

Meniscus-Assisted Solution Shearing Enables Highly Ordered Molecular Alignment for Stable Organic Electrical Device Performance

This presentation introduces DTCP-based photochromic materials for organic semiconductors and liquid crystal photonic systems. DTCP additives improved molecular alignment and charge transport in PDVT-10 thin films, increasing hole mobility from 2.12 to 3.23 cm² V⁻¹ s⁻¹. A newly designed DTCP liquid-crystalline dye also enabled reversible light-controlled switching between transparent and absorptive states, demonstrating potential applications in smart windows, rewritable optical devices, and multifunctional optoelectronic materials.



Speaker:

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