Petronilla Fragiacomo

List of Publications by Year
in descending order

64 papers	1,392 citations	331670 21 h-index	361022 35 g-index
64 all docs	64 docs citations	64 times ranked	910 citing authors

#	Article	IF	Citations
1	Hydrogen station evolution towards a poly-generation energy system. International Journal of Hydrogen Energy, 2022, 47, 12264-12280.	7.1	17
2	Improving chiller performance and energy efficiency in hydrogen station operation by tuning the auxiliary cooling. International Journal of Hydrogen Energy, 2022, 47, 2532-2546.	7.1	14
3	Strategic Overview on Fuel Cell-Based Systems for Mobility and Electrolytic Cells for Hydrogen Production. Procedia Computer Science, 2022, 200, 1254-1263.	2.0	10
4	Analysing thermal regime and transient by using numerical modelling for solid oxide electrolyser aided by solar radiation. International Journal of Thermal Sciences, 2022, 177, 107545.	4.9	7
5	<scp>Semiâ€empirical</scp> development of a novel and versatile <scp>multiobjective</scp> optimization tool for co/trigeneration energy system design. International Journal of Energy Research, 2022, 46, 12623-12641.	4.5	8
6	Towards a new mobility concept for regional trains and hydrogen infrastructure. Energy Conversion and Management, 2021, 228, 113650.	9.2	35
7	Empirically verified analysis of dual pre-cooling system for hydrogen refuelling station. Renewable Energy, 2021, 163, 1612-1625.	8.9	21
8	Techno-energy-economic sensitivity analysis of hybrid system Solid Oxide Fuel Cell/Gas Turbine. AIMS Energy, 2021, 9, 934-990.	1.9	12
9	Comprehensive Review on Fuel Cell Technology for Stationary Applications as Sustainable and Efficient Poly-Generation Energy Systems. Energies, 2021, 14, 4963.	3.1	95
10	Parametric technical-economic investigation of a pressurized hydrogen electrolyzer unit coupled with a storage compression system. Renewable Energy, 2021, 180, 502-515.	8.9	15
11	Multi-objective optimization model for fuel cell-based poly-generation energy systems. Energy, 2021, 237, 121823.	8.8	18
12	Analysis of energy systems for poly-generation using optimization modelling: the optimization process strategies and the formalization of an innovative multi-objective optimization model. E3S Web of Conferences, 2021, 238, 05002.	0.5	1
13	Preliminary design of AR/SOFC cogeneration energy system using livestock waste. Procedia Computer Science, 2021, 180, 935-942.	2.0	3
14	Vehicle-to-grid application with hydrogen-based tram. Energy Conversion and Management, 2021, 250, 114915.	9.2	18
15	Hydrogen station in situ back-to-back fueling data for design and modeling. Journal of Cleaner Production, 2021, 329, 129737.	9.3	22
16	Hydrogen losses in fueling station operation. Journal of Cleaner Production, 2020, 248, 119266.	9.3	48
17	Technical-economic analysis of a hydrogen production facility for power-to-gas and hydrogen mobility under different renewable sources in Southern Italy. Energy Conversion and Management, 2020, 223, 113332.	9.2	64
18	Numerical simulations of the energy performance of a PEM water electrolysis based high-pressure hydrogen refueling station. International Journal of Hydrogen Energy, 2020, 45, 27457-27470.	7.1	36

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19	Design of an Equivalent Consumption Minimization Strategy-Based Control in Relation to the Passenger Number for a Fuel Cell Tram Propulsion. Energies, 2020, 13, 4010.	3.1	14
20	Performance analysis of an on-site hydrogen facility for fuel cell trains. E3S Web of Conferences, 2020, 197, 05007.	0.5	0
21	A multi-method control strategy for numerically testing a fuel cell-battery-supercapacitor tramway. Energy Conversion and Management, 2020, 225, 113481.	9.2	31
22	Experimental activities on a PEFC based powertrain for a hybrid electric minibus. International Journal of Hydrogen Energy, 2020, 45, 34011-34023.	7.1	5
23	Developing a mathematical tool for hydrogen production, compression and storage. International Journal of Hydrogen Energy, 2020, 45, 17685-17701.	7.1	30
24	Extensive analysis of SOFC fed by direct syngas at different anodic compositions by using two numerical approaches. Energy Conversion and Management, 2020, 209, 112664.	9.2	30
25	Insights for Industry 4.0 Applications into a Hydrogen Advanced Mobility. Procedia Manufacturing, 2020, 42, 239-245.	1.9	19
26	Intermediate temperature solid oxide fuel cell/electrolyzer towards future large-scale production. Procedia Manufacturing, 2020, 42, 259-266.	1.9	12
27	Modeling and energy demand analysis of a scalable green hydrogen production system. International Journal of Hydrogen Energy, 2019, 44, 30237-30255.	7.1	49
28	Fuel cell hybrid powertrains for use in Southern Italian railways. International Journal of Hydrogen Energy, 2019, 44, 27930-27946.	7.1	40
29	Experimental Activity on a 100-W IT-SOFC Test Bench Fed by Simulated Syngas. Journal of Energy Engineering - ASCE, 2018, 144, .	1.9	19
30	Electrical and thermal analysis of an intermediate temperature IIRâ€SOFC system fed by biogas. Energy Science and Engineering, 2018, 6, 60-72.	4.0	25
31	Numerical modelling of a PEFC powertrain system controlled by a hybrid strategy for rail urban transport. Journal of Energy Storage, 2018, 17, 474-484.	8.1	22
32	Anion exchange membrane fuel cell modelling. International Journal of Sustainable Energy, 2018, 37, 340-353.	2.4	5
33	Performance Analysis of an Intermediate Temperature Solid Oxide Electrolyzer Test Bench under a CO2-H2O Feed Stream. Energies, 2018, 11, 2276.	3.1	22
34	Design of an SOFC/SOE station: experimental test campaigns. Energy Procedia, 2018, 148, 543-550.	1.8	13
35	Design of an SOFC/SOE experimental station: planning of simulation tests. Energy Procedia, 2018, 148, 535-542.	1.8	10
36	Assuring pulsation-free flow in a directly pressurized fuel delivery at a retail hydrogen station. International Journal of Hydrogen Energy, 2018, 43, 16623-16637.	7.1	26

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37	Performance Analysis of a Solid Oxide Fuel Cell-Gasifier Integrated System in Co-Trigenerative Arrangement. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	2.3	14
38	Numerical modeling of an indirect internal CO2 reforming solid oxide fuel cell energy system fed by biogas. Fuel, 2017, 196, 352-361.	6.4	19
39	Numerical simulations for testing performances of an Indirect Internal CO2 Reforming Solid Oxide Fuel Cell System fed by biogas. Fuel, 2017, 196, 378-390.	6.4	15
40	Energy performance of a Fuel Cell hybrid system for rail vehicle propulsion. Energy Procedia, 2017, 126, 1051-1058.	1.8	25
41	Dynamic modeling of a hybrid electric system based on an anion exchange membrane fuel cell. Cogent Engineering, 2017, 4, 1357891.	2.2	14
42	Theoretical and experimental investigation of syngas-fueled molten carbonate fuel cell for assessment of its performance. International Journal of Hydrogen Energy, 2017, 42, 28816-28828.	7.1	14
43	Energy Valorization of Edible Organic Matter for Electrical, Thermal and Cooling Energy Generation: Part One. Energy Procedia, 2016, 101, 81-88.	1.8	0
44	Energy Valorization of Edible Organic Matter for Electrical, Thermal and Cooling Energy Generation: Part Two. Energy Procedia, 2016, 101, 89-96.	1.8	0
45	Strategies for Dimensioning Twoâ€Wheeled Fuel Cell Hybrid Electric Vehicles Using Numerical Analysis Software. Fuel Cells, 2016, 16, 628-639.	2.4	17
46	Thermoelectric characterization of an intermediate temperature solid oxide fuel cell system directly fed by dry biogas. Energy Conversion and Management, 2016, 127, 90-102.	9.2	33
47	Influence of Anodic Gas Mixture Composition on Solid Oxide Fuel Cell Performance: Part 1. International Journal of Heat and Technology, 2016, 34, S303-S308.	0.6	3
48	Influence of Anodic Gas Mixture Composition on Solid Oxide Fuel Cell Performance: Part 2. International Journal of Heat and Technology, 2016, 34, S309-S314.	0.6	4
49	Influence of anodic gas mixture composition on solid oxide fuel cell performance: Part 1. International Journal of Heat and Technology, 2016, 34, S303-S308.	0.6	3
50	Influence of anodic gas mixture composition on solid oxide fuel cell performance: Part 2. International Journal of Heat and Technology, 2016, 34, S309-S314.	0.6	2
51	Optimal Operation Conditions for a Methane Fuelled SOFC and Microturbine Hybrid System. Journal of Renewable Energy, 2015, 2015, 1-13.	3.6	1
52	Optimal design of a small size trigeneration plant in civil users: A MINLP (Mixed Integer Non Linear) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	8.8	47
53	Energy analysis of an SOFC system fed by syngas. Energy Conversion and Management, 2015, 93, 175-186.	9.2	82
54	Technical analysis of hydrogen-rich stream generation through CO2 reforming of biogas by using numerical modeling. Fuel, 2015, 158, 538-548.	6.4	30

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55	Energetic-Environmental Enhancement of Waste and Agricultural Biomass by Anaerobic Digestion Process. Energy Technology & Policy, 2014, 1, 59-69.	1.1	5
56	Electrical and electrical-thermal power plants with molten carbonate fuel cell/gas turbine-integrated systems. International Journal of Energy Research, 2012, 36, 153-165.	4.5	16
57	A methodology for improving the performance of molten carbonate fuel cell/gas turbine hybrid systems. International Journal of Energy Research, 2012, 36, 96-110.	4.5	21
58	A Numerical Simulation Model of High Temperature Fuel Cells Fed by Biogas. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2011, 34, 101-110.	2.3	11
59	A Performance Analysis of an Anaerobic Digesterâ€"High Temperature Fuel Cells Fed by Urban Solid Waste Biogas. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2011, 34, 207-218.	2.3	10
60	Technical Analysis of an Ecoâ€Friendly Hybrid Plant With a Microgas Turbine and an MCFC System. Fuel Cells, 2010, 10, 194-208.	2.4	4
61	A mixed integer programming model for optimal design of trigeneration in a hospital complex. Energy, 2007, 32, 1430-1447.	8.8	179
62	Hydroelectric plant integrated with foul waters. International Journal of Sustainable Energy, 2005, 24, 107-113.	2.4	0
63	Thermo-environmental evaluation of traditional cogenerative and fuel cell plants. Applied Energy, 2002, 71, 127-146.	10.1	3
64	Fuel Cell-Based Powertrain Analysis for Tramway Systems. , 0, , .		4