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Selected Publications:

J. Colin, J. Grilhe and N. Junqua, "Localized surface instability of a non-homogeneously stressed solid", *Europhysics Letters*, Vol. 38, No. 3, pp 307-312, 1 May 1997

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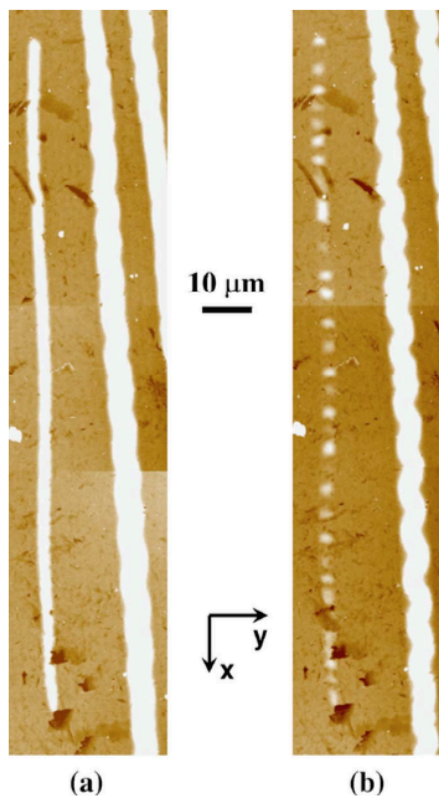


FIG. 4. (Color online) Atomic force microscopy evolution of a nickel 50-nm-thick film under stress. The initial state (a) is associated with higher transversal (Oy) and lower longitudinal (Ox) stresses, compared to the final state (b). The white areas correspond to the buckling structures induced at the sample surface during the compression experiment. Two morphological transitions are observed from straight-sided to either periodic distributions of bubbles (left side) or telephone cord buckling structures (right side).

From: Parry G., Cimetière A., Coupeau C., Colin J., Grilhé J.: Stability diagram of unilateral buckling patterns of strip-delaminated films. *Phys. Rev. E* **74**, 066601 (2006)

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Julien Durinck, Christophe Coupeau, Jerome Colin and Jean Grilhe, “Molecular dynamics simulations of buckling-induced plasticity”, *Applied Physics Letters*, Vol. 93, 221904, 2008

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