Abstract Submitted
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Electro-optic Measurements in Single-Crystal Films of a Combination of Materials Involving DAST and IR-125 A. NARAYANAN, J. TITUS, M. THAKUR, PHOTONIC MATERIALS RESEARCH LABORATORY, AUBURN UNIVERSITY, AL, 36849 TEAM — Single crystal films of a combination of materials involving DAST and a dye molecule IR-125 have been prepared using the modified shear method. X-ray diffraction results indicate a [001] orientation of the film similar to a DAST single-crystal film. The electro-optic measurements of the DAST-IR125 films have been performed using field induced birefringence in the cross polarized geometry at 633 nm and 1550 nm. A modulation of 14 percent has been observed in a single pass through the film for a field of 1 Volt/micron at 633 nm. The results indicate exceptionally high electro-optic coefficients at both of the wavelengths (633 and 1550 nm).

M. Thakur
Photonic Materials Research Laboratory, Auburn University, AL

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