Mauro Coelho dos Santos

List of Publications by Citations

116 papers	2,985 citations	35 h-index	50 g-index
124 ext. papers	3,364 ext. citations	5.4 avg, IF	5.06 L-index

#	Paper	IF	Citations
116	A comparative study of the electrogeneration of hydrogen peroxide using Vulcan and Printex carbon supports. *Carbon*, **2011**, 49, 2842-2851	10.4	133
115	Electrochemical incineration of the antibiotic ciprofloxacin in sulfate medium and synthetic urine matrix. *Water Research*, **2015**, 83, 31-41	12.5	128
114	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	6.7	106
113	Study of anion adsorption on polycrystalline Pt by electrochemical quartz crystal microbalance. *Electrochemistry Communications*, **2000**, 2, 692-696	5.1	103
112	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	3.9	87
111	Palladium and palladiumâ□in supported on multi wall carbon nanotubes or carbon for alkaline direct ethanol fuel cell. *Journal of Power Sources*, **2015**, 275, 189-199	8.9	78
110	Low content cerium oxide nanoparticles on carbon for hydrogen peroxide electrosynthesis. *Applied Catalysis A: General*, **2012**, 411-412, 1-6	5.1	76
109	Ethanol oxidation reactions using SnO2@Pt/C as an electrocatalyst. *Applied Catalysis B: Environmental*, **2010**, 99, 265-271	21.8	65
108	Oxidation of ammonia using PtRh/C electrocatalysts: Fuel cell and electrochemical evaluation. *Applied Catalysis B: Environmental*, **2015**, 174-175, 136-144	21.8	64
107	Oxygen reduction reaction catalyzed by e-MnO2: Influence of the crystalline structure on the reaction mechanism. *Electrochimica Acta*, **2012**, 85, 423-431	6.7	63
106	PtSn/C alloyed and non-alloyed materials: Differences in the ethanol electro-oxidation reaction pathways. *Applied Catalysis B: Environmental*, **2011**, 110, 141-147	21.8	63
105	PdBi/C electrocatalysts for ethanol electro-oxidation in alkaline medium. *International Journal of Hydrogen Energy*, **2011**, 36, 10522-10526	6.7	62
104	Electrochemical oxidation of benzene on boron-doped diamond electrodes. *Chemosphere*, **2007**, 66, 2153-21	3.8	62
103	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	21.8	60
102	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	8.9	58
101	Ptâ□Ruâ□TiO2 photoelectrocatalysts for methanol oxidation. *Journal of Power Sources*, **2011**, 196, 872-876	8.9	57
100	Investigation of PdIr/C electrocatalysts as anode on the performance of direct ammonia fuel cell. *Journal of Power Sources*, **2014**, 268, 129-136	8.9	55

99	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	4.1	54
98	Binary and ternary palladium based electrocatalysts for alkaline direct glycerol fuel cell. *Journal of Power Sources*, **2015**, 293, 823-830	8.9	50
97	Degradation of Evans Blue diazo dye by electrochemical processes based on Fentonâ reaction chemistry. *Journal of Electroanalytical Chemistry*, **2015**, 747, 1-11	4.1	49
96	PtSnCe/C electrocatalysts for ethanol oxidation: DEFC and FTIR âin-situâ studies. *International Journal of Hydrogen Energy*, **2011**, 36, 11519-11527	6.7	49
95	Electrochemical Behavior of Nicotine Studied by Voltammetric Techniques at Boron-Doped Diamond Electrodes. *Analytical Letters*, **2005**, 38, 1587-1599	2.2	49
94	Determination of dopamine in synthetic cerebrospinal fluid by SWV with a graphite-polyurethane composite electrode. *Analytical and Bioanalytical Chemistry*, **2005**, 381, 1161-6	4.4	49
93	Low tungsten content of nanostructured material supported on carbon for the degradation of phenol. *Applied Catalysis B: Environmental*, **2013**, 142-143, 479-486	21.8	47
92	Ethanol oxidation reaction on PtCeO2/C electrocatalysts prepared by the polymeric precursor method. *Applied Catalysis B: Environmental*, **2009**, 91, 516-523	21.8	46
91	Methanol and ethanol electroxidation using Pt electrodes prepared by the polymeric precursor method. *Journal of Power Sources*, **2006**, 158, 164-168	8.9	45
90	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	6.7	43
89	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	4.1	43
88	Electrocatalysis of methanol, ethanol and formic acid using a Ru/Pt metallic bilayer. *Journal of Power Sources*, **2007**, 163, 695-701	8.9	42
87	PtSnNi/C nanoparticle electrocatalysts for the ethanol oxidation reaction: Ni stability study. *Electrochimica Acta*, **2013**, 96, 243-252	6.7	40
86	Carbon-supported TiO2âAu hybrids as catalysts for the electrogeneration of hydrogen peroxide: Investigating the effect of TiO2 shape. *Journal of Catalysis*, **2015**, 326, 100-106	7.3	39
85	Synthesis and characterization of nanostructured electrocatalysts based on nickel and tin for hydrogen peroxide electrogeneration. *Electrochimica Acta*, **2013**, 109, 245-251	6.7	39
84	The use of a metallic bilayer for the oxidation of small organic molecules. *Journal of Electroanalytical Chemistry*, **2005**, 575, 177-182	4.1	36
83	Use of a vanadium nanostructured material for hydrogen peroxide electrogeneration. *Journal of Electroanalytical Chemistry*, **2014**, 719, 127-132	4.1	35
82	Use of Graphite Polyurethane Composite Electrode for Imipramine OxidationâMechanism Proposal and Electroanalytical Determination. *Analytical Letters*, **2006**, 39, 507-520	2.2	35

81	PdxNby electrocatalysts for DEFC in alkaline medium: Stability, selectivity and mechanism for EOR. *International Journal of Hydrogen Energy*, **2018**, 43, 4505-4516	6.7	34
80	Carbon-supported MnO2 nanoflowers: Introducing oxygen vacancies for optimized volcano-type electrocatalytic activities towards H2O2 generation. *Electrochimica Acta*, **2018**, 268, 101-110	6.7	34
79	Influence of the preparation method and the support on H2O2 electrogeneration using cerium oxide nanoparticles. *Electrochimica Acta*, **2013**, 111, 339-343	6.7	34
78	Electrogravimetric investigation of formaldehyde oxidation at Pt electrodes in acidic media. *Electrochimica Acta*, **2004**, 49, 1893-1901	6.7	34
77	Degradation of dipyrone via advanced oxidation processes using a cerium nanostructured electrocatalyst material. *Applied Catalysis A: General*, **2013**, 462-463, 256-261	5.1	33
76	Preparation of Pt thin film electrodes using the Pechini method. *Materials Letters*, **2006**, 60, 1906-1910	3.3	32
75	An EQCM investigation of charging RuO2 thin films prepared by the polymeric precursor method. *Journal of Solid State Electrochemistry*, **2005**, 9, 91-95	2.6	32
74	Ceria high aspect ratio nanostructures supported on carbon for hydrogen peroxide electrogeneration. *Electrochimica Acta*, **2018**, 259, 865-872	6.7	31
73	Surface and Catalytical effects on Treated Carbon Materials for Hydrogen Peroxide Electrogeneration. *Electrocatalysis*, **2016**, 7, 60-69	2.7	26
72	W@Au Nanostructures Modifying Carbon as Materials for Hydrogen Peroxide Electrogeneration. *Electrochimica Acta*, **2017**, 231, 713-720	6.7	23
71	The underpotential deposition of Sn on Pt in acid media. Cyclic voltammetric and electrochemical quartz crystal microbalance studies. *Electrochimica Acta*, **2003**, 48, 2607-2614	6.7	23
70	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		22
69	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	2.2	21
68	Ethanol oxidation using a metallic bilayer Rh/Pt deposited over Pt as electrocatalyst. *Journal of Power Sources*, **2006**, 157, 212-216	8.9	20
67	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	6.1	19
66	PtSnIr/C anode electrocatalysts: promoting effect in direct ethanol fuel cells. *Journal of the Brazilian Chemical Society*, **2012**, 23, 1146-1153	1.5	19
65	Methanol oxidation reaction on Ti/RuO2(x)Pt(1â) electrodes prepared by the polymeric precursor method. *Journal of Power Sources*, **2007**, 171, 373-380	8.9	19
64	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	8.4	19

63	PtSn Electrocatalyst Supported on MWCNT-COOH: Investigating the Ethanol Oxidation Reaction. *ChemElectroChem*, **2017**, 4, 1950-1958	4.3	18
62	Ethanol Electro-oxidation on Pt/C Electrocatalysts: An â□h Situâ□Raman Spectroelectrochemical Study. *Electrocatalysis*, **2011**, 2, 28-34	2.7	18
61	A voltammetric and nanogravimetric study of Te underpotential deposition on Pt in perchloric acid medium. *Electrochimica Acta*, **2005**, 50, 2289-2295	6.7	17
60	Niobium: a promising Pd co-electrocatalyst for ethanol electrooxidation reactions. *Journal of Solid State Electrochemistry*, **2018**, 22, 1495-1506	2.6	16
59	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	6.7	16
58	Estudo eletroquí□mico e quí□mico-quí□tico da oxidaõ do antidepressivo tricí□lico amitriptilina. *Quimica Nova*, **2005**, 28, 456-461	1.6	16
57	Ethanol Oxidation Reaction Using PtSn/C+Ce/C Electrocatalysts: Aspects of Ceria Contribution. *Electrochimica Acta*, **2014**, 117, 292-298	6.7	15
56	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	1.5	15
55	Mineralization of paracetamol using a gas diffusion electrode modified with ceria high aspect ratio nanostructures. *Electrochimica Acta*, **2019**, 295, 39-49	6.7	15
54	A high-throughput analytical tool for quantification of 15 metallic nanoparticles supported on carbon black. *Heliyon*, **2019**, 5, e01308	3.6	12
53	Mitigation of arsenic in rice grains by polishing and washing: Evidencing the benefit and the cost. *Journal of Cereal Science*, **2019**, 87, 52-58	3.8	12
52	Sn-containing electrocatalysts with a reduced amount of palladium for alkaline direct ethanol fuel cell applications. *Renewable Energy*, **2020**, 158, 49-63	8.1	12
51	Microwave synthesis of Ti/(RuO2)0.5(IrO2)0.5 anodes: Improved electrochemical properties and stability. *Journal of Electroanalytical Chemistry*, **2020**, 874, 114460	4.1	12
50	DFT and electrochemical studies on nortriptyline oxidation sites. *Journal of Molecular Modeling*, **2009**, 15, 945-52	2	11
49	Self-assembled films based on polyaniline/multiwalled carbon nanotubes composites and sulphonated polystyrene deposited onto ITO substrates. *Synthetic Metals*, **2015**, 210, 186-191	3.6	10
48	Niobium increasing the electrocatalytic activity of palladium for alkaline direct ethanol fuel cell. *Journal of Electroanalytical Chemistry*, **2020**, 858, 113824	4.1	10
47	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**,	1.5	9
46	Nanomaterials for Energy Conversion and Storage. *Journal of Nanomaterials*, **2012**, 2012, 1-2	3.2	9

45	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	7.3	9
44	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	1.5	8
43	Tellurium underpotential deposited ad-atoms on Au electrodes: A new electrodeposition mechanism using an electrochemical quartz crystal nanobalance. *Electrochimica Acta*, **2011**, 58, 1-5	6.7	8
42	Electrochemical behavior of Ni particles modified polypyrrole films studied by EQCN technique. *Journal of Electroanalytical Chemistry*, **2005**, 583, 162-166	4.1	8
41	The effect of support on Pd1Nb1 electrocatalysts for ethanol fuel cells. *Renewable Energy*, **2020**, 150, 293-306	8.1	8
40	Niobium Enhances Electrocatalytic Pd Activity in Alkaline Direct Glycerol Fuel Cells. *ChemElectroChem*, **2019**, 6, 5396-5406	4.3	6
39	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	2.8	6
38	Insights in the Study of the Oxygen Reduction Reaction in Direct Ethanol Fuel Cells using Hybrid Platinum-Ceria Nanorods Electrocatalysts. *ChemElectroChem*, **2019**, 6, 5124-5135	4.3	6
37	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	1.5	6
36	A microgravimetric study of simultaneous adsorption of anions and copper on polycrystalline Pt surfaces. *Journal of the Brazilian Chemical Society*, **2006**, 17, 1339-1346	1.5	6
35	Medicinal electrochemistry: integration of electrochemistry, medicinal chemistry and computational chemistry. *Current Medicinal Chemistry*, **2014**, 21, 2266-75	4.3	6
34	Removal of Orange II (OII) dye by simulated solar photoelectro-Fenton and stability of WO/Vulcan XC72 gas diffusion electrode. *Chemosphere*, **2020**, 239, 124670	8.4	6
33	MWCNT-COOH supported PtSnNi electrocatalysts for direct ethanol fuel cells: Low Pt content, selectivity and chemical stability. *Renewable Energy*, **2019**, 143, 1397-1405	8.1	5
32	Ethanol Electrooxidation on Bi Submonolayers Deposited on a Pt Electrode. *Electrocatalysis*, **2011**, 2, 224-230	2.7	5
31	Ethanol Oxidation Reaction on IrPtSn/C Electrocatalysts with low Pt Content. *Journal of the Brazilian Chemical Society*, **2013**,	1.5	5
30	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	6.7	5
29	Carbon Modified with Vanadium Nanoparticles for Hydrogen Peroxide Electrogeneration. *Electrocatalysis*, **2017**, 8, 311-320	2.7	4
28	Electrochemical and mass variation behaviour of rhodium oxide electrodes prepared by the polymeric precursor method. *Thin Solid Films*, **2005**, 483, 164-168	2.2	4

27	Microgravimetric and voltammetric study of Zn underpotential deposition on platinum in alkaline medium. *Surface Science*, **2005**, 579, 58-64	1.8	4
26	Reaproveitamento de xidos de mangans de pilhas descartadas para eletrocatise da rea de redu de oxignio em meio bsico. *Quimica Nova*, **2010**, 33, 730-733	1.6	4
25	Time dependent-density functional theory (TD-DFT) and experimental studies of UVâVisible spectra and cyclic voltammetry for Cu(II) complex with Et2DTC. *Journal of Molecular Structure*, **2018**, 1157, 463-468	3.4	3
24	Copper underpotential deposition on TiO2 electrodes: A voltammetric and electrochemical quartz crystal nanobalance study. *Thin Solid Films*, **2010**, 518, 2669-2673	2.2	3
23	A model for the flux of the species generated during the electrodissolution of a copperâickel alloy on Pt in acidic media. *Surface and Coatings Technology*, **2006**, 200, 2990-2994	4.4	3
22	Microgravimetric studies of silver electrocrystallization on polycrystalline gold surfaces. *Journal of Electroanalytical Chemistry*, **2003**, 547, 53-59	4.1	3
21	Estudos da eletrodeposi de metais em regime de subtens. *Quimica Nova*, **2000**, 23, 392-400	1.6	3
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	3.5	3
19	NaNbO3 microcubes decorated with minimum Pd and maximum performance for Alkaline Direct Ethanol Fuel Cell applications. *Journal of Power Sources*, **2021**, 493, 229694	8.9	3
18	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	1.5	2
17	Fuel Cells: Hydrogen and Ethanol Technologies **2017**,		2
16	Comparative Studies of Oxygen Reduction Reaction and Ethanol Oxidation Reaction on PtSn/C and PtNi/C Catalysts. *ECS Transactions*, **2011**, 41, 1299-1306	1	2
15	Nanogravimetric studies of tungsten oxide thin films obtained by the polymeric precursor method. *Thin Solid Films*, **2007**, 515, 7155-7161	2.2	2
14	Estudos da deposi em subtens de cdmio sobre ouro policristalino na presen de diferentes ions co-adsorvidos. *Quimica Nova*, **2001**, 24, 465-472	1.6	2
13	Acetol as a high-performance molecule for oxidation in alkaline direct liquid fuel cell. *Renewable Energy*, **2021**, 165, 37-42	8.1	2
12	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	5.7	1
11	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, 39438-39438	6.7	1
10	Electrochemical and spectroscopy studies of the interaction between the Zn2+ and the diethylditiocarbamate ligand (Et2DTCâ *Transition Metal Chemistry*, **2021**, 46, 291-297	2.1	1

9	Assessing the oxygen reduction reaction by a 2-electron mechanism on ceria surfaces. *Physical Chemistry Chemical Physics*, **2021**, 23, 18580-18587	3.6	1
8	MnO2/Vulcan-Based Gas Diffusion Electrode for Mineralization of Diazo Dye in Simulated Effluent. *Electrocatalysis*, **2020**, 11, 268-274	2.7	0
7	Methane activation on PdMn/C-ITO electrocatalysts using a reactor-type PEMFC. *Research on Chemical Intermediates*, **2020**, 46, 4383-4402	2.8	0
6	Density functional theory studies of oxygen reduction reaction for hydrogen peroxide generation on Graphene-Based catalysts. *Journal of Electroanalytical Chemistry*, **2021**, 895, 115429	4.1	0
5	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	4.1	0
4	Using carbon black modified with Nb2O5 and RuO2 for enhancing selectivity toward H2O2 electrogeneration. *Journal of Environmental Chemical Engineering*, **2021**, 9, 106787	6.8	0
3	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*,1	1.9	0
2	Use of WO2.72 Nanoparticles/Vulcan XC72 GDE Electrocatalyst Combined with the Photoelectro-Fenton Process for the Degradation of 17Ethinylestradiol (EE2). *Electrocatalysis*,1	2.7	0
1	Fast and Inexpensive Synthesis of Multilayer Graphene Used as Pd Support in Alkaline Direct Ethanol Fuel Cell Anode. *Electrocatalysis*, **2021**, 12, 715	2.7	