

عنوان مقاله:

Effect of thickness of the panel on the buckling load of piezoelectric cylindrical composite panels reinforced with carbon nanotubes

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خلاصه مقاله:

This article presents the effect of thickness of the panel on buckling load of piezoelectric cylindrical composite panels reinforced with carbon nano-tubes subjected to axial load is investigated. Classical laminated plate theory (CLPT) is employed to reach stress and displacement correlations embracing mechanical and magnetic terms. Stress-strain equations for piezoelectric cylindrical panels reinforced with carbon nanotubes are then written by using Mori-Tanaka method. The results suggest that changing the panel thickness changes the buckling load however the changes are completely nonlinear. In order to verify the solution approach, motivated by a recent research work published by Interna

کلمات کلیدی:

Thickness of the panel, buckling load, nanocomposite, piezoelectric cylindrical shell, Mori-Tanaka model

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