THE LIGHT-INDUCED FREDERICKSZ TRANSITION THRESHOLD IN A NEMATIC CELL WITH INHOMOGENEOUS ANCHORING ENERGY OF THE DIRECTOR

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S u m m a r y

The influence of inhomogeneity of the director anchoring energy with the surface of a nematic cell on the Fredericksz transition threshold in a light field with both homogeneous and spatially modulated distributions of the light intensity is studied. The analytic expressions for the threshold value are obtained at small amplitudes of modulation of the anchoring energy. For large amplitudes, we numerically calculated the threshold value and studied its dependence on the type of inhomogeneity of the anchoring energy and values of its parameters.