

Abstract Submitted
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Photon Localization in a nematic Liquid Crystal JIM MCCLYMER,

University of Maine, HAYEL SHEHADEH, Prince Sultan University, Saudi Arabia
— Over 50 years ago Anderson¹ described a process whereby electrons can be localized due to multiple interference caused by scattering from defects. Nearly 25 years later John² and Anderson³ suggested that light can also be localized in highly scattering media. Such highly scattering systems typically have extremely high absorption, complicating efforts to verify localization. We report transmitted light intensity measurements in a nematic liquid crystal that shows clear evidence for strong localization.

¹P. W. Anderson, *Phys. Rev.* **109**, 1492 (1958).

²S. John, *Phys. Rev. Lett.* **53**, 2169 (1984).

³P. W. Anderson, *Philos. Mag. B* **52**, 505 (1985).

Jim McClymer
University of Maine

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