XXI International Congress of Theoretical and Applied Mechanics
Warsaw, Poland, August 15–21, 2004

Mechanics of Thin Film Structures

Henrik Myhre Jensen

Aalborg University, Denmark

With emphasis on interface delamination in thin film structures, a variety of phenomena are discussed. The effects of curvature of the substrate on buckling-driven delamination of thin films in compression are analysed. Details in the morphology of buckling-driven delamination and in particular the causes of the so-called telephone cord blister are discussed. Conditions for delamination at edges and corners are formulated and it is shown that steady-state delamination at a corner is possible at significantly lower stress levels than delaminations at straight-sided edges.

View the extended summary