

## **Dr. D. Ezhilarasi**

### **International Journals**

1. Anjali S. Nair, D Ezhilarasi, "Performance Analysis of Super Twisting Sliding Mode Controller by ADAMS–MATLAB Co-simulation in Lower Extremity Exoskeleton", International Journal of Precision Engineering and Manufacturing-Green Technology volume 7, pages 743–754 (2020)
2. Minu A. Pillai, D. D. Ebenezer, and Ezhilarasi Deenadayalan, "Transfer matrix analysis of a duct with gradually varying arbitrary cross-sectional area", The Journal of the Acoustical Society of America, 146, 4435 (2019), <https://doi.org/10.1121/1.5139412>
2. Ganesan Muniandi, Ezhilarasi Deenadayalan, "Composite model reference adaptive sliding mode controller for automatic train operation", IET Control Theory and Applications, Oct. 2019, Vol. 13 Iss. 15, pp. 2425-2435.
3. Ganesan Muniandi, Ezhilarasi Deenadayalan, "Train distance and speed estimation using multi sensor data fusion", IET Radar, Sonar & Navigation, 13(4), pp. 664 – 671, April 2019
4. Minu A. Pillai, D. D. Ebenezer and Ezhilarasi Deenadayalan, "Design and optimization of piezoelectric unimorph beams with distributed excitation", The Journal of the Acoustical Society of America, 143 (5), pp. 2685-2696, May 2018.
5. Minu A. Pillai, D. D. Ebenezer and Ezhilarasi Deenadayalan, "Erratum: Analytical model of mechanically Excited Piezoelectric Unimorph Beams [J. Acoust..Soc. Am. 142(2)718-727 (2017) ] ", The Journal of the Acoustical Society of America, 142(4), 1871-1873, October 2017
6. Minu A. Pillai, D. D. Ebenezer and Ezhilarasi Deenadayalan, "Analytical model of mechanically excited piezoelectric unimorph beams", The Journal of the Acoustical Society of America, 142 (2), pp. 718-727, August 2017.
7. Ganesan M , Ezhilarasi D , Jijo Benni, "Second-order sliding mode controller with model reference adaptation for automatic train operation", Vehicle System Dynamics, Taylor & Francis, June 2017.
8. Ganesan M , Ezhilarasi D , Jijo Benni, "Hybrid model reference adaptive second order sliding mode controller for automatic train operation", IET Control Theory and Applications, Vol. 11 Iss. 8, pp. 1222-1233, May 2017
9. Minu A Pillai, Ezhilarasi D, " Improved Acoustic Energy Harvester using Tapered neck Helmholtz Resonator and Piezoelectric Cantilever undergoing concurrent bending and twisting", Procedia Engineering (ELSEVIER), Vol 144, pp. 674-681, 2016.

10. A. Rami Reddy, M. Umapathy, D. Ezhilarasi, G. Uma. Piezoelectric energy harvester with shape memory alloy actuator using solar energy, IEEE Transactions on Sustainable Energy, vol 6, no.4, pp 1409-1415, Oct 2015.
11. A. Rami Reddy, M. Umapathy, D. Ezhilarasi, G. Uma. Cantilever Beam with Trapezoidal Cavity for Improved Energy Harvesting. Journal of International Journal of Precision Engineering and Manufacturing, Vol. 16(8), 1875-1881, 2015.
12. A. Rami Reddy, M. Umapathy, D. Ezhilarasi, G. Uma. Modelling and Experimental investigations on stepped beam with cavity for energy harvesting. Journal of Smart Structures and Systems. Vol. 16(4), 2015.
13. K. Dhanalakshmi, M. Umapathy and D Ezhilarasi, Sliding Mode Control of SMA Actuated Structures for Vibration Control, International Journal of Modelling, Identification and Control, 23(3), 2015.
14. A Rami reddy, Umapathy Mangalanathan, D. Ezhilarasi, Uma Gandhi, "Improved energy harvesting from vibration by introducing cavity in a cantilever beam" Journal of Vibration and Control, 10.1177/1077546314558498, 1-10, 2014.
15. Minu A Pillai, D. Ezhilarasi, "A review of Acoustic Energy Harvesting", International Journal of Precision Engineering and Manufacturing , Volume 15, Issue 5, pp 949-965, May 2014.
16. S. Harihara Krishnan, D. Ezhilarasi, G. Uma, M. Umapathy, "Pyroelectric based solar and wind energy harvesting system" IEEE Transactions on Sustainable Energy, Vol 5, Issue 1, pp 73-81, Jan 2014.
17. K. Dhanalakshmi, M. Umapathy, D. Ezhilarasi, "Shape memory alloy actuated structural control with discrete time sliding mode control using multirate output feedback", Journal of Vibration and Control published online 4 July 2014.

### **International and National Conferences**

1. Himadri Poddar, D. Ezhilarasi, " Trajectory Planning and Obstacle Avoidance for cascaded PD controlled Quadrotor", Proceeding of ICECON 2019, NIT Tiruchirappalli, India, 20th-21st December 2019
2. S. Arutselvi, D. Ezhilarasi, Galla Divyanshi, Anuradha Nayak, TSV Krishna Sai, "Meandered Broadband Vibration Energy Harvester", Proceeding of ICECON 2019, NIT Tiruchirappalli, India, 20th-21st December 2019.
3. Anjali S Nair, Ezhilarasi D, "Performance analysis of Super Twisting Sliding Mode Controller in Lower Extremity Exoskeleton", proceedings of IEEE ICESIP 2019, IIITD&M Kancheepuram, Chennai, 04th -06th July 2019.

4. Chinari Subhechha Subudhi, D Ezhilarasi, "Modeling and Trajectory Tracking with Cascaded PD Controller for Quadrotor", *Procedia Computer Science* (Elsevier), Vol 133, 2018, PP 952-959, July 2018.
5. Bhabani Sankar Padhy and D. Ezhilarasi (2017) Damage Detection In Non-Uniform Cantilever Beam Having Two Different Types Of Crack Using Strain Energy Analysis, *International Conference on Frontiers in Engineering, Applied Sciences and Technology (FEAST-2017)*, March 31st - April 1st, 2017, NIT Tiruchirappalli, India,
6. N. Sampath, D. Ezhilarasi, "Analysis of Cantilevered Piezoelectric Harvester with Different Proof Mass Geometry for Low Frequency Vibrations", *International Conference on Smart Engineering Materials [ICSEM- 2016]*, 20th to 22nd October 2016, Bangalore, India.
7. N. Sampath, D. Ezhilarasi, "Analysis of Cross Shaped Cantilever With C Shaped Proof Mass for Vibration Energy Harvesting", *International Conference on Smart Engineering Materials [ICSEM- 2016]*, 20th to 22nd October 2016, Bangalore, India.
8. Bhabani Sankar Padhy , D. Ezhilarasi, "Detection and Stiffness Analysis of Inclined Height Crack in Cantilever Beam using Strain Energy Analysis", *Proceedings of the International Conference on Advanced in Dynamics, Vibration and Control, ICADV-2016*, February 25-27, NIT Durgapur, India
9. Bhabani Sankar Padhy , D. Ezhilarasi, "Detection of Inclined Edge Crack in Cantilever Beam using Modal Analysis", *Proceedings of the International Conference on Materials, Design and Manufacturing Process, ICMDM '16*, February 17-19, 2016, Anna University (CEG), Chennai, INDIA 76. Bhabani Sankar Padhy , Laji C A, D. Ezhilarasi, "Detection Of Longitudinal Cracks In Beam Structures Using Electromechanical Impedance And Frequency Analysis", *ISSS National Conference on MEMS Smart Materials, Structures and Systems*, September 23-25, 2015, CUSAT, Kochi, India
10. Minu A Pillai, Ezhilarasi D, " Improved Acoustic Energy Harvester using Tapered neck Helmholtz Resonator and Piezoelectric Cantilever undergoing concurrent bending and twisting", *Proceedings of 12th International Conference on Vibration Problems (ICOVP 2015)*, Dec 14-17, 2015, IIT Guwahati, India.
11. M. Ganesan, D. Ezhilarasi, "Design of Nonlinear Model reference Adaptive Controller for Automatically Driven Indian High speed Trains", *Proceeding of 3rd International Conference of Transportation research Group of India (CTRG 2015)*, 17-20 Dec 2015, Kolkata, India.
12. Minu A Pillai, Ezhilarasi D, " Acoustic Energy Harvesting using Helmholtz resonator with tapered neck", *Proceedings of COMSOL conference*, 13th-14th Nov 2014, Bangalore, India.

13. Kattilapparambu Abhfeeth, Ezhilarasi Deenadayalan, “ GSM Based RF Energy Harvesting”, Proceedings of VIIth international ISSS Conference on Smart Materials, Structures and Systems (ISSS 2014), IISC Bangalore, July 2014