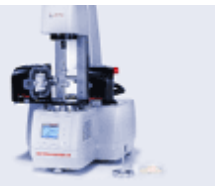




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Submitted: 03 May 2013

Accepted: 03 June 2013

Published Online: 19 June 2013

Isotropic and anisotropic wrinkling of diamond-like carbon films on polydimethylsiloxane substrates

Journal of Applied Physics **113**, 234904 (2013); <https://doi.org/10.1063/1.4811456>

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ABSTRACT

We describe experimental results about the spontaneous wrinkling of diamond-like carbon films over the thickness range 2 nm–58 nm, grown on polydimethylsiloxane (PDMS) substrates with a 5 nm gold film deposited as adhesion layer. Using Atomic Force Microscopy data with suitable processing, we explore both isotropic and anisotropic wrinkling, the latter done by creating trench structures on PDMS substrates. We show new non-predictable results based on the known literature.

This work was supported by the Fundação de Amparo a Pesquisa do Estado de São Paulo (FAPESP), the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), and Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), Brazil.

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