Alberto Benato

List of Publications by Year in descending order

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315357 331259 1,462 47 21 38 h-index citations g-index papers 49 49 49 1209 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	Pumped Thermal Electricity Storage: A technology overview. Thermal Science and Engineering Progress, 2018, 6, 301-315.	1.3	155
2	Performance and cost evaluation of an innovative Pumped Thermal Electricity Storage power system. Energy, 2017, 138, 419-436.	4.5	104
3	Improving photovoltaics efficiency by water cooling: Modelling and experimental approach. Energy, 2017, 137, 798-810.	4.5	89
4	Waste heat recovery technologies for offshore platforms. Applied Energy, 2014, 136, 228-241.	5.1	84
5	Italian Biogas Plants: Trend, Subsidies, Cost, Biogas Composition and Engine Emissions. Energies, 2019, 12, 979.	1.6	71
6	Combined cycle power plants: A comparison between two different dynamic models to evaluate transient behaviour and residual life. Energy Conversion and Management, 2014, 87, 1269-1280.	4.4	63
7	The ORC-PD: A versatile tool for fluid selection and Organic Rankine Cycle unit design. Energy, 2016, 102, 605-620.	4.5	62
8	LTE: A procedure to predict power plants dynamic behaviour and components lifetime reduction during transient operation. Applied Energy, 2016, 162, 880-891.	5.1	59
9	A model for the optimal design and management of a cogeneration system with energy storage. Energy and Buildings, 2016, 124, 241-247.	3.1	53
10	Heat transfer fluid and material selection for an innovative Pumped Thermal Electricity Storage system. Energy, 2018, 147, 155-168.	4. 5	51
11	Dynamic simulation of combined cycle power plant cycling in the electricity market. Energy Conversion and Management, 2016, 107, 76-85.	4.4	48
12	Biogas Engine Waste Heat Recovery Using Organic Rankine Cycle. Energies, 2017, 10, 327.	1.6	48
13	Components design and daily operation optimization of a hybrid system with energy storages. Energy, 2016, 117, 569-577.	4.5	47
14	Dynamic behaviour analysis of a three pressure level heat recovery steam generator during transient operation. Energy, 2015, 90, 1595-1605.	4. 5	46
15	Modelling and analyzing the impact of hydrogen enriched natural gas on domestic gas boilers in a decarbonization perspective. Carbon Resources Conversion, 2020, 3, 122-129.	3.2	45
16	Analysis of hot spots in boilers of organic Rankine cycle units during transient operation. Applied Energy, 2015, 151, 119-131.	5.1	35
17	Biogas Engine Emissions: Standards and On-Site Measurements. Energy Procedia, 2017, 126, 398-405.	1.8	34
18	Energy and Cost Analysis of a New Packed Bed Pumped Thermal Electricity Storage Unit. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	1.4	34

#	Article	IF	Citations
19	Small wind turbines: A numerical study for aerodynamic performance assessment under gust conditions. Renewable Energy, 2018, 121, 123-132.	4.3	28
20	An Experimental Investigation of a Novel Low-Cost Photovoltaic Panel Active Cooling System. Energies, 2019, 12, 1448.	1.6	26
21	Study and Simulation of a Hydraulic Hybrid Powertrain. Energy Procedia, 2017, 126, 1131-1138.	1.8	24
22	Impact of control strategies on the emissions in a city bus equipped with power-split transmission. Transportation Research, Part D: Transport and Environment, 2017, 50, 357-371.	3.2	19
23	Energy and cost analysis of an Air Cycle used as prime mover of a Thermal Electricity Storage. Journal of Energy Storage, 2018, 17, 29-46.	3.9	19
24	Techno-economic benefits deriving from optimal scheduling of a Virtual Power Plant: Pumped hydro combined with wind farms. Journal of Energy Storage, 2021, 37, 102461.	3.9	19
25	Fluid Selection and Plant Configuration of an ORC-biomass fed System Generating Heat and/or Power. Energy Procedia, 2016, 101, 822-829.	1.8	17
26	Life Cycle Assessment of a Commercially Available Organic Rankine Cycle Unit Coupled with a Biomass Boiler. Energies, 2020, 13, 1835.	1.6	17
27	Spraying Cooling System for PV Modules: Experimental Measurements for Temperature Trends Assessment and System Design Feasibility. Designs, 2021, 5, 25.	1.3	17
28	Integrated Thermal Electricity Storage System: Energetic and cost performance. Energy Conversion and Management, 2019, 197, 111833.	4.4	15
29	Design and Off-Design Analysis of an ORC Coupled with a Micro-Gas Turbine. Energy Procedia, 2017, 129, 551-558.	1.8	14
30	Regulated Emissions of Biogas Enginesâ€"On Site Experimental Measurements and Damage Assessment on Human Health. Energies, 2020, 13, 1044.	1.6	14
31	High-order conservative formulation of viscous terms for variable viscosity flows. Acta Mechanica, 2021, 232, 2115-2133.	1.1	13
32	State-of-the-art and future development of sensible heat thermal electricity storage systems. International Journal of Heat and Technology, 2017, 35, S244-S251.	0.3	12
33	Improving the efficiency of a cataphoresis oven with a cogenerative organic Rankine cycle unit. Thermal Science and Engineering Progress, 2018, 5, 182-194.	1.3	11
34	A Human Health Toxicity Assessment of Biogas Engines Regulated and Unregulated Emissions. Applied Sciences (Switzerland), 2020, 10, 7048.	1.3	10
35	Dynamic Performance of a Combined Gas Turbine and Air Bottoming Cycle Plant for Off-Shore Applications. , 2014, , .		9
36	Potentialities of hydrogen enriched natural gas for residential heating decarbonization and impact analysis on premixed boilers. E3S Web of Conferences, 2019, 116, 00072.	0.2	6

#	Article	IF	CITATIONS
37	Analysis of the Inner Fluid-Dynamics of Scroll Compressors and Comparison between CFD Numerical and Modelling Approaches. Energies, 2021, 14, 1158.	1.6	6
38	Improvement of the Energy System of a Nepali Village Through Innovative Exploitation of Local Resources. Energy Procedia, 2016, 101, 790-797.	1.8	5
39	Superheater and Drum Lifetime Estimation: An Approach Based on Dynamic Analysis. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	1.4	5
40	The Importance of Energy Storage. World Scientific Series in Current Energy Issues, 2017, , 1-26.	0.1	5
41	Environmental Impact of Energy Systems Integrated with Electrochemical Accumulators and Powered by Renewable Energy Sources in a Life-Cycle Perspective. Applied Sciences (Switzerland), 2021, 11, 2770.	1.3	5
42	Optimal Design and Management of a Hybrid Photovoltaic-Pump Hydro Energy Storage System. , 2014, , .		4
43	Gas fired boilers: Perspective for near future fuel composition and impact on burner design process. E3S Web of Conferences, 2017, 22, 00154.	0.2	4
44	TES-PD: A Fast and Reliable Numerical Model to Predict the Performance of Thermal Reservoir for Electricity Energy Storage Units. Fluids, 2021, 6, 256.	0.8	3
45	Costs to Reduce the Human Health Toxicity of Biogas Engine Emissions. Energies, 2021, 14, 6360.	1.6	3
46	The IRC-PD Tool: A Code to Design Steam and Organic Waste Heat Recovery Units. Energies, 2021, 14, 5611.	1.6	2
47	EU energy policies achievement by industries in decentralized areas. E3S Web of Conferences, 2017, 22, 00035.	0.2	1