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JOURNAL PUBLICATIONS

**Prof. Suresh Bhalla, Department of Civil
Engineering, IIT Delhi**

TOTAL JOURNAL PUBLICATIONS=83

H-index: 27 (Web of Science), 30 (SCOPUS)

(Last updated 06 August 2023)

1. Krishnanunni, A. V. K, Kaur, N., **Bhalla, S.**, Singh, N. and Balgavhar, S. (2023), “Efficacy of Singly Curved Thin Piezo Transducers for Structural Health Monitoring and Energy Harvesting for RC Structures”, Energy Reports, Vol. 9 (Dec), pp. 2506–2524. DOI: [10.1016/j.egy.2023.01.084](https://doi.org/10.1016/j.egy.2023.01.084)
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2. Aulakh, D. S., and **Bhalla, S.** (2023), “Piezo Sensor Based Multiple Damage Detection Under Output Only Structural Identification Using Strain Modal Flexibility”, Mechanical Systems and Signal Processing, Vol. 194 (July), paper no. 110272, DOI: [10.1016/j.ymsp.2023.110272](https://doi.org/10.1016/j.ymsp.2023.110272)
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3. Balgavhar, S. and **Bhalla, S.** (2023), “Assessment of MOSFET/Diode Based Rectifier Interface Circuits for Piezoelectric Energy Harvesting from Structural Vibrations”, Analog Integrated Circuits and Signal Processing, Vol. 115, No. 2, (May), pp. 169-182. DOI: [10.1007/s10470-023-02143-1](https://doi.org/10.1007/s10470-023-02143-1)
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4. Baral, S., Negi, P., Adhikari, S. and **Bhalla, S.** (2023), “Temperature Compensation for Reusable Piezo Configuration for Condition Monitoring of Metallic Structures: EMI Approach”, Sensors, Vol. 23, No. 3 (Feb), Paper no. 1587, DOI: [10.3390/s23031587](https://doi.org/10.3390/s23031587)
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6. Balgavhar, S., **Bhalla, S.** and Soh, C. K. (2022), "Efficacious Piezoelectric Energy Harvesting, Including Storage From Low-Frequency Non-Periodic Bridge Vibrations", Current Science, Vol. 123, No. 4, (Aug), pp. 554-567. DOI: 10.18520/cs/v123/i4/554-567.
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7. Baral, S., Adhikari, S., Negi, P. and **Bhalla, S.** (2022), "Development and Evaluation of Reusable Piezo Sensors for Health Monitoring of Thin Walled Steel Structures", Journal of Civil Structural Health Monitoring, Vol. 12, No. 3 (Jun), pp. 647–657, DOI: 10.1007/s13349-022-00567-3
Click here to open --> <https://doi.org/10.1007/s13349-022-00567-3>
8. Addala, M. B., **Bhalla, S.** and Madan, A. (2022), "Controlling Dynamic Response of Structures Using Hybrid Passive Energy Dissipation Device" Journal of Earthquake Engineering, Vol. 26, No. 6, pp. 3209–3227, DOI: 10.1080/13632469.2020.1792378
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9. Addala, M. B., **Bhalla, S.** and Madan, A. (2022), "Performance Based Design of a New Hybrid Passive Energy Dissipation Device for Vibration Control of Reinforced Concrete Frames Subjected to Broad-Ranging Earthquake Ground Excitations" Advances in Structural Engineering, Vol. 25, No. 4 (March), pp. 895-912. DOI: 10.1177/13694332211052350
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10. Moharana, S., **Bhalla, S.** and Munjwani, S. (2022), "Vibration-Based Pre-Emptive Detection of Plate Buckling Using Piezo-Transducers" Innovative Infrastructure Solutions, Vol. 7, No 3 (June), paper no 188. DOI: 10.1007/s41062-022-00749-4
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11. Haq, M., **Bhalla, S.** and Naqvi, T. (2022), Piezo-Impedance Based Fatigue Damage Monitoring of Restrengthened Concrete Frames”, Composite Structures, Vol. 280, No 1 (Jan), paper no 114868. **DOI: 10.1016/j.compstruct.2021.114868**
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12. Negi, P., Chakraborty, T. and **Bhalla, S.** (2022), “Viability of Electro-mechanical Impedance Technique for Monitoring Damage in Rocks under Cyclic Loading”, Acta Geotechnica, Vol V17, No. 2 (Feb), pp. 483-495. **DOI: 10.1007/s11440-021-01181-1**
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15. Bhagat, D., **Bhalla, S.** and West, R. P. (2021), “Fabrication and Structural Evaluation of Fibre Reinforced Bamboo Composite Beams as Green Structural Elements” Composites: Part C, Vol. 5 (July), paper no 100150. **DOI: 10.1016/j.jcomc.2021.100150**
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16. Addala, M. B., **Bhalla, S.** and Madan, A. (2020), “Controlling Dynamic Response of Structures Using Hybrid Passive Energy Dissipation Device” Journal of Earthquake Engineering, Vol. 26, No. 6, pp. 3209–3227. **DOI: 10.1080/13632469.2020.1792378**
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34. Srivastava, S., **Bhalla, S.** and Madan, A. (2017), "Assessment of Human Bones Encompassing Physiological Decay and Damage Using Piezo Sensors in Non-Bonded Configuration", Journal of Intelligent Material Systems and Structures, Vo. 28, No. 14 (Aug), pp. 1977-1992. DOI: 10.1177/1045389X16672570
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