

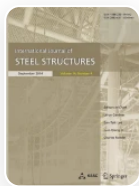
# Effect of Porosity on Stability Analysis of Bidirectional FGM Skew Plate via Higher Order Shear Deformation Theory and RBF Approach

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Aims and scope

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## Abstract

This research presents a comprehensive stability analysis of bidirectional porous functionally graded material (BPFGM) skew plates with varying porosity distributions, employing Higher Order Shear Deformation Theory (HSDT) and a meshfree approach. To model the complex behavior of the BPFGM skew plates, the material properties are graded in both the thickness and length directions according to a modified power-law distribution, incorporating four distinct porosity distributions. The governing differential equations are derived using the