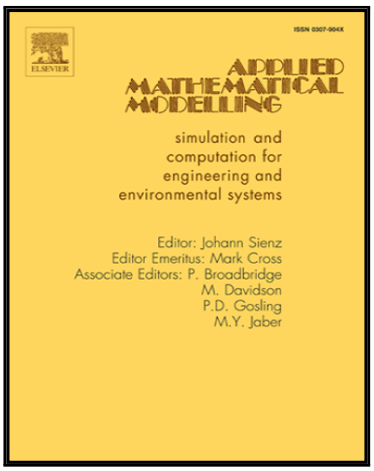

Vibration analysis of Euler–Bernoulli nanobeams embedded in an elastic medium by a sixth-order compact finite difference method

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Highlights

- Vibration analysis of a nonlocal Euler–Bernoulli beam embedded in an elastic medium.
- Pasternak elastic foundation model - Nonlocal differential elasticity of Eringen.
- Sixth-order accuracy schemes for governing equation and boundary conditions.
- The proposed 6^{th} order scheme is simple and outperforms similar existing methods.
- Parametric study for nonlocal parameter, slenderness ratios, and boundary conditions.