Almir Oliveira Neto

List of Publications by Citations

121 papers	3,023 citations	29 h-index	50 g-index
132 ext. papers	3,353 ext. citations	4.6 avg, IF	5.08 L-index

#	Paper	IF	Citations
121	Electro-oxidation of methanol and ethanol using PtRu/C, PtSn/C and PtSnRu/C electrocatalysts prepared by an alcohol-reduction process. *Journal of Power Sources*, **2007**, 166, 87-91	8.9	217
120	The Electro-oxidation of Ethanol on Pt-Ru and Pt-Mo Particles Supported on High-Surface-Area Carbon. *Journal of the Electrochemical Society*, **2002**, 149, A272	3.9	143
119	Electro-oxidation of methanol and ethanol using PtRu/C electrocatalysts prepared by spontaneous deposition of platinum on carbon-supported ruthenium nanoparticles. *Journal of Power Sources*, **2004**, 129, 121-126	8.9	129
118	Co-catalytic effect of nickel in the electro-oxidation of ethanol on binary PtSn electrocatalysts. *Electrochemistry Communications*, **2005**, 7, 365-369	5.1	127
117	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
116	Electro-oxidation of methanol and ethanol on PtRu/C and PtRuMo/C electrocatalysts prepared by Bönnemann's method. *Journal of the European Ceramic Society*, **2003**, 23, 2987-2992	6	90
115	Palladium and palladium–tin 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
114	Electro-oxidation of ethanol using PtRu/C electrocatalysts prepared by alcohol-reduction process. *Journal of Power Sources*, **2004**, 137, 17-23	8.9	75
113	Electro-oxidation of ethylene glycol on PtRu/C and PtSn/C electrocatalysts prepared by alcohol-reduction process. *Journal of Applied Electrochemistry*, **2005**, 35, 193-198	2.6	69
112	Direct ammonia fuel cell performance using PtIr/C as anode electrocatalysts. *International Journal of Hydrogen Energy*, **2014**, 39, 5148-5152	6.7	66
111	Oxidation of ammonia using PtRh/C electrocatalysts: Fuel cell and electrochemical evaluation. *Applied Catalysis B: Environmental*, **2015**, 174-175, 136-144	21.8	64
110	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
109	PdBi/C electrocatalysts for ethanol electro-oxidation in alkaline medium. *International Journal of Hydrogen Energy*, **2011**, 36, 10522-10526	6.7	62
108	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
107	Enhanced electro-oxidation of ethanol using PtSn/CeO2/C electrocatalyst prepared by an alcohol-reduction process. *Electrochemistry Communications*, **2008**, 10, 1315-1317	5.1	58
106	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
105	The high activity of PtBi/C electrocatalysts for ethanol electro-oxidation in alkaline medium. *Electrochemistry Communications*, **2011**, 13, 143-146	5.1	51

104	Binary and ternary palladium based electrocatalysts for alkaline direct glycerol fuel cell. *Journal of Power Sources*, **2015**, 293, 823-830	8.9	50
103	Electrocatalysis and electrocatalysts for low temperature fuel cells: fundamentals, state of the art, research and development. *Quimica Nova*, **2005**, 28, 1066-1075	1.6	50
102	PtSnCe/C electrocatalysts for ethanol oxidation: DEFC and FTIR □n-situ□studies. *International Journal of Hydrogen Energy*, **2011**, 36, 11519-11527	6.7	49
101	The effect of acetaldehyde and acetic acid on the direct ethanol fuel cell performance using PtSnO2/C electrocatalysts. *International Journal of Hydrogen Energy*, **2013**, 38, 12069-12077	6.7	46
100	Electro-oxidation of ethanol using PtSnRh/C electrocatalysts prepared by an alcohol-reduction process. *Ionics*, **2010**, 16, 91-95	2.7	45
99	Synthesis of Pt+SnO2/C electrocatalysts containing Pt nanoparticles with preferential (100) orientation for direct ethanol fuel cell. *Applied Catalysis B: Environmental*, **2017**, 218, 91-100	21.8	42
98	PtAu/C electrocatalysts as anodes for direct ammonia fuel cell. *Applied Catalysis A: General*, **2015**, 490, 133-138	5.1	39
97	Electro-oxidation of ethanol on PtRu/C electrocatalysts prepared from (□C2H4)(Cl)Pt(□Cl)2Ru(Cl)(□3,□3-C10H16). *Journal of Power Sources*, **2003**, 124, 426-431	8.9	38
96	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
95	Electrochemical and fuel cell evaluation of PtAu/C electrocatalysts for ethanol electro-oxidation in alkaline media. *International Journal of Hydrogen Energy*, **2014**, 39, 10121-10127	6.7	33
94	Preparation of PtRuNi/C electrocatalysts by an alcohol-reduction process for electro-oxidation of methanol. *Applied Catalysis A: General*, **2010**, 372, 162-166	5.1	30
93	Enhanced activity observed for sulfuric acid and chlorosulfuric acid functionalized carbon black as PtRu and PtSn electrocatalyst support for DMFC and DEFC applications. *International Journal of Hydrogen Energy*, **2011**, 36, 14659-14667	6.7	29
92	Electro-oxidation of ethanol on PtSn/CeO2□ electrocatalyst. *Journal of Applied Electrochemistry*, **2009**, 39, 1153-1156	2.6	28
91	Synthesis of Pt nanoparticles with preferential (1 0 0) orientation directly on the carbon support for Direct Ethanol Fuel Cell. *Journal of Catalysis*, **2016**, 342, 67-74	7.3	28
90	Structural analysis of PdRh/C and PdSn/C and its use as electrocatalysts for ethanol oxidation in alkaline medium. *International Journal of Hydrogen Energy*, **2019**, 44, 937-951	6.7	28
89	Evaluation of carbon supported platinum□uthenium nanoparticles for ammonia electro-oxidation: Combined fuel cell and electrochemical approach. *International Journal of Hydrogen Energy*, **2017**, 42, 193-201	6.7	27
88	Ethanol electrooxidation on PdIr/C electrocatalysts in alkaline media: electrochemical and fuel cell studies. *Ionics*, **2015**, 21, 487-495	2.7	27
87	Acid-treated PtSn/C and PtSnCu/C electrocatalysts for ethanol electro-oxidation. *International Journal of Hydrogen Energy*, **2014**, 39, 5671-5677	6.7	26

86	The performance of Pt nanoparticles supported on Sb2O5.SnO2, on carbon and on physical mixtures of Sb2O5.SnO2 and carbon for ethanol electro-oxidation. *International Journal of Hydrogen Energy*, **2010**, 35, 9177-9181	6.7	26
85	The Catalytic Activity of Pt:Ru Nanoparticles for Ethylene Glycol and Ethanol Electrooxidation in a Direct Alcohol Fuel Cell. *Electrocatalysis*, **2019**, 10, 203-213	2.7	25
84	Preparation and characterization of Pt–Rare Earth/C electrocatalysts using an alcohol reduction process for methanol electro-oxidation. *Journal of Alloys and Compounds*, **2009**, 476, 288-291	5.7	25
83	Métodos de preparação de nanopartículas metálicas suportadas em carbono de alta área superficial, como eletrocatalisadores em células a combustível com membrana trocadora de prótons. *Quimica Nova*, **2004**, 27, 648-654	1.6	25
82	PdAu/C Electrocatalysts as Anodes for Direct Formate Fuel Cell. *Electrocatalysis*, **2015**, 6, 442-446	2.7	24
81	The effect of antimony-tin and indium-tin oxide supports on the catalytic activity of Pt nanoparticles for ammonia electro-oxidation. *Materials Chemistry and Physics*, **2016**, 180, 97-103	4.4	24
80	Glycerol oxidation reaction using PdAu/C electrocatalysts. *Ionics*, **2016**, 22, 1167-1175	2.7	23
79	In situ spectroscopy studies of ethanol oxidation reaction using a single fuel cell/ATR-FTIR setup. *International Journal of Hydrogen Energy*, **2013**, 38, 10585-10591	6.7	23
78	Preparation of PtSn/C and PtSnNi/C electrocatalysts using the alcohol-reduction process. *Materials Letters*, **2008**, 62, 2099-2102	3.3	22
77	Synthesis of electrocatalysts by the Bönnemann method for the oxidation of methanol and the mixture H2/CO in a Proton Exchange Membrane Fuel Cell. *Journal of the Brazilian Chemical Society*, **2002**, 13, 516-521	1.5	22
76	Electrochemical and in situ ATR-FTIR studies of ethanol electro-oxidation in alkaline medium using PtRh/C electrocatalysts. *Materials for Renewable and Sustainable Energy*, **2015**, 4, 1	4.7	21
75	PtRu/C electrocatalysts prepared using γ-irradiation. *Journal of Power Sources*, **2007**, 170, 303-307	8.9	21
74	The effect of ethanol concentration on the direct ethanol fuel cell performance and products distribution: A study using a single fuel cell/attenuated total reflectance – Fourier transform infrared spectroscopy. *Journal of Power Sources*, **2014**, 253, 392-396	8.9	20
73	Iridium–Rhodium Nanoparticles for Ammonia Oxidation: Electrochemical and Fuel Cell Studies. *ChemElectroChem*, **2017**, 4, 1101-1107	4.3	19
72	Preparation of PdAu/C-Sb2O5–SnO2 electrocatalysts by borohydride reduction process for direct formic acid fuel cell. *Ionics*, **2013**, 19, 1207-1213	2.7	19
71	PtSnIr/C anode electrocatalysts: promoting effect in direct ethanol fuel cells. *Journal of the Brazilian Chemical Society*, **2012**, 23, 1146-1153	1.5	19
70	Preparation of PtSnO2/C electrocatalysts using electron beam irradiation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 175, 261-265	3.1	18
69	Microbial fuel cell-induced production of fungal laccase to degrade the anthraquinone dye Remazol Brilliant Blue R. *Environmental Chemistry Letters*, **2019**, 17, 1413-1420	13.3	17

68	Carbon-supported Pt nanoparticles with (100) preferential orientation with enhanced electrocatalytic properties for carbon monoxide, methanol and ethanol oxidation in acidic medium. *International Journal of Hydrogen Energy*, **2017**, 42, 28786-28796	6.7	17
67	Electro-oxidation of ethanol using PtRuBi/C electrocatalyst prepared by borohydride reduction. *Ionics*, **2009**, 15, 743-747	2.7	17
66	Electro-oxidation of ethylene glycol on PtSn/C and PtSnNi/C electrocatalysts. *Ionics*, **2006**, 12, 309-313	2.7	17
65	Ethanol Oxidation Reaction Using PtSn/C+Ce/C Electrocatalysts: Aspects of Ceria Contribution. *Electrochimica Acta*, **2014**, 117, 292-298	6.7	15
64	Electrooxidation of ethanol using Pt rare earth electrocatalysts prepared by an alcohol reduction process. *Ionics*, **2008**, 14, 577-581	2.7	15
63	PtAu Electrocatalyst for Glycerol Oxidation Reaction Using a ATR-FTIR/Single Direct Alkaline Glycerol/Air Cell In Situ Study. *Electrocatalysis*, **2016**, 7, 22-32	2.7	14
62	Electro-Oxidation of Ethanol on PtSnRh/C-Sb2O5SnO2 Electrocatalysts Prepared by Borohydride Reduction. *Electrocatalysis*, **2013**, 4, 159-166	2.7	14
61	Direct oxidation of methane at low temperature using Pt/C, Pd/C, Pt/C-ATO and Pd/C-ATO electrocatalysts prepared by sodium borohydride reduction process. *Journal of Fuel Chemistry and Technology*, **2018**, 46, 1137-1145	1.8	13
60	In Situ ATR-FTIR Studies of Ethanol Electro-oxidation in Alkaline Medium on PtRh/C Electrocatalyst Prepared by an Alcohol Reduction Process. *Electrocatalysis*, **2016**, 7, 297-304	2.7	12
59	Direct Alkaline Anion Exchange Membrane Fuel Cell to Converting Methane into Methanol. *ChemistrySelect*, **2019**, 4, 11430-11434	1.8	12
58	Effect of TiO2 Content on Ethanol Electrooxidation in Alkaline Media Using Pt Nanoparticles Supported on Physical Mixtures of Carbon and TiO2 as Electrocatalysts. *Electrocatalysis*, **2014**, 5, 213-219	2.7	12
57	Influence of the relative volumes between catalyst and Nafion ionomer in the catalyst layer efficiency. *International Journal of Hydrogen Energy*, **2014**, 39, 14680-14689	6.7	12
56	Electrochemical and Fuel Cell Evaluation of PtIr/C Electrocatalysts for Ethanol Electrooxidation in Alkaline Medium. *Electrocatalysis*, **2014**, 5, 438-444	2.7	12
55	Partial oxidation of methane and generation of electricity using a PEMFC. *Ionics*, **2019**, 25, 5077-5082	2.7	11
54	Anodic oxidation of formic acid on PdAuIr/C-Sb2O5SnO2 electrocatalysts prepared by borohydride reduction. *Journal of Fuel Chemistry and Technology*, **2014**, 42, 851-857	1.8	11
53	PtRu/C electrocatalysts prepared using electron beam irradiation. *Materials Research*, **2007**, 10, 367-370	1.5	11
52	Methanol Oxidation in Alkaline Medium Using PtIn/C Electrocatalysts. *Electrocatalysis*, **2016**, 7, 445-450	2.7	10
51	Use of PtAu/C electrocatalysts toward formate oxidation: electrochemical and fuel cell considerations. *Materials for Renewable and Sustainable Energy*, **2016**, 5, 1	4.7	10

50	Ni/Carbon Hybrid Prepared by Hydrothermal Carbonization and Thermal Treatment as Support for PtRu Nanoparticles for Direct Methanol Fuel Cell. *Journal of Materials Science and Technology*, **2013**, 29, 747-751	9.1	10
49	Preparation and characterization of PtRu/C-rare earth using an alcohol-reduction process for ethanol electro-oxidation. *Ionics*, **2011**, 17, 189-193	2.7	10
48	Platinum nanoparticles supported on nitrogen-doped carbon for ammonia electro-oxidation. *Materials Chemistry and Physics*, **2017**, 200, 354-360	4.4	9
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	Preparation of PtSn/C electrocatalysts using citric acid as reducing agent for direct ethanol fuel cell (DEFC). *Ionics*, **2010**, 16, 85-89	2.7	9
45	Preparation of PtRu/carbon hybrids by hydrothermal carbonization process. *Materials Research*, **2007**, 10, 171-175	1.5	9
44	PtSn/C electrocatalysts prepared by different methods for direct ethanol fuel cell. *Studies in Surface Science and Catalysis*, **2006**, 617-624	1.8	9
43	Fuel cell and electrochemical studies of the ethanol electro-oxidation in alkaline media using PtAuIr/C as anodes. *Ionics*, **2017**, 23, 2367-2376	2.7	8
42	Palladium nanoparticles supported on phosphorus-doped carbon for ethanol electro-oxidation in alkaline media. *Ionics*, **2018**, 24, 1111-1119	2.7	8
41	Preparation of PtSnRh/C-Sb2O5□SnO2 electrocatalysts by an alcohol reduction process for direct ethanol fuel cell. *Ionics*, **2012**, 18, 781-786	2.7	8
40	The effect of support on Pd1Nb1 electrocatalysts for ethanol fuel cells. *Renewable Energy*, **2020**, 150, 293-306	8.1	8
39	Enhanced Electrooxidation of Ethanol Using Pd/C + TiO2 Electrocatalysts in Alkaline Media. *Electrocatalysis*, **2015**, 6, 86-91	2.7	7
38	Comparative analysis between mass and volume of catalysts as a criterion to determine the optimal quantity of Nafion ionomer in catalyst layers. *International Journal of Hydrogen Energy*, **2015**, 40, 2840-2849	6.7	7
37	Application of microbial fuel cell technology for vinasse treatment and bioelectricity generation. *Biotechnology Letters*, **2019**, 41, 107-114	3	7
36	Methanol oxidation in acidic and alkaline electrolytes using PtRuIn/C electrocatalysts prepared by borohydride reduction process. *Journal of Fuel Chemistry and Technology*, **2018**, 46, 1462-1471	1.8	7
35	PtRu Nanoparticles Supported on Phosphorous-Doped Carbon as Electrocatalysts for Methanol Electro-Oxidation. *Electrocatalysis*, **2017**, 8, 245-251	2.7	6
34	Synthesis of hydroquinone with co-generation of electricity from phenol aqueous solution in a proton exchange membrane fuel cell reactor. *Catalysis Communications*, **2015**, 59, 113-115	3.2	6
33	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

32	PtRu/carbon hybrid materials prepared by hydrothermal carbonization as electrocatalysts for methanol electrooxidation. *Ionics*, **2012**, 18, 215-222	2.7	6
31	Glycerol and Methanol Electro-oxidation at Pt/C-ITO under Alkaline Condition. *Electroanalysis*, **2016**, 28, 2552-2558	3	6
30	Performance of Pd Electrocatalyst Supported on a Physical Mixture Indium Tin Oxide–Carbon for Glycerol Electro-Oxidation in Alkaline Media. *Electroanalysis*, **2017**, 29, 960-964	3	5
29	Conversion of Methane into Methanol Using the [6,6'-(2,2'-Bipyridine-6,6'-Diyl)bis(1,3,5-Triazine-2,4-Diamine)](Nitrato-O)Copper(II) Complex in a Solid Electrolyte Reactor Fuel Cell Type. *ACS Omega*, **2020**, 5, 16003-16009	3.9	5
28	Preparation of PtSnSb/C by an alcohol reduction process for direct ethanol fuel cell (DEFC). *Ionics*, **2011**, 17, 559-564	2.7	5
27	Ethanol Oxidation Reaction on IrPtSn/C Electrocatalysts with low Pt Content. *Journal of the Brazilian Chemical Society*, **2013**,	1.5	5
26	Effect of Ni content in PdNi/C anode catalysts on power and methanol co-generation in alkaline direct methane fuel cell type. *Journal of Colloid and Interface Science*, **2020**, 578, 390-401	9.3	4
25	Effect of the TiO2 content as support with carbon toward methanol electro-oxidation in alkaline media using platinum nanoparticles as electrocatalysts. *Ionics*, **2014**, 20, 1137	2.7	4
24	Preparation of PtRu/C electrocatalysts by hydrothermal carbonization using different carbon sources. *Studies in Surface Science and Catalysis*, **2010**, 551-554	1.8	4
23	PtRu/C Electrocatalysts Prepared Using Gamma and Electron Beam Irradiation for Methanol Electrooxidation. *Journal of Nanomaterials*, **2012**, 2012, 1-6	3.2	4
22	Eletro-oxidação de etanol sobre eletrocatalisadores PtRh/C, PtSn/C e PtSnRh/C preparados pelo método da redução por álcool. *Ecletica Quimica*, **2006**, 31, 81-88	2.6	4
21	New Electrocatalysts for Electro-Oxidation of Methanol Prepared by Bönnemann´s Method. *Portugaliae Electrochimica Acta*, **2004**, 22, 93-101	2.4	4
20	High activity of PtRh supported on CNT-ITO for ethanol oxidation in alkaline medium. *Research on Chemical Intermediates*, **2020**, 46, 1555-1570	2.8	4
19	New approach by electrospray technique to prepare a gas diffusion layer for the proton exchange membrane fuel cell anode. *Materials Today Advances*, **2021**, 12, 100161	7.4	4
18	Partial Methane Oxidation in Fuel Cell-Type Reactors for Co-Generation of Energy and Chemicals: A Short Review. *Catalysts*, **2022**, 12, 217	4	4
17	Preparation of PtSn/C skeletal-type electrocatalyst for ethanol oxidation. *Studies in Surface Science and Catalysis*, **2010**, 559-562	1.8	3
16	Preparation of PtSn/C electrocatalysts using electron beam irradiation. *Studies in Surface Science and Catalysis*, **2010**, 555-558	1.8	3
15	Preparation of PtRu/C Electrocatalysts by Hydrothermal Carbonization Process for Methanol Electro-oxidation. *Portugaliae Electrochimica Acta*, **2009**, 27, 345-352	2.4	3

14	Methane conversion to higher value-added product and energy co-generation using anodes OF PdCu/C in a solid electrolyte reactor: alkaline fuel cell type monitored by differential mass spectroscopy. *Research on Chemical Intermediates*, **2021**, 47, 743-757	2.8	3
13	Obtaining C2 and C3 Products from Methane Using Pd/C as Anode in a Solid Fuel Cell-type Electrolyte Reactor. *ChemCatChem*, **2020**, 12, 4517-4521	5.2	2
12	High CO tolerance of Pt nanoparticles synthesized by sodium borohydride in a time-domain NMR spectrometer. *International Journal of Hydrogen Energy*, **2020**, 45, 22973-22978	6.7	2
11	Au core stabilizes CO adsorption onto Pd leading to CO2 production. *Materials Today Advances*, **2020**, 6, 100070	7.4	2
10	Glycerol dehydrogenation steps on Au/C surface in alkaline medium: An in-situ ATR-FTIR approach. *Renewable Energy*, **2021**, 167, 954-959	8.1	2
9	Characterization of Proton Exchange Membrane Fuel Cell Cathode Catalysts Prepared by Alcohol-Reduction Process. *Materials Science Forum*, **2010**, 660-661, 94-99	0.4	1
8	Borohydride Reduction Method for PdIn/C Electrocatalysts Synthesis towards Glycerol Electrooxidation under Alkaline Condition. *Electroanalysis*, **2021**, 33, 1115-1120	3	1
7	Effects of TiO2 in Pd-TiO2/C for glycerol oxidation in a direct alkaline fuel cell. *Journal of Fuel Chemistry and Technology*, **2022**, 50, 474-482	1.8	1
6	Facile, clean and rapid exfoliation of boron-nitride using a non-thermal plasma process. *Materials Today Advances*, **2021**, 12, 100181	7.4	0
5	Methane activation on PdMn/C-ITO electrocatalysts using a reactor-type PEMFC. *Research on Chemical Intermediates*, **2020**, 46, 4383-4402	2.8	0
4	Comparison of various atomic compositions of Au@Pd/C, Pd/C, and AuPd/C electrocatalysts for direct ethanol fuel cells. *Energy Storage*, **2020**, 2, e139	2.8	
3	Preparation of PtSn/C Electrocatalyst by Successive Reduction for Ethanol Electro-Oxidation. *ECS Transactions*, **2012**, 43, 339-344	1	
2	Addition of bismuth to Pt and Pd for electric power generation with selective cogeneration of acetate from ethanol in a fuel cell type reactor. *Journal of Fuel Chemistry and Technology*, **2021**, 49, 1540-1548	1.8	
1	PtSb/C electrocatalysts for glycerol oxidation in alkaline electrolyte. *Results in Chemistry*, **2022**, 4, 100375	2.1	