

Abstract Submitted
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Surface Induced Reduction of Twisting Power in Liquid Crystal Films LIDONG PAN, University of Minnesota, CHENG-CHER HUANG — Null transmission ellipsometry was employed to study the temperature evolution of the helical structure in smectic liquid crystal films. Free standing films with thickness ranging from 31 to more than 400 layers were prepared and studied. The experimental results show a reduced twisting power in thin films. A simple model was constructed to explain the results. Surface effect was found to be the reason for this phenomenon. Our findings are consistent with the studies of helically ordered magnetic films.

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