



Earthquakes and Structures pp 201–212

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Metro Train-Induced Vibration Measurement on Buildings

[M. Bharathi](#), [Dhiraj Raj](#)  & [Yogendra Singh](#)

Conference paper | [First Online](#)

864 Accesses | **2** Citations

Part of the [Lecture Notes in Earth and Atmospheric Sciences](#) (LNCE, volume 188)

Yogendra Singh

Indian Institute of Technology Roorkee, Roorkee, Uttarakhand, 247667, India

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Abstract

Vibrations in four buildings located at different positions along the Delhi Metro Rail Corporation (DMRC) network have been measured and reported. Vibrations developed due to the passage of metro trains through tunnels located at a depth up to 30 m from the ground level were measured on the considered buildings at different floor levels. To interpret the effect of vibrations on buildings, different vibration parameters, viz. Peak Ground Acceleration (PGA), Peak Ground Velocity (PGV) and