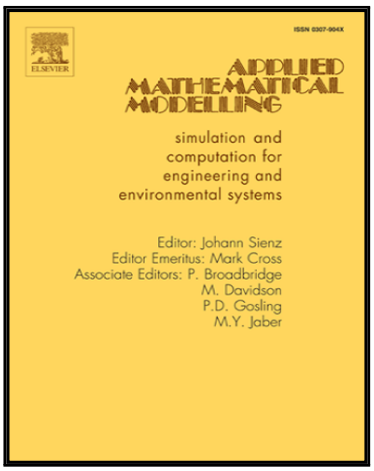

Non-linear forced vibration analysis of nanobeams subjected to moving concentrated load resting on a viscoelastic foundation considering thermal and surface effects

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PII: S0307-904X(17)30411-0
DOI: 10.1016/j.apm.2017.06.019
Reference: APM 11823

To appear in: *Applied Mathematical Modelling*

Received date: 2 October 2016
Revised date: 18 May 2017
Accepted date: 14 June 2017

Please cite this article as: Majid Ghadiri , Ali Rajabpour , Amir Akbarshahi , Non-linear forced vibration analysis of nanobeams subjected to moving concentrated load resting on a viscoelastic foundation considering thermal and surface effects, *Applied Mathematical Modelling* (2017), doi: 10.1016/j.apm.2017.06.019

Highlights

- Non-linear vibration of nanobeam considering thermal and surface effects is investigated.
- The nanobeam resting on a viscoelastic foundation is subjected to moving concentrated load.
- The Eringen's nonlocal and the Euler-Bernoulli theories are applied.
- The Galerkin and the Multiple Scales methods are employed to solve the problem.
- The influences of the various parameters on the jump phenomenon are studied.