

PUBLICATION DETAILS OF PROPOSED DC MEMBERS

Name : Dr. Immanuel Selvakumar A
Designation : Professor
Department : Electrical and Electronics Engineering
University/Institute : Karunya Institute of Technology and Sciences
Place & Pincode : Coimbatore-641114
Mobile : 9994534647
E-Mail : immanuel@karunya.edu

Journal Publications:

1. Benin Pratap Chandran, A Immanuel Selvakumar, G Shine Let, S Paul Sathiyam(2020),” Optimal model parameter estimation of solar and fuel cells using improved estimation of distribution algorithm”, Ain Shams Engineering Journal, Elsevier, <https://doi.org/10.1016/j.asej.2020.07.034>
2. Meenal R and Immanuel Selvakumar A (2019), “Assessment of Solar Energy Potential of Smart Cities of Tamil Nadu Using Machine Learning with Big Data”, Advances in Big Data and Cloud Computing, Springer, Vol. 750. pp. 27-36.
3. Benin Pratap Chandran, Immanuel Selvakumar A and Finna Mary Mathew (2018), “Integrating Multilevel Converters Application on Renewable Energy Sources—A survey”, Journal of Renewable and Sustainable Energy, Vol. 10, Issue 6, Article No. 065502.
4. Meenal R, Immanuel Selvakumar A, Berclin JeyaPrabha S and Rajasekaran E (2018), “Solar Mapping of India using Support Vector Machine”, Journal of Physics: Conference Series, Vol. 1142, Issue 1, Article No. 012010.
5. Meenal R and Immanuel Selvakumar A (2018), “Assessment of SVM, empirical and ANN based solar radiation prediction models with most influencing input parameters”, Renewable Energy, Elsevier, Vol. 121, pp. 324-343.
6. Lydia M, Suresh Kumar S, Immanuel Selvakumar A and Edwin Prem Kumar G (2018), “Wind Farm Power Prediction Based on Wind Speed and Power Curve Models”, Intelligent and Efficient Electrical Systems, Springer, Vol. 446, pp. 15-24.
7. Jeba P and Immanuel Selvakumar A (2018), “FOPID based MPPT for photovoltaic system”, Energy Sources, Part A: Recovery, Utilization and Environmental Effects, Vol. 40, Issue 13, pp. 1591-1603.
8. Berclin Jeyaprabha S and Immanuel Selvakumar A (2017), “Model-based MPPT for shaded and mismatched modules of photovoltaic farm”, IEEE Transactions on Sustainable Energy, Vol. 8, Issue 4, pp. 1763-1771.
9. Jenitha P and Immanuel Selvakumar A (2017), “Fault detection in PV systems”, Applied Solar Energy, Vol. 53, Issue 3, pp. 229-237.

10. Lydia M, Suresh Kumar S, Immanuel Selvakumar A and Edwin Prem Kumar G (2016), "Linear and non-linear autoregressive models for short-term wind speed forecasting", *Energy Conversion and Management*, Elsevier, Vol. 112, pp. 115-124.
11. Paul Sathiyar S, Suresh Kumar S and Immanuel Selvakumar A (2016), "Optimized fuzzy logic-based adaptive cruise control vehicle for urban and highway driving patterns", *Emerging research in Computing, Information, Communication and applications*, Springer, pp. 319-331.
12. Meenal R, Boazina P G and Immanuel Selvakumar A (2016), "Temperature based radiation models for the estimation of global solar radiation at horizontal surface in India", *Indian Journal of Science and Technology*, Vol. 9, Issue 46.
13. Paul Sathiyar S, Suresh Kumar S and Immanuel Selvakumar A (2016), "Novel HBM Spacing Policy for Fuzzy Based Forward Collision Avoidance System in Vehicle", *Emerging Research in Computing, Information, Communication and Applications (ERCICA)*, Springer, pp. 229-238.
14. Jagannath D J and Immanuel Selvakumar A (2015), "Superior foetal electrocardiogram signal elicitation using a novel artificial intelligent Bayesian methodology", *Applied Soft Computing*, Elsevier, Vol. 37, pp. 1002-1017.
15. Lydia M, Suresh Kumar S, Immanuel Selvakumar A and Edwin Prem Kumar G (2015), "Wind resource estimation using wind speed and power curve models", *Renewable energy*, Elsevier, Vol. 83, pp. 425-434.
16. Vinoth Kumar K, Suresh Kumar S and Immanuel Selvakumar A (2015), "Spectrum Analysis of Sidebands in Industrial Drives", *International Journal of Measurement Technologies and Instrumentation Engineering (IJMTIE)*, Vol. 5, Issue 2, pp. 1-13.
17. Berlin Jeyaprabha S and Immanuel Selvakumar A (2015), "Optimal sizing of photovoltaic/battery/diesel based hybrid system and optimal tilting of solar array using the artificial intelligence for remote houses in India", *Energy and Buildings*, Elsevier, Vol. 96, pp. 40-52.
18. Rini Jones S B, Poongodi P and Immanuel Selvakumar A (2015), "Model reference fuzzy cascade controller: a novel method for attaining desired mass flow in a wind tunnel", *International Journal of Information and Communication Technology*, Vol. 7, Issue 4/5, pp. 336-347.
19. Jude Hemanth D, Kezi Selva Vijila C, Immanuel Selvakumar A and Anitha J (2014), "Performance improved iteration-free artificial neural networks for abnormal magnetic resonance brain image classification", *Neurocomputing*, Elsevier, Vol. 130, pp. 98-107.
20. Jagannath D J and Immanuel Selvakumar A (2014), "Issues and research on foetal electrocardiogram signal elicitation", *Biomedical Signal Processing and Control*, Elsevier, Vol. 10, pp. 224-244.
21. Lydia M, Suresh Kumar S, Immanuel Selvakumar A and Edwin Prem Kumar G (2014), "A comprehensive review on wind turbine power curve modeling techniques", *Renewable and Sustainable Energy Reviews*, Elsevier, Vol. 30, pp. 452-460.
22. Paul Sathiyar S, Suresh Kumar S and Immanuel Selvakumar A (2014), "Particle swarm optimization technique for rule base optimization of FLC for low speed ACC

vehicle”, ARPN Journal of Engineering and Applied Sciences, Vol. 9, Issue 6, pp. 981-987.

23. Winnie Rachel Cherian, Jagannath D J and Immanuel Selvakumar A (2014), “Comparison of algorithms for fetal ECG extraction”, International Journal of Engineering Trends and Technology (IJETT), Vol. 9, Issue 11, pp. 540-543.

Conference Publications:

1. Meenal R, Immanuel Selvakumar A, Brighta K, Christy Jeba Joice S and Richerd C P (2018), “Solar radiation resource assessment using WEKA”, 2nd International Conference on Inventive Systems and Control (ICISC), 19-20 January 2018, Indexed in IEEE Explorer, DOI: 10.1109/ICISC.2018.8398960.
2. Meenal R and Immanuel Selvakumar A (2017), “Review on artificial neural network based solar radiation prediction”, 2nd International Conference on Communication and Electronics Systems (ICCES), 19-20 October 2017, Indexed in IEEE Explorer, DOI: 10.1109/CESYS.2017.8321285.
3. Satheesh Kumar S and Immanuel Selvakumar A (2017), “Detection of the faults in the photovoltaic array under normal and partial shading conditions”, Innovations in Power and Advanced Computing Technologies (i-PACT), 21-22 April 2017, Indexed in IEEE Explorer, DOI: 10.1109/IPACT.2017.8244890.
4. Meenal R and Immanuel Selvakumar A (2017), “Temperature based model for predicting global solar radiation using genetic algorithm [GA]”, International Conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology (ICEEIMT), 3-4 February 2017, Indexed in IEEE Explorer, DOI: 10.1109/ICIEEIMT.2017.8116817.
5. Meenal R and Immanuel Selvakumar A (2016), “Estimation of global solar radiation using sunshine duration and temperature in Chennai”, International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS), 24-26 February 2016, Indexed in IEEE Explorer, DOI: 10.1109/ICETETS.2016.7603089.
6. Paul Sathiyar S, Suresh Kumar S and Immanuel Selvakumar A (2015), “Optimised fuzzy controller for improved comfort level during transitions in Cruise and Adaptive Cruise Control Vehicles”, International Conference on Signal Processing and Communication Engineering Systems, 2-3 January 2015, Indexed in IEEE Explorer, DOI: 10.1109/SPACES.2015.7058221.
7. Winnie Rachel Cherian, Jagannath D J and Immanuel Selvakumar A (2014), “Application of projective filtering to fetal electrocardiography”, International Conference on Electronics and Communication Systems (ICECS), 13-14 February 2014, Indexed in IEEE Explorer, DOI: 10.1109/ECS.2014.6892600.
8. Subhashini S, Jagannath D J and Immanuel Selvakumar A (2014), “Extricating noninvasive fetal ECG by adaptive optimization technique”, International Conference

on Electronics and Communication Systems (ICECS), 13-14 February 2014, Indexed
in IEEE Explorer, DOI: 10.1109/ECS.2014.6892659.