

# Rodrigo De Souza

## List of Publications by Year in descending order

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236925

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	CO <sub>2</sub> reduction on Cu/C used as a cathode in a polymeric electrolyte reactor - Fuel cell type. International Journal of Hydrogen Energy, 2022, 47, 4010-4017.	7.1	4
2	Partial Methane Oxidation in Fuel Cell-Type Reactors for Co-Generation of Energy and Chemicals: A Short Review. Catalysts, 2022, 12, 217.	3.5	14
3	PtSb/C electrocatalysts for glycerol oxidation in alkaline electrolyte. Results in Chemistry, 2022, 4, 100375.	2.0	1
4	Methanol electrosynthesis from CO <sub>2</sub> reduction reaction in polymer electrolyte reactors – fuel cell type using [6,6-(2,2-bipyridine-6,6-diyl)bis(1,3,5-triazine-2,4-diamine)] (dinitrate-O) copper (II) complex. Materials Today Sustainability, 2022, 19, 100177.	4.1	2
5	[6-(Pyridin-2-yl)-1,3,5-triazine-2,4-diamine](dichloride) Palladium(II)-Based Electrolyte Membrane Reactors for Partial Oxidation Methane to Methanol. ACS Omega, 2022, 7, 24249-24255.	3.5	1
6	Glycerol dehydrogenation steps on Au/C surface in alkaline medium: An in-situ ATR-FTIR approach. Renewable Energy, 2021, 167, 954-959.	8.9	3
7	Borohydride Reduction Method for PdIn/C Electrocatalysts Synthesis towards Glycerol Electrooxidation under Alkaline Condition. Electroanalysis, 2021, 33, 1115-1120.	2.9	4
8	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.	2.7	14
9	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.	5.2	6
10	Facile, clean and rapid exfoliation of boron-nitride using a non-thermal plasma process. Materials Today Advances, 2021, 12, 100181.	5.2	5
11	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.	2.0	1
12	High activity of Pt–Rh supported on Ca–ITO for ethanol oxidation in alkaline medium. Research on Chemical Intermediates, 2020, 46, 1555-1570.	2.7	6
13	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.	7.1	8
14	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.	9.4	14
15	Obtaining C <sub>2</sub> and C <sub>3</sub> Products from Methane Using Pd/C as Anode in a Solid Fuel Cell-type Electrolyte Reactor. ChemCatChem, 2020, 12, 4517-4521.	3.7	12
16	Methane activation at low temperature in an acidic electrolyte using PdAu/C, PdCu/C, and PdTiO <sub>2</sub> /C electrocatalysts for PEMFC. Research on Chemical Intermediates, 2020, 46, 2481-2496.	2.7	12
17	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.	3.5	12
18	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.	4.3	0

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19	Au core stabilizes CO adsorption onto Pd leading to CO <sub>2</sub> production. <i>Materials Today Advances</i> , 2020, 6, 100070.	5.2	2
20	Partial oxidation of methane and generation of electricity using a PEMFC. <i>Ionics</i> , 2019, 25, 5077-5082.	2.4	25
21	Direct Alkaline Anion Exchange Membrane Fuel Cell to Converting Methane into Methanol. <i>ChemistrySelect</i> , 2019, 4, 11430-11434.	1.5	26
22	Evaluation of Paullinia Cupana as a green corrosion inhibitor for carbon steel utilizing gravimetric and electrochemical noise techniques. <i>Materials Research Express</i> , 2019, 6, 076522.	1.6	4
23	Microbial fuel cell-induced production of fungal laccase to degrade the anthraquinone dye Remazol Brilliant Blue R. <i>Environmental Chemistry Letters</i> , 2019, 17, 1413-1420.	16.2	29
24	Novel electrochemical sensor based on molecularly imprinted polymer for selective recognition of sesquiterpene $\beta$ -caryophyllene. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 217, 271-277.	3.9	9
25	Activation of Methane on PdZn/C Electrocatalysts in an Acidic Electrolyte at Low Temperatures. <i>International Journal of Electrochemical Science</i> , 2019, 14, 10819-10834.	1.3	14
26	Geometry-dependent DNA-TiO <sub>2</sub> immobilization mechanism: A spectroscopic approach. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 199, 349-355.	3.9	13
27	Synthesis of Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> nanoparticles by sonochemical method for solid state electrolyte applications. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 1315-1319.	2.5	10
28	Glycerol and Ethanol Oxidation in Alkaline Medium Using PtCu/C Electrocatalysts. <i>International Journal of Electrochemical Science</i> , 2018, 13, 1893-1904.	1.3	30
29	Pseudocapacitance Properties of Co <sub>3</sub> O <sub>4</sub> Nanoparticles Synthesized Using a Modified Sol-Gel Method. <i>Materials Research</i> , 2018, 21, .	1.3	18
30	Screening of filamentous fungi for antimicrobial silver nanoparticles synthesis. <i>AMB Express</i> , 2017, 7, 31.	3.0	100
31	Performance of Pd Electrocatalyst Supported on a Physical Mixture Indium Tin Oxide-carbon for Glycerol Electro-oxidation in Alkaline Media. <i>Electroanalysis</i> , 2017, 29, 960-964.	2.9	5
32	Glycerol and Methanol Electro-oxidation at Pt/C@TiO <sub>2</sub> under Alkaline Condition. <i>Electroanalysis</i> , 2016, 28, 2552-2558.	2.9	8
33	Methanol Oxidation in Alkaline Medium Using PtIn/C Electrocatalysts. <i>Electrocatalysis</i> , 2016, 7, 445-450.	3.0	18
34	Glycerol oxidation reaction using PdAu/C electrocatalysts. <i>Ionics</i> , 2016, 22, 1167-1175.	2.4	30
35	In Situ ATR-FTIR Studies of Ethanol Electro-oxidation in Alkaline Medium on PtRh/C Electrocatalyst Prepared by an Alcohol Reduction Process. <i>Electrocatalysis</i> , 2016, 7, 297-304.	3.0	15
36	PtAu Electrocatalyst for Glycerol Oxidation Reaction Using a ATR-FTIR/Single Direct Alkaline Glycerol/Air Cell In Situ Study. <i>Electrocatalysis</i> , 2016, 7, 22-32.	3.0	18

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37	Oxidation of ammonia using PtRh/C electrocatalysts: Fuel cell and electrochemical evaluation. <i>Applied Catalysis B: Environmental</i> , 2015, 174-175, 136-144.	20.2	85
38	Enhanced Electrooxidation of Ethanol Using Pd/C + TiO <sub>2</sub> Electrocatalysts in Alkaline Media. <i>Electrocatalysis</i> , 2015, 6, 86-91.	3.0	10
39	Ethanol electrooxidation on PdIr/C electrocatalysts in alkaline media: electrochemical and fuel cell studies. <i>Ionics</i> , 2015, 21, 487-495.	2.4	32
40	Electrochemical and in situ ATR-FTIR studies of ethanol electro-oxidation in alkaline medium using PtRh/C electrocatalysts. <i>Materials for Renewable and Sustainable Energy</i> , 2015, 4, 1.	3.6	29
41	PtAu/C electrocatalysts as anodes for direct ammonia fuel cell. <i>Applied Catalysis A: General</i> , 2015, 490, 133-138.	4.3	60
42	Synthesis of hydroquinone with co-generation of electricity from phenol aqueous solution in a proton exchange membrane fuel cell reactor. <i>Catalysis Communications</i> , 2015, 59, 113-115.	3.3	10
43	Glycerol Electrooxidation in Alkaline Medium Using Pd/C, Au/C and PdAu/C Electrocatalysts Prepared by Electron Beam Irradiation. <i>Journal of the Brazilian Chemical Society</i> , 2014, , .	0.6	11
44	Effect of the TiO <sub>2</sub> content as support with carbon toward methanol electro-oxidation in alkaline media using platinum nanoparticles as electrocatalysts. <i>Ionics</i> , 2014, 20, 1137.	2.4	4
45	Effect of TiO <sub>2</sub> Content on Ethanol Electrooxidation in Alkaline Media Using Pt Nanoparticles Supported on Physical Mixtures of Carbon and TiO <sub>2</sub> as Electrocatalysts. <i>Electrocatalysis</i> , 2014, 5, 213-219.	3.0	13
46	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. <i>Journal of Power Sources</i> , 2014, 253, 392-396.	7.8	26
47	Investigation of PdIr/C electrocatalysts as anode on the performance of direct ammonia fuel cell. <i>Journal of Power Sources</i> , 2014, 268, 129-136.	7.8	69
48	Anodic oxidation of formic acid on PdAuIr/C-Sb <sub>2</sub> O <sub>5</sub> -SnO <sub>2</sub> electrocatalysts prepared by borohydride reduction. <i>Journal of Fuel Chemistry and Technology</i> , 2014, 42, 851-857.	2.0	12
49	Direct ammonia fuel cell performance using PtIr/C as anode electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 5148-5152.	7.1	88
50	Electrochemical and Fuel Cell Evaluation of PtIr/C Electrocatalysts for Ethanol Electrooxidation in Alkaline Medium. <i>Electrocatalysis</i> , 2014, 5, 438-444.	3.0	14
51	Ethanol Oxidation Reaction Using PtSn/C+Ce/C Electrocatalysts: Aspects of Ceria Contribution. <i>Electrochimica Acta</i> , 2014, 117, 292-298.	5.2	17
52	Electrochemical and fuel cell evaluation of PtAu/C electrocatalysts for ethanol electro-oxidation in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 10121-10127.	7.1	37
53	Preparation of PdAu/C-Sb <sub>2</sub> O <sub>5</sub> -SnO <sub>2</sub> electrocatalysts by borohydride reduction process for direct formic acid fuel cell. <i>Ionics</i> , 2013, 19, 1207-1213.	2.4	29
54	Influence of the preparation method and the support on H <sub>2</sub> O <sub>2</sub> electrogeneration using cerium oxide nanoparticles. <i>Electrochimica Acta</i> , 2013, 111, 339-343.	5.2	42

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55	Degradation of dipyrone via advanced oxidation processes using a cerium nanostructured electrocatalyst material. <i>Applied Catalysis A: General</i> , 2013, 462-463, 256-261.	4.3	36
56	Ethanol electro-oxidation in an alkaline medium using Pd/C, Au/C and PdAu/C electrocatalysts prepared by electron beam irradiation. <i>Electrochimica Acta</i> , 2013, 111, 455-465.	5.2	125
57	Low tungsten content of nanostructured material supported on carbon for the degradation of phenol. <i>Applied Catalysis B: Environmental</i> , 2013, 142-143, 479-486.	20.2	61
58	In situ spectroscopy studies of ethanol oxidation reaction using a single fuel cell/ATR-FTIR setup. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 10585-10591.	7.1	28
59	Electro-Oxidation of Ethanol on PtSnRh/C-Sb <sub>2</sub> O <sub>5</sub> -SnO <sub>2</sub> Electrocatalysts Prepared by Borohydride Reduction. <i>Electrocatalysis</i> , 2013, 4, 159-166.	3.0	16
60	Ethanol Oxidation Reaction on IrPtSn/C Electrocatalysts with low Pt Content. <i>Journal of the Brazilian Chemical Society</i> , 2013, , .	0.6	6
61	PtSnIr/C anode electrocatalysts: promoting effect in direct ethanol fuel cells. <i>Journal of the Brazilian Chemical Society</i> , 2012, 23, 1146-1153.	0.6	20
62	Low content cerium oxide nanoparticles on carbon for hydrogen peroxide electrosynthesis. <i>Applied Catalysis A: General</i> , 2012, 411-412, 1-6.	4.3	100
63	PtSn/C alloyed and non-alloyed materials: Differences in the ethanol electro-oxidation reaction pathways. <i>Applied Catalysis B: Environmental</i> , 2011, 110, 141-147.	20.2	76
64	PtSnCe/C electrocatalysts for ethanol oxidation: DEFC and FTIR <i>in-situ</i> studies. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 11519-11527.	7.1	55
65	Pt-Ru-TiO <sub>2</sub> photoelectrocatalysts for methanol oxidation. <i>Journal of Power Sources</i> , 2011, 196, 872-876.	7.8	60
66	Ethanol Electro-oxidation on Pt/C Electrocatalysts: An <i>In Situ</i> Raman Spectroelectrochemical Study. <i>Electrocatalysis</i> , 2011, 2, 28-34.	3.0	32
67	A comparative study of the electrogeneration of hydrogen peroxide using Vulcan and Printex carbon supports. <i>Carbon</i> , 2011, 49, 2842-2851.	10.3	161
68	PtSnCe/C and PtSnIr/C Electrocatalysts for Ethanol Oxidation: DEFC and In Situ FTIR studies. <i>ECS Transactions</i> , 2011, 41, 1293-1298.	0.5	1
69	The Mechanism for Ethanol Oxidation Reaction on SnO <sub>2</sub> @Pt/C Core Shell Electrocatalyst. <i>ECS Transactions</i> , 2011, 41, 2231-2236.	0.5	0
70	Comparative Studies of Oxygen Reduction Reaction and Ethanol Oxidation Reaction on PtSn/C and PtNi/C Catalysts. <i>ECS Transactions</i> , 2011, 41, 1299-1306.	0.5	2
71	Ethanol oxidation reactions using SnO <sub>2</sub> @Pt/C as an electrocatalyst. <i>Applied Catalysis B: Environmental</i> , 2010, 99, 265-271.	20.2	79
72	Study of ethanol electro-oxidation in acid environment on Pt <sub>3</sub> Sn/C anode catalysts prepared by a modified polymeric precursor method under controlled synthesis conditions. <i>Journal of Power Sources</i> , 2010, 195, 1589-1593.	7.8	70

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73	Reaproveitamento de $\text{Mn}^{3+}$ xidos de manganês de pilhas descartadas para eletrocatalise da reduçãõ de oxigênio em meio básico. Química Nova, 2010, 33, 730-733.	0.3	5
74	Ethanol oxidation reaction on PtCeO <sub>2</sub> /C electrocatalysts prepared by the polymeric precursor method. Applied Catalysis B: Environmental, 2009, 91, 516-523.	20.2	56
75	Application of Binary PdSb/C as an Anode in a Polymeric Electrolyte Reactor-Fuel Cell Type for Electrosynthesis of Methanol from Methane. Materials Research, 0, 25, .	1.3	1