Mauro Coelho dos Santos

List of Publications by Year
in descending order

123	3,837	81900	144013
papers	citations	39 h-index	57 g-index

124	124	124	3873
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pd-Pt nanoparticles combined with ceria nanorods for application in oxygen reduction reactions in alkaline direct ethanol fuel cell cathodes. Journal of Alloys and Compounds, 2022, 899, 163361.	5.5	12
2	Determination of the electrochemically active surface area by CO and hydrogen of PtSnRuTa/C-based electrocatalysts and their relationship with catalytic activity against alcohol oxidation. Chemical Papers, 2022, 76, 4597-4613.	2.2	2
3	Use of WO2.72 Nanoparticles/VulcanÂ® XC72 GDE Electrocatalyst Combined with the Photoelectro-Fenton Process for the Degradation of 17Î±-Ethinylestradiol (EE2). Electrocatalysis, 2022, 13, 457-468.	3.0	4
4	Cotton fabric derived Î±Fe magnetic porous carbon as electrocatalyst for alkaline direct ethanol fuel cell. Catalysis Today, 2021, 381, 65-75.	4.4	2
5	Acetol as a high-performance molecule for oxidation in alkaline direct liquid fuel cell. Renewable Energy, 2021, 165, 37-42.	8.9	7
6	Electrochemical and spectroscopy studies of the interaction between the Zn2+ and the diethylditiocarbamate ligand (Et2DTCâ¯). Transition Metal Chemistry, 2021, 46, 291-297.	1.4	1
7	Hybrid palladium-ceria nanorod electrocatalysts applications in oxygen reduction and ethanol oxidation reactions in alkaline media. International Journal of Hydrogen Energy, 2021, 46, 15896-15911.	7.1	17
8	NaNbO3 microcubes decorated with minimum Pd and maximum performance for Alkaline Direct Ethanol Fuel Cell applications. Journal of Power Sources, 2021, 493, 229694.	7.8	9
9	Density functional theory studies of oxygen reduction reaction for hydrogen peroxide generation on Graphene-Based catalysts. Journal of Electroanalytical Chemistry, 2021, 895, 115429.	3.8	4
10	Determination of chemical elements in rice from Singapore markets: Distribution, estimated intake and differentiation of rice varieties. Journal of Food Composition and Analysis, 2021, 101, 103969.	3.9	7
11	Fast and Inexpensive Synthesis of Multilayer Graphene Used as Pd Support in Alkaline Direct Ethanol Fuel Cell Anode. Electrocatalysis, 2021, 12, 715.	3.0	1
12	Assessing the oxygen reduction reaction by a 2-electron mechanism on ceria surfaces. Physical Chemistry Chemical Physics, 2021, 23, 18580-18587.	2.8	7
13	Electrocatalysts based on low amounts of palladium combined with tin nanoparticles and cerium dioxide nanorods for application as ADEFC anodes. International Journal of Hydrogen Energy, 2021, 46, 39438-39456.	7.1	7
14	Using carbon black modified with Nb2O5 and RuO2 for enhancing selectivity toward H2O2 electrogeneration. Journal of Environmental Chemical Engineering, 2021, 9, 106787.	6.7	9
15	Removal of Orange II (OII) dye by simulated solar photoelectro-Fenton and stability of WO2.72/Vulcan XC72 gas diffusion electrode. Chemosphere, 2020, 239, 124670.	8.2	13
16	Niobium increasing the electrocatalytic activity of palladium for alkaline direct ethanol fuel cell. Journal of Electroanalytical Chemistry, 2020, 858, 113824.	3.8	21
17	The effect of support on Pd1Nb1 electrocatalysts for ethanol fuel cells. Renewable Energy, 2020, 150, 293-306.	8.9	13
18	Methane activation on PdMn/C-ITO electrocatalysts using a reactor-type PEMFC. Research on Chemical Intermediates, 2020, 46, 4383-4402.	2.7	2

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19	Microwave synthesis of Ti/(RuO2)0.5(IrO2)0.5 anodes: Improved electrochemical properties and stability. Journal of Electroanalytical Chemistry, 2020, 874, 114460.	3.8	30
20	Diamond electrodes applied to the voltammetric generation of nitro-anion radicals from methyl parathion in aqueous media. Diamond and Related Materials, 2020, 110, 108112.	3.9	4
21	Catalysis of oxygen reduction reaction for H2O2 electrogeneration: The impact of different conductive carbon matrices and their physicochemical properties. Journal of Catalysis, 2020, 392, 56-68.	6.2	29
22	Sn-containing electrocatalysts with a reduced amount of palladium for alkaline direct ethanol fuel cell applications. Renewable Energy, 2020, 158, 49-63.	8.9	18
23	Methane activation at low temperature in an acidic electrolyte using PdAu/C, PdCu/C, and PdTiO2/C electrocatalysts for PEMFC. Research on Chemical Intermediates, 2020, 46, 2481-2496.	2.7	12
24	MnO2/Vulcan-Based Gas Diffusion Electrode for Mineralization of Diazo Dye in Simulated Effluent. Electrocatalysis, 2020, 11, 268-274.	3.0	4
25	Pt-Decorated TiO₂ Materials Supported on Carbon: Increasing Activities and Stabilities toward the ORR by Tuning the Pt Loading. ACS Applied Energy Materials, 2019, 2, 5759-5768.	5.1	35
26	Insights in the Study of the Oxygen Reduction Reaction in Direct Ethanol Fuel Cells using Hybrid Platinumâ€Ceria Nanorods Electrocatalysts. ChemElectroChem, 2019, 6, 5124-5135.	3.4	9
27	Niobium Enhances Electrocatalytic Pd Activity in Alkaline Direct Glycerol Fuel Cells. ChemElectroChem, 2019, 6, 5396-5406.	3.4	9
28	MWCNT-COOH supported PtSnNi electrocatalysts for direct ethanol fuel cells: Low Pt content, selectivity and chemical stability. Renewable Energy, 2019, 143, 1397-1405.	8.9	9
29	A high-throughput analytical tool for quantification of 15 metallic nanoparticles supported on carbon black. Heliyon, 2019, 5, e01308.	3.2	13
30	Mitigation of arsenic in rice grains by polishing and washing: Evidencing the benefit and the cost. Journal of Cereal Science, 2019, 87, 52-58.	3.7	23
31	Mineralization of paracetamol using a gas diffusion electrode modified with ceria high aspect ratio nanostructures. Electrochimica Acta, 2019, 295, 39-49.	5.2	26
32	PdxNby electrocatalysts for DEFC in alkaline medium: Stability, selectivity and mechanism for EOR. International Journal of Hydrogen Energy, 2018, 43, 4505-4516.	7.1	41
33	Carbon-supported MnO2 nanoflowers: Introducing oxygen vacancies for optimized volcano-type electrocatalytic activities towards H2O2 generation. Electrochimica Acta, 2018, 268, 101-110.	5.2	60
34	Time dependent-density functional theory (TD-DFT) and experimental studies of UVâ€“Visible spectra and cyclic voltammetry for Cu(II) complex with Et2DTC. Journal of Molecular Structure, 2018, 1157, 463-468.	3.6	7
35	Evaluation of H2O2 electrogeneration and decolorization of Orange II azo dye using tungsten oxide nanoparticle-modified carbon. Applied Catalysis B: Environmental, 2018, 232, 436-445.	20.2	98
36	Niobium: a promising Pd co-electrocatalyst for ethanol electrooxidation reactions. Journal of Solid State Electrochemistry, 2018, 22, 1495-1506.	2.5	22

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37	Ceria high aspect ratio nanostructures supported on carbon for hydrogen peroxide electrogeneration. Electrochimica Acta, 2018, 259, 865-872.	5.2	54
38	Application and stability of cathodes with manganese dioxide nanoflowers supported on Vulcan by Fenton systems for the degradation of RB5 azo dye. Chemosphere, 2018, 208, 131-138.	8.2	34
39	W@Au Nanostructures Modifying Carbon as Materials for Hydrogen Peroxide Electrogeneration. Electrochimica Acta, 2017, 231, 713-720.	5.2	36
40	PtSn Electrocatalyst Supported on MWCNTâ€COOH: Investigating the Ethanol Oxidation Reaction. ChemElectroChem, 2017, 4, 1950-1958.	3.4	20
41	Carbon Modified with Vanadium Nanoparticles for Hydrogen Peroxide Electrogeneration. Electrocatalysis, 2017, 8, 311-320.	3.0	9
42	Fuel Cells: Hydrogen and Ethanol Technologies. , 2017, , .		2
43	Electrooxidation of Mixed Ethanol and Methanol Solutions on PtSn/C Electrocatalysts Prepared by the Polymeric Precursor Method. Journal of the Brazilian Chemical Society, 2017, 28, 1091-1097.	0.6	3
44	Surface and Catalytical effects on Treated Carbon Materials for Hydrogen Peroxide Electrogeneration. Electrocatalysis, 2016, 7, 60-69.	3.0	50
45	Oxidation of ammonia using PtRh/C electrocatalysts: Fuel cell and electrochemical evaluation. Applied Catalysis B: Environmental, 2015, 174-175, 136-144.	20.2	85
46	Electrochemical incineration of the antibiotic ciprofloxacin in sulfate medium and synthetic urine matrix. Water Research, 2015, 83, 31-41.	11.3	159
47	Binary and ternary palladium based electrocatalysts for alkaline direct glycerol fuel cell. Journal of Power Sources, 2015, 293, 823-830.	7.8	63
48	Degradation of Evans Blue diazo dye by electrochemical processes based on Fentonâ€™s reaction chemistry. Journal of Electroanalytical Chemistry, 2015, 747, 1-11.	3.8	66
49	Carbon-supported TiO2â€“Au hybrids as catalysts for the electrogeneration of hydrogen peroxide: Investigating the effect of TiO2 shape. Journal of Catalysis, 2015, 326, 100-106.	6.2	45
50	Self-assembled films based on polyaniline/multiwalled carbon nanotubes composites and sulphonated polystyrene deposited onto ITO substrates. Synthetic Metals, 2015, 210, 186-191.	3.9	11
51	Palladium and palladiumâ€“tin supported on multi wall carbon nanotubes or carbon for alkaline direct ethanol fuel cell. Journal of Power Sources, 2015, 275, 189-199.	7.8	91
52	Glycerol Electrooxidation in Alkaline Medium Using Pd/C, Au/C and PdAu/C Electrocatalysts Prepared by Electron Beam Irradiation. Journal of the Brazilian Chemical Society, 2014, , .	0.6	11
53	Use of a vanadium nanostructured material for hydrogen peroxide electrogeneration. Journal of Electroanalytical Chemistry, 2014, 719, 127-132.	3.8	48
54	Investigation of PdIr/C electrocatalysts as anode on the performance of direct ammonia fuel cell. Journal of Power Sources, 2014, 268, 129-136.	7.8	69

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55	Ethanol Oxidation Reaction Using PtSn/C+Ce/C Electrocatalysts: Aspects of Ceria Contribution. Electrochimica Acta, 2014, 117, 292-298.	5.2	17
56	Medicinal Electrochemistry: Integration of Electrochemistry, Medicinal Chemistry and Computational Chemistry. Current Medicinal Chemistry, 2014, 21, 2266-2275.	2.4	11
57	XIX Brazilian Symposium on Electrochemistry and Electroanalytical Chemistry (XIX-SIBEE). Journal of the Brazilian Chemical Society, 2014, , .	0.6	0
58	Influence of the preparation method and the support on H2O2 electrogeneration using cerium oxide nanoparticles. Electrochimica Acta, 2013, 111, 339-343.	5.2	42
59	Degradation of dipyrone via advanced oxidation processes using a cerium nanostructured electrocatalyst material. Applied Catalysis A: General, 2013, 462-463, 256-261.	4.3	36
60	Ethanol electro-oxidation in an alkaline medium using Pd/C, Au/C and PdAu/C electrocatalysts prepared by electron beam irradiation. Electrochimica Acta, 2013, 111, 455-465.	5.2	125
61	Synthesis and characterization of nanostructured electrocatalysts based on nickel and tin for hydrogen peroxide electrogeneration. Electrochimica Acta, 2013, 109, 245-251.	5.2	46
62	Low tungsten content of nanostructured material supported on carbon for the degradation of phenol. Applied Catalysis B: Environmental, 2013, 142-143, 479-486.	20.2	61
63	PtSnNi/C nanoparticle electrocatalysts for the ethanol oxidation reaction: Ni stability study. Electrochimica Acta, 2013, 96, 243-252.	5.2	44
64	Ethanol Oxidation Reaction on IrPtSn/C Electrocatalysts with low Pt Content. Journal of the Brazilian Chemical Society, 2013, , .	0.6	6
65	Nanomaterials for Energy Conversion and Storage. Journal of Nanomaterials, 2012, 2012, 1-2.	2.7	12
66	Use of Gas Diffusion Electrode for the In Situ Generation of Hydrogen Peroxide in an Electrochemical Flow-By Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 649-654.	3.7	108
67	Oxygen reduction reaction catalyzed by É›-MnO2: Influence of the crystalline structure on the reaction mechanism. Electrochimica Acta, 2012, 85, 423-431.	5.2	71
68	PtSnIr/C anode electrocatalysts: promoting effect in direct ethanol fuel cells. Journal of the Brazilian Chemical Society, 2012, 23, 1146-1153.	0.6	20
69	Low content cerium oxide nanoparticles on carbon for hydrogen peroxide electrosynthesis. Applied Catalysis A: General, 2012, 411-412, 1-6.	4.3	100
70	DegradaÃ§Ã£o eletroquÃmica da vinhaÃ§a usando eletrodo de diamante dopado com boro. Quimica Nova, 2011, 34, 1517-1520.	0.3	2
71	Ethanol electrooxidation using Ti/(RuO2)(x) Pt(1-x) electrodes prepared by the polymeric precursor method. Journal of the Brazilian Chemical Society, 2011, 22, 1709-1717.	0.6	11
72	Tellurium underpotential deposited ad-atoms on Au electrodes: A new electrodeposition mechanism using an electrochemical quartz crystal nanobalance. Electrochimica Acta, 2011, 58, 1-5.	5.2	9

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73	PtSn/C alloyed and non-alloyed materials: Differences in the ethanol electro-oxidation reaction pathways. Applied Catalysis B: Environmental, 2011, 110, 141-147.	20.2	76
74	PtSnCe/C electrocatalysts for ethanol oxidation: DEFC and FTIR â€œin-situâ€•studies. International Journal of Hydrogen Energy, 2011, 36, 11519-11527.	7.1	55
75	PdBi/C electrocatalysts for ethanol electro-oxidation in alkaline medium. International Journal of Hydrogen Energy, 2011, 36, 10522-10526.	7.1	73
76	Ptâ€“Ruâ€“TiO2 photoelectrocatalysts for methanol oxidation. Journal of Power Sources, 2011, 196, 872-876.	7.8	60
77	Ethanol Electro-oxidation on Pt/C Electrocatalysts: An â€œIn Situâ€•Raman Spectroelectrochemical Study. Electrocatalysis, 2011, 2, 28-34.	3.0	32
78	Ethanol Electrooxidation on Bi Submonolayers Deposited on a Pt Electrode. Electrocatalysis, 2011, 2, 224-230.	3.0	5
79	A comparative study of the electrogeneration of hydrogen peroxide using Vulcan and Printex carbon supports. Carbon, 2011, 49, 2842-2851.	10.3	161
80	PtSnCe/C and PtSnIr/C Electrocatalysts for Ethanol Oxidation: DEFC and In Situ FTIR studies. ECS Transactions, 2011, 41, 1293-1298.	0.5	1
81	The Mechanism for Ethanol Oxidation Reaction on SnO2@Pt/C Core Shell Electrocatalyst. ECS Transactions, 2011, 41, 2231-2236.	0.5	0
82	Comparative Studies of Oxygen Reduction Reaction and Ethanol Oxidation Reaction on PtSn/C and PtNi/C Catalysts. ECS Transactions, 2011, 41, 1299-1306.	0.5	2
83	Ethanol oxidation reactions using SnO2@Pt/C as an electrocatalyst. Applied Catalysis B: Environmental, 2010, 99, 265-271.	20.2	79
84	Study of ethanol electro-oxidation in acid environment on Pt3Sn/C anode catalysts prepared by a modified polymeric precursor method under controlled synthesis conditions. Journal of Power Sources, 2010, 195, 1589-1593.	7.8	70
85	Copper underpotential deposition on TiO2 electrodes: A voltammetric and electrochemical quartz crystal nanobalance study. Thin Solid Films, 2010, 518, 2669-2673.	1.8	3
86	Reaproveitamento de Ã³xidos de manganÃªs de pilhas descartadas para eletrocatÃ¡lise da reaÃ§Ã£o de reduÃ§Ã£o de oxigÃªnio em meio bÃ¡sico. Quimica Nova, 2010, 33, 730-733.	0.3	5
87	DFT and electrochemical studies on nortriptyline oxidation sites. Journal of Molecular Modeling, 2009, 15, 945-952.	1.8	12
88	Ethanol oxidation reaction on PtCeO2/C electrocatalysts prepared by the polymeric precursor method. Applied Catalysis B: Environmental, 2009, 91, 516-523.	20.2	56
89	Electrochemical oxidation of benzene on boron-doped diamond electrodes. Chemosphere, 2007, 66, 2152-2158.	8.2	73
90	A voltammetric and nanogravimetric study of ZnSe electrodeposition from an acid bath containing Zn(II) and Se(IV). Thin Solid Films, 2007, 515, 6860-6866.	1.8	24

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91	Nanogravimetric studies of tungsten oxide thin films obtained by the polymeric precursor method. Thin Solid Films, 2007, 515, 7155-7161.	1.8	3
92	Electrocatalysis of methanol, ethanol and formic acid using a Ru/Pt metallic bilayer. Journal of Power Sources, 2007, 163, 695-701.	7.8	45
93	Methanol oxidation reaction on Ti/RuO2(x)Pt(1â^'x) electrodes prepared by the polymeric precursor method. Journal of Power Sources, 2007, 171, 373-380.	7.8	21
94	Use of Graphite Polyurethane Composite Electrode for Imipramine Oxidationâ€"Mechanism Proposal and Electroanalytical Determination. Analytical Letters, 2006, 39, 507-520.	1.8	40
95	A nanogravimmetric investigation of the charging processes on ruthenium oxide thin films and their effect on methanol oxidation. Applied Surface Science, 2006, 253, 1817-1822.	6.1	20
96	Ethanol oxidation using a metallic bilayer Rh/Pt deposited over Pt as electrocatalyst. Journal of Power Sources, 2006, 157, 212-216.	7.8	25
97	Methanol and ethanol electroxidation using Pt electrodes prepared by the polymeric precursor method. Journal of Power Sources, 2006, 158, 164-168.	7.8	53
98	A model for the flux of the species generated during the electrodissolution of a copperâ€"nickel alloy on Pt in acidic media. Surface and Coatings Technology, 2006, 200, 2990-2994.	4.8	3
99	Preparation of Pt thin film electrodes using the Pechini method. Materials Letters, 2006, 60, 1906-1910.	2.6	36
100	A microgravimetric study of simultaneous adsorption of anions and copper on polycrystalline Pt surfaces. Journal of the Brazilian Chemical Society, 2006, 17, 1339-1346.	0.6	6
101	The use of a metallic bilayer for the oxidation of small organic molecules. Journal of Electroanalytical Chemistry, 2005, 575, 177-182.	3.8	37
102	Electrochemical behavior of Ni particles modified polypyrrole films studied by EQCN technique. Journal of Electroanalytical Chemistry, 2005, 583, 162-166.	3.8	10
103	Electrochemical and mass variation behaviour of rhodium oxide electrodes prepared by the polymeric precursor method. Thin Solid Films, 2005, 483, 164-168.	1.8	4
104	A voltammetric and nanogravimetric study of Te underpotential deposition on Pt in perchloric acid medium. Electrochimica Acta, 2005, 50, 2289-2295.	5.2	17
105	Determination of dopamine in synthetic cerebrospinal fluid by SWV with a graphite?polyurethane composite electrode. Analytical and Bioanalytical Chemistry, 2005, 381, 1161-1166.	3.7	55
106	Microgravimetric and voltammetric study of Zn underpotential deposition on platinum in alkaline medium. Surface Science, 2005, 579, 58-64.	1.9	4
107	An EQCM investigation of charging RuO2 thin films prepared by the polymeric precursor method. Journal of Solid State Electrochemistry, 2005, 9, 91-95.	2.5	34
108	Estudo eletroquÃmico e quÃmico-quÂ¢ntico da oxidaÃ§Ã£o do antidepressivo tricÃclico amitriptilina. Quimica Nova, 2005, 28, 456-461.	0.3	18

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109	Electrochemical Behavior of Nicotine Studied by Voltammetric Techniques at Boronâ€Doped Diamond Electrodes. Analytical Letters, 2005, 38, 1587-1599.	1.8	64
110	Electrogravimetric investigation of formaldehyde oxidation at Pt electrodes in acidic media. Electrochimica Acta, 2004, 49, 1893-1901.	5.2	37
111	Microgravimetric, rotating ring-disc and voltammetric studies of the underpotential deposition of selenium on polycrystalline platinum electrodes. Journal of Electroanalytical Chemistry, 2004, 567, 203-210.	3.8	56
112	Rh electrodeposition on Pt in acidic medium: a study using cyclic voltammetry and an electrochemical quartz crystal microbalance. Journal of Electroanalytical Chemistry, 2004, 569, 233-240.	3.8	50
113	The underpotential deposition of Sn on Pt in acid media. Cyclic voltammetric and electrochemical quartz crystal microbalance studies. Electrochimica Acta, 2003, 48, 2607-2614.	5.2	26
114	Microgravimetric studies of silver electrocrystallization on polycrystalline gold surfaces. Journal of Electroanalytical Chemistry, 2003, 547, 53-59.	3.8	4
115	Voltammetric and rotating ring-disk studies of the influence of anions in the underpotential deposition of zinc on platinum. Journal of the Brazilian Chemical Society, 2002, 13, 529-534.	0.6	15
116	Estudos da deposiÃ§Ã£o em subtensÃ£o de cÃ¡dmio sobre ouro policristalino na presenÃ§a de diferentes Ã¢nions co-adsorvidos. Quimica Nova, 2001, 24, 465-472.	0.3	4
117	Study of anion adsorption on polycrystalline Pt by electrochemical quartz crystal microbalance. Electrochemistry Communications, 2000, 2, 692-696.	4.7	115
118	Estudos da eletrodeposiÃ§Ã£o de metais em regime de subtensÃ£o. Quimica Nova, 2000, 23, 392-400.	0.3	4
119	Voltammetric and rotating ring-disk studies of underpotential deposition of Ag and Cu on polycrystalline Au electrodes in aqueous H2SO4. Electrochimica Acta, 1998, 43, 2263-2272.	5.2	45
120	Electrochemical deposition of the first Cd monolayer on polycrystalline Pt and Au electrodes: an Upd study. Journal of the Brazilian Chemical Society, 1998, 9, 211.	0.6	7
121	Underpotential deposition of silver on polycrystalline platinum studied by cyclic voltammetry and rotating ring-disc techniques. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 3999-4003.	1.7	24
122	Addition of CeO2 Nanorods in PtSn-Based Electrocatalysts for Ethanol Electrochemical Oxidation in Acid Medium. Journal of the Brazilian Chemical Society, 0, , .	0.6	1
123	Hydrogen Peroxide Electrogeneration by Gas Diffusion Electrode Modified With Tungsten Oxide Nanoparticles for Degradation of Orange II and Sunset Yellow FCF Azo Dyes. Journal of the Brazilian Chemical Society, 0, , .	0.6	3