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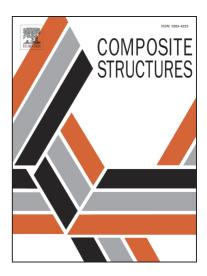
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Buckling and vibrations of microstructured rectangular plates considering phenomenological and lattice-based nonlocal continuum models

N. Challamel¹, F. Hache^{1,2}, I. Elishakoff² and C.M. Wang³

¹ University of South Brittany UBS, Institut de Recherche Dupuy de Lôme, Centre de Recherche, Rue de Saint Maudé, BP92116, 56321 Lorient cedex, France

Email: noel.challamel@univ-ubs.fr

Email: florian.hache@univ-ubs.fr, fhache2014@fau.edu

² Department of Ocean and Mechanical Engineering, Florida Atlantic University, Boca Raton, FL 33481-0991, USA

Email: elishako@fau.edu

³ Engineering Science Programme and Department of Civil and Environmental Engineering, National University of Singapore, Kent Ridge, Singapore, 119260, Singapore

Email: ceewcm@nus.edu.sg

Abstract

The present study investigates three different kinds of nonlocal plate theories for capturing the small length scale effect of microstructured plates in elasticity. One kind is the classical stress gradient Eringen's theory as applied to the Kirchhoff-Love plate model, another kind is based on the continualization of the discrete lattice model and the last kind is a combination of Eringen's model with some additional gradient curvature terms. From the three associated

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