

PHOTOALIGNMENT OF LIQUID CRYSTALS
ON CHALCOGENIDE GLASS $\text{As}_{20}\text{Se}_{80}$ SURFACE

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S u m m a r y

Photoalignment of nematic liquid crystals on the chalcogenide glass $\text{As}_{20}\text{Se}_{80}$ surface is studied by the digital processing of the optical textures of light-induced twist deformations of a liquid crystal (LC) in a cell irradiated with Gaussian polarized light. The original experimental method allowed obtaining the dependence of the light-induced twist angle for the $\text{As}_{20}\text{Se}_{80}$ surface on the exposure dose by the analysis of the only irradiated spot. The dependences of the light-induced twist angle on the exposure dose are found to be qualitatively different for LC 5CB and LC E7, which points on a possibility of different mechanisms of photoalignment on chalcogenide glass.