

Annexure-I

List of Publications (Citations : 280, H-Index :9, I10 Index : 9)

1. **Research Highlights:** "Nanotubes as Mass Sensors", [Nature India](#), doi: 10.1038/nindia.2011.119, Published: 18th August, 2011, *Nature Publishing Group, United Kingdom*.

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2. Ajay M. Patel, **Anand Y. Joshi**. "Characterizing the nonlinear behaviour of double walled carbon nanotube based nano mass sensor." [Microsystem Technologies](#) (2016): 1-11, DOI:10.1007/s00542-016-3099-5, *Springer Publishers*.
3. Ajay Patel, **Anand Joshi**. "Modelling the nonlinear behaviour of double walled carbon nanotube based resonator with curvature factors", [Physica E: Low Dimensional systems & Nanostructures](#), 84, 2016, 98-107, DOI :10.1016/j.physe.2016.05.018, *Elsevier Publishers*.
4. Ajay Patel, Bhavik Ardeshana, Umang Jani, **Anand Joshi**, "Prediction of Fracture Pattern in Defective Single Walled Carbon Nanotubes Using Molecular Structural Mechanics", [Procedia Technology](#), 23, 2016, 114-121, DOI:10.1016/j.protcy.2016.03.006, *Elsevier Publishers*.
5. Ajay Patel, **Anand Joshi**. Effect of Stone-wales and Vacancy Defect in Double Walled Carbon Nanotube for Mass Sensing [Procedia Technology](#), 23, 2016, 122-129, DOI:10.1016/j.protcy.2016.03.007, *Elsevier Publishers*.
6. Nipun D. Gosai, **Anand Y. Joshi** "Experimental Investigation and Optimization of Process Parameters Used in the Silicon Powder Mixed Electro Discharge Machining of Ti-6Al-4V Alloy Using Response Surface Methodology", [Journal for Manufacturing Science and Production](#), 16, (1), 2016, 21-32, DOI: 10.1515/jmsp-2015-0013, *Degruyter Publishers*.

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8. Ajay M. Patel, Nipun Gosai, **Anand Y Joshi**. "A Review on Defects in Carbon Nanotubes", [Applied Mechanics and Materials](#), 813-814, 145-150, 2015, *Trans Tech Publications, Switzerland*. doi:10.4028/www.scientific.net/AMM.813-814.145.

9. Nipun Gosai, **Anand Y Joshi**, "Effect of Powder Concentration in EDM Process with Powder-Mixed Dielectric (PMD-EDM)", [Applied Mechanics and Materials](#), 813-814, 304-308, 2015, *Trans Tech Publications, Switzerland*, **doi :10.4028/www.scientific.net/AMM.813-814.304**.
10. Ajay M. Patel, **Anand Y Joshi**, "Influence of Atomic Vacancies on the Dynamic Characteristics of Nanoresonators based on Double Walled Carbon Nanotube", [Physica E: Low Dimensional systems & Nanostructures](#), 70, (C), 90 - 100, **DOI: 10.1016/j.physe.2015.02.016**, *Elsevier Publishers*.
11. Ajay M. Patel, **Anand Y Joshi**, "Evaluating the Vibrational Characteristics of Double Walled Carbon Nanotubes with Pinhole Defects" [Current NanoScience](#), 11, (3), 371- 378, *Bentham Science Publishers*, **DOI: 10.2174/1573413711666150218002013**.

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12. Ankit Panchal, Amit Patel, S. Sheth, **Anand Joshi**, "Experimental Research on Performance of Electrochemical Machining Process on Carbon Steel EN9 and Copper, [Applied Mechanics and Materials](#), 704, 2014, 48-57, **DOI : 10.4028/www.scientific.net/AMM.704.48** , Transtech Publishers.
13. Ajay M. Patel, **Anand Y Joshi**, "Detection of biological objects using dynamic characteristics of Double walled carbon nanotubes", [Applied Nanoscience](#), **DOI : 10.1007/s13204-014-0364-8**, Springer
14. Ajay M. Patel, **Anand Y Joshi**, "Investigating the Influence of Surface Deviations in Double Wall Carbon Nanotube based Nanomechanical Sensors", [Computational Materials Science](#), 89, 2014, 157-164, **DOI:10.1016/j.commatsci.2014.03.034**, Elsevier Publishers.
15. Ajay M. Patel, **Anand Y Joshi**, "Effect of waviness on dynamic characteristics of Double walled Carbon Nanotubes", [Nanoscience and Nanotechnology Letters](#), 6, (1), 2014, 1-9, **DOI:10.1166/nnl.2014.1720**, *American Scientific Publishers*.
16. Ajay M. Patel, **Anand Y Joshi**, "Investigation of Double walled Carbon Nanotubes for Mass Sensing" , [Procedia Technology](#), 14, 2014, 290- 294, **DOI : 10.1016/j.protcy.2014.08.038**, Elsevier Publishers
17. Ajay M. Patel, **Anand Y Joshi**, "Computational Investigation of mass sensing using defective Double walled Carbon Nanotubes" , [Procedia Materials Science](#), 5, 2014, 482-488, **DOI:10.1016/j.mspro.2014.07.291**, Elsevier Publishers.

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18. Ajay M. Patel, **Anand Y Joshi**, "Vibration analysis of Double wall Carbon Nanotube based resonators for Zeptogram level mass recognition", [Computational Materials Science](#), 79, 2013, 230-238, **DOI:10.1016/j.commatsci.2013.06.022**, *Elsevier Publishers*.

19. Ajay M. Patel, **Anand Y Joshi**, “Modeling and Analysis of a Manufacturing System with Deadlocks to Generate the Reachability Tree using Petri Net System” [Procedia Engineering](#), DOI:10.1016/j.proeng.2013.09.153, Elsevier Publishers, 64, 775-784.
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23. **Anand Y Joshi**, Satish C Sharma, S. P. Harsha, Chaotic Response Analysis of Single-Walled Carbon Nanotube Due To Surface Deviations” [NANO](#), 7, (2), 2012, 1250008/1 - 1250008/10, DOI:10.1142/S1793292012500087, World Scientific Press.

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25. **Anand Y Joshi**, Satish C Sharma, S. P. Harsha, “Zeptogram scale mass sensing using single walled carbon nanotube based bio sensors”, [Sensors & Actuators A. Physical](#), 168, (2), 2011, 275-280, DOI:10.1016/j.sna.2011.04.031, Elsevier Publishers.
26. **Anand Y Joshi**, S. P. Harsha, Satish C Sharma, “The Effect of Pinhole Defect on Vibration Characteristics of Single Walled Carbon Nanotube”, [Physica E: Low Dimensional systems & Nanostructures](#), 43, (5), 2011, 1040-1045, DOI:10.1016/j.physe.2010.12.011, Elsevier Publishers.
27. **Anand Y Joshi**, S. P. Harsha, Satish C Sharma, “Effect of chirality and atomic vacancies on the dynamics of nano resonator based on SWCNT”, [Sensor Review](#), 31, (1), 2011, 47-57, DOI:10.1108/02602281111099080, Emerald Publishers, United Kingdom.
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hottest articles of the Journal for the period January 2011- March 2011, Most cited article of the Journal since 2008).

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36. **Anand Y Joshi**, Satish C Sharma, S. P. Harsha, "Vibration Analysis of Pre-Stressed Single Walled CNT Based Mass Sensor", [International Journal of Electro spun Nano fibers and Applications](#), 2, (3) 2009, 161-170, Serials Publications.

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37. Vivek Deshpande, **Anand Y Joshi**, Jayesh Koisha, "Application of Taguchi method for optimization of cutting parameters of Lathe machine to reduce power consumption", [Industrial Engineering Journal](#), 2, (5) , 2009, 42-44.

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38. Krunal R. Mishra, **Anand Y Joshi**, "Deformable Mirror for space borne telescope : A Review, " [Proceedings of 1st International conference on Automation in Industries \(ICAI\)](#), jointly organized by Om Engineering College and Space Society of Mechanical Engineers, 5-6 April 2016, 268-271.

39. Ajay M Patel, **Anand Y Joshi**, “ Vibration Analysis of Defective double walled carbon Nanotube based nano resonators”, [Proceedings of ASME 2014 International Mechanical Engineering Congress and Exposition \(IMECE 2014\)](#), held at Montreal, CANADA, November 14-20, 2014 DOI :10.1115/IMECE2014-36454.
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42. **Anand Y Joshi**, Satish C Sharma, S. P. Harsha, “Analysis of Single walled Carbon Nanotubes with multiple defects”, [Proceedings of the Fourth International conference on Structural Stability and Dynamics \(ICSSD-2012\)](#), organized by Department of Structural Engineering, Malaviya National Institute of Technology (MNIT), Jaipur, January 4 – 6, 2012.
43. **Anand Y Joshi**, Satish C Sharma, S. P. Harsha, “Diagnostic applications of carbon nanotubes as biosensors”, [Proceedings of the Fourth International conference on Structural Stability and Dynamics \(ICSSD-2012\)](#), organized by Department of Structural Engineering, Malaviya National Institute of Technology (MNIT), Jaipur, January 4 – 6, 2012.
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51. Unnati A Joshi, **Anand Y Joshi**, “A Genetic Algorithm for planar kinematic chains” [Proceedings of the National Conference on Advances in Manufacturing Technology in the Era of Globalisation \(AMTEG\)](#), jointly organized by the Production Engg Dept, Pune Institute of Tech, and Indian Institution of Production Engineers, between 21 to 22 Jan **2005**, 55 - 58.

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