Mauro Venturini

List of Publications by Year
in descending order

98 papers	1,542 citations	346980 22 h-index	388640 36 g-index
98 all docs	98 docs citations	98 times ranked	1522 citing authors

#	Article	IF	Citations
1	Detection of Unit of Measure Inconsistency in gas turbine sensors by means of Support Vector Machine classifier. ISA Transactions, 2022, 123, 323-338.	3.1	10
2	Prediction of Gas Turbine Trip: A Novel Methodology Based on Random Forest Models. Journal of Engineering for Gas Turbines and Power, 2022, 144, .	0.5	7
3	Optimal Classifier to Detect Unit of Measure Inconsistency in Gas Turbine Sensors. Machines, 2022, 10, 228.	1.2	5
4	A diagnostic approach for fault detection and identification in district heating networks. Energy, 2022, 251, 123988.	4.5	15
5	Detection and identification of faults in a District Heating Network. Energy Conversion and Management, 2022, 266, 115837.	4.4	17
6	Optimal selection of pumps as turbines for maximizing electrical energy production. E3S Web of Conferences, 2021, 238, 01005.	0.2	1
7	Analysis of tripod supported offshore wind turbines under conditions of marine growth. Ocean Engineering, 2021, 220, 108441.	1.9	9
8	Optimal design and energy management of a renewable energy plant with seasonal energy storage. E3S Web of Conferences, 2021, 238, 02002.	0.2	1
9	Structured Methodology for Clustering Gas Turbine Transients by Means of Multivariate Time Series. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	0.5	5
10	Sizing and Operation of a Hybrid Energy Plant Composed of Industrial Gas Turbines, Renewable Energy Systems, and Energy Storage Technologies. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	0.5	5
11	Optimization of energy and economic scheduling of a hybrid energy plant by using a dynamic programming approach. Applied Thermal Engineering, 2021, 187, 116577.	3.0	10
12	Prediction of Gas Turbine Trip: a Novel Methodology Based on Random Forest Models. , 2021, , .		0
13	Data Selection and Feature Engineering for the Application of Machine Learning to the Prediction of Gas Turbine Trip. , 2021, , .		0
14	Inventory scaling, life cycle impact assessment and design optimization of distributed energy plants. Applied Energy, 2021, 304, 117701.	5.1	4
15	Simultaneous optimization of the design and operation of multi-generation energy systems based on life cycle energy and economic assessment. Energy Conversion and Management, 2021, 249, 114883.	4.4	25
16	Simulation and Experimental Validation of Fuzzy Control Techniques for Wind Turbine System and Hydroelectric Plant. , 2021, , .		0
17	Cradle-to-gate life cycle assessment of energy systems for residential applications by accounting for scaling effects. Applied Thermal Engineering, 2020, 171, 115062.	3.0	13
18	Optimal Management of the Energy Flows of Interconnected Residential Users. Energies, 2020, 13, 1507.	1.6	5

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19	Development and Validation of a General and Robust Methodology for the Detection and Classification of Gas Turbine Sensor Faults. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	0.5	10
20	Structured Methodology for Clustering Gas Turbine Transients by Means of Multi-Variate Time Series. , 2020, , .		1
21	Detection of Unit of Measure Inconsistency by Means of a Machine Learning Model. , 2020, , .		1
22	Fuzzy Control Techniques for Energy Conversion Systems. Advances in Intelligent Systems and Computing, 2020, , 943-955.	0.5	1
23	Sizing and Operation of a Hybrid Energy Plant Composed of Industrial Gas Turbines, Renewable Energy Systems and Energy Storage Technologies. , 2020, , .		0
24	Autoregressive Bayesian Hierarchical Model to Predict Gas Turbine Degradation. , 2020, , .		1
25	Optimization of a hybrid energy plant by integrating the cumulative energy demand. Applied Energy, 2019, 253, 113484.	5.1	32
26	Fuzzy Control Techniques for Energy Conversion Systems: Wind Turbine and Hydroelectric Plants. , 2019, , .		1
27	Optimal design of a hybrid energy plant by accounting for the cumulative energy demand. Energy Procedia, 2019, 158, 2834-2840.	1.8	4
28	Micro Combined Heat and Power System Transient Operation in a Residential User Microgrid. Journal of Energy Resources Technology, Transactions of the ASME, 2019, 141, .	1.4	5
29	Data-Driven Control Techniques for Renewable Energy Conversion Systems: Wind Turbine and Hydroelectric Plants. Electronics (Switzerland), 2019, 8, 237.	1.8	3
30	Fuzzy Control Techniques Applied to Wind Turbine Systems and Hydroelectric Plants. , 2019, , .		3
31	Minimization of the primary energy consumption of residential users connected by means of an energy grid. AIP Conference Proceedings, 2019, , .	0.3	1
32	Application of a physics-based model to predict the performance curves of pumps as turbines. AIP Conference Proceedings, 2019, , .	0.3	5
33	Prediction of compressor efficiency by means of Bayesian Hierarchical Models. AIP Conference Proceedings, 2019, , .	0.3	0
34	Harmonized and systematic assessment of microalgae energy potential for biodiesel production. Renewable and Sustainable Energy Reviews, 2019, 101, 614-624.	8.2	22
35	Anomaly Detection in Gas Turbine Time Series by Means of Bayesian Hierarchical Models. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	9
36	Self-Tuning Control Techniques for Wind Turbine and Hydroelectric Plant Systems. Journal of Power and Energy Engineering, 2019, 07, 27-61.	0.3	3

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37	Gas Turbine Health State Prognostics by Means of Bayesian Hierarchical Models. , 2019, , .		0
38	Property Risk Assessment for Liquefied Natural Gas Liquefaction Plants. , 2019, , .		0
39	Validation of an Advanced Diagnostic Methodology for the Identification and Classification of Gas Turbine Sensor Faults by Means of Field Data. , 2019, , .		0
40	Anomaly Detection in Gas Turbine Time Series by Means of Bayesian Hierarchical Models. , 2019, , .		1
41	A General Diagnostic Methodology for Sensor Fault Detection, Classification and Overall Health State Assessment. , 2019, , .		0
42	Gas Turbine Health State Prognostics by Means of Bayesian Hierarchical Models. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	3
43	Resistant Statistical Methodologies for Anomaly Detection in Gas Turbine Dynamic Time Series: Development and Field Validation. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	5
44	Optimization of Statistical Methodologies for Anomaly Detection in Gas Turbine Dynamic Time Series. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	8
45	Development of a Simulation Model of Transient Operation of Micro-Combined Heat and Power Systems in a Microgrid. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	5
46	A Comprehensive Approach for Detection, Classification, and Integrated Diagnostics of Gas Turbine Sensors. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	10
47	Development of a physics-based model to predict the performance of pumps as turbines. Applied Energy, 2018, 231, 343-354.	5.1	32
48	Capability of the Bayesian Forecasting Method to Predict Field Time Series. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	5
49	Development of Reliable NARX Models of Gas Turbine Cold, Warm, and Hot Start-Up. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	6
50	Comparison of Different Approaches to Predict the Performance of Pumps As Turbines (PATs). Energies, 2018, 11, 1016.	1.6	13
51	Capability of the Bayesian Forecasting Method to Predict Field Time Series. , 2018, , .		0
52	Detection and Classification of Sensor Anomalies in Gas Turbine Field Data. , 2018, , .		1
53	Combining an accelerated deployment of bioenergy and land use strategies: Review and insights for a post-conflict scenario in Colombia. Renewable and Sustainable Energy Reviews, 2017, 73, 159-177.	8.2	54
54	A Comprehensive Approach for Detection, Classification and Integrated Diagnostics of Gas Turbine Sensors (DCIDS). , 2017, , .		7

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55	Development of Reliable NARX Models of Gas Turbine Cold, Warm and Hot Start-Up. , 2017, , .		3
56	Resistant Statistical Methodologies for Anomaly Detection in Gas Turbine Dynamic Time Series: Development and Field Validation. , 2017, , .		6
57	Development of a Simulation Model of Transient Operation of Micro-CHP Systems in a Microgrid. , 2017, , .		0
58	A Novel Geometry for Vertical Axis Wind Turbines Based on the Savonius Concept. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	1.4	40
59	Energy Production by Means of Pumps As Turbines in Water Distribution Networks. Energies, 2017, 10, 1666.	1.6	25
60	Optimization of Statistical Methodologies for Anomaly Detection in Gas Turbine Dynamic Time Series. , 2017, , .		5
61	Fault tolerant control of a simulated hydroelectric system. Control Engineering Practice, 2016, 51, 13-25.	3.2	29
62	Development of a technology roadmap for bioenergy exploitation including biofuels, waste-to-energy and power generation & CHP. Applied Energy, 2016, 180, 338-352.	5.1	39
63	Fault tolerant model predictive control applied to a simulated hydroelectric system. , 2016, , .		3
64	A general modeling framework to evaluate energy, economy, land-use and GHG emissions nexus for bioenergy exploitation. Applied Energy, 2016, 178, 223-249.	5.1	25
65	Methodology for improving the reliability of biomass energy potential estimation. Biomass and Bioenergy, 2016, 88, 43-58.	2.9	21
66	NARX models for simulation of the start-up operation of a single-shaft gas turbine. Applied Thermal Engineering, 2016, 93, 368-376.	3.0	94
67	Feasibility analysis of gas turbine inlet air cooling by means of liquid nitrogen evaporation for IGCC power augmentation. Applied Thermal Engineering, 2015, 80, 168-177.	3.0	16
68	Dataâ€"Driven Design of a Fault Tolerant Fuzzy Controller for a Simulated Hydroelectric System. IFAC-PapersOnLine, 2015, 48, 1090-1095.	0.5	7
69	Design, Analysis and Optimization of a Micro-CHP System Based on Organic Rankine Cycle for Ultralow Grade Thermal Energy Recovery. Journal of Energy Resources Technology, Transactions of the ASME, 2014, 136, .	1.4	26
70	Modeling and Simulation of the Start-Up Operation of a Heavy-Duty Gas Turbine by Using NARX Models. , 2014, , .		7
71	Modeling and Simulation of the Transient Behavior of an Industrial Power Plant Gas Turbine. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	0.5	38
72	Methodology for estimating biomass energy potential and its application to Colombia. Applied Energy, 2014, 136, 781-796.	5.1	61

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73	Performance Evaluation of Nonuniformly Fouled Axial Compressor Stages by Means of Computational Fluid Dynamics Analyses. Journal of Turbomachinery, 2014, 136, .	0.9	37
74	Experimental Analysis of a Micro Gas Turbine Fuelled with Vegetable Oils from Energy Crops. Energy Procedia, 2014, 45, 91-100.	1.8	26
75	Advances and challenges in ORC systems modeling for low grade thermal energy recovery. Applied Energy, 2014, 121, 79-95.	5.1	167
76	Numerical Analysis of the Effects of Surface Roughness Localization on the Performance of an Axial Compressor Stage. Energy Procedia, 2014, 45, 1057-1066.	1.8	16
77	Methodology for biomass energy potential estimation: Projections of future potential in Colombia. Renewable Energy, 2014, 69, 488-505.	4.3	26
78	Optimal allocation of thermal, electric and cooling loads among generation technologies in household applications. Applied Energy, 2013, 112, 205-214.	5.1	18
79	Application of a Statistical Methodology for Gas Turbine Degradation Prognostics to Alstom Field Data. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	0.5	15
80	Application of a Statistical Methodology for Gas Turbine Degradation Prognostics to Alstom Field Data. , 2013, , .		6
81	Performance Evaluation of Non-Uniformly Fouled Axial Compressor Stages by Means of Computational Fluid Dynamic Analyses. , 2013, , .		2
82	Prediction Reliability of a Statistical Methodology for Gas Turbine Prognostics. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	0.5	13
83	Gas Turbine Health State Determination: Methodology Approach and Field Application. International Journal of Rotating Machinery, 2012, 2012, 1-14.	0.8	10
84	Development and Validation of an Advanced Simulation Model for ORC-Based Systems. , 2012, , .		3
85	Application of Forecasting Methodologies to Predict Gas Turbine Behavior Over Time. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	0.5	20
86	Prediction Reliability of a Statistical Methodology for Gas Turbine Prognostics. , 2012, , .		8
87	Application of an Advanced Simulation Model to a Micro-CHP ORC-Based System for Ultra-Low Grade Heat Recovery. , 2012, , .		0
88	Development of a Statistical Methodology for Gas Turbine Prognostics. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	0.5	26
89	Analysis of innovative micro-CHP systems to meet household energy demands. Applied Energy, 2012, 97, 723-733.	5.1	149
90	An Innovative Inlet Air Cooling System for IGCC Power Augmentation: Part Iâ€"Analysis of IGCC Plant Components. , 2012, , .		3

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91	Property risk assessment for power plants: Methodology, validation and application. Energy, 2011, 36, 3189-3203.	4.5	12
92	Numerical Analysis of the Effects of Nonuniform Surface Roughness on Compressor Stage Performance. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	0.5	49
93	Computational Fluid Dynamics Simulation of Fouling on Axial Compressor Stages. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	0.5	48
94	Experimental Implementation of a Micro-Scale ORC-Based CHP Energy System for Domestic Applications. , 2010, , .		9
95	Numerical Analysis of the Effects of Non-Uniform Surface Roughness on Compressor Stage Performance. , 2010, , .		8
96	Analysis of biogas compression system dynamics. Applied Energy, 2009, 86, 2466-2475.	5.1	28
97	CFD Simulation of Fouling on Axial Compressor Stages. , 2009, , .		6
98	A Model for the Simulation of Large-Size Single-Shaft Gas Turbine Start-Up Based on Operating Data Fitting. , 2007, , 1849.		8