

## **SCI PUBLICATIONS**

1. Singh, S.K., **Shanker, R.**, Ranjan, A. Health monitoring of steel structures using surface mountable and detachable PZT sensor. *Journal of Intelligent Material Systems and Structures*. 2023;35(4):380-392. doi:10.1177/1045389X231185613
2. Maurya, K.K., Rawat, A., **Shanker, R.** Performance evaluation concept for crack healing in bacterial concrete structure using electro mechanical impedance technique with PZT patch, *Developments in the Built Environment*, Volume 15, 2023, 100196, ISSN 2666-1659, <https://doi.org/10.1016/j.dibe.2023.100196>.
3. Singh, S.K., Maurya, K.K., **Shanker, R.** Prediction of remaining life of RCC sewer manhole using smart material-based EMI technique for sustainable environment. *Environmental Science and Pollution Research* 30, 61526–61540 (2023). <https://doi.org/10.1007/s11356-022-23576-7>
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1. Sonker, M., **Shanker, R.** Enhanced diagnostic approach for multiple damage detection and severity evaluation through EMI-based sensing and artificial neural network model. *Asian Journal of Civil Engineering* 26, 747–760 (2025). <https://doi.org/10.1007/s42107-024-01220-8>
2. Sonker, M., **Shanker, R.** Prediction of durability of the concrete using electro-mechanical impedance technique: an experimental and machine learning approaches. *Asian Journal of Civil Engineering* 26, 701–717 (2025). <https://doi.org/10.1007/s42107-024-01215-5>
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9. Singh S. and **Shanker, R.**, “Detection of Multiple Damages in Structures Using PZT Transducer”, Second ASCE India Conference on Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies (CRSIDE2020), March 02—04,2020
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12. Ranjan A, **Shanker, R.**, Singh S.K., "Dynamic Characterization of Bridge Girder using PZT Sensor”, International Conference on Recent Developments in Civil Engineering (RDC2022), October 20-21, 2022

## **BOOK CHAPTERS**

1. Maurya, K.K., Rawat, A., **Shanker, R.** (2022). Review on Bacteria Based Cementitious Matrix for Sustainable Building Construction. In: Ashish, D.K., de Brito, J. (eds) Environmental Restoration. F-EIR 2021. Lecture Notes in Civil Engineering, vol 232. Springer, Cham. [https://doi.org/10.1007/978-3-030-96202-9\\_1](https://doi.org/10.1007/978-3-030-96202-9_1)
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