

# **Nanomesh aluminum films for LC alignment. Theoretical and experimental modeling**

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## **Abstract**

A porous system for LC alignment is reviewed. Fabrication of nanomesh aluminum films and their porous structure are described. Methods of the nanomesh parameters for optimal LC alignment are discussed. A model of the LC alignment in a porous system is proposed. The LC orientation type is determined by the free anchoring energy and the micropore diameter. The difference between planar and homeotropic anchoring energies appears to be lower than the interaction energy by two orders of magnitude.