

Abstract Submitted
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Band-edge enhancement of magneto-optical rotation in a 1-d polymer lattice MICHAEL CRESCIMANNO, JAMES ANDREWS, GUILIN MAO, AARON BISHOP, KYLE COMEAU, Youngstown State U, Dept. Physics, RYAN LIVINGSTON, BIJAYANDRA SHAKYA, CLIPS CENTER, CASE WESTERN RESERVE UNIVERSITY COLLABORATION — Faraday rotation, the rotation of the polarization of light propagating along an applied magnetic field, can be enhanced by modifying the dispersion relationship. We develop the theory and computational tools necessary to understand the enhancement measured in recent experiments conducted at YSU using a multilayer of polystyrene and PMMA prepared by the CLiPS NSF Center at CWRU.

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