

عنوان مقاله:

Linear dynamic response of nanobeams accounting for higher gradient effects

محل انتشار:

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خلاصه مقاله:

Linear dynamic response of simply supported nanobeams subjected to a variable axial force is assessed by Galerkin numerical approach. Constitutive behavior is described by three functional forms of elastic energy densities enclosing nonlocal and strain gradient effects and their combination. Linear stationary dynamics of nanobeams is modulated by an axial force which controls the global stiffness of nanostructure and hence its angular frequencies. Influence of the considered elastic energy densities on dynamical response is investigated and thoroughly commented

کلمات کلیدی:

Nanobeams, Higher gradient effects, Dynamic response

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