A R De Andrade

List of Publications by Year
in descending order

124 papers	3,506 citations	117625 34 h-index	175258 52 g-index
128 all docs	128 docs citations	128 times ranked	3282 citing authors

#	Article	IF	Citations
1	Electrochemically assisted photocatalytic degradation of reactive dyes. Applied Catalysis B: Environmental, 1999, 22, 83-90.	20.2	220
2	Electroactivity of tin modified platinum electrodes for ethanol electrooxidation. Journal of Power Sources, 2007, 167, 1-10.	7.8	161
3	Carbon-supported ternary PtSnIr catalysts for direct ethanol fuel cell. Electrochimica Acta, 2007, 52, 6997-7006.	5.2	158
4	Electrooxidation of glyphosate herbicide at different DSAÂ® compositions: pH, concentration and supporting electrolyte effect. Electrochimica Acta, 2009, 54, 2039-2045.	5.2	117
5	Activity of platinumâ€“tin catalysts prepared by the Pechiniâ€“Adams method for the electrooxidation of ethanol. Journal of Electroanalytical Chemistry, 2009, 628, 81-89.	3.8	84
6	Electrochemical oxidation ofp-chlorophenol on SnO₂â€“Sb₂O₅based anodes for wastewater treatment. Journal of Applied Electrochemistry, 2003, 33, 1211-1215.	2.9	81
7	Characterisation of DSAÂ®-type coatings with nominal composition Ti/Ru0.3Ti(0.7â^'x)SnxO2 prepared via a polymeric precursor. Electrochimica Acta, 2001, 47, 913-920.	5.2	80
8	Effect of W on PtSn/C catalysts for ethanol electrooxidation. Journal of Applied Electrochemistry, 2008, 38, 653-662.	2.9	74
9	Utilization of enzyme cascades for complete oxidation of lactate in an enzymatic biofuel cell. Electrochimica Acta, 2011, 56, 10772-10775.	5.2	71
10	An optimization study of PtSn/C catalysts applied to direct ethanol fuel cell: Effect of the preparation method on the electrocatalytic activity of the catalysts. Journal of Power Sources, 2012, 215, 53-62.	7.8	68
11	Application of electrochemical advanced oxidation processes to the mineralization of the herbicide diuron. Chemosphere, 2014, 109, 49-55.	8.2	64
12	Electroconversion of glycerol in alkaline medium: From generation of energy to formation of value-added products. Journal of Power Sources, 2017, 351, 174-182.	7.8	62
13	Electrocatalytic oxidation of ethanol on Ptâ€“Mo bimetallic electrodes in acid medium. Journal of Applied Electrochemistry, 2006, 36, 1391-1397.	2.9	59
14	Morphological and electrochemical investigation of RuO2â€“Ta2O5 oxide films prepared by the Pechiniâ€“Adams method. Journal of Applied Electrochemistry, 2008, 38, 767-775.	2.9	57
15	Preparation, characterization and application of Ptâ€“Ruâ€“Sn/C trimetallic electrocatalysts for ethanol oxidation in direct fuel cell. International Journal of Hydrogen Energy, 2011, 36, 11034-11042.	7.1	55
16	Effect of Ni on Pt/C and PtSn/C prepared by the Pechini method. International Journal of Hydrogen Energy, 2011, 36, 3803-3810.	7.1	53
17	Photoelectrochemical degradation of lignin. Journal of Applied Electrochemistry, 2000, 30, 953-958.	2.9	52
18	An Overview of Enzymatic Biofuel Cells. Electrocatalysis, 2010, 1, 87-94.	3.0	51

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19	Facile synthesis of highly active and durable PdM/C (M = Fe, Mn) nanocatalysts for the oxygen reduction reaction in an alkaline medium. Journal of Materials Chemistry A, 2016, 4, 8337-8349.	10.3	51
20	Electrochemical oxidation of 4-chlorophenol and its by-products using Ti/Ru0.3M0.7O2 (MÂ=ÂTi or Sn) anodes: preparation route versus degradation efficiency. Journal of Applied Electrochemistry, 2007, 37, 691-698.	2.9	49
21	Direct ethanol fuel cell: Electrochemical performance at 90Â°C on Pt and PtSn/C electrocatalysts. Journal of Power Sources, 2012, 198, 95-99.	7.8	49
22	Total removal of alachlor from water by electrochemical processes. Separation and Purification Technology, 2014, 132, 674-683.	7.9	48
23	A High Redox Potential Laccase from Pycnoporus sanguineus RP15: Potential Application for Dye Decolorization. International Journal of Molecular Sciences, 2016, 17, 672.	4.1	48
24	Direct electron transfer-based bioanodes for ethanol biofuel cells using PQQ-dependent alcohol and aldehyde dehydrogenases. Electrochimica Acta, 2013, 87, 323-329.	5.2	46
25	Characterization of RuO[sub 2]-Ta[sub 2]O[sub 5] Coated Titanium Electrode. Journal of the Electrochemical Society, 2004, 151, D106.	2.9	45
26	Combinatorial PtSnM (MÂ=ÂFe, Ni, Ru and Pd) nanoparticle catalyst library toward ethanol electrooxidation. Journal of Power Sources, 2015, 284, 623-630.	7.8	45
27	Title is missing!. Journal of Applied Electrochemistry, 2000, 30, 467-474.	2.9	42
28	The effect of water proofing on the performance of nickel foam cathode in microbial fuel cells. Journal of Power Sources, 2012, 198, 100-104.	7.8	40
29	Hydrogen and electrical energy co-generation by a cooperative fermentation system comprising Clostridium and microbial fuel cell inoculated with port drainage sediment. Bioresource Technology, 2019, 277, 94-103.	9.6	39
30	Electrocatalytic oxidation of acetaldehyde on Pt alloy electrodes. Electrochimica Acta, 2004, 49, 2077-2083.	5.2	37
31	Electrochemical degradation of glyphosate formulations at DSAÂ® anodes in chloride medium: an AOX formation study. Journal of Applied Electrochemistry, 2009, 39, 1863-1870.	2.9	37
32	Hybrid nanocatalysts containing enzymes and metallic nanoparticles for ethanol/O2 biofuel cell. Journal of Power Sources, 2014, 259, 25-32.	7.8	36
33	Membraneless enzymatic ethanol/O2 fuel cell: Transitioning from an air-breathing Pt-based cathode to a bilirubin oxidase-based biocathode. Journal of Power Sources, 2016, 324, 208-214.	7.8	36
34	Employing iron and nickel to enhance ethanol oxidation of Pd-based anodes in alkaline medium. Electrochimica Acta, 2019, 295, 751-758.	5.2	36
35	Development of nanostructured bioanodes containing dendrimers and dehydrogenases enzymes for application in ethanol biofuel cells. Biosensors and Bioelectronics, 2011, 26, 2922-2926.	10.1	34
36	Effect of Coâ€catalyst on the Selective Electrooxidation of Glycerol over Rutheniumâ€based Nanomaterials. ChemElectroChem, 2017, 4, 39-45.	3.4	33

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37	The oxidation of formaldehyde on high overvoltage DSA type electrodes. Journal of the Brazilian Chemical Society, 2000, 11, 16-21.	0.6	32
38	Effect of solvent on the preparation and characterization of DSAÂ®-type anodes containing RuO2-TiO2-SnO2. Journal of the Brazilian Chemical Society, 2006, 17, 771-779.	0.6	31
39	A hybrid photoelectrocatalytic/photoelectro-Fenton treatment of Indigo Carmine in acidic aqueous solution using TiO2 nanotube arrays as photoanode. Journal of Electroanalytical Chemistry, 2019, 847, 113088.	3.8	30
40	Solvent and support electrolyte effects on the catalytic activity of Ti/RuO2 and Ti/IrO2 electrodes: oxidation of isosafrole as a probe model. Electrochimica Acta, 1999, 44, 3333-3340.	5.2	29
41	Development of novel bioanodes for ethanol biofuel cell using PAMAM dendrimers as matrix for enzyme immobilization. Biosensors and Bioelectronics, 2011, 26, 2675-2679.	10.1	29
42	Energy generation in a Microbial Fuel Cell using anaerobic sludge from a wastewater treatment plant. Scientia Agricola, 2016, 73, 424-428.	1.2	29
43	Ethanol Electroâ€oxidation in Rutheniumâ€Oxideâ€Coated Titanium Electrodes. Journal of the Electrochemical Society, 1998, 145, 3839-3843.	2.9	27
44	Investigation of the electrical properties, charging process, and passivation of RuO2â€“Ta2O5 oxide films. Journal of Electroanalytical Chemistry, 2006, 592, 153-162.	3.8	27
45	Application of Ti/RuO2â€“Ta2O5 electrodes in the electrooxidation of ethanol and derivants: Reactivity versus electrocatalytic efficiency. Electrochimica Acta, 2008, 53, 7845-7851.	5.2	27
46	High current density PQQ-dependent alcohol and aldehyde dehydrogenase bioanodes. Biosensors and Bioelectronics, 2015, 72, 247-254.	10.1	27
47	Azo dyes degradation and mutagenicity evaluation with a combination of microbiological and oxidative discoloration treatments. Ecotoxicology and Environmental Safety, 2019, 183, 109484.	6.0	27
48	Thirty minutes laser calcination method for the preparation of DSAÂ® type oxide electrodes. Electrochemistry Communications, 2002, 4, 139-142.	4.7	26
49	Electrochemical degradation of reactive dyes at different DSAÂ® compositions. Journal of the Brazilian Chemical Society, 2011, 22, 126-133.	0.6	26
50	The kinetic behavior of dehydrogenase enzymes in solution and immobilized onto nanostructured carbon platforms. Process Biochemistry, 2011, 46, 2347-2352.	3.7	26
51	Hybrid catalyst cascade architecture enhancement for complete ethanol electrochemical oxidation. Biosensors and Bioelectronics, 2018, 121, 281-286.	10.1	26
52	Espectroscopia de impedÃ¢ncia eletroquÃmica aplicada ao estudo das reaÃ§Ãµes heterogÃªneas em Ã¢nodos dimensionalmente estÃ¡veis. Quimica Nova, 2006, 29, 796-804.	0.3	25
53	Ferrocene Entrapped In Polypyrrole Film and PAMAM Dendrimers as Matrix for Mediated Glucose/O2 Biofuel Cell. Electrochimica Acta, 2014, 136, 52-58.	5.2	25
54	Multiwalled carbon nanotubes to improve ethanol/air biofuel cells. Electrochimica Acta, 2013, 106, 109-113.	5.2	24

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55	Effect of Adding a Third Metal to Carbon-Supported PtSn-Based Nanocatalysts for Direct Ethanol Fuel Cell in Acidic Medium. Journal of the Electrochemical Society, 2013, 160, F965-F971.	2.9	23
56	Electrochemically-driven mineralization of Reactive Blue 4 cotton dye: On the role of in situ generated oxidants. Journal of Electroanalytical Chemistry, 2019, 840, 415-422.	3.8	23
57	XAS characterization of the RuO2â€“Ta2O5 system local (crystal) structure. Materials Chemistry and Physics, 2011, 125, 449-460.	4.0	22
58	Identification of chemicals resulted in selective glycerol conversion as sustainable fuel on Pd-based anode nanocatalysts. RSC Advances, 2014, 4, 64476-64483.	3.6	22
59	Co-immobilization of gold nanoparticles with glucose oxidase toÂimprove bioelectrocatalytic glucose oxidation. Journal of Power Sources, 2015, 285, 493-498.	7.8	22
60	Product Analysis of Operating an Ethanol/O₂Biofuel Cell Shows the Synergy between Enzymes within an Enzymatic Cascade. Journal of the Electrochemical Society, 2018, 165, H575-H579.	2.9	22
61	Electrochemical and morphological properties of Ti/Ru0.3Pb(0.7â^'x)TixO2-coated electrodes. Electrochimica Acta, 2003, 48, 4137-4142.	5.2	21
62	Electrochemical Treatment of Wastewater of Veterinary Industry Containing Antibiotics. Electrocatalysis, 2013, 4, 283-289.	3.0	20
63	Enhanced Reduced Nicotinamide Adenine Dinucleotide electrocatalysis onto multi-walled carbon nanotubes-decorated gold nanoparticles and their use in hybrid biofuel cell. Journal of Power Sources, 2015, 273, 1065-1072.	7.8	20
64	Electrochemical Behavior of Ethanol Oxidation on a Ti/Ru[sub 0.3]Ti[sub (0.7â^'x)]Sn[sub x]O[sub 2] Electrode. Journal of the Electrochemical Society, 2003, 150, E222.	2.9	19
65	The Use of PAMAM Dendrimers as a Platform for Laccase Immobilization: Kinetic Characterization of the Enzyme. Applied Biochemistry and Biotechnology, 2012, 167, 1854-1864.	2.9	19
66	Electrochemical characterization of methanol/O2 biofuel cell: Use of laccase biocathode immobilized with polypyrrole film and PAMAM dendrimers. Electrochimica Acta, 2013, 90, 90-94.	5.2	19
67	Investigation of the influence of the anode composition of DSA-type electrodes on the electrocatalytic oxidation of phenol in neutral medium. Journal of the Brazilian Chemical Society, 2004, 15, 525-533.	0.6	18
68	Electrooxidation of acetaldehyde on platinum-modified Ti/Ru0.3Ti0.7O2 electrodes. Electrochimica Acta, 2006, 51, 2800-2808.	5.2	18
69	New Energy Sources: The Enzymatic Biofuel Cell. Journal of the Brazilian Chemical Society, 2013, , .	0.6	18
70	Developing ethanol bioanodes using a hydrophobically modified linear polyethylenimine hydrogel for immobilizing an enzyme cascade. Journal of Electroanalytical Chemistry, 2018, 812, 153-158.	3.8	18
71	The electro-oxidation of tetracycline hydrochloride in commercial DSAÂ® modified by electrodeposited platinum. Environmental Science and Pollution Research, 2021, 28, 23595-23609.	5.3	18
72	Effect of the preparation methodology on some physical and electrochemical properties of Ti/IrxSn(1â^'x)O2 materials. Journal of Materials Science, 2007, 42, 9293-9299.	3.7	17

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73	Enhanced electrochemical oxidation of ethanol using a hybrid catalyst cascade architecture containing pyrene-TEMPO, oxalate decarboxylase and carboxylated multi-walled carbon nanotube. Biosensors and Bioelectronics, 2020, 154, 112077.	10.1	17
74	A phytotoxicity assessment of the efficiency 2,4-D degradation by different oxidative processes. Journal of Environmental Management, 2020, 266, 110588.	7.8	17
75	Bioinspired architecture of a hybrid bifunctional enzymatic/organic electrocatalyst for complete ethanol oxidation. Bioelectrochemistry, 2019, 130, 107331.	4.6	16
76	Ethanol bioelectrooxidation in a robust poly(methylene green-pyrrole)- mediated enzymatic biofuel cell. Journal of Electroanalytical Chemistry, 2019, 844, 43-48.	3.8	15
77	Potential application of laccase from Pycnoporus sanguineus in methanol/O2 biofuel cells. Journal of Electroanalytical Chemistry, 2016, 765, 2-7.	3.8	14
78	Employing Methylene Green Coated Carbon Nanotube Electrodes to Enhance NADH Electrocatalysis for Use in an Ethanol Biofuel Cell. Electroanalysis, 2013, 25, 2394-2402.	2.9	13
79	High Catalytic Activity for Glycerol Electrooxidation by Binary Pd-Based Nanoparticles in Alkaline Media. ECS Transactions, 2013, 58, 651-661.	0.5	12
80	Biocathodes for Enzymatic Biofuel Cells Using Laccase and Different Redox Mediators Entrapped in Polypyrrole Matrix. Journal of the Electrochemical Society, 2014, 161, F445-F450.	2.9	12
81	Addition of iron oxide to Pt-based catalyst to enhance the catalytic activity of ethanol electrooxidation. Journal of Electroanalytical Chemistry, 2017, 796, 49-56.	3.8	12
82	Hybrid enzymatic and organic catalyst cascade for enhanced complete oxidation of ethanol in an electrochemical micro-reactor device. Electrochimica Acta, 2020, 331, 135254.	5.2	12
83	Comparative study of catalyst effect on ethanol electrooxidation in alkaline medium: Pt- and Pd-based catalysts containing Sn and Ru. Journal of Electroanalytical Chemistry, 2020, 878, 114592.	3.8	12
84	Tratamento de resÃduos de corante por eletrofloculaÃ§Ã£o: um experimento para cursos de graduaÃ§Ã£o em quÃmica. Quimica Nova, 2011, 34, 1468-1471.	0.3	11
85	Photo-assisted Electrochemical Degradation of Textile Effluent to Reduce Organic Halide (AOX) Production. Water, Air, and Soil Pollution, 2014, 225, 1.	2.4	11
86	Simultaneous energy generation, decolorization, and detoxification of the azo dye Procion Red MX-5B in a microbial fuel cell. Journal of Environmental Chemical Engineering, 2021, 9, 106221.	6.7	11
87	Electrochemical Oxidation of Phenol at Tiâˆ•Ru[sub 0.3]Pb[sub (0.7â^'x)]Ti[sub x]O[sub y] Electrodes in Aqueous Media. Journal of the Electrochemical Society, 2007, 154, E25.	2.9	10
88	Acclimatization of a microbial consortium into a stable biofilm to produce energy and 1,3-propanediol from glycerol in a microbial fuel cell. International Journal of Hydrogen Energy, 2022, 47, 21241-21252.	7.1	10
89	Formaldehyde Oxidation on a DSA-Type Electrode Modified by Pt or PbO[sub 2] Electrodeposition. Journal of the Electrochemical Society, 2007, 154, E19.	2.9	9
90	Insight into the Electrooxidation Mechanism of Ethylene Glycol on Palladiumâ€Based Nanocatalysts: In Situ FTIRS and LCâ€MS Analysis. ChemElectroChem, 2020, 7, 4326-4335.	3.4	9

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91	Ethanol Biofuel Cells: Hybrid Catalytic Cascades as a Tool for Biosensor Devices. Biosensors, 2021, 11, 41.	4.7	9
92	Unveiling complete lactate oxidation through a hybrid catalytic cascade. Electrochimica Acta, 2021, 376, 138044.	5.2	9
93	Systematic Ranking of Nucleophiles as Electron Donors.. Acta Chemica Scandinavica, 1999, 53, 938-948.	0.7	9
94	Ethanol Electrooxidation by Plurimetallic Pt-Based Electrocatalysts Prepared by Microwave Assisted Heating. Journal of the Electrochemical Society, 2014, 161, F473-F479.	2.9	8
95	Electrochemical Characterization of DSAÂ®-Type Electrodes Using Niobium Substrate. Electrocatalysis, 2010, 1, 129-138.	3.0	7
96	Development of Ternary and Quaternary Catalysts for the Electrooxidation of Glycerol. Scientific World Journal, The, 2012, 2012, 1-6.	2.1	6
97	Adding value to lignocellulosic byproducts by using acetate and p-coumaric acid as substrate in a microbial fuel cell. Industrial Crops and Products, 2021, 171, 113844.	5.2	6
98	Carbon Nanotube PtSn Nanoparticles for Enhanced Complete Biocatalytic Oxidation of Ethylene Glycol in Biofuel Cells. ACS Materials Au, 2022, 2, 94-102.	6.0	6
99	Microbial Fuel Cells and Wastewater Treatment. , 2018, , 305-331.		5
100	Degradation of the Dye Reactive Blue 4 by Coupled Photoassisted Electrochemistry at DSA^{Â®}-Type Electrode. Journal of the Brazilian Chemical Society, 2015, , .	0.6	5
101	An Optimization Study of PtSn/C Nanocatalysts Prepared by Microwave-assisted Heating and Their Application in Direct Ethanol Fuel Cell: A Comparative Study of PtSn/C Nanocatalysts. ECS Transactions, 2011, 41, 1271-1278.	0.5	4
102	Development of plurimetallic electrocatalysts prepared by decomposition of polymeric precursors for EtOH/O2 fuel cell. Journal of the Brazilian Chemical Society, 2012, 23, 555-564.	0.6	4
103	New Trends in Direct Ethanol Fuel Cells. , 2013, , 429-452.		4
104	Hybrid Bioelectrocatalytic Reduction of Oxygen at Anthracene-modified Multi-walled Carbon Nanotubes Decorated with Ni90Pd10 Nanoparticles. Electrochimica Acta, 2017, 251, 195-202.	5.2	4
105	Evaluation of the Acid Blue 161 dye degradation through electrochemical oxidation combined with microbiological systems. International Journal of Environmental Science and Technology, 2019, 16, 8185-8196.	3.5	4
106	Electrochemical Behavior of Pd-based Nanocatalysts (Hollow@Me@Pd/C) in Direct Alcohol Oxidation in Alkaline Medium. ECS Transactions, 2013, 58, 1327-1334.	0.5	3
107	Enhancing the performance of an acetate-fed microbial fuel cell with methylene green. Brazilian Journal of Chemical Engineering, 2021, 38, 471-484.	1.3	3
108	Study of the Oxygen Evolution Reaction on Ta/RuO2-Ta2O5-TiO2 Type Electrodes. Revista Virtual De Quimica, 2016, 8, 1347-1365.	0.4	3

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109	EletroxidaÃ§Ã£o do etanol em eletrodos de Ti/IrO2. Quimica Nova, 2001, 24, 43.	0.3	2
110	Fatores quÃmicos e fÃsicos que afetam a contaminaÃ§Ã£o por chumbo e cobre em Ã¡gua potÃ¡vel: uma abordagem para o estudo de caso em quÃmica analÃtica. Quimica Nova, 2012, 35, 1995-2001.	0.3	2
111	Electrochemical Degradation of Diuron in Chloride Medium using DSAÂ®Based Anodes. Journal of the Brazilian Chemical Society, 2013, , .	0.6	2
112	Direct Ethanol Fuel Cell on Carbon Supported Pt Based Nanocatalysts. Nanostructure Science and Technology, 2016, , 435-475.	0.1	2
113	Competitive Pathways in the Electrochemical Reduction of Citral. Journal of the Electrochemical Society, 1996, 143, 2452-2457.	2.9	1
114	Corrosion Studies of Austenitic and Ferritic Stainless Steels in Solution Containing Chloride Ions. ECS Transactions, 2014, 61, 25-36.	0.5	1
115	PANORAMA DA ELETROQUÃMICA E ELETROANALÃTICA NO BRASIL. Quimica Nova, 2017, , .	0.3	1
116	Application of Oxides Electrodes (Ru, Ti, Ir and Sn) for the Electrooxidation of Levofloxacin. Current Analytical Chemistry, 2018, 15, 66-74.	1.2	1
117	Rationalizing the activity of a hybrid biocatalyst for ethanol oxidation. Journal of Molecular Structure, 2022, 1268, 133682.	3.6	1
118	Electrochemical Behavior of 4-keto Isophorone in Non-Aqueous Medium in the Presence of Carbon Dioxide. Journal of the Brazilian Chemical Society, 1998, 9, 157-161.	0.6	0
119	Eletrochemical Oxidation of Herbicides. , 0, , .		0
120	Improvement of Ethanol Catalytic Activity by Mn Doped Pt and Pt-Sn/C- Based Catalysts. ECS Transactions, 2014, 64, 1129-1137.	0.5	0
121	Synthetic and Mechanistic Aspects of the Electrochemical Behavior on Mercury of Ketal of 4-Keto-Isophorone in Aqueous Medium: Selectivity of the Reduction Process. Journal of the Brazilian Chemical Society, 1993, 4, 116-121.	0.6	0
122	Synthetic and Mechanistic Aspects of the Electrochemical Behavior on Mercury of 4-Keto-Isophorone in Aqueous Medium: Selectivity of the Reduction Process. Journal of the Brazilian Chemical Society, 1993, 4, 133-138.	0.6	0
123	MATERIALS OF COMPOSITION Ti/PbXTi1-XO2FOR PHOTO-ASSISTED ELECTROCHEMICAL DEGRADATION OF ORGANIC POLLUTANTS. Quimica Nova, 2016, , .	0.3	0
124	Biocatalysts in Electrofermentation Systems. , 2020, , 239-276.		0