

Abstract Submitted  
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**Optical and magneto-optical spectra of  $\text{Bi}_{1-x}\text{Sb}_x$  with  $x = 0.015$**  M.S. WOLF, S.V. DORDEVIC, The University of Akron, N. STOJILOVIC, University of Wisconsin Oshkosh, S.S. VUJATOVIC, M.V. NIKOLIC, P.M. NIKOLIC, Serbian Academy of Arts and Sciences, L.C. TUNG, National High Magnetic Field Laboratory — Bismuth and its alloys with antimony have attracted attention in recent years due to possible realization of topological insulating state. In this study we have used infrared and magneto-optical spectroscopies to probe the electrodynamic response of bismuth doped with 1.5 % of antimony. The spectra will be presented for temperatures down to 5 K, and in magnetic fields as high as 18 Tesla. The results reveal strong magneto-optical activity, especially around the plasma minimum in reflectance. These findings will be compared and contrasted with magneto-optical results on pure bismuth.

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