Dr M Premkumar

List of Publications by Citations

51 papers	694 citations	14 h-index	24 g-index
64 ext. papers	1,256 ext. citations	2.5 avg, IF	5.43 L-index

#	Paper	IF	Citations
51	A new stochastic slime mould optimization algorithm for the estimation of solar photovoltaic cell parameters. *Optik*, **2020**, 223, 165277	2.5	73
50	A new metaphor-less algorithms for the photovoltaic cell parameter estimation. *Optik*, **2020**, 208, 164559	2.5	59
49	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
48	MOSMA: Multi-Objective Slime Mould Algorithm Based on Elitist Non-Dominated Sorting. *IEEE Access*, **2021**, 9, 3229-3248	3.5	42
47	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
46	A New Arithmetic Optimization Algorithm for Solving Real-World Multiobjective CEC-2021 Constrained Optimization Problems: Diversity Analysis and Validations. *IEEE Access*, **2021**, 9, 84263-84295	3.5	35
45	Enhanced chaotic JAYA algorithm for parameter estimation of photovoltaic cell/modules. *ISA Transactions*, **2021**, 116, 139-166	5.5	33
44	An effective maximum power point tracker for partially shaded solar photovoltaic systems. *Energy Reports*, **2019**, 5, 1445-1462	4.6	27
43	Mathematical Modelling of Solar Photovoltaic Cell/Panel/Array based on the Physical Parameters from the Manufacturer's Datasheet. *International Journal of Renewable Energy Development*, **2020**, 9, 7-22	1.5	25
42	MOGBO: A new Multiobjective Gradient-Based Optimizer for real-world structural optimization problems. *Knowledge-Based Systems*, **2021**, 218, 106856	7.3	24
41	Identification of Solar Photovoltaic Model Parameters Using an Improved Gradient-Based Optimization Algorithm With Chaotic Drifts. *IEEE Access*, **2021**, 9, 62347-62379	3.5	24
40	Improved Perturb and Observation Maximum Power Point Tracking Technique for Solar Photovoltaic Power Generation Systems. *IEEE Systems Journal*, **2021**, 15, 3024-3035	4.3	23
39	Certain Study on MPPT Algorithms to track the Global MPP under Partial Shading on Solar PV Module/Array. *International Journal of Computing and Digital Systems*, **2019**, 8, 405-416	1.6	18
38	. *IEEE Access*, **2021**, 9, 84982-85016	3.5	17
37	Design and Implementation of New Topology for Solar PV Based Transformerless Forward Microinverter. *Journal of Electrical Engineering and Technology*, **2019**, 14, 145-155	1.4	13
36	A novel non-isolated high step-up DC-DC boost converter using single switch for renewable energy systems. *Electrical Engineering*, **2020**, 102, 811-829	1.5	12
35	A New Metaheuristic Optimization Algorithms for Brushless Direct Current Wheel Motor Design Problem. *Computers, Materials and Continua*, **2021**, 67, 2227-2242	3.9	12

34	A novel salp swarm assisted hybrid maximum power point tracking algorithm for the solar photovoltaic power generation systems. *Automatika*, **2021**, 62, 1-20	1.6	11
33	Extraction of uncertain parameters of single-diode photovoltaic module using hybrid particle swarm optimization and grey wolf optimization algorithm. *Materials Today: Proceedings*, **2021**, 46, 5315-5321	1.4	11
32	Design and Implementation of New Topology for Nonisolated DC-DC Microconverter with Effective Clamping Circuit. *Journal of Circuits, Systems and Computers*, **2019**, 28, 1950082	0.9	10
31	Analysis and Implementation of High-Performance DC-DC Step-Up Converter for Multilevel Boost Structure. *Frontiers in Energy Research*, **2019**, 7,	3.8	10
30	An efficient multi-thresholding based COVID-19 CT images segmentation approach using an improved equilibrium optimizer. *Biomedical Signal Processing and Control*, **2022**, 73, 103401	4.9	9
29	Design and Development of Non-Isolated Modified SEPIC DC-DC Converter Topology for High-Step-Up Applications: Investigation and Hardware Implementation. *Energies*, **2020**, 13, 3960	3.1	8
28	A Review on Solar PV Based Grid Connected Microinverter Control Schemes and Topologies. *International Journal of Renewable Energy Development*, **2018**, 7, 171-182	1.5	7
27	A holistic review on the integration of heat pipes in solar thermal and photovoltaic systems. *Solar Energy*, **2021**, 227, 577-605	6.8	7
26	Orthogonal learning-based Gray Wolf Optimizer for identifying the uncertain parameters of various photovoltaic models. *Optik*, **2021**, 247, 167973	2.5	7
25	An Effective Solar Photovoltaic Module Parameter Estimation Technique for Single-Diode Model. *IOP Conference Series: Materials Science and Engineering*, **2020**, 937, 012014	0.4	6
24	A holistic review on Cyber-Physical Power System (CPPS) testbeds for secure and sustainable electric power grid – Part I: Background on CPPS and necessity of CPPS testbeds. *International Journal of Electrical Power and Energy Systems*, **2022**, 136, 107718	5.1	6
23	Analysis and Simulation of Bio-Inspired Intelligent Salp Swarm MPPT Method for the PV Systems under Partial Shaded Conditions. *International Journal of Computing and Digital Systems*, **2019**, 8, 489-496	1.6	5
22	A New and Reliable Objective Functions for Extracting the Unknown Parameters of Solar Photovoltaic Cell Using Political Optimizer Algorithm **2020**,		5
21	AN APPROACH FOR IMPROVING THE LABELLING IN A TEXT CORPORA USING SENTIMENT ANALYSIS. *Advances in Mathematics: Scientific Journal (discontinued)*, **2020**, 9, 8165-8174	1.6	5
20	BHGSO: Binary Hunger Games Search Optimization Algorithm for Feature Selection Problem. *Computers, Materials and Continua*, **2022**, 70, 557-579	3.9	5
19	Renewable sources-based automatic load frequency control of interconnected systems using chaotic atom search optimization. *Applied Soft Computing Journal*, **2022**, 119, 108574	7.5	4
18	A Comparative Study and Analysis on Conventional Solar PV Based DC-DC Converters and MPPT Techniques. *Indonesian Journal of Electrical Engineering and Computer Science*, **2018**, 11, 831	1.6	4
17	Design of Nonlinear Uncertainty Controller for Grid-Tied Solar Photovoltaic System Using Sliding Mode Control. *Energy Engineering: Journal of the Association of Energy Engineers*, **2020**, 117, 481-495	0.6	4

16	Survey of Image Processing Based Applications in AMR. *Review of Computer Engineering Research*, **2018**, 5, 12-19	1	4
15	Analysis of Fractional Order Sliding Mode Control in a D-STATCOM Integrated Power Distribution System. *IEEE Access*, **2021**, 9, 70337-70352	3.5	4
14	MOMPA: Multi-objective marine predator algorithm for solving multi-objective optimization problems. *Evolutionary Intelligence*,1	1.7	4
13	MOTEO: A novel physics-based multiobjective thermal exchange optimization algorithm to design truss structures. *Knowledge-Based Systems*, **2022**, 242, 108422	7.3	4
12	Modelling and Implementation of Cascaded Multilevel Inverter as Solar PV Based Microinverter Using FPGA. *International Journal of Intelligent Engineering and Systems*, **2018**, 11, 18-27	1.6	3
11	Many-Objective Gradient-Based Optimizer to Solve Optimal Power Flow Problems: Analysis and Validations. *Engineering Applications of Artificial Intelligence*, **2021**, 106, 104479	7.2	3
10	Opposition decided gradient-based optimizer with balance analysis and diversity maintenance for parameter identification of solar photovoltaic models. *Journal of Ambient Intelligence and Humanized Computing*,1	3.7	3
9	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
8	Stability assessment and performance analysis of new controller for power quality conditioning in microgrids. *International Transactions on Electrical Energy Systems*, **2021**, 31, e12891	2.2	3
7	A dataset of the study on design parameters for the solar photovoltaic charge controller. *Data in Brief*, **2018**, 21, 1954-1962	1.2	3
6	IRKO: An Improved Runge-Kutta Optimization Algorithm for Global Optimization Problems. *Computers, Materials and Continua*, **2022**, 70, 4803-4827	3.9	2
5	Constraint estimation in three-diode solar photovoltaic model using Gaussian and Cauchy mutation-based hunger games search optimizer and enhanced Newton-Raphson method. *IET Renewable Power Generation*,	2.9	2
4	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
3	Design and development of low-cost photovoltaic module characterization educational demonstration tool. *Materials Today: Proceedings*, **2021**, 46, 5433-5440	1.4	1
2	A new maximum power point tracking technique based on whale optimisation algorithm for solar photovoltaic systems. *International Journal of Ambient Energy*,1-11	2	1
1	Scheduling Task to Heterogeneous Processors by Modified ACO Algorithm. *Advances in Intelligent Systems and Computing*, **2019**, 565-576	0.4	0