

عنوان مقاله:

Free vibration analysis of thin functionally graded plates rested on two-parameter elastic foundation

محل انتشار:

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خلاصه مقاله:

Responses of the dynamical systems to some extent are affected by the natural frequencies. In this paper, differential transformation method is proposed for free vibration of thin functionally graded (FG) circular plates resting on elastic foundation. The material properties of the FG plate are assumed to be graded in the thickness direction according to the power-law distribution in terms of the volume fractions of the constituents. Accuracy of the present work is studied by comparing the numerical results with published results in literature. Then, the influence of Winkler and Pasternak elastic coefficients and the material grading index for different boundary condition is carried out.

کلمات کلیدی:

Free vibration, Functionally graded plates,DTM, Two parameter elastic foundation

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