

# Extremely Short Helix Pitch Deformed Helix Ferroelectric Liquid Crystals: Applications in Transflective Displays

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Here in this investigation, we showed that deformed helix ferroelectric liquid crystals exhibiting extremely short helix pitch (in UV region  $\sim 350$  nm) can be successfully implement for transflective displays which is hot topic of research nowadays. Present study shows the high contrast both in transparent as well as reflective regions. It is evident from the present study that this display is more promising both in indoor as well as outdoor environment. More understanding of the phenomena is under investigation and our future studies throw light on this system.

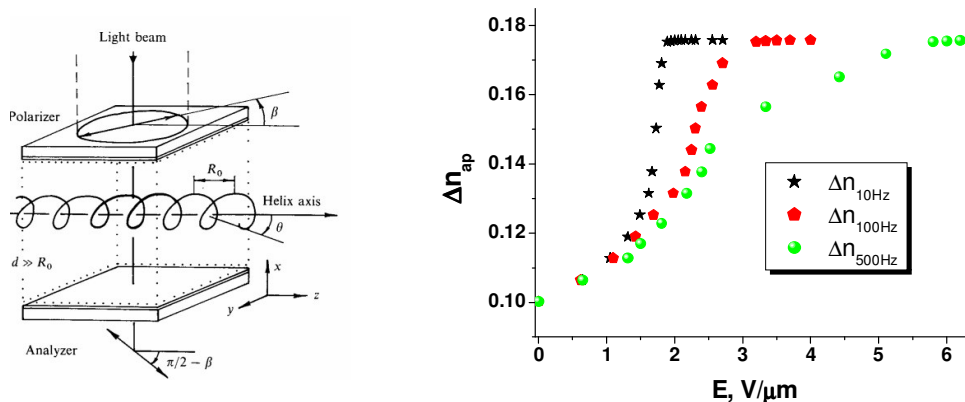


Figure 1: DHF mode for transflective FLC,  $\beta=\theta$  (left); Optimized parameters of frequency and voltage for fabricating transflective cell (right). Voltage applied is 1.5 and frequency applied is 1 Hz.

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