

A fuzzy analysis for the plane bimodular problem

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Abstract

This paper presents a numerical approach for the fuzzy analysis of the plane bimodular problem. A FE-sensitivity analysis based algorithm is employed to solve the plane bimodular problem and is combined with the General Transformation Method to estimate the fuzzy set of response of structures when uncertainty of bimodular constitutive parameters are described by a fuzzy set. Numerical tests are provided to verify the proposed approach.