Lucian Mihet-Popa

List of Publications by Citations

92 papers	1,343 citations	19 h-index	33 g-index
114 ext. papers	2,127 ext. citations	3.3 avg, IF	5.31 L-index

#	Paper	IF	Citations
92	A Comprehensive Study of Key Electric Vehicle (EV) Components, Technologies, Challenges, Impacts, and Future Direction of Development. *Energies*, **2017**, 10, 1217	3.1	234
91	. *IEEE Access*, **2020**, 8, 74432-74457	3.5	118
90	Wind turbine Generator modeling and Simulation where rotational speed is the controlled variable. *IEEE Transactions on Industry Applications*, **2004**, 40, 3-10	4.3	76
89	Constant Power Loads (CPL) with Microgrids: Problem Definition, Stability Analysis and Compensation Techniques. *Energies*, **2017**, 10, 1656	3.1	53
88	Cyber-Physical Power System (CPPS): A Review on Modeling, Simulation, and Analysis With Cyber Security Applications. *IEEE Access*, **2020**, 8, 151019-151064	3.5	44
87	Evaluation of Mathematical Model to Characterize the Performance of Conventional and Hybrid PV Array Topologies under Static and Dynamic Shading Patterns. *Energies*, **2020**, 13, 3216	3.1	40
86	Maximum Power Point Tracking for Brushless DC Motor-Driven Photovoltaic Pumping Systems Using a Hybrid ANFIS-FLOWER Pollination Optimization Algorithm. *Energies*, **2018**, 11, 1067	3.1	32
85	Energy Management Strategy for Rural Communities DC Micro Grid Power System Structure with Maximum Penetration of Renewable Energy Sources. *Applied Sciences (Switzerland)*, **2018**, 8, 585	2.6	30
84	Model Predictive Controller for Active Demand Side Management with PV self-consumption in an intelligent building **2012**,		30
83	. *IEEE Access*, **2021**, 9, 69235-69266	3.5	30
82	Power Balancing Control for Grid Energy Storage System in Photovoltaic Applications Real Time Digital Simulation Implementation. *Energies*, **2017**, 10, 928	3.1	29
81	Review on Inductive Wireless Power Transfer Charging for Electric vehicles A Review. *IEEE Access*, **2021**, 1-1	3.5	28
80	Grid-Tied Photovoltaic and Battery Storage Systems with Malaysian Electricity Tariff A Review on Maximum Demand Shaving. *Energies*, **2017**, 10, 1884	3.1	27
79	Study and Analysis of an Intelligent Microgrid Energy Management Solution with Distributed Energy Sources. *Energies*, **2017**, 10, 1419	3.1	26
78	An Assessment of Onshore and Offshore Wind Energy Potential in India Using Moth Flame Optimization. *Energies*, **2020**, 13, 3063	3.1	24
77	Minimization of Load Variance in Power Grids Investigation on Optimal Vehicle-to-Grid Scheduling. *Energies*, **2017**, 10, 1880	3.1	24
76	Electrical Vehicle Batteries Testing in a Distribution Network Using Sustainable Energy. *IEEE Transactions on Smart Grid*, **2014**, 5, 1033-1042	10.7	23

75	A Review on Optimization and Control Methods Used to Provide Transient Stability in Microgrids. *Energies*, **2019**, 12, 3582	3.1	22
74	An Overview of Energy Scenarios, Storage Systems and the Infrastructure for Vehicle-to-Grid Technology. *Energies*, **2018**, 11, 2174	3.1	19
73	Closed-Loop Control and Performance Evaluation of Reduced Part Count Multilevel Inverter Interfacing Grid-Connected PV System. *IEEE Access*, **2020**, 8, 75691-75701	3.5	18
72	A Modified High Voltage Gain Quasi-Impedance Source Coupled Inductor Multilevel Inverter for Photovoltaic Application. *Energies*, **2020**, 13, 874	3.1	16
71	Control Strategy for a Grid-Connected Inverter under Unbalanced Network Conditions—A Disturbance Observer-Based Decoupled Current Approach. *Energies*, **2017**, 10, 1067	3.1	16
70	Toward Green Vehicles Digitalization for the Next Generation of Connected and Electrified Transport Systems. *Energies*, **2018**, 11, 3124	3.1	16
69	Sliding Mode Controller and Lyapunov Redesign Controller to Improve Microgrid Stability: A Comparative Analysis with CPL Power Variation. *Energies*, **2017**, 10, 1959	3.1	15
68	Grid Synchronization of a Seven-Phase Wind Electric Generator Using d-q PLL. *Energies*, **2017**, 10, 926	3.1	15
67	A novel Sustainable Development Goal 7 composite index as the paradigm for energy sustainability assessment: A case study from Europe. *Applied Energy*, **2021**, 118173	10.7	15
66	Hybrid PV-Wind, Micro-Grid Development Using Quasi-Z-Source Inverter Modeling and Control—Experimental Investigation. *Energies*, **2018**, 11, 2277	3.1	15
65	A Hybridization of Cuk and Boost Converter Using Single Switch with Higher Voltage Gain Compatibility. *Energies*, **2020**, 13, 2312	3.1	14
64	Technical and Economic Analysis of One-Stop Charging Stations for Battery and Fuel Cell EV with Renewable Energy Sources. *Energies*, **2020**, 13, 2855	3.1	14
63	Infrared Thermography Based Defects Testing of Solar Photovoltaic Panel with Fuzzy Rule-Based Evaluation. *Energies*, **2020**, 13, 1343	3.1	14
62	An Evaluation on Wind Energy Potential Using Multi-Objective Optimization Based Non-Dominated Sorting Genetic Algorithm III. *Sustainability*, **2021**, 13, 410	3.6	13
61	A Hybrid RES Distributed Generation System for Autonomous Islands: A DER-CAM and Storage-Based Economic and Optimal Dispatch Analysis. *Sustainability*, **2017**, 9, 2010	3.6	12
60	A Comprehensive Study of Key Electric Vehicle (EV) Components, Technologies, Challenges, Impacts, and Future Direction of Development		12
59	Fast Charging and Smart Charging Tests for Electric Vehicles Batteries Using Renewable Energy. *Oil and Gas Science and Technology*, **2016**, 71, 13	1.9	12
58	Hybrid Micro-Grids Exploiting Renewables Sources, Battery Energy Storages, and Bi-Directional Converters. *Applied Sciences (Switzerland)*, **2019**, 9, 4973	2.6	12

57	Electric Vehicles Charging Stations Architectures, Criteria, Power Converters, and Control Strategies in Microgrids. *Electronics (Switzerland)*, **2021**, 10, 1895	2.6	12
56	A Comprehensive Survey on Different Control Strategies and Applications of Active Power Filters for Power Quality Improvement. *Energies*, **2021**, 14, 4589	3.1	11
55	State-of-the-art sustainable approaches for deeper decarbonization in Europe An endowment to climate neutral vision. *Renewable and Sustainable Energy Reviews*, **2022**, 159, 112204	16.2	10
54	. *IEEE Access*, **2020**, 8, 175788-175804	3.5	10
53	Frequency Splitting Elimination and Cross-Coupling Rejection of Wireless Power Transfer to Multiple Dynamic Receivers. *Applied Sciences (Switzerland)*, **2018**, 8, 179	2.6	9
52	Wind energy integration via residential appliances. *Energy Efficiency*, **2017**, 10, 319-329	3	8
51	Three-stage control architecture for cascaded H-Bridge inverters in large-scale PV systems Real time simulation validation. *Applied Energy*, **2018**, 229, 1111-1127	10.7	7
50	Real-Time Analysis of a Modified State Observer for Sensorless Induction Motor Drive Used in Electric Vehicle Applications. *Energies*, **2017**, 10, 1077	3.1	7
49	Probabilistic Optimization Techniques in Smart Power System. *Energies*, **2022**, 15, 825	3.1	7
48	Fast Computation of Highly Oscillatory ODE Problems: Applications in High-Frequency Communication Circuits. *Symmetry*, **2022**, 14, 115	2.7	7
47	Power Quality Performance Analysis of grid tied PV fed Parallel Pumping System under Normal and Vibrating Condition. *Energy Procedia*, **2018**, 145, 497-503	2.3	7
46	A holistic review on Cyber-Physical Power System (CPPS) testbeds for secure and sustainable electric power grid Part : Background on CPPS and necessity of CPPS testbeds. *International Journal of Electrical Power and Energy Systems*, **2022**, 136, 107718	5.1	6
45	Control Architecture for Cascaded H-Bridge Inverters in Large-Scale PV Systems. *Energy Procedia*, **2018**, 145, 549-557	2.3	6
44	Reconfiguration of a Multilevel Inverter with Trapezoidal Pulse Width Modulation. *Energies*, **2018**, 11, 2148	3.1	5
43	Battery management system test platform developed for electric vehicle applications **2015**,		4
42	Thermal Analysis of Power Rectifiers in Steady-State Conditions. *Energies*, **2020**, 13, 1942	3.1	4
41	Charging and discharging tests for obtaining an accurate dynamic electro-thermal model of high power lithium-ion pack system for hybrid and EV applications **2013**,		4
40	Neutral Point Clamped Transformer-Less Multilevel Converter for Grid-Connected Photovoltaic System. *Electronics (Switzerland)*, **2021**, 10, 977	2.6	4

39	Solar-Based DG Allocation Using Harris Hawks Optimization While Considering Practical Aspects. *Energies*, **2021**, 14, 5206	3.1	4
38	Considerations Regarding the Design of a Minimum Variance Control System for an Induction Generator. *Electronics (Switzerland)*, **2019**, 8, 532	2.6	3
37	. *IEEE Access*, **2021**, 1-1	3.5	3
36	Modeling and Simulation of a 12 MW Wind Farm. *Advances in Electrical and Computer Engineering*, **2010**, 10, 141-144	1.3	3
35	A specialized review on outlook of future Cyber-Physical Power System (CPPS) testbeds for securing electric power grid. *International Journal of Electrical Power and Energy Systems*, **2022**, 136, 107720	5.1	3
34	AI4People. *International Journal of Technoethics*, **2021**, 12, 101-125	0.9	3
33	A Buck-Chopper Based Energy Storage System for the Cascaded H-Bridge Inverters in PV Applications. *Energy Procedia*, **2018**, 145, 534-541	2.3	3
32	Investigations of power quality disturbances in a variable speed parallel pumping system with grid tied solar PV. *Energy Procedia*, **2018**, 145, 490-496	2.3	3
31	The Motivation for Incorporation of Microgrid Technology in Rooftop Solar Photovoltaic Deployment to Enhance Energy Economics. *Sustainability*, **2020**, 12, 10365	3.6	2
30	Analysis of 132kV/33kV 15MVA power transformer dissolved gas using transport-X Kelman Kit through Duval's triangle and Roger's Ratio prediction **2018**,		2
29	Modified SEPIC boost converter with constant switching frequency modulation using sliding mode controller **2018**,		2
28	Issues regarding the modeling and simulation of wind energy conversion systems components **2008**,		2
27	Assessment of Thermophysical Performance of Ester-Based Nanofluids for Enhanced Insulation Cooling in Transformers. *Electronics (Switzerland)*, **2022**, 11, 376	2.6	2
26	A Novel Energy-Safe Algorithm for Enhancing the Battery Life for IoT Sensors Applications. *Energies*, **2021**, 14, 6613	3.1	2
25	A Modified Topology of a High Efficiency Bidirectional Type DC DC Converter by Synchronous Rectification. *Electronics (Switzerland)*, **2020**, 9, 1555	2.6	2
24	Reinforced Demand Side Management for Educational Institution with Incorporation of Users Comfort. *Energies*, **2021**, 14, 2855	3.1	2
23	Controller Parameters Optimization for Multi-Terminal DC Power System Using Ant Colony Optimization. *IEEE Access*, **2021**, 9, 59910-59919	3.5	2
22	. *IEEE Access*, **2021**, 9, 125658-125677	3.5	2

21	A Novel Hybrid Feature Selection Method for Day-Ahead Electricity Price Forecasting. *Energies*, **2021**, 14, 8455	3.1	2
20	A Review of BLDC Motor: State of Art, Advanced Control Techniques, and Applications. *IEEE Access*, **2022**, 1-1	3.5	2
19	Potential Energy Flexibility for a Hot-Water Based Heating System in Smart Buildings via Economic Model Predictive Control **2017**,		1
18	Simulation models developed for voltage control in a distribution network using energy storage systems for PV penetration **2013**,		1
17	Analysis by numerical simulation regarding the stability of the synchronous generator operating in autonomous or grid connected regime **2009**,		1
16	Fault Detection Methods for Frequency Converters Fed Induction Machines **2007**,		1
15	Managing the Demand in a Micro Grid Based on Load Shifting with Controllable Devices Using Hybrid WFS2ACSO Technique. *Energies*, **2022**, 15, 790	3.1	1
14	A holistic review on Cyber-Physical Power System (CPPS) testbeds for secure and sustainable electric power grid Part II: Classification, overview and assessment of CPPS testbeds. *International Journal of Electrical Power and Energy Systems*, **2021**, 137, 107721	5.1	1
13	Mitigation of circulating current with effective energy management in low-power PV-FC-battery-microgrid. *International Transactions on Electrical Energy Systems*, **2021**, 31, e12899	2.2	1
12	A Novel Control Approach to Hybrid Multilevel Inverter for High-Power Applications. *Energies*, **2021** , 14, 4563	3.1	1
11	A Robust Multilevel Inverter Topology for Operation under Fault Conditions. *Electronics (Switzerland)*, **2021**, 10, 3099	2.6	1
10	FPGA Implementation of AI-Based Inverter IGBT Open Circuit Fault Diagnosis of Induction Motor Drives. *Micromachines*, **2022**, 13, 663	3.3	1
9	Investigation on Current and Prospective Energy Transition Scenarios in Indian Landscape Using Integrated SWOT-MCDA Methodology. *Sustainability*, **2022**, 14, 4940	3.6	1
8	Hardware Implementation and a New Adaptation in the Winding Scheme of Standard Three Phase Induction Machine to Utilize for Multifunctional Operation: A New Multifunctional Induction Machine. *Energies*, **2017**, 10, 1757	3.1	0
7	A Hybrid Sailfish Whale Optimization and Deep Long Short-Term Memory (SWO-DLSTM) Model for Energy Efficient Autonomy in India by 2048. *Sustainability*, **2022**, 14, 1355	3.6	0
6	Flashover Voltage Prediction Models under Agricultural and Biological Contaminant Conditions on Insulators. *Energies*, **2022**, 15, 1297	3.1	0
5	Hybrid Multicarrier Random Space Vector PWM for the Mitigation of Acoustic Noise. *Electronics (Switzerland)*, **2021**, 10, 1483	2.6	0
4	. *IEEE Access*, **2021**, 9, 9481-9492	3.5	0

3	Influence of Area and Volume Effect on Dielectric Behaviour of the Mineral Oil-Based Nanofluids. *Energies*, **2022**, 15, 3354	3.1	0
2	Exhaustive Modeling of Electric Vehicle Dynamics, Powertrain and Energy Storage/Conversion for Electrical Component Sizing and Diagnostic. *Lecture Notes in Electrical Engineering*, **2020**, 433-440	0.2	
1	Incorporation of Microgrid Technology Solutions to Reduce Power Loss in a Distribution Network with Elimination of Inefficient Power Conversion Strategies. *Sustainability*, **2021**, 13, 13882	3.6	