

The Study of DLC and Si-DLC Based Coatings and Their Mechanical Properties

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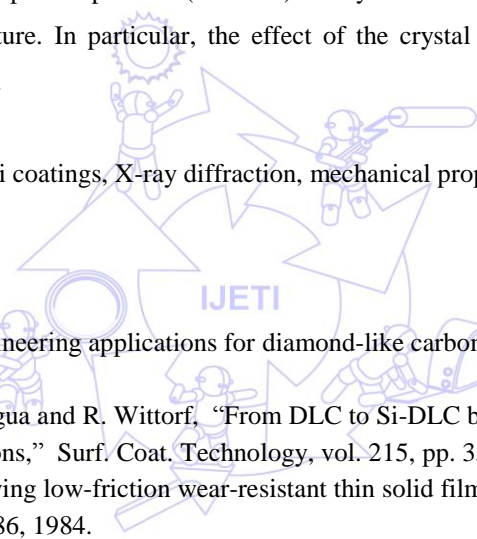
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Abstract

In this paper, diamond-like carbon (DLC) films and DLC-Si films were studied. These films were deposited by DC-plasma-assisted chemical vapour deposition (PACVD). X-ray diffraction analysis of coatings was used for a determination of coatings structure. In particular, the effect of the crystal structure of the coatings on their mechanical properties was studied.

Keywords: DLC coatings, DLC-Si coatings, X-ray diffraction, mechanical properties

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