Stress vs sputtering effects in the propagation of surface ripples produced by ion-beam sputtering

A. Moreno Barrado; M. Castro Ponce; J. Muñoz García; R. Cuerno Rejado

Abstract-

Under low energy semiconductor materials, with typical sizes in the nanometric range. Recently, a theory of pattern formation has been able to account for the variability with the ion/target combination of the critical angle value separating conditions on ion incidence that induce the presence or the absence of ripples. Such a theory is based in the accumulation of stress in the damaged irradiated layer and its relaxation via surface-confined

Index Terms- Surface nanostructuring; Ion-beam sputtering; Continuum models; Stress-induced viscous flow; Ripple velocity

Due to copyright restriction we cannot distribute this content on the web. However, clicking on the next link, authors will be able to distribute to you the full version of the paper:

Request full paper to the authors

If you institution has a electronic subscription to Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms, you can download the paper from the journal website:

Access to the Journal website

Citation:

Moreno Barrado, A.; Castro, M.; Muñoz-Garcia, J.; Cuerno, R. "Stress vs sputtering effects in the propagation of surface ripples produced by ion-beam sputtering", Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms, vol.365, no.Part A, pp.13-16, December, 2015.