

Publications

SCI Journals:

1. **Jayu Kalambe**, Rajendra Patrikar, “Design, Fabrication and Characterization of Microcantilever Sensor for Temperature Detection,” Sensors Journal, IEEE, Volume 15, Issue 3, pp 1595 – 1601, 2015
2. Deepak G. Khushalani, Vaibhav R. Dubey, Pratik P. Bheley, **Jayu P. Kalambe, Rajesh S. Pande**, Rajendra M. Patrikar, “Design optimization & Fabrication of Microcantilever for Switching Application,” Elsevier, Sensors and Actuators A: Physical, Volume 225, pp 1–7, 2015
3. **Jayu Kalambe**, Rajendra Patrikar, “Design of Microcantilever Based Biosensor with Digital Feedback Control Circuit,” Journal of Sensors, Hindawi Publication Corporation, Volume 2012, Article ID 586429
4. **Suresh Balpande, Dr. Rajesh S. Pande**, Dr. Rajendra Patrikar, “Design and low cost fabrication of green vibration energy harvester”, ELSEVIER Sensors and Actuators A: Physical, Vol 251, 1 November 2016, Pages 134–141.
5. **Suresh Balpande**, Manish Bhaiyya, **Rajesh S. Pande**, "Low cost fabrication of polymer substrate based piezoelectric microgenerator with PPE, IDE and ME", IET Electronics Letters
6. Deepak Khushalani, **R.S. Pande**, R.M. Patrikar, “Fabrication and characterization of MEMS cantilever array for switching applications”, Microelectronic Engineering, ISSN: 0167-9317, SCI Impact Factor: 1.277, Volume 157, pp78–82 SCI Journal.
7. Yogita Nafde, **Rajesh S. Pande** “Design and Analysis of Resistive Series RF MEMS Switches Based Fractal U-Slot Reconfigurable Antenna” International Journal of Wireless Personal Communication ISSN:0929-6212, 8 July 2017, Index: SCI-E, Impact factor: 0.951.
8. **Suresh S. Balpande, Jayu P. Kalambe, Rajesh S. Pande** “Development of strain energy harvester as an alternative power source for the wearable biomedical diagnostic system “Micro & Nano Letters, pp. 1–5 doi: 10.1049/mnl.2018.5250 Micro & Nano Letters.
9. Mary Salve, Ashwini Wadafale, Gurushree Dindorkar, **Jayu Kalambe** “Quantifying colorimetric assays in μ PAD for milk adulterants detection using colorimetric android application”, Micro & Nano Letters, Online ISSN 1750-0443, DOI: 10.1049/mnl.2018.5334, Volume 13, Issue 11, November 2018, p. 1520 – 1524, November 2018, Index: SCI, Impact factor: 0.841
10. **Prasanna P Deshpande, Rajesh S Pande**, Rajendra Patrikar, “Fabrication and characterization of zinc oxide piezoelectric MEMS resonator”, Micro and Nano systems Information Storage and Processing System Microsystem Technologies, pp 1-9.

Other Publications in this field (National/International Conferences and Journals)

1. Rupali Zumbadkar, **Jayu Kalambe** “Feedback Control System for Biosensor Application” Computational Intelligence and Information Technology, Springer, Volume 250, pp 421-423, 2011.
2. Ankita Kumar, **Shubham Anjankar , S. S. Balpande** "Electromagnetic Energy Harvester for Low Frequency Vibrations Using MEMS"7th International conference on communication, computing & virtualization 2016 ,Elsevier procedia Computer Science, Volume 79, 2016, Pages 785-792.,Scopus Indexing
3. Manish Bhaiya, Dhiraj Tulaskar, **Suresh Balpande**, Gopal Gawande, Kamlesh Kanchandani “Design and Development of Ambient Harvester with Aluminium Foil Interdigitated Electrodes” International Conference on Smart Materials, Structures & Systems (ISSS 2017) IISC, Bangalore, 4-7 July2017
4. Samruddhi R Saroj, **Vishal Rathee, Rajesh S Pande**” Design and Analysis of a Micromachined LC Filter for 2-4GHz Application” International conference on Advances in Material and Manufacturing Applications, Amrita School of Engineering, Amrita Vishwa Vidyapeeth University, Bengaluru Campus, 17th -19th August 2017, Index: Scopus
5. Mary Salve, Sakshi Rana, Gurushree Dindorkar, **Jayu Kalambe**” Development of paper based micro fluidics devices for measuring the concentration of adulteration in milk with colorimetric Android application” The 13th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems on 22-26, April 2018 at Grand Hyatt, Singapore, 22-26, April 2018, Index: Scopus
6. **Suresh Balpande, Jayu Kalambe, Rajesh Pande**” Vibration Energy Harvester Driven wearable biomedical diagnostic system” The 13th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems on 22-26, April 2018 at Grand Hyatt, Singapore, 22-26, April 2018, Index: Scopus
7. Divya K. Chopde, **S.V. Admane**, “Efficiency improvement of crystalline silicon solar cell by spectral conversion using Ba₂SiO₄: Eu²⁺, Nd³⁺ phosphors” International conference on Materials, Applied Physics and Engineering-2018, Effotel Hotel Indore, 3-4 June,2018, Index: Scopus
8. Prakash Rewatkar, **Suresh Balpande, Jayu Kalambe**” Design and Development of PDMS based Channel for Fluid Analysis” Indian Journal of Science and Technology, ISSN (Print): 0974-6846, ISSN (Online): 0974-5645, Vol 11(36), DOI: 10.17485/ijst/2018/v11i36/96827, September 2018, Index: WoS.
9. Dr. Sudhir B. Lande, **Suresh S. Balpande**, “FPAA Based Design of Assistive Listening Device for Hearing Disorders People, Helix Vol. 8(6): 4446 -4452, DOI 10.29042/2018-4446-4452, Helix E-ISSN: 2319-5592; P-ISSN: 2277-3495 (WOS indexed)
10. **Poorvi K Joshi**” Recent Development in Applications of Optical MEMS: A Review”, Helix the Scientific Explorer print: 2277-3495, Electronic 2319-5592, DOI: 10.29042/2018, PP:4345-4348, VOL:8(6) Sep-Oct. 2018, Index: WOS

11. Kunal N Dekate, **Anju Gupta**, Rajesh S Pande, "Modelling of trapping mechanism in MEMS switches" International Conference on Computer and Communication Technology (IC CCT), Pages 621-625, Publisher IEEE Explore.
12. Dr. **Balpande Suresh**; Yenorkar, Surendra" Optimization of Energy Harvester for Trapping Maximum Body Motions to Power Wearables" American Scientific Publishers, Sensor Letters, Volume 17, Number 1, pp. 46-54(9) DOI: <https://doi.org/10.1166/sl.2019.4003> January 2019, Scopus Indexed
13. Dhone Mayuri D, **Balpande Suresh, Kalambe Jayu**" Energy Harvester: A Green Power Source for Wearable Biosensors" American Scientific Publishers Sensor Letters, Volume 17, Number 1, pp. 55-63(9) DOI: <https://doi.org/10.1166/sl.2019.3984>, January 2019, Scopus Indexed
14. Salve Mary, Dhone Mayuri; Rewatkar, Prakash; **Balpande, Suresh; Kalambe, Jayu**" Design and Sensitivity Analysis of Micro-Cantilever Based Biosensor for Tumor Detection" American Scientific Publishers, Sensor Letters, Volume 17, Number 1, January 2019, pp. 64-68(5) <https://doi.org/10.1166/sl.2019.3981> (Scopus Indexed).
15. Mankar Chaitali; Rewatkar Prakash; Dhone Mayuri; **Balpande Suresh; Kalambe Jayu; Pande Rajesh**; Goel Sanket "Microfluidic Microbial Fuel Cell to Harvest Energy from Urine" American Scientific Publishers, Sensor Letters, Volume 17, Number 1, January 2019, pp. 69-74(6), <https://doi.org/10.1166/sl.2019.3998> (Scopus Indexed).
16. Suvarna K. Gosavi and **Suresh S. Balpande**" A Comprehensive Review of Micro and Nano Scale Piezoelectric Energy Harvesters" SENSOR LETTERS Vol. 17, No.3, pp 180–195, 2019 Received: 20th Sept 2018. Accepted: 15th Dec 2018, Scopus Indexed
17. Mary Salve, Sakshi Rana, Gurushree Dindorkar, Prakash Rewatkar, **Jayu Kalambe** "Development of Microfluidics-Based Quantitative Adulteration Detection" Received: April 7, 2018 Revised: May 1, 2018 Accepted: May 3, 2018, Scopus Indexed
18. Bhavishya Waghwan, **Suresh Balpande, Jayu kalambe**" Development of Microfluidic Paper Based Analytical Device for Detection of Phosphate in Water" International Journal of innovative technology and Exploring engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-6S, April 2019
19. Suroosh Ali, **Vishal Rathee, Jayu Kalambe, Suresh Balpande**, "Cadmium Contaminated Water Detection with Interdigitated Electrodes and Microfluidic System", International journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249-8958, Volume-8 Issue-5, June 2019, Page No :1137-1140
20. Pranjali Chakole, **Vishal Rathee, Jayu Kalambe, Prasanna Kulkarni, Suresh Balpande**, "Design and Development of Triboelectric Blue Energy Harvester", International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249-8958, Volume - 8 Issue - 5, June 2019, Page No: 1278-1283.
21. Gurushree Dinorkar, **Vishal Rathee, Suresh Balpande, Jayu Kalambe**, "Detection of Mercury in Water using Filter paper-based Channel and colorimetric Android Readout" International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249-8958, Volume - 9 Issue - 2, December 2019.