

Abstract Submitted  
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**Raman Scattering studies of Topological Insulators  $\text{Bi}_2\text{Te}_3$ ,  $\text{Bi}_2\text{Se}_3$ , and  $\text{Sb}_2\text{Te}_3$** <sup>1</sup> KOLAWOLE AKINTOLA, TODD ANDREWS, STEPHANIE CURNOE, Memorial University of Newfoundland, TAKAO SASAGAWA, Materials and Structure Laboratory, Tokyo Institute of Technology — Raman scattering spectroscopy has been used to probe the bismuth and antimony chalcogenides  $\text{Bi}_2\text{Se}_3$ ,  $\text{Bi}_2\text{Te}_3$ , and  $\text{Sb}_2\text{Te}_3$ . Room temperature spectra of these topological insulators reveal new phonon modes in spectral regions not previously investigated. Polarization studies have been done to characterize these modes. New results on the temperature dependence of the Raman active phonon modes in these materials will also be presented.

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