Maria Grazia De Giorgi

List of Publications by Year
in descending order

123 papers	2,543 citations	218592 26 h-index	223716 46 g-index
125 all docs	125 docs citations	125 times ranked	1959 citing authors

#	Article	IF	Citations
1	Photovoltaic power forecasting using statistical methods: impact of weather data. IET Science, Measurement and Technology, 2014, 8, 90-97.	0.9	185
2	Error analysis of short term wind power prediction models. Applied Energy, 2011, 88, 1298-1311.	5.1	145
3	Assessment of the benefits of numerical weather predictions in wind power forecasting based on statistical methods. Energy, 2011, 36, 3968-3978.	4.5	130
4	Long term performance, losses and efficiency analysis of a 960 kW P photovoltaic system in the Mediterranean climate. Energy Conversion and Management, 2017, 145, 169-181.	4.4	126
5	Performance measurements of monocrystalline silicon PV modules in South-eastern Italy. Energy Conversion and Management, 2013, 68, 1-10.	4.4	118
6	Comparison Between Wind Power Prediction Models Based on Wavelet Decomposition with Least-Squares Support Vector Machine (LS-SVM) and Artificial Neural Network (ANN). Energies, 2014, 7, 5251-5272.	1.6	116
7	Comparison of strategies for multi-step ahead photovoltaic power forecasting models based on hybrid group method of data handling networks and least square support vector machine. Energy, 2016, 107, 360-373.	4.5	98
8	Error analysis of hybrid photovoltaic power forecasting models: A case study of mediterranean climate. Energy Conversion and Management, 2015, 100, 117-130.	4.4	85
9	Comparison between synthetic jets and continuous jets for active flow control: Application on a NACA 0015 and a compressor stator cascade. Aerospace Science and Technology, 2015, 43, 256-280.	2.5	81
10	Forecasting of PV Power Generation using weather input data–preprocessing techniques. Energy Procedia, 2017, 126, 651-658.	1.8	65
11	Evaluating cavitation regimes in an internal orifice at different temperatures using frequency analysis and visualization. International Journal of Heat and Fluid Flow, 2013, 39, 160-172.	1.1	64
12	Photovoltaic forecast based on hybrid PCA–LSSVM using dimensionality reduced data. Neurocomputing, 2016, 211, 72-83.	3.5	61
13	Hybrid MultiGene Genetic Programming - Artificial neural networks approach for dynamic performance prediction of an aeroengine. Aerospace Science and Technology, 2020, 103, 105902.	2.5	51
14	Image processing for the characterization of flame stability in a non-premixed liquid fuel burner near lean blowout. Aerospace Science and Technology, 2016, 49, 41-51.	2.5	48
15	Influence of convective heat transfer modeling on the estimation of thermal effects in cryogenic cavitating flows. International Journal of Heat and Mass Transfer, 2012, 55, 6538-6554.	2.5	45
16	Data on Support Vector Machines (SVM) model to forecast photovoltaic power. Data in Brief, 2016, 9, 13-16.	0.5	41
17	Investigation of the boundary layer characteristics for assessing the DBD plasma actuator control of the separated flow at low Reynolds numbers. Experimental Thermal and Fluid Science, 2017, 81, 482-498.	1.5	39
18	Influence of actuation parameters of multi-DBD plasma actuators on the static and dynamic behaviour of an airfoil in unsteady flow. Aerospace Science and Technology, 2020, 96, 105587.	2.5	39

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19	Investigation of a Micro Dielectric Barrier Discharge Plasma Actuator for Regional Aircraft Active Flow Control. IEEE Transactions on Plasma Science, 2015, 43, 3668-3680.	0.6	38
20	Optimization of micro single dielectric barrier discharge plasma actuator models based on experimental velocity and body force fields. Acta Astronautica, 2015, 116, 318-332.	1.7	36
21	Improvement of lean flame stability of inverse methane/air diffusion flame by using coaxial dielectric plasma discharge actuators. Energy, 2017, 126, 689-706.	4.5	34
22	A diagnostics tool for aero-engines health monitoring using machine learning technique. Energy Procedia, 2018, 148, 860-867.	1.8	34
23	Separation control by a microfabricated SDBD plasma actuator for small engine turbine applications: influence of the excitation waveform. Aerospace Science and Technology, 2018, 76, 442-454.	2.5	31
24	Analysis of Thermal Effects in a Cavitating Orifice Using Rayleigh Equation and Experiments. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	0.5	29
25	Effect of a micro dielectric barrier discharge plasma actuator on quiescent flow. IET Science, Measurement and Technology, 2014, 8, 135-142.	0.9	29
26	Data on photovoltaic power forecasting models for Mediterranean climate. Data in Brief, 2016, 7, 1639-1642.	0.5	28
27	Application and Comparison of Different Combustion Models of High Pressure LOX/CH4 Jet Flames. Energies, 2014, 7, 477-497.	1.6	25
28	Improvements in the predictions for the photovoltaic system performance of the Mediterranean regions. Energy Conversion and Management, 2016, 128, 191-202.	4.4	25
29	Plasma actuator scaling down to improve its energy conversion efficiency for active flow control in modern turbojet engines compressors. Applied Thermal Engineering, 2016, 106, 334-350.	3.0	25
30	Micro DBD plasma actuators for flow separation control on a low pressure turbine at high altitude flight operating conditions of aircraft engines. Applied Thermal Engineering, 2017, 114, 511-522.	3.0	23
31	Effects on performance, combustion and pollutants of water emulsified fuel in an aeroengine combustor. Applied Energy, 2020, 260, 114263.	5.1	23
32	Plasma Assisted Flame Stabilizationin a Non-Premixed Lean Burner. Energy Procedia, 2015, 82, 410-416.	1.8	21
33	Horizontal Air-Ground Heat Exchanger Performance and Humidity Simulation by Computational Fluid Dynamic Analysis. Energies, 2016, 9, 930.	1.6	21
34	An artificial neural network approach to investigate cavitating flow regime at different temperatures. Measurement: Journal of the International Measurement Confederation, 2014, 47, 971-981.	2.5	20
35	Cavitation Regime Detection by LS-SVM and ANN With Wavelet Decomposition Based on Pressure Sensor Signals. IEEE Sensors Journal, 2015, 15, 5701-5708.	2.4	20
36	A novel quasi-one-dimensional model for performance estimation of a Vaporizing Liquid Microthruster. Aerospace Science and Technology, 2019, 84, 1020-1034.	2.5	20

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37	Computational Fluid Dynamic Modeling of Horizontal Air-Ground Heat Exchangers (HAGHE) for HVAC Systems. Energies, 2014, 7, 8465-8482.	1.6	19
38	Jet engine degradation prognostic using artificial neural networks. Aircraft Engineering and Aerospace Technology, 2019, 92, 296-303.	0.7	19
39	Global rainbow thermometry assessed by Airy and Lorenz-Mie theories and compared with phase Doppler anemometry. Applied Optics, 2003, 42, 4016.	2.1	18
40	Monitoring Cavitation Regime From Pressure and Optical Sensors: Comparing Methods Using Wavelet Decomposition for Signal Processing. IEEE Sensors Journal, 2015, 15, 4684-4691.	2.4	18
41	Implementation and validation of an extended Schnerr-Sauer cavitation model for non-isothermal flows in OpenFOAM. Energy Procedia, 2017, 126, 58-65.	1.8	17
42	Characterization of cavitating flow regimes in an internal sharp-edged orifice by means of Proper Orthogonal Decomposition. Experimental Thermal and Fluid Science, 2018, 93, 242-256.	1.5	17
43	Modeling, fabrication and plasma actuator coupling of flexible pressure sensors for flow separation detection and control in aeronautical applications. Journal Physics D: Applied Physics, 2016, 49, 235201.	1.3	16
44	Pollutant Formation during the Occurrence of Flame Instabilities under Very-Lean Combustion Conditions in a Liquid-Fuel Burner. Energies, 2017, 10, 352.	1.6	16
45	Experimental and Numerical Analysis of a Micro Plasma Actuator for Active Flow Control in Turbomachinery. , 2014, , .		15
46	Flame Structure and Chemiluminescence Emissions of Inverse Diffusion Flames under Sinusoidally Driven Plasma Discharges. Energies, 2017, 10, 334.	1.6	15
47	Characterization of the effects of a dielectric barrier discharge plasma actuator on a coaxial jet in a Bunsen burner. Experimental Thermal and Fluid Science, 2018, 91, 292-305.	1.5	15
48	Comparison of different plasma actuation strategies for aeroelastic control on a linear compressor cascade. Aerospace Science and Technology, 2021, 117, 106902.	2.5	15
49	Study of degradation of a grid connected photovoltaic system. Energy Procedia, 2017, 126, 644-650.	1.8	14
50	Numerical Investigation of Nonisothermal Cavitating Flows on Hydrofoils by Means of an Extended Schnerrâ€"Sauer Model Coupled With a Nucleation Model. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	0.5	14
51	Active Flow Control Techniques on a Stator Compressor Cascade: A Comparison Between Synthetic Jet and Plasma Actuators. , 2012, , .		13
52	Neural Nonlinear Autoregressive Model with Exogenous Input (NARX) for Turboshaft Aeroengine Fuel Control Unit Model. Aerospace, 2021, 8, 206.	1.1	13
53	Intelligent Combined Neural Network and Kernel Principal Component Analysis Tool for Engine Health Monitoring Purposes. Aerospace, 2022, 9, 118.	1.1	11
54	Optimization of Plasma Actuator Excitation Waveform and Materials for Separation Control in Turbomachinery. Energy Procedia, 2017, 126, 786-793.	1.8	10

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55	Development of a real time intelligent health monitoring platform for aero-engine. MATEC Web of Conferences, 2018, 233, 00007.	0.1	10
56	Predictions of Operational Degradation of the Fan Stage of an Aircraft Engine Due to Particulate Ingestion. Journal of Engineering for Gas Turbines and Power, 2015, 137, .	0.5	9
57	Lean Blowout Sensing and Plasma Actuation of Non-Premixed Flames. IEEE Sensors Journal, 2016, 16, 3896-3903.	2.4	9
58	CFD data of unsteady cavitation around a hydrofoil, based on an extended Schnerr-Sauer model coupled with a nucleation model. Data in Brief, 2019, 25, 104226.	0.5	9
59	Experimental and Numerical Investigations of Cavitating Flows. , 2005, , .		8
60	Modeling Nucleation Phenomena in Cavitating Flow. , 2007, , .		8
61	Investigations of the Actuation Effect of a Single DBD Plasma Actuator for Flow Separation Control Under Simulated Low-Pressure Turbine Blade Conditions. , 2016, , .		8
62	Investigation of the Effects of Plasma Discharges on Methane Decomposition for Combustion Enhancement of a Lean Flame. Energies, 2020, 13, 1452.	1.6	8
63	Short-term wind forecasting using artificial neural networks (ANNs). , 2009, , .		8
64	Optical Diagnostics for Solid Rocket Plumes Characterization: A Review. Energies, 2022, 15, 1470.	1.6	8
65	Aircraft Distributed Flow Turbulence Sensor Network with Embedded Flow Control Actuators. , 2014, , .		7
66	Frequency Analysis and Predictive Identification of Flame Stability by Image Processing. , 2014, , .		7
67	Numerical investigation of the performance of Contra-Rotating Propellers for a Remotely Piloted Aerial Vehicle. Energy Procedia, 2017, 126, 1011-1018.	1.8	7
68	Modeling viscous effects on boundary layer of rarefied gas flows inside micronozzles in the slip regime condition. Energy Procedia, 2018, 148, 838-845.	1.8	7
69	Fabrication and embedded sensors characterization of a micromachined water-propellant vaporizing liquid microthruster. Applied Thermal Engineering, 2021, 188, 116625.	3.0	7
70	Effects of Nanosecond Repetitively Pulsed Discharges Timing for Aeroengines Ignition at Low Temperature Conditions by Needle-Ring Plasma Actuator. Energies, 2021, 14, 5814.	1.6	7
71	Model-Based Dynamic Performance Simulation of a Microturbine Using Flight Test Data. Aerospace, 2022, 9, 60.	1.1	7
72	Plasma Assisted Re-Ignition of Aeroengines under High Altitude Conditions. Aerospace, 2022, 9, 66.	1.1	7

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73	Simulation of Cryogenic Cavitation by Using Both Inertial and Heat Transfer Control Bubble Growth. , 2009, , .		6
74	Assessment of the impact of nanosecond plasma discharge on the combustion of methane air flames. E3S Web of Conferences, 2020, 197, 10001.	0.2	6
75	Ignition thresholds and flame propagation of methane-air mixture: detailed kinetic study coupled with electrical measurements of the nanosecond repetitively pulsed plasma discharges. Journal Physics D: Applied Physics, 2022, 55, 315202.	1.3	6
76	Thermodynamic Effects on Cavitation in Water and Cryogenic Fluids. , 2010, , .		5
77	Performance Improvement of Turbomachinery Using Plasma Actuators. , 2011, , .		5
78	A General Platform for the Modeling and Optimization of Conventional and More Electric Aircrafts. , 2014, , .		5
79	Assessment of the Combustion Behavior of a Pilot-Scale Gas Turbine Burner Using Image Processing. , 2014, , .		5
80	Combustion performance of a low NOx gas turbine combustor using urea addition into liquid fuel. Fuel, 2021, 288, 119701.	3.4	5
81	Cavitation Modeling in Cryogenic Fluids for Liquid Rocket Engine Applications. , 2008, , .		4
82	Spray and Combustion Modeling in High Pressure Cryogenic Jet Flames. , 2012, , .		4
83	Dissipated power and induced velocity fields data of a micro single dielectric barrier discharge plasma actuator for active flow control. Data in Brief, 2015, 5, 65-70.	0.5	4
84	Experimental data regarding the characterization of the flame behavior near lean blowout in a non-premixed liquid fuel burner. Data in Brief, 2016, 6, 189-193.	0.5	4
85	Impact of Population Balance Modeling on the Prediction of Cryogenic Cavitation in Aerospace Propulsion Systems. , 2018, , .		4
86	MEMS Vaporazing Liquid Microthruster: A Comprehensive Review. Applied Sciences (Switzerland), 2021, 11, 8954.	1.3	4
87	Experimental and Numerical Study of Particle Ingestion in Aircraft Engine. , 2013, , .		3
88	Investigating Flow Dynamics with Wireless Pressure Sensors Network. , 2014, , .		3
89	Experimental and Numerical Investigations on the Effect of Different Air-Fuel Mixing Strategies on the Performance of a Lean Liquid Fueled Swirled Combustor. Energy Procedia, 2016, 101, 925-932.	1.8	3
90	Plasma-based flow control for low-pressure turbines at low-Reynolds-number. Aircraft Engineering and Aerospace Technology, 2017, 89, 671-682.	0.8	3

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91	Dynamic performance simulation and control of an aeroengine by using NARX models. MATEC Web of Conferences, 2019, 304, 03005.	0.1	3
92	Data regarding dynamic performance predictions of an aeroengine. Data in Brief, 2020, 31, 105977.	0.5	3
93	Flow regime characterization of a silicon-based vaporizing liquid microthruster. Acta Astronautica, 2022, 193, 691-703.	1.7	3
94	Active Control of Unsteady Cavitating Flows Over Hydrofoil. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142, .	0.8	3
95	Shape Optimization for Cryogenic Cavitating Flows Past an Isolated Hydrofoil. , 2008, , .		2
96	A New Hybrid Method for Wind Power Forecasting Based on Wavelet Decomposition and Artificial Neural Networks. , 2011, , .		2
97	Effect of jet-A1 emulsified fuel on aero-engine performance and emissions. AIP Conference Proceedings, 2019, , .	0.3	2
98	Numerical data concerning the performance estimation of a Vaporizing Liquid Microthruster. Data in Brief, 2019, 22, 307-311.	0.5	2
99	Comparison of Different Physical Models for the Simulation of Cavitating Flows Around a Hydrofoil. , 2005, , 797.		1
100	Ultra Lean Combustion Characterization in a Pilot-Scale Gas Turbine Burner Using Image Processing Techniques. , 2015, , .		1
101	Comparison of numerical predictions of the supersonic expansion inside micronozzles of micro–resistojets. MATEC Web of Conferences, 2019, 304, 02012.	0.1	1
102	Ozone Production With Plasma Discharge: Comparisons Between Activated Air and Activated Fuel/Air Mixture. , 2021, , .		1
103	Comparisons of Different Wind Power Forecasting Systems. , 2010, , .		1
104	Liquid dynamics sloshing in cylindrical containers: A 3D free-surface reconstruction dataset. Data in Brief, 2020, 33, 106546.	0.5	1
105	Model-based dynamic performance simulation of a microturbine. IOP Conference Series: Materials Science and Engineering, 2022, 1226, 012032.	0.3	1
106	Experimental Study of Thermal Cavitation in an Orifice. , 2006, , 523.		0
107	Analysis of Thermal Effects in a Cavitating Orifice Using Rayleigh Equation and Experiments. , 2009, , .		0
108	A Neural Network Approach to Analyse Cavitating Flow Regime in an Internal Orifice. , 2012, , .		0

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109	Plasma Actuation to Enhance the Flame Stabilization in a Non-Premixed Lean Microburner. , 2015, , .		0
110	Editorial Special Issue "Combustion and Propulsion" Energies, 2017, 10, 824.	1.6	0
111	Active Sensors/Actuators-Based Flow and Noise Control for Aerospace Applications. Lecture Notes in Electrical Engineering, 2018, , 185-196.	0.3	0
112	Mode decomposition methods for the analysis of cavitating flows in turbomachinery. Energy Procedia, 2018, 148, 924-931.	1.8	0
113	Numerical Investigation of Non-Isothermal Cavitating Flows on Hydrofoils by Means of an Extended Schnerr-Sauer Model Coupled With a Nucleation Model. , 2018, , .		0
114	Dielectric barrier discharge plasma actuator effect on unsteady aerodynamic behavior of a pitching airfoil. AIP Conference Proceedings, 2019, , .	0.3	0
115	Impact of plasma actuation on the stability of a co-flow premixed methane-air flame under lean conditions. AIP Conference Proceedings, 2019, , .	0.3	0
116	Dielectric Barrier Discharge Plasma Actuator for Load Alleviation and Instability Control in a Compressor Cascade. MATEC Web of Conferences, 2019, 304, 01006.	0.1	0
117	Data regarding the computational fluid dynamics simulations of an airfoil with plasma actuator in unsteady flow. Data in Brief, 2020, 29, 105286.	0.5	0
118	Experimental data regarding the effects of urea addition into liquid fuel to combustion enhancement of a low NOx gas turbine combustor. Data in Brief, 2021, 34, 106702.	0.5	0
119	Thrust Augmentation of Micro-Resistojets by Steady Micro-Jet Blowing into Planar Micro-Nozzle. Applied Sciences (Switzerland), 2021, 11, 5821.	1.3	0
120	Special Issue "Active Flow Control Technologies for Energy and Propulsive Systems" Applied Sciences (Switzerland), 2020, 10, 221.	1.3	0
121	Effects of plasma kinetic modeling on performance characterization of plasma actuators for active flow control. E3S Web of Conferences, 2020, 197, 10004.	0.2	0
122	Enhancement of Blowout Limits in Lifted Swirled Flames in Methane-Air Combustor by the Use of Sinusoidally Driven Plasma Discharges. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2022, , 66-82.	0.2	0
123	Dataset of numerical simulations for aeroelastic control of an aero engine compressor cascade using plasma actuators. Data in Brief, 2021, 39, 107584.	0.5	0