

Industrial Trends in Optical Film Applications of Liquid Crystals

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Aligned liquid crystal materials are key components in many optical devices and applications requiring light and polarization control. Especially, optical alignment of monomeric and polymeric liquid crystals enables novel molecular configurations in liquid crystal displays (LCD) as well as a plethora of new thin-film optical elements on single substrates. Besides technological advance, cost-effective industrial feasibility is a crucial challenge. To illustrate technological and industrial progress and trends, examples of optical film devices for displays and other applications will be presented.