260, 405-415.	0.3	5
61	Numerical Simulation of Bulk Electrolysis in the Presence of Homogeneous Following Reactions. <i>The Journal of Physical Chemistry</i> , 1995, 99, 10365-10372.	2.9	5
62	Application of the MPB theory to the analysis of the ion-free layer thickness. <i>Electrochimica Acta</i> , 1996, 41, 2125-2130.	2.6	5
63	Analysis of the diffuse layer potential drop in the limit of small fields on the basis of a generalized mean spherical approximation. <i>Journal of Electroanalytical Chemistry</i> , 2003, 552, 105-110.	1.9	5
64	Probing interfacial solvation of incipient self-assembled monolayers. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 13519.	1.3	5
65	Voltammetric study of the adsorbed thermophilic plastocyanin from <i>Phormidium laminosum</i> up to 90°C. <i>Electrochemistry Communications</i> , 2012, 19, 105-107.	2.3	5
66	Adsorption of chloride at the mercury/aqueous LaCl ₃ interface. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1986, 209, 183-201.	0.3	4
67	Comparison of Cationic Excesses in the Presence of Perchlorate and Chloride Anions. <i>Langmuir</i> , 1999, 15, 4892-4897.	1.6	4
68	Application of the Unequal Distances of Closest Approach Theory to the Analysis of Double-Layer Effects on Zn(II) Reduction at a Mercury Electrode. <i>Journal of Physical Chemistry A</i> , 2001, 105, 9156-9165.	1.1	4
69	Aliphatic Alcohols Facilitate Interfacial Reorientation of Thiols: Correlation with Alcohol Adsorptivity. <i>Langmuir</i> , 2010, 26, 5254-5261.	1.6	4
70	Key Role of the Local Hydrophobicity in the East Patch of Plastocyanins on Their Thermal Stability and Redox Properties. <i>ACS Omega</i> , 2018, 3, 11447-11454.	1.6	4
71	Active Role of the Buffer in the Proton-Coupled Electron Transfer of Immobilized Iron Porphyrins. <i>Inorganic Chemistry</i> , 2021, 60, 42-54.	1.9	4
72	Highly Sensitive Hydrogen Peroxide Biosensor Based on Tobacco Peroxidase Immobilized on <i>p</i> -Phenylenediamine Diazonium Cation Grafted Carbon Nanotubes: Preventing Fenton-like Inactivation at Negative Potential. <i>ChemElectroChem</i> , 2021, 8, 2495-2504.	1.7	4

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73	Electric field-induced functional changes in electrode-immobilized mutant species of human cytochrome c. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2022, 1863, 148570.	0.5	4
74	Adsorption of malonate and succinate at the Hg/aqueous solution interphase. <i>Journal of Electroanalytical Chemistry</i> , 1993, 361, 239-249.	1.9	3
75	Diffusional Surface Voltammetry as a Probe of Adsorption Energetics. <i>Analytical Chemistry</i> , 2012, 84, 1034-1041.	3.2	3
76	The Electrocapillary Effect at an Electrode Modified with an Insoluble Redox-Active Self-Assembled Monolayer. <i>Langmuir</i> , 2004, 20, 869-874.	1.6	2
77	Protein crosslinking improves the thermal resistance of plastocyanin immobilized on a modified gold electrode. <i>Bioelectrochemistry</i> , 2018, 124, 127-132.	2.4	2
78	IONPIT: A full implementation of Pitzer's ion interaction treatment. <i>Computers & Chemistry</i> , 1985, 9, 185-190.	1.2	1
79	Proton transfer impedance of electrodes modified with acid thiol monolayers. <i>Journal of Electroanalytical Chemistry</i> , 2018, 819, 145-151.	1.9	1
80	Reduction mechanism of benzoin on a mercury electrode. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1997, 440, 51-56.	0.3	1
81	Reduction mechanism of deoxybenzoin on a mercury electrode. <i>Journal of Electroanalytical Chemistry</i> , 2000, 482, 102-109.	1.9	0
82	Calculation of ionic surface excess concentrations in the diffuse double layer at low field strengths for a restricted primitive model electrolyte. <i>Journal of Electroanalytical Chemistry</i> , 2005, 575, 211-219.	1.9	0