

Samuel Simon Araya

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2056963/publications.pdf>

Version: 2024-02-01

41
papers

1,333
citations

361296

20
h-index

345118

36
g-index

42
all docs

42
docs citations

42
times ranked

1197
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of effectiveness factor on the modeling of methanol steam reforming over CuO/ZnO/Al ₂ O ₃ catalyst in a multi-tubular reactor. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 8700-8715.	3.8	14
2	Electrothermally balanced operation of solid oxide electrolysis cells. <i>Journal of Power Sources</i> , 2022, 523, 231040.	4.0	16
3	Modeling a Hybrid Reformed Methanol Fuel Cell–Battery System for Telecom Backup Applications. <i>Energies</i> , 2022, 15, 3218.	1.6	3
4	Comparison between 1D and 2D numerical models of a multi-tubular packed-bed reactor for methanol steam reforming. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 22704-22719.	3.8	11
5	Investigating low and high load cycling tests as accelerated stress tests for proton exchange membrane water electrolysis. <i>Electrochimica Acta</i> , 2021, 370, 137748.	2.6	11
6	Effects of Impurities on Pre-Doped and Post-Doped Membranes for High Temperature PEM Fuel Cell Stacks. <i>Energies</i> , 2021, 14, 2994.	1.6	9
7	The effects of cationic impurities on the performance of proton exchange membrane water electrolyzer. <i>Journal of Power Sources</i> , 2020, 473, 228617.	4.0	17
8	System Design and Modeling of a High Temperature PEM Fuel Cell Operated with Ammonia as a Fuel. <i>Energies</i> , 2020, 13, 4689.	1.6	5
9	A Review of The Methanol Economy: The Fuel Cell Route. <i>Energies</i> , 2020, 13, 596.	1.6	123
10	Modeling and Design of a Multi-Tubular Packed-Bed Reactor for Methanol Steam Reforming over a Cu/ZnO/Al ₂ O ₃ Catalyst. <i>Energies</i> , 2020, 13, 610.	1.6	24
11	Electrochemical Impedance Parameter Extraction for Online Control of Reformed Methanol High Temperature PEM Fuel Cells. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 395-403.	0.3	0
12	Hydrogen mass transport resistance changes in a high temperature polymer membrane fuel cell as a function of current density and acid doping. <i>Electrochimica Acta</i> , 2019, 317, 521-527.	2.6	12
13	Influence of the operation mode on PEM water electrolysis degradation. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 29889-29898.	3.8	88
14	Long-term contamination effect of iron ions on cell performance degradation of proton exchange membrane water electrolyser. <i>Journal of Power Sources</i> , 2019, 434, 226755.	4.0	35
15	The effect of Fe ³⁺ contamination in feed water on proton exchange membrane electrolyzer performance. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 12952-12957.	3.8	22
16	Impact of iron and hydrogen peroxide on membrane degradation for polymer electrolyte membrane water electrolysis: Computational and experimental investigation on fluoride emission. <i>Journal of Power Sources</i> , 2019, 420, 54-62.	4.0	48
17	Fault Characterization of a Proton Exchange Membrane Fuel Cell Stack. <i>Energies</i> , 2019, 12, 152.	1.6	31
18	Model-supported characterization of a PEM water electrolysis cell for the effect of compression. <i>Electrochimica Acta</i> , 2018, 263, 228-236.	2.6	54

#	ARTICLE	IF	CITATIONS
19	Modelling and Experimental Analysis of a Polymer Electrolyte Membrane Water Electrolysis Cell at Different Operating Temperatures. <i>Energies</i> , 2018, 11, 3273.	1.6	56
20	Investigating different break-in procedures for reformed methanol high temperature proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 14691-14700.	3.8	11
21	Model-Supported Analysis of Degradation Phenomena of a PEM Water Electrolysis Cell under Dynamic Operation. <i>ECS Transactions</i> , 2018, 85, 37-45.	0.3	4
22	Experimental study to distinguish the effects of methanol slip and water vapour on a high temperature PEM fuel cell at different operating conditions. <i>Applied Energy</i> , 2017, 192, 422-436.	5.1	35
23	An EIS alternative for impedance measurement of a high temperature PEM fuel cell stack based on current pulse injection. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 15851-15860.	3.8	28
24	Fault detection and isolation of high temperature proton exchange membrane fuel cell stack under the influence of degradation. <i>Journal of Power Sources</i> , 2017, 359, 37-47.	4.0	44
25	New load cycling strategy for enhanced durability of high temperature proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27230-27240.	3.8	14
26	Impedance characterization of high temperature proton exchange membrane fuel cell stack under the influence of carbon monoxide and methanol vapor. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 21901-21912.	3.8	24
27	Electrochemical Impedance Spectroscopy (EIS) Characterization of Reformate-operated High Temperature PEM Fuel Cell Stack. <i>International Journal of Power and Energy Research</i> , 2017, 1, .	0.4	12
28	Identification of critical parameters for PEMFC stack performance characterization and control strategies for reliable and comparable stack benchmarking. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 21415-21426.	3.8	18
29	A comprehensive review of PBI-based high temperature PEM fuel cells. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 21310-21344.	3.8	320
30	Modeling and experimental validation of water mass balance in a PEM fuel cell stack. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3079-3092.	3.8	64
31	Performance Degradation Tests of Phosphoric Acid Doped Polybenzimidazole Membrane Based High Temperature Polymer Electrolyte Membrane Fuel Cells. <i>Journal of Fuel Cell Science and Technology</i> , 2015, 12, .	0.8	21
32	Parametric Sensitivity Testsâ€™European Polymer Electrolyte Membrane Fuel Cell Stack Test Procedures. <i>Journal of Fuel Cell Science and Technology</i> , 2014, 11, .	0.8	6
33	Parametric Sensitivity Tests â€™ European PEM Fuel Cell Stack Test Procedures. , 2014, , .		1
34	Performance Degradation Tests of Phosphoric Acid Doped PBI Membrane Based High Temperature PEM Fuel Cells. , 2014, , .		1
35	Performance and endurance of a high temperature PEM fuel cell operated on methanol reformat. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 18343-18350.	3.8	42
36	Comparative study of the break in process of post doped and solâ€™gel high temperature proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 14959-14968.	3.8	24

#	ARTICLE	IF	CITATIONS
37	Vapor Delivery Systems for the Study of the Effects of Reformate Gas Impurities in HT-PEM Fuel Cells. Journal of Fuel Cell Science and Technology, 2012, 9, .	0.8	2
38	Experimental Characterization of the Poisoning Effects of Methanol-Based Reformate Impurities on a PBI-Based High Temperature PEM Fuel Cell. Energies, 2012, 5, 4251-4267.	1.6	40
39	Investigating the effects of methanol-water vapor mixture on a PBI-based high temperature PEM fuel cell. International Journal of Hydrogen Energy, 2012, 37, 18231-18242.	3.8	41
40	Vapor Delivery Systems for the Study of the Effects of Reformate Gas Impurities in HT-PEM Fuel Cells. , 2011, , .		0
41	EIS Characterization of the Poisoning Effects of CO and CO2 on a PBI Based HT-PEM Fuel Cell. , 2010, , .		2