# Dr M Premkumar

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 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 | 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 |
| 50 | 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 |
| 49 | IRKO: An Improved Runge-Kutta Optimization Algorithm for Global Optimization Problems. *Computers, Materials and Continua*, **2022**, 70, 4803-4827 | 3.9 | 2 |
| 48 | 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 |
| 47 | 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 |
| 46 | BHGSO: Binary Hunger Games Search Optimization Algorithm for Feature Selection Problem. *Computers, Materials and Continua*, **2022**, 70, 557-579 | 3.9 | 5 |
| 45 | MOTEO: A novel physics-based multiobjective thermal exchange optimization algorithm to design truss structures. *Knowledge-Based Systems*, **2022**, 242, 108422 | 7.3 | 4 |
| 44 | 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 |
| 43 | 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 |
| 42 | MOGBO: A new Multiobjective Gradient-Based Optimizer for real-world structural optimization problems. *Knowledge-Based Systems*, **2021**, 218, 106856 | 7.3 | 24 |
| 41 | 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 |
| 40 | 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 |
| 39 | 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 |
| 38 | 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 |
| 37 | Design and development of low-cost photovoltaic module characterization educational demonstration tool. *Materials Today: Proceedings*, **2021**, 46, 5433-5440 | 1.4 | 1 |
| 36 | Enhanced chaotic JAYA algorithm for parameter estimation of photovoltaic cell/modules. *ISA Transactions*, **2021**, 116, 139-166 | 5.5 | 33 |
| 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 |

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| 34 | 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 |
| 33 | . *IEEE Access*, **2021**, 9, 84982-85016 | 3.5 | 17 |
| 32 | Analysis of Fractional Order Sliding Mode Control in a D-STATCOM Integrated Power Distribution System. *IEEE Access*, **2021**, 9, 70337-70352 | 3.5 | 4 |
| 31 | MOSMA: Multi-Objective Slime Mould Algorithm Based on Elitist Non-Dominated Sorting. *IEEE Access*, **2021**, 9, 3229-3248 | 3.5 | 42 |
| 30 | A holistic review on the integration of heat pipes in solar thermal and photovoltaic systems. *Solar Energy*, **2021**, 227, 577-605 | 6.8 | 7 |
| 29 | Orthogonal learning-based Gray Wolf Optimizer for identifying the uncertain parameters of various photovoltaic models. *Optik*, **2021**, 247, 167973 | 2.5 | 7 |
| 28 | 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 |
| 27 | 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 |
| 26 | Mathematical Modelling of Solar Photovoltaic Cell/Panel/Array based on the Physical Parameters from the Manufacturer Datasheet. *International Journal of Renewable Energy Development*, **2020**, 9, 7-22 | 1.5 | 25 |
| 25 | 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 |
| 24 | A New and Reliable Objective Functions for Extracting the Unknown Parameters of Solar Photovoltaic Cell Using Political Optimizer Algorithm **2020**, | | 5 |
| 23 | 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 |
| 22 | 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 |
| 21 | 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 |
| 20 | A new stochastic slime mould optimization algorithm for the estimation of solar photovoltaic cell parameters. *Optik*, **2020**, 223, 165277 | 2.5 | 73 |
| 19 | 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 |
| 18 | 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 |
| 17 | A new metaphor-less algorithms for the photovoltaic cell parameter estimation. *Optik*, **2020**, 208, 164552 | 2.5 | 59 |

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| 16 | 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 |
| 15 | 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 |
| 14 | Scheduling Task to Heterogeneous Processors by Modified ACO Algorithm. *Advances in Intelligent Systems and Computing*, **2019**, 565-576 | 0.4 | 0 |
| 13 | An effective maximum power point tracker for partially shaded solar photovoltaic systems. *Energy Reports*, **2019**, 5, 1445-1462 | 4.6 | 27 |
| 12 | 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 |
| 11 | 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 |
| 10 | Analysis and Implementation of High-Performance DC-DC Step-Up Converter for Multilevel Boost Structure. *Frontiers in Energy Research*, **2019**, 7, | 3.8 | 10 |
| 9 | 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 |
| 8 | 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 |
| 7 | Survey of Image Processing Based Applications in AMR. *Review of Computer Engineering Research*, **2018**, 5, 12-19 | 1 | 4 |
| 6 | A dataset of the study on design parameters for the solar photovoltaic charge controller. *Data in Brief*, **2018**, 21, 1954-1962 | 1.2 | 3 |
| 5 | 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 |
| 4 | 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 |
| 3 | MOMPA: Multi-objective marine predator algorithm for solving multi-objective optimization problems. *Evolutionary Intelligence*,1 | 1.7 | 4 |
| 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 | 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 |