Dr. Sitharthan R, Ph.D.

Assistant Professor (Sr.)

Department of Electrical Engineering,

Vellore Institute of Technology, Vellore,

Vellore - 632014

Sitharthan.r@vit.ac.in

PUBLICATION

1. **Sitharthan R**, Yuvaraj S, Sanjeevikumarpadmanabhan, Jens Bo Holm-Nielsen, Sujith M, Rajesh M, Prabaharan N, and vengatesan K, 2020, Piezoelectric Energy Harvester Converting Wind Aerodynamic Energy into Electrical Energy for Microelectronic Application, IET Renewable Power Generation- Accepted for Publication. (IF: 3.894)

2. **Sitharthan R**, Sujatha Krishnamoorthy, PadmanabanSanjeevikumar, Jens Bo Holm-Nielsen, Raja Singh R, Rajesh M, 2020, Torque ripple minimization of PMSM using an adaptive Elman neural network-controlled feedback linearization-based direct torque control strategy, International Transactions on Electrical Energy Systems, Wiley. Accepted for publication DOI: 10.1002/2050-7038.12685. (IF: 1.692)

3. Sivaranjani, R., Sundar, D.S., Sridarshini, T., **Sitharthan, R**., Karthikeyan, M., Raja, A.S. and Carrasco, M.F., 2020. Photonic crystal based all-optical half adder: a brief analysis. Laser Physics, 30(11), p.116205. (IF:1.333)

4. Nataraj, S.K., Al-Turjman, F., Adom, A.H., **Sitharthan, R**., Rajesh, M. and Kumar, R., 2020. Intelligent Robotic Chair with Thought Control and Communication Aid Using Higher Order Spectra Band Features. IEEE Sensors Journal. DOI: 10.1109/JSEN.2020.3020971. (IF: 3.076)

5. Natarajan, B., Obaidat, M.S., Sadoun, B., Manoharan, R., **Sitharthan Ramachandran** and Velusamy, N., New Clustering-Based Semantic Service Selection and User Preferential Model. IEEE Systems, DOI: 10.1109/JSYST.2020.3025407. (IF: 3.987)

6. Rukmani, D.K., Thangaraj, Y., Subramaniam, U., **Sitharthan Ramachandran**, Madurai Elavarasan, R., Das, N., Baringo, L. and Imran Abdul Rasheed, M., 2020. A new approach to optimal location and sizing of DSTATCOM in radial distribution networks using bio-inspired cuckoo search algorithm. Energies, 13(18), p.4615. (IF: 2.702)

7. **Sitharthan R**, Soundrabalan CK, 2020. Design and Modeling of Hybrid DC/AC Microgrid with Manifold Renewable Energy Sources, IEEE Canadian Journal of

Electrical and Computer Engineering, Accepted for publication. DOI: 10.1109/CJECE.2020.2989222 (IF: 1.091).

8. Gomathy V, Janarthanan K, Fadi Al-Turjman, **Sitharthan R**, rajesh M, Vengatesan K, PriyaReshma T, 2020, Investigating the Spread of Coronavirus Disease by relating Air Pollution using Edge AI, ACM Transactions on Internet Technology- Accepted for publication. (IF: 1.598).

9. Karthikeyan, M., **Sitharthan, R**., Ali, T. and Roy, B., 2020. Compact multiband CPW fed monopole antenna with square ring and T-shaped strips. Microwave and Optical Technology Letters, 62(2), pp.926-932.

10. Sundar, D. Shanmuga, T. Sridarshini, **R. Sitharthan**, MadurakaviKarthikeyan, A. Sivanantha Raja, and Marcos Flores Carrasco. "Performance investigation of 16/32-channel DWDM PON and long-reach PON systems using an ASE noise source." In Advances in Optoelectronic Technology and Industry Development: Proceedings of the 12th International Symposium on Photonics and Optoelectronics (SOPO 2019), August 17-19, 2019, Xi'an, China, p. 93. CRC Press, 2019.

11. D.ShanmugaSundar, ArunThirumurugan, MuneeswaranMuniyandi, **R. Sitharthan**, KarthikeyanMadurakavi, A.Sivanantha Raja, and Marcos Flores Carrasco (2019). Conductive oxides role in Flexible Electronic Device Applications, Materials for electronic devices and sustainable energy, Springer Nature **(SCI),** (Accepted for publications).

12. **Sitharthan R**, ShanmugaSundar D, Rajesh M, MadurakaviKarthikeyan, Jacob Raglend I, Belwin Edward J, Raja Singh R, and Kumar R, "Assessing Nitrogen dioxide (NO2) Impact on Health Pre-and Post- COVID-19 Pandemic using IoT in India" International Journal of Pervasive Computing and Communications, Emerald Publication-Accepted for publication, DOI: 10.1108/IJPCC-08-2020-0115

13. Babu, R.G., Obaidat, M.S., Amudha, V., Manoharan, R. and **Sitharthan, R**., 2020. Comparative analysis of distributive linear and non-linear optimised spectrum sensing clustering techniques in cognitive radio network systems. IET Networks. DOI: 10.1049/iet-net.2020.0122

14. Janeera, D.A., Amudhavalli, P., Sherubha, P., Sasirekha, S.P., Raj, P.A.C. and **Sitharthan, R**., 2020, September. Visualization and Classification of Diseases using Deep Learning Based Convolution Neural Network. In IOP Conference Series: Materials Science and Engineering (Vol. 937, No. 1, p. 012053). IOP Publishing.

15. Rani, S.S., Janet, J., Ramya, K.C., **Sitharthan, R**., Kesavan, T. and Shrivastava, S., 2020, September. UAV based Mapping System for Precision Agriculture. In IOP Conference Series: Materials Science and Engineering (Vol. 937, No. 1, p. 012035). IOP Publishing.

16. Reshma, R., Ramachandraiah, U., Devabalaji, K.R. and **Sitharthan, R**., 2020, September. Liquid metal level measurement techniques. In IOP Conference Series: Materials Science and Engineering (Vol. 937, No. 1, p. 012027). IOP Publishing.

17. Kesavan, T., Gnanamalar, S.S., Sivaranjani, S., Gomathy, V., Radhakrishnan, G. and **Sitharthan, R.,** 2020, September. SVM Based Reduction of Input Current Harmonics in Three Phase Rectifier. In IOP Conference Series: Materials Science and Engineering (Vol. 937, No. 1, p. 012058). IOP Publishing.

18. Shrivastava, S., Sahu, J. and **Sitharthan, R**., 2020, September. Noise Resilient distributed Voltage and Frequency Control for Low Voltage Islanded Microgrid. In IOP Conference Series: Materials Science and Engineering (Vol. 937, No. 1, p. 012036). IOP Publishing.

19. Shivam, S., Singh, R., Singh, R.R. and **Sitharthan, R**., 2020, September. A Review on Power Electronics and Drives in Electric Propulsion System. In IOP Conference Series: Materials Science and Engineering (Vol. 937, No. 1, p. 012050). IOP Publishing.

20. **Sitharthan, R** (2019). Analysis on Smart Material Suitable for Autogenous Microelectronic Application- Materials Research Express **(SCI)-**6(10), p.105709.

21. **Sitharthan, R** (2019). Adaptive hybrid intelligent MPPT controller to approximate effectual wind speed and optimal rotor speed of variable speed wind turbine- ISA Transactions **(SCI)** -DOI:10.1016/j.isatra.2019.05.029

22. **Sitharthan, R** (2019). An improved RBFNN control strategy based MPPT controller for wind power generation system- Transactions of the Institute of Measurement and Control **(SCI)** - DOI: 10.1177/0142331218823858.

23. **Sitharthan, R** (2019). Automated Power Management Strategy for Wind Power Generation System using Pitch Angle Controller, Measurement and Control **(SCI-E)** - DOI:10.1177/0020294019827330.

24. V. Gomathy, Sheeba Rani, Sujatha K.**Sitharthan, R** (2019). An intergrated algorithm for detecting classifying the faults in power system. Journal of Electrical Engineering **(SCOPUS),.** Vol. 55. pp. 469-476.

25. D.Shanmugasundar, C.Umamaheswari, T.Sridarshini, M.Karthikeyan, **R. Sitharthan**, A.Sivanantha Raja, and Marcos Flores C, (2019), "Compact Four Port Circulator based on 2D Photonic Crystals with 90º Rotation of Light Wave for Photonic Integrated Circuits Applications", Laser Physics, IOP Publishing, **(SCI)** Vol. 29, No. 9, pp. 066201.

26. **Sitharthan, R**., Sundarabalan, C.K., Devabalaji, K.R., Nataraj, S.K. and Karthikeyan, M., 2018. Improved fault ride through capability of DFIG-wind turbines using customized dynamic voltage restorer. Sustainable Cities and Society **(SCI)**, 39, pp.114-125.

27. **Sitharthan, R**., Swaminathan, J.N. and Parthasarathy, T., 2018, March. Exploration of Wind Energy in India: A Short Review. In 2018 National Power Engineering Conference (NPEC) (pp. 1-5). IEEE.

28. **Sitharthan, R**. and Geethanjali, M., 2017. An adaptive Elman neural network with C-PSO learning algorithm based pitch angle controller for DFIG based WECS. Journal of Vibration and Control **(SCI)**, 23(5), pp.716-730.

29. **Sitharthan, R**., Devabalaji, K.R. and Jees, A., 2017. AnLevenberg–Marquardt trained feed-forward back-propagation based intelligent pitch angle controller for wind generation system. Renewable Energy Focus **(SCOPUS)**, 22, pp.24-32.

30. **Sitharthan, R**., Geethanjali, M. and Pandy, T.K.S., 2016. Adaptive protection scheme for smart microgrid with electronically coupled distributed generations. Alexandria Engineering Journal **(SCI)**, 55(3), pp.2539-2550.

31. **Sitharthan, R**. and Geethanjali, M., 2015. Application of the superconducting fault current limiter strategy to improve the fault ride-through capability of a doubly-fed induction generator–based wind energy conversion system. Simulation **(SCI)**, 91(12), pp.1081-1087.

32. **Sitharthan, R**.; Geethanjali, M. ANFIS based Wind Speed Sensor-less MPPT Controller for Variable Speed Wind Energy Conversion Systems. Australian Journal of Basic and Applied Sciences **(SCOPUS)**, 2014; 8(18): 14-23. Print ISSN: 1991-8178.

33. **Sitharthan, R**., &Geethanjali, M. (2014). Wind Energy Utilization in India- A Review. Middle-East Journal of Scientific Research **(SCOPUS)**, 22(6), 796-801, Print ISSN: 1990-9233.