

# Francesco Grimaccia

## List of Publications by Year in descending order

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Version: 2024-02-01

73  
papers

2,329  
citations

236925

25  
h-index

315739

38  
g-index

73  
all docs

73  
docs citations

73  
times ranked

2081  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis and validation of 24 hours ahead neural network forecasting of photovoltaic output power. <i>Mathematics and Computers in Simulation</i> , 2017, 131, 88-100.	4.4	221
2	Light Unmanned Aerial Vehicles (UAVs) for Cooperative Inspection of PV Plants. <i>IEEE Journal of Photovoltaics</i> , 2014, 4, 1107-1113.	2.5	188
3	A Physical Hybrid Artificial Neural Network for Short Term Forecasting of PV Plant Power Output. <i>Energies</i> , 2015, 8, 1138-1153.	3.1	152
4	Innovative Automated Control System for PV Fields Inspection and Remote Control. <i>IEEE Transactions on Industrial Electronics</i> , 2015, 62, 7287-7296.	7.9	118
5	Pitch angle control using hybrid controller for all operating regions of SCIG wind turbine system. <i>Renewable Energy</i> , 2014, 70, 197-203.	8.9	116
6	Genetical Swarm Optimization: Self-Adaptive Hybrid Evolutionary Algorithm for Electromagnetics. <i>IEEE Transactions on Antennas and Propagation</i> , 2007, 55, 781-785.	5.1	104
7	Hybrid Predictive Models for Accurate Forecasting in PV Systems. <i>Energies</i> , 2013, 6, 1918-1929.	3.1	83
8	Planning for PV plant performance monitoring by means of unmanned aerial systems (UAS). <i>International Journal of Energy and Environmental Engineering</i> , 2015, 6, 47-54.	2.5	83
9	Survey on PV Modulesâ€™ Common Faults After an O&M Flight Extensive Campaign Over Different Plants in Italy. <i>IEEE Journal of Photovoltaics</i> , 2017, 7, 810-816.	2.5	78
10	Thermal and Performance Analysis of a Photovoltaic Module with an Integrated Energy Storage System. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 1107.	2.5	74
11	PV plant digital mapping for modulesâ€™ defects detection by unmanned aerial vehicles. <i>IET Renewable Power Generation</i> , 2017, 11, 1221-1228.	3.1	68
12	Performance Analysis of a Single-Axis Tracking PV System. <i>IEEE Journal of Photovoltaics</i> , 2012, 2, 524-531.	2.5	66
13	Improving Transient Stability in a Grid-Connected Squirrel-Cage Induction Generator Wind Turbine System Using a Fuzzy Logic Controller. <i>Energies</i> , 2015, 8, 6328-6349.	3.1	48
14	Comparison of Training Approaches for Photovoltaic Forecasts by Means of Machine Learning. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 228.	2.5	46
15	ANN Sizing Procedure for the Day-Ahead Output Power Forecast of a PV Plant. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 622.	2.5	45
16	Comparison of echo state network and feed-forward neural networks in electrical load forecasting for demand response programs. <i>Mathematics and Computers in Simulation</i> , 2021, 184, 282-293.	4.4	45
17	Architecture and Methods for Innovative Heterogeneous Wireless Sensor Network Applications. <i>Remote Sensing</i> , 2012, 4, 1146-1161.	4.0	35
18	Novel Speed-Bump Design and Optimization for Energy Harvesting From Traffic. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2013, 14, 1983-1991.	8.0	35

#	ARTICLE	IF	CITATIONS
19	An Evolutionary-Based MPPT Algorithm for Photovoltaic Systems under Dynamic Partial Shading. Applied Sciences (Switzerland), 2018, 8, 558.	2.5	35
20	IR real-time analyses for PV system monitoring by digital image processing techniques. , 2015, , .		33
21	Review of O&M Practices in PV Plants: Failures, Solutions, Remote Control, and Monitoring Tools. IEEE Journal of Photovoltaics, 2020, 10, 914-926.	2.5	33
22	Novel Speed Bumps Design and Optimization for Vehicles' Energy Recovery in Smart Cities. Energies, 2012, 5, 4624-4642.	3.1	31
23	Design of Tubular Permanent Magnet Generators for Vehicle Energy Harvesting by Means of Social Network Optimization. IEEE Transactions on Industrial Electronics, 2018, 65, 1884-1892.	7.9	30
24	Optimization Models for Islanded Micro-Grids: A Comparative Analysis between Linear Programming and Mixed Integer Programming. Energies, 2017, 10, 241.	3.1	29
25	PV power plant inspection by image mosaicing techniques for IR real-time images. , 2016, , .		28
26	Hybrid model analysis and validation for PV energy production forecasting. , 2014, , .		27
27	Image resolution and defects detection in PV inspection by unmanned technologies. , 2016, , .		27
28	Automatic Boundary Extraction of Large-Scale Photovoltaic Plants Using a Fully Convolutional Network on Aerial Imagery. IEEE Journal of Photovoltaics, 2020, 10, 1061-1067.	2.5	27
29	Neuro-fuzzy predictive model for PV energy production based on weather forecast. , 2011, , .		26
30	Comparison of power quality in different grid-integrated wind turbines. , 2014, , .		26
31	A Computer Vision Line-Tracking Algorithm for Automatic UAV Photovoltaic Plants Monitoring Applications. Energies, 2020, 13, 838.	3.1	25
32	Advanced Asset Management Tools in Photovoltaic Plant Monitoring: UAV-Based Digital Mapping. Energies, 2019, 12, 4736.	3.1	24
33	Weather-based machine learning technique for Day-Ahead wind power forecasting. , 2017, , .		22
34	Machine Learning-Based Detection Technique for NDT in Industrial Manufacturing. Mathematics, 2021, 9, 1251.	2.2	22
35	PV power plant inspection by UAS: Correlation between altitude and detection of defects on PV modules. , 2015, , .		21
36	Short Term Electric Power Load Forecasting Using Principal Component Analysis and Recurrent Neural Networks. Forecasting, 2022, 4, 149-164.	2.8	19

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37	SOCIAL NETWORK OPTIMIZATION FOR MICROWAVE CIRCUITS DESIGN. Progress in Electromagnetics Research C, 2015, 58, 51-60.	0.9	18
38	Optimal Task Allocation in Wireless Sensor Networks by Means of Social Network Optimization. Mathematics, 2019, 7, 315.	2.2	18
39	Improving LVRT characteristics in variable-speed wind power generation by means of fuzzy logic. , 2014, , .		16
40	A new algorithm for antenna optimization in aerospace applications: The sounding rocket test case. , 2013, , .		15
41	Genetical Swarm Optimization of Multihop Routes in Wireless Sensor Networks. Applied Computational Intelligence and Soft Computing, 2010, 2010, 1-14.	2.3	12
42	Optimization of an energy harvesting buoy for coral reef monitoring. , 2013, , .		12
43	Impact of SCIG, DFIG wind power plant on IEEE 14 bus system with small signal stability assessment. , 2014, , .		12
44	Blockchain as Key Enabling Technology for Future Electric Energy Exchange: A Vision. IEEE Access, 2020, 8, 205250-205271.	4.2	11
45	OPTIMIZATION OF A DUAL RING ANTENNA BY MEANS OF ARTIFICIAL NEURAL NETWORK. Progress in Electromagnetics Research B, 2014, 58, 59-69.	1.0	10
46	Optimal management algorithm for battery energy storage system included in an islanded Micro-Grid. , 2016, , .		10
47	Assessment of PV Plant Monitoring System by Means of Unmanned Aerial Vehicles. , 2018, , .		10
48	Small signal stability of power system with SCIG, DFIG wind turbines. , 2014, , .		9
49	Advanced predictive models towards PV energy integration in smart grid. , 2012, , .		8
50	Experimental comparison of MPPT methods for PV systems under dynamic partial shading conditions. , 2016, , .		8
51	Hybrid controller for transient stability in wind generators. , 2015, , .		7
52	SNO design of microstrip antennas for an experimental rocket. , 2014, , .		6
53	Risk Analysis of the Future Implementation of a Safety Management System for Multiple RPAS Based on First Demonstration Flights. Electronics (Switzerland), 2017, 6, 50.	3.1	6
54	Modeling and Performance Evaluation of a Fuzzy Logic Controller for Buck-Boost DC/DC Converters. , 2018, , .		6

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55	Comparison of Binary Evolutionary Algorithms for Optimization of Thinned Array Antennas. , 2018, , .		5
56	Optimal Computational Distribution of Social Network Optimization in Wireless Sensor Networks. , 2018, , .		5
57	Social Network Optimization for WSN Routing: Analysis on Problem Codification Techniques. Mathematics, 2020, 8, 583.	2.2	5
58	A hybrid Fuzzy-PI cascade controller for transient stability improvement in DFIG wind generators. , 2016, , .		4
59	Seamless Grid: an off-chain model proposal for scalable P2P electricity markets and grids management. , 2019, , .		4
60	Stability Analysis and Optimal Energy Management of a Stand-Alone Hybrid Micro-Grid. , 2018, , .		3
61	Optimization Environment Definition for Beam Steering Reflectarray Antenna Design. Mathematics, 2022, 10, 33.	2.2	3
62	Evolutionary techniques for sensor networks energy optimization in marine environmental monitoring. Proceedings of SPIE, 2012, , .	0.8	2
63	Regulatory and Standardization Process for Unconventional Aircraft in Light UAV Segment. , 0, , .		2
64	Hybrid Power System Optimization in Mission-Critical Communication. Electronics (Switzerland), 2020, 9, 1971.	3.1	2
65	Hybrid Renewable Power System for Radio Networks in Mission Critical Applications. , 2020, , .		2
66	Photovoltaic Plant Inspection by means of UAV: current practices and future perspectives. , 2021, , .		2
67	Architecture and methods for UAV-based heterogeneous sensor network applications. , 2012, , .		1
68	A comparison between SNO and PSO for reflect-array optimization. , 2016, , .		1
69	SNO multi-objective implementation for sparse array optimization. , 2017, , .		1
70	Effect of introduction of hypotheses in Antenna Optimization: Thinned array test case. , 2018, , .		1
71	Analysis of Photovoltaic Five-Parameter Model. , 2018, , .		1
72	Airborne Unmanned Monitoring System for Coastal Erosion Assessment. , 2014, , 115-120.		1

#	ARTICLE	IF	CITATIONS
73	A new evolutionary algorithm for sparse array optimization. , 2016, , .		0