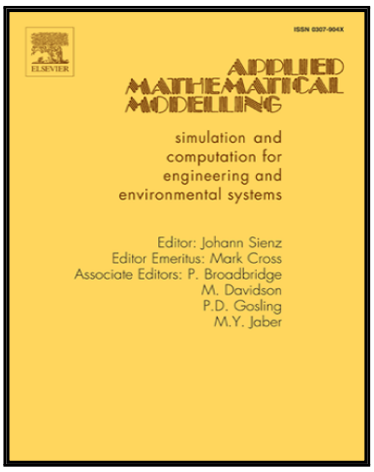

Nonlinear bending and vibration of functionally graded tubes resting on elastic foundations in thermal environment based on a refined beam model

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Highlights

- A refined beam model for tubes which can meet the vanishing stress condition on inner and outer surfaces is established.
- Nonlinear bending and vibration are solved by employing a two-step perturbation technique.
- The temperature-dependent material properties are considered.