

# Felipe rosa

## List of Publications by Year in descending order

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53  
papers

2,300  
citations

201385

27  
h-index

214527

47  
g-index

53  
all docs

53  
docs citations

53  
times ranked

2429  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dataset and mesh of the CFD numerical model for the modelling and simulation of a PEM fuel cell. <i>Data in Brief</i> , 2022, 41, 107987.	0.5	3
2	Experimental and numerical Investigation on the design of a bioinspired PEM fuel cell. <i>Energy</i> , 2022, 257, 124799.	4.5	13
3	Determination of time constants of diffusion and electrochemical processes in Polymer Electrolyte Membrane Fuel Cells. <i>Energy</i> , 2021, 221, 119833.	4.5	12
4	Mechanically robust and highly conductive polymer electrolyte membranes comprising high molecular weight poly[2,2'-(bipyridyl)-bibenzimidazole] and graphene oxide. <i>Polymer</i> , 2021, 233, 124223.	1.8	6
5	Boosting the catalytic efficiency of platinum nanoparticles supported on pristine carbon nanotubes: Synergistic effects of conducting polymers. <i>Fuel</i> , 2021, 306, 121681.	3.4	6
6	Bipolar plate research using Computational Fluid Dynamics and neutron radiography for proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 12432-12442.	3.8	24
7	Multi-Tubular Reactor for Hydrogen Production: CFD Thermal Design and Experimental Testing. <i>Processes</i> , 2019, 7, 31.	1.3	11
8	Experimental testing of multi-tubular reactor for hydrogen production and comparison with a thermal CFD model. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	2
9	Water build-up and evolution during the start-up of a PEMFC: Visualization by means of Neutron Imaging. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 13839-13849.	3.8	32
10	Optimization of a PEM fuel cell operating conditions: Obtaining the maximum performance polarization curve. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 19713-19723.	3.8	62
11	Definition, analysis and experimental investigation of operation modes in hydrogen-renewable-based power plants incorporating hybrid energy storage. <i>Energy Conversion and Management</i> , 2016, 113, 290-311.	4.4	45
12	Methodology for thermal design of solar tubular reactors using CFD techniques. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 19525-19538.	3.8	11
13	Experimental validation of the polarization curve and the temperature distribution in a PEMFC stack using a one dimensional analytical model. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 20615-20632.	3.8	38
14	Effect of Serpentine Multi-pass Flow Field Channel Orientation in the Liquid Water Distributions and Cell Performance. <i>Fuel Cells</i> , 2016, 16, 777-783.	1.5	9
15	Energy Management Strategies in hydrogen Smart-Grids: A laboratory experience. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 13715-13725.	3.8	71
16	Validation of cell voltage and water content in a PEM (polymer electrolyte membrane) fuel cell model using neutron imaging for different operating conditions. <i>Energy</i> , 2016, 101, 100-112.	4.5	45
17	Integration of Fuel Cell Technologies in Renewable-Energy-Based Microgrids Optimizing Operational Costs and Durability. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 167-177.	5.2	104
18	Heat loss from thermal energy storage ventilated tank foundations. <i>Solar Energy</i> , 2015, 122, 783-794.	2.9	13

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19	Car air-conditioning considerations on hydrogen consumption in fuel cell and driving limitations. International Journal of Hydrogen Energy, 2015, 40, 11696-11703.	3.8	27
20	Effect of carbon dioxide on the contamination of low temperature and high temperature PEM (polymer electrolyte membrane) fuel cells. Influence of temperature, relative humidity and analysis of regeneration processes. Energy, 2015, 90, 299-309.	4.5	30
21	Effect of the Membrane Thermal Conductivity on the Performance of a Polymer Electrolyte Membrane Fuel Cell. Journal of Fuel Cell Science and Technology, 2014, 11, .	0.8	4
22	Validation of a three dimensional PEM fuel cell CFD model using local liquid water distributions measured with neutron imaging. International Journal of Hydrogen Energy, 2014, 39, 7089-7099.	3.8	57
23	Modeling, simulation and experimental set-up of a renewable hydrogen-based domestic microgrid. International Journal of Hydrogen Energy, 2013, 38, 11672-11684.	3.8	107
24	Design, Planning and Management of a Hydrogen-Based Microgrid. IEEE Transactions on Industrial Informatics, 2013, 9, 1398-1404.	7.2	122
25	Experimental validation of an optical and thermal model of a linear Fresnel collector system. Applied Thermal Engineering, 2013, 50, 1463-1471.	3.0	52
26	Power management using model predictive control in a hydrogen-based microgrid. , 2012, , .		51
27	Safety study of a hydrogen leak in a fuel cell vehicle using computational fluid dynamics. International Journal of Hydrogen Energy, 2012, 37, 5299-5306.	3.8	33
28	Non-dimensional analysis of PEM fuel cell phenomena by means of AC impedance measurements. Journal of Power Sources, 2011, 196, 4264-4269.	4.0	27
29	Update on numerical model for the performance prediction of a PEM Fuel Cell. International Journal of Hydrogen Energy, 2011, 36, 9123-9127.	3.8	32
30	Influence of wind turbine power curve and electrolyzer operating temperature on hydrogen production in wind-hydrogen systems. Journal of Power Sources, 2011, 196, 4418-4426.	4.0	52
31	Numerical model for the performance prediction of a PEM fuel cell. Model results and experimental validation. International Journal of Hydrogen Energy, 2010, 35, 11533-11550.	3.8	141
32	Experimental fuel cell performance analysis under different operating conditions and bipolar plate designs. International Journal of Hydrogen Energy, 2010, 35, 11437-11447.	3.8	51
33	Solar absorption cooling plant in Seville. Solar Energy, 2010, 84, 1503-1512.	2.9	142
34	A comparative study of the water gas shift reaction over platinum catalysts supported on CeO <sub>2</sub> , TiO <sub>2</sub> and Ce-modified TiO <sub>2</sub> . Catalysis Today, 2010, 149, 372-379.	2.2	128
35	Practical implementation of an hybrid electric-fuel cell vehicle. , 2009, , .		5
36	Reforming of Diesel Fuel for Hydrogen Production over Catalysts Derived from LaCo <sub>1-x</sub> M <sub>x</sub> O <sub>3</sub> (M= Ru, Fe). Topics in Catalysis, 2009, 52, 1995-2000.	1.3	19

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37	A Simulation Tool for Geometrical Analysis and Optimization of Fuel Cell Bipolar Plates: Development, Validation and Results. <i>Energies</i> , 2009, 2, 582-594.	1.6	10
38	Zirconia-supported LaCoO <sub>3</sub> catalysts for hydrogen production by oxidative reforming of diesel: Optimization of preparation conditions. <i>Catalysis Today</i> , 2008, 138, 135-140.	2.2	21
39	Hydrogen production for fuel cell by oxidative reforming of diesel surrogate: Influence of ceria and/or lanthana over the activity of Pt/Al <sub>2</sub> O <sub>3</sub> catalysts. <i>Fuel</i> , 2008, 87, 2502-2511.	3.4	47
40	Performance of La,Ce-modified alumina-supported Pt and Ni catalysts for the oxidative reforming of diesel hydrocarbons. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 652-663.	3.8	93
41	Performance enhancement in the water-gas shift reaction of platinum deposited over a cerium-modified TiO <sub>2</sub> support. <i>Catalysis Communications</i> , 2008, 9, 1759-1765.	1.6	44
42	A comparison between conventional recuperative gas turbine and hybrid solid oxide fuel cell-gas turbine systems with direct/indirect integration. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2008, 222, 149-159.	0.8	11
43	Optimization of a solar hydrogen storage system: Exergetic considerations. <i>International Journal of Hydrogen Energy</i> , 2007, 32, 1537-1541.	3.8	10
44	Effect of Ru on LaCoO <sub>3</sub> perovskite-derived catalyst properties tested in oxidative reforming of diesel. <i>Applied Catalysis B: Environmental</i> , 2007, 73, 247-258.	10.8	80
45	Diesel fuel processor for hydrogen production for 5kW fuel cell application. <i>International Journal of Hydrogen Energy</i> , 2007, 32, 1429-1436.	3.8	35
46	Hydrogen production by oxidative reforming of hexadecane over Ni and Pt catalysts supported on Ce/La-doped Al <sub>2</sub> O <sub>3</sub> . <i>Applied Catalysis A: General</i> , 2006, 297, 60-72.	2.2	110
47	Design of a diesel reformer coupled to a PEMFC. <i>Catalysis Today</i> , 2006, 116, 324-333.	2.2	20
48	Production of hydrogen by oxidative reforming of ethanol over Pt catalysts supported on Al <sub>2</sub> O <sub>3</sub> modified with Ce and La. <i>Applied Catalysis B: Environmental</i> , 2005, 55, 229-241.	10.8	156
49	Solar hydrogen production: A spanish experience. <i>International Journal of Hydrogen Energy</i> , 1993, 18, 995-1000.	3.8	32
50	CESA-1 project capabilities for high temperature material testing: Application to the HERMES wing leading edge tests. <i>Solar Energy</i> , 1991, 46, 175-182.	2.9	5
51	CESA-1 thermal storage system evaluation. <i>Solar Energy</i> , 1991, 46, 305-312.	2.9	18
52	Evaluation of Advanced Sodium Receiver Losses During Operation of the IEA/SSPS Central Receiver System. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 1989, 111, 24-31.	1.1	2
53	A Determination of the Sources in the Seville Urban Aerosol. <i>International Journal of Environmental Analytical Chemistry</i> , 1988, 33, 233-244.	1.8	19