

Accepted Manuscript

Uncertainty analysis for wave dispersion behavior of carbon nanotubes embedded in Pasternak-type elastic medium

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PII: S0093-6413(17)30304-X
DOI: <https://doi.org/10.1016/j.mechrescom.2018.08.004>
Reference: MRC 3296



To appear in: *Mechanics Research Communications*

Received date: 5 June 2017
Revised date: 15 July 2018
Accepted date: 6 August 2018

Please cite this article as: Hu Liu , Zheng Lv , Uncertainty analysis for wave dispersion behavior of carbon nanotubes embedded in Pasternak-type elastic medium, *Mechanics Research Communications* (2018), doi: <https://doi.org/10.1016/j.mechrescom.2018.08.004>

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Highlights

- Effect of uncertain material properties on the wave-dispersion behavior of carbon nanotubes embedded in a Pasternak-type elastic medium is studied.
- Upper and lower bounds of the wave frequencies are predicted by using the interval analysis method.
- The present model is verified by comparing with Monte Carlo simulation.
- Influences of the small scale and elastic medium parameters on the bounds of wave frequencies are discussed.

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