Bending analysis of functionally graded plates under mechanical and thermal environment using non-polynomial shear deformation theory

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Aims and scope

Submit manuscript

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Abstract

In this paper, a penalty-based C^0 finite element (FE) model for C^1 higher-order shear deformation theory (HSDT) five variables is proposed for linear bending analysis of functionally graded material (FGM) plates under mechanical and thermal loads. The rule of mixture is considered to model the material characteristics of the FGM. The principle of