Rafael Andreu

List of Publications by Year
in descending order

82	1,452	19	34
papers	citations	h-index	g-index
		393982	377514

83	83	83	1310
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electric field-induced functional changes in electrode-immobilized mutant species of human cytochrome c. Biochimica Et Biophysica Acta - Bioenergetics, 2022, 1863, 148570.	0.5	4
2	Enzyme-like activity of cobalt-MOF nanosheets for hydrogen peroxide electrochemical sensing. Sensors and Actuators B: Chemical, 2022, 368, 132129.	4.0	30
3	Active Role of the Buffer in the Proton-Coupled Electron Transfer of Immobilized Iron Porphyrins. Inorganic Chemistry, 2021, 60, 42-54.	1.9	4
4	Immobilizing redox enzymes at mesoporous and nanostructured electrodes. Current Opinion in Electrochemistry, 2021, 26, 100658.	2.5	13
5	Highly Sensitive Hydrogen Peroxide Biosensor Based on Tobacco Peroxidase Immobilized on <i>p</i>â€Phenylenediamine Diazonium Cation Grafted Carbon Nanotubes: Preventing Fentonâ€like Inactivation at Negative Potential. ChemElectroChem, 2021, 8, 2495-2504.	1.7	4
6	Structural and functional insights into lysine acetylation of cytochrome <i>c</i> using mimetic point mutants. FEBS Open Bio, 2021, 11, 3304-3323.	1.0	6
7	Physical contact between cytochrome c1 and cytochrome c increases the driving force for electron transfer. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148277.	0.5	13
8	Influence of tryptophan mutation on the direct electron transfer of immobilized tobacco peroxidase. Electrochimica Acta, 2020, 351, 136465.	2.6	8
9	The Fe (III)/Fe(II) redox couple as a probe of immobilized tobacco peroxidase: Effect of the immobilization protocol. Electrochimica Acta, 2019, 299, 55-61.	2.6	7
10	Highly sensitive, stable and selective hydrogen peroxide amperometric biosensors based on peroxidases from different sources wired by Os-polymer: A comparative study. Solid State Ionics, 2018, 314, 178-186.	1.3	23
11	Proton transfer impedance of electrodes modified with acid thiol monolayers. Journal of Electroanalytical Chemistry, 2018, 819, 145-151.	1.9	1
12	Key Role of the Local Hydrophobicity in the East Patch of Plastocyanins on Their Thermal Stability and Redox Properties. ACS Omega, 2018, 3, 11447-11454.	1.6	4
13	Protein crosslinking improves the thermal resistance of plastocyanin immobilized on a modified gold electrode. Bioelectrochemistry, 2018, 124, 127-132.	2.4	2
14	Intermolecular interactions in electroactive thiol monolayers probed by linear scan voltammetry. Current Opinion in Electrochemistry, 2017, 1, 22-26.	2.5	19
15	Fenton-like Inactivation of Tobacco Peroxidase Electrocatalysis at Negative Potentials. ACS Catalysis, 2016, 6, 7452-7457.	5.5	14
16	Super-Nernstian Shifts of Interfacial Proton-Coupled Electron Transfers: Origin and Effect of Noncovalent Interactions. Journal of Physical Chemistry C, 2016, 120, 15586-15592.	1.5	16
17	Interprotein Coupling Enhances the Electrocatalytic Efficiency of Tobacco Peroxidase Immobilized at a Graphite Electrode. Analytical Chemistry, 2015, 87, 10807-10814.	3.2	15
18	Temperature-Driven Changeover in the Electron-Transfer Mechanism of a Thermophilic Plastocyanin. Journal of Physical Chemistry Letters, 2014, 5, 910-914.	2.1	7

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19	Potentiostatic infrared titration of 11-mercaptoundecanoic acid monolayers. Electrochemistry Communications, 2014, 45, 13-16.	2.3	16
20	Analytical Expressions for Proton Transfer Voltammetry: Analogy to Surface Redox Voltammetry with Frumkin Interactions. Analytical Chemistry, 2013, 85, 4475-4482.	3.2	7
21	Proton Transfer Voltammetry at Electrodes Modified with Acid Thiol Monolayers. Analytical Chemistry, 2012, 84, 5778-5786.	3.2	17
22	Diffusional Surface Voltammetry as a Probe of Adsorption Energetics. Analytical Chemistry, 2012, 84, 1034-1041.	3.2	3
23	Voltammetric study of the adsorbed thermophilic plastocyanin from Phormidium laminosum up to 90Â°C. Electrochemistry Communications, 2012, 19, 105-107.	2.3	5
24	Chemical Reactivity and Electrochemistry of Metalâ€“Metal-Bonded Zincocenes. Inorganic Chemistry, 2011, 50, 6361-6371.	1.9	21
25	Accurate Analytical Expressions for Stripping Voltammetry in the Henry Adsorption Limit. Analytical Chemistry, 2011, 83, 6401-6409.	3.2	7
26	Aliphatic Alcohols Facilitate Interfacial Reorientation of Thiols: Correlation with Alcohol Adsorptivity. Langmuir, 2010, 26, 5254-5261.	1.6	4
27	Reorientation of Thiols during 2D Self-Assembly: Interplay between Steric and Energetic Factors. Langmuir, 2010, 26, 2914-2923.	1.6	12
28	Probing interfacial solvation of incipient self-assembled monolayers. Physical Chemistry Chemical Physics, 2010, 12, 13519.	1.3	5
29	Potential of zero charge as a sensitive probe for the titration of ionizable self-assembled monolayers. Electrochemistry Communications, 2008, 10, 1548-1550.	2.3	15
30	Direct electron transfer from graphite and functionalized gold electrodes to T1 and T2/T3 copper centers of bilirubin oxidase. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 1364-1369.	0.5	140
31	Folding and Unfolding in the Blue Copper Protein Rusticyanin: Role of the Oxidation State. Bioinorganic Chemistry and Applications, 2007, 2007, 1-9.	1.8	16
32	Determination of the Potential of Zero Charge of Au(111) Modified with Thiol Monolayers. Analytical Chemistry, 2007, 79, 6473-6479.	3.2	64
33	Direct Electron Transfer Kinetics in Horseradish Peroxidase Electrocatalysis. Journal of Physical Chemistry B, 2007, 111, 469-477.	1.2	69
34	Electro-oxidation of altertoxin I (ATX-I) at gold electrodes modified by dodecanethiol self-assembled monolayers. Journal of Electroanalytical Chemistry, 2007, 605, 118-124.	1.9	8
35	Onset of Crystalline Order in 1-Nonanethiol Monolayers Deposited from Solution. Angewandte Chemie - International Edition, 2006, 45, 6166-6169.	7.2	10
36	Calculation of ionic surface excess concentrations in the diffuse double layer at low field strengths for a restricted primitive model electrolyte. Journal of Electroanalytical Chemistry, 2005, 575, 211-219.	1.9	0

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37	Electrochemical formation and electron transfer through self-assembled monolayers of 4-mercaptophenol on mercury. Journal of Electroanalytical Chemistry, 2005, 582, 179-190.	1.9	17
38	Experimental Study of the Interplay between Long-Range Electron Transfer and Redox Probe Permeation at Self-Assembled Monolayers:Â Evidence for Potential-Induced Ion Gating. Journal of the American Chemical Society, 2005, 127, 6476-6486.	6.6	29
39	Improvement of alternariol monomethyl ether detection at gold electrodes modified with a dodecanethiol self-assembled monolayer. Journal of Electroanalytical Chemistry, 2004, 570, 209-217.	1.9	11
40	The Electrocapillary Effect at an Electrode Modified with an Insoluble Redox-Active Self-Assembled Monolayer. Langmuir, 2004, 20, 869-874.	1.6	2
41	Influence of temperature on the reduction kinetics of Zn2+ at a mercury electrode. Journal of Electroanalytical Chemistry, 2003, 552, 247-259.	1.9	14
42	Analysis of the diffuse layer potential drop in the limit of small fields on the basis of a generalized mean spherical approximation. Journal of Electroanalytical Chemistry, 2003, 552, 105-110.	1.9	5
43	Kinetic Analysis of Wired Enzyme Electrodes. Application to Horseradish Peroxidase Entrapped in a Redox Polymer Matrix. Journal of Physical Chemistry B, 2003, 107, 6629-6643.	1.2	24
44	Voltammetry of Surface Redox Processes Perturbed by Dimerization and Adsorption of the Products. Journal of the Electrochemical Society, 2002, 149, E45.	1.3	7
45	Influence of Spatial Redox Distribution on the Electrochemical Behavior of Electroactive Self-Assembled Monolayers. Journal of Physical Chemistry B, 2001, 105, 9557-9568.	1.2	50
46	A Kinetic Model for the Reductive Desorption of Self-Assembled Thiol Monolayers. Langmuir, 2001, 17, 3273-3280.	1.6	38
47	An Isotropic Model for Micellar Systems:Â Application to Sodium Dodecyl Sulfate Solutions. Langmuir, 2001, 17, 314-322.	1.6	30
48	Application of the Unequal Distances of Closest Approach Theory to the Analysis of Double-Layer Effects on Zn(II) Reduction at a Mercury Electrode. Journal of Physical Chemistry A, 2001, 105, 9156-9165.	1.1	4
49	Formation and Reductive Desorption of Mercaptohexanol Monolayers on Mercury. Journal of Physical Chemistry B, 2001, 105, 5477-5488.	1.2	28
50	Voltammetry of surface redox processes perturbed by a fatherâ€“son reaction. Electrochimica Acta, 2000, 45, 3087-3097.	2.6	6
51	Quantitative characterization of desorptive stripping voltammograms complicated by surface dimerization reactions. Application to the reductive desorption of thiols from mercury. Journal of Electroanalytical Chemistry, 2000, 482, 18-31.	1.9	21
52	Reduction mechanism of deoxybenzoin on a mercury electrode. Journal of Electroanalytical Chemistry, 2000, 482, 102-109.	1.9	0
53	Influence of Adsorption/Diffusion Coupling on Surface Voltammetric Waves. First Stages of 2-Mercaptoethanesulfonate Oxidative Adsorption on Gold. Langmuir, 1999, 15, 1842-1852.	1.6	14
54	Voltammetry of Surface Electrodimerization Processes. Application to the Oxidation of Adsorbed 2-Mercaptoethyl Ether on Mercury. Langmuir, 1999, 15, 1480-1490.	1.6	7

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55	Comparison of Cationic Excesses in the Presence of Perchlorate and Chloride Anions. Langmuir, 1999, 15, 4892-4897.	1.6	4
56	Role of Ion Pairing in Double-Layer Effects at Self-Assembled Monolayers Containing a Simple Redox Couple. Journal of Physical Chemistry B, 1997, 101, 2884-2894.	1.2	46
57	Discreteness of Charge and Ion Association Effects on Electroactive Self-Assembled Monolayers. Langmuir, 1997, 13, 5189-5196.	1.6	36
58	Reduction mechanism of benzoin on a mercury electrode. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1997, 440, 51-56.	0.3	1
59	Desorption of Spontaneously Adsorbed and Electrochemically Readsorbed 2-Mercaptoethanesulfonate on Au(111). Langmuir, 1996, 12, 5696-5703.	1.6	107
60	Numerical simulation of desorption transients at electrodes on the basis of non-linear adsorption isotherms. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 3701-3708.	1.7	13
61	Application of the MPB theory to the analysis of the ion-free layer thickness. Electrochimica Acta, 1996, 41, 2125-2130.	2.6	5
62	The role of the metal in determining electrosorption valency in the case of strong molecular adsorption at the electrode | solution interface. Journal of Electroanalytical Chemistry, 1996, 401, 231-235.	1.9	8
63	Influence of solution acidity on the adsorption and charge transfer kinetics of parabanic acid reduction. Journal of Electroanalytical Chemistry, 1995, 390, 115-126.	1.9	7
64	A SNIFTIRS Study of the Double Layer at a Gold Electrode in Dimethylacetamide. The Journal of Physical Chemistry, 1995, 99, 6760-6762.	2.9	13
65	Numerical Simulation of Bulk Electrolysis in the Presence of Homogeneous Following Reactions. The Journal of Physical Chemistry, 1995, 99, 10365-10372.	2.9	5
66	Discreteness-of-Charge Effects at Molecular Films Containing Acid/Base Groups. The Journal of Physical Chemistry, 1994, 98, 12753-12758.	2.9	64
67	On the simultaneous evaluation of charge transfer kinetics and adsorption: reduction of parabanic acid in low acidity xM HCl + (2 âˆ' x)M LiCl mixtures. Journal of Electroanalytical Chemistry, 1994, 366, 105-125.	1.9	9
68	Generalization of the UDCA theory and its application to the analysis of the ion-free layer thickness. Journal of Electroanalytical Chemistry, 1993, 358, 49-62.	1.9	9
69	Adsorption of malonate and succinate at the Hg/aqueous solution interphase. Journal of Electroanalytical Chemistry, 1993, 361, 239-249.	1.9	3
70	A comparative study of the interphase between mercury and aqueous solutions of mono-, di- and trivalent chlorides. Journal of Electroanalytical Chemistry, 1992, 322, 133-151.	1.9	6
71	Electrochemical reduction of benzil in strongly acid and alkaline media. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 316, 133-142.	0.3	6
72	An automatic system for the measurement of dropping mercury electrode impedances. Electroanalysis, 1991, 3, 377-383.	1.5	13

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73	Keto-enol tautomerism in the electrochemical reduction of parabanic acid. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 290, 191-202.	0.3	7
74	Kinetic salt effects in intramolecular electron transfer. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 937-940.	1.7	17
75	A comparative study of the adsorption of La3+ and Al3+ at the mercury/aqueous electrolyte interphase. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 260, 405-415.	0.3	5
76	Ion size effects in the Hurwitz-Parsons analysis. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 260, 417-423.	0.3	8
77	Adsorption of chloride at the mercury/aqueous LaCl3 interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1986, 209, 183-201.	0.3	4
78	The reduction of Cr(III) in concentrated aqueous electrolytes at a DME. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1986, 210, 111-126.	0.3	18
79	IONPIT: A full implementation of Pitzer's ion interaction treatment. Computers & Chemistry, 1985, 9, 185-190.	1.2	1
80	The catalysis of the reduction of Zn(II) ions by iodide ions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1984, 171, 139-155.	0.3	19
81	Adsorption of cinnamaldehyde at the mercury-water interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1984, 178, 305-319.	0.3	10
82	The mechanism of the reduction of Zn(II) from NaClO4 base electrolyte solutions at the DME. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1982, 134, 101-115.	0.3	92