Davide Papurello

List of Publications by Year
in descending order

47 papers	1,855 citations	172457 29 h-index	254184 43 g-index
47 all docs	47 docs citations	47 times ranked	1357 citing authors

#	Article	IF	Citations
1	Dealing with fuel contaminants in biogas-fed solid oxide fuel cell (SOFC) and molten carbonate fuel cell (MCFC) plants: Degradation of catalytic and electro-catalytic active surfaces and related gas purification methods. Progress in Energy and Combustion Science, 2017, 61, 150-188.	31.2	122
2	Waste to energy: Exploitation of biogas from organic waste in aÂ500ÂWel solid oxide fuel cell (SOFC) stack. Energy, 2015, 85, 145-158.	8.8	104
3	Sulfur poisoning in Ni-anode solid oxide fuel cells (SOFCs): Deactivation in single cells and a stack. Chemical Engineering Journal, 2016, 283, 1224-1233.	12.7	100
4	Solid oxide fuel cell anode degradation by the effect of siloxanes. Journal of Power Sources, 2015, 279, 460-471.	7.8	91
5	Performance of a Solid Oxide Fuel Cell short-stack with biogas feeding. Applied Energy, 2014, 125, 254-263.	10.1	80
6	Monitoring of volatile compound emissions during dry anaerobic digestion of the Organic Fraction of Municipal Solid Waste by Proton Transfer Reaction Time-of-Flight Mass Spectrometry. Bioresource Technology, 2012, 126, 254-265.	9.6	78
7	SOFC single cells fed by biogas: Experimental tests with trace contaminants. Waste Management, 2018, 72, 306-312.	7.4	67
8	Biogas reforming process investigation for SOFC application. Energy Conversion and Management, 2015, 98, 252-258.	9.2	63
9	Numerical model of planar anode supported solid oxide fuel cell fed with fuel containing H2S operated in direct internal reforming mode (DIR-SOFC). Applied Energy, 2018, 230, 1573-1584.	10.1	58
10	Trace compounds impact on SOFC performance: Experimental and modelling approach. Applied Energy, 2017, 208, 637-654.	10.1	54
11	Solid oxide fuel cell anode degradation by the effect of hydrogen chloride in stack and single cell environments. Journal of Power Sources, 2016, 326, 349-356.	7.8	53
12	Distributed relaxation times technique for the determination of fuel cell losses with an equivalent circuit model to identify physicochemical processes. Electrochimica Acta, 2017, 258, 98-109.	5.2	53
13	Biowaste for SOFCs. Energy Procedia, 2016, 101, 424-431.	1.8	50
14	The effect of heavy tars (toluene and naphthalene) on the electrochemical performance of an anode-supported SOFC running on bio-syngas. Renewable Energy, 2016, 99, 747-753.	8.9	50
15	Limiting factors for planar solid oxide fuel cells under different trace compound concentrations. Energy, 2016, 95, 67-78.	8.8	50
16	Real-time monitoring of removal of trace compounds with PTR-MS: Biochar experimental investigation. Renewable Energy, 2018, 125, 344-355.	8.9	48
17	Catalytic stability of a Ni-Catalyst towards biogas reforming in the presence of deactivating trace compounds. Renewable Energy, 2018, 127, 481-494.	8.9	43
18	Biogas Cleaning: Activated Carbon Regeneration for H2S Removal. Clean Technologies, 2018, 1, 40-57.	4.2	40

#	Article	IF	Citations
19	Biogas from the organic fraction of municipal solid waste: Dealing with contaminants for a solid oxide fuel cell energy generator. Waste Management, 2014, 34, 2047-2056.	7.4	39
20	Carbon recovery and re-utilization (CRR) from the exhaust of a solid oxide fuel cell (SOFC): Analysis through a proof-of-concept. Journal of CO2 Utilization, 2017, 18, 206-221.	6.8	39
21	CFD model for tubular SOFC directly fed by biomass. International Journal of Hydrogen Energy, 2021, 46, 17421-17434.	7.1	39
22	Biogas cleaning: Trace compounds removal with model validation. Separation and Purification Technology, 2019, 210, 80-92.	7.9	38
23	Biogas trace compounds impact on high-temperature fuel cells short stack performance. International Journal of Hydrogen Energy, 2021, 46, 8792-8801.	7.1	35
24	Proton transfer reaction mass spectrometry technique for the monitoring of volatile sulfur compounds in a fuel cell quality clean-up system. Fuel Processing Technology, 2015, 130, 136-146.	7.2	34
25	Evaluation of the Wheeler-Jonas parameters for biogas trace compounds removal with activated carbons. Fuel Processing Technology, 2016, 152, 93-101.	7.2	33
26	Biogas trace compound removal with ashes using proton transfer reaction time-of-flight mass spectrometry as innovative detection tool. Fuel Processing Technology, 2016, 145, 62-75.	7.2	32
27	Biogas Purification: A Comparison of Adsorption Performance in D4 Siloxane Removal Between Commercial Activated Carbons and Waste Wood-Derived Char Using Isotherm Equations. Processes, 2019, 7, 774.	2.8	32
28	Influence of co-vapors on biogas filtration for fuel cells monitored with PTR-MS (Proton Transfer) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	7.2	31
29	Proton transfer reaction-mass spectrometry as a rapid inline tool for filter efficiency of activated charcoal in support of the development of Solid Oxide Fuel Cells fueled with biogas. Fuel Processing Technology, 2015, 130, 78-86.	7.2	31
30	Reporting Degradation from Different Fuel Contaminants in Niâ€anode SOFCs. Fuel Cells, 2017, 17, 423-433.	2.4	31
31	CFD model for tubular SOFC stack fed directly by biomass. International Journal of Hydrogen Energy, 2022, 47, 6860-6872.	7.1	28
32	Direct injection mass spectrometry technique for the odorant losses at ppb(v) level from nalophanâ„¢ sampling bags. International Journal of Mass Spectrometry, 2019, 436, 137-146.	1.5	26
33	Characterization of a circular 80Âmm anode supported solid oxide fuel cell (AS-SOFC) with anode support produced using high-pressure injection molding (HPIM). International Journal of Hydrogen Energy, 2019, 44, 19405-19411.	7.1	25
34	Effect of different pre-treatment methods on gasification properties of grass biomass. Renewable Energy, 2021, 170, 875-883.	8.9	22
35	Proton transfer reaction mass spectrometry for the gas cleaning using commercial and waste-derived materials: Focus on the siloxane removal for SOFC applications. International Journal of Mass Spectrometry, 2018, 430, 69-79.	1.5	19
36	Study of H2S Removal Capability from Simulated Biogas by Using Waste-Derived Adsorbent Materials. Processes, 2020, 8, 1030.	2.8	17

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37	Natural Gas Trace Compounds Analysis with Innovative Systems: PTR-ToF-MS and FASTGC. Energy Procedia, 2016, 101, 536-541.	1.8	14
38	Management of Digestate and Exhausts from Solid Oxide Fuel Cells Produced in the Dry Anaerobic Digestion Pilot Plant: Microalgae Cultivation Approach. Waste and Biomass Valorization, 2020, 11, 6499-6514.	3.4	14
39	CFD Performance Analysis of a Dish-Stirling System for Microgeneration. Processes, 2021, 9, 1142.	2.8	13
40	Experimental and model validation of a phase change material heat exchanger integrated into a real building. International Journal of Energy Research, 2021, 45, 18222-18236.	4.5	11
41	Physical Activation of Waste-Derived Materials for Biogas Cleaning. Energies, 2018, 11, 2338.	3.1	10
42	H2S Removal with Sorbent Obtained from Sewage Sludges. Processes, 2020, 8, 130.	2.8	10
43	Experimental Analysis and Model Validation on the Performance of Impregnated Activated Carbons for the Removal of Hydrogen Sulfide (H2S) from Sewage Biogas. Processes, 2019, 7, 548.	2.8	9
44	Thermal Activation of Digested Sewage Sludges for Carbon Dioxide Removal from Biogas. Fuels, 2020, 1, 30-46.	2.7	7
45	Wood ash biomethane upgrading system: A case study. Renewable Energy, 2022, 182, 702-712.	8.9	7
46	Hybrid Models for Indoor Temperature Prediction Using Long Short Term Memory Networksâ€”Case Study Energy Center. Buildings, 2022, 12, 933.	3.1	4
47	SIMULATED SOFC EXHAUSTS AND THEIR FIXATION ON CHLORELLA VULGARIS: STUDY ON AFFECTING PARAMETERS. Detritus, 2019, In Press, 1.	0.9	1