Jy-shan Hsu

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Ph.D.; National Chung-Tung University
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Liquid Crystals, Liquid Crystal Display

◆ Research Interests

- Courses taught include General Physics, Optics, Fourier Optics, Optical Wave in Crystal, and Modern Technology in Photonics. Jy-Shan Hsu's research interests are in the areas of Liquid Crystals and its applications. Research topics include (1) the back flow effects on liquid crystal display (2) the relationships between bistable liquid crystal display and liquid crystal back flow effect (3) the applications of liquid crystals.

◆ Selected Publications

- Chong-Yin Wu, Yi-Hong Zou, Ivan Timofeev, Yu-Ting Lin, Victor Ya. Zyryanov, **Jy-Shan Hsu**, and Wei Lee, 2011: Tunable bi-functional photonic device based on one-dimensional photonic crystal infiltrated with a bistable liquid-crystal layer, Optics Express, 19 , 8, 7349－7355.
- **Jy-Shan Hsu*** and Chun-Hao Yeh, 2009: Determination of surface tilt angle of splay and bend liquid crystal cells, *Applied Optics* 48, 43.
- **Jy-Shan Hsu***, Bau-Jy Liang and Shu-Hsia Chen, 2006: Dynamic behaviors of dual frequency liquid crystals in bistable chiral tilted-homeotropic nematic liquid crystal cell. *Appl. Phys. Lett.* 89, 051920.
- **Jy-Shan Hsu***, Bau-Jy Liang and Shu-Hsia Chen, 2004: Bistable chiral tilied-homeotropic nematic liquid crystal cells. *Appl. Phys. Lett.* 85, 5511-5513.

◆ Recent Research Projects

- Flow effects and corresponding electro-optical characteristics in Liquid Crystals, sponsored by National Science Council (August 2008 ~ July 2011)
- The dynamic behaviors and electro-optical characteristics of the BHN Liquid Crystal Display and its Varieties, sponsored by National Science Council (August 2007 ~ July 2008)