Abstract Submitted
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Effect of Sm valence variation on hybridization gap and in-gap excitons in SmB6 studied by Raman spectroscopy[1] MICHAEL VALENTINE, SEYED KOOHPAYEH, WILLIAM A. PHELAN, TYREL MCQUEEN, NATALIA DRICHKO, Institute for Quantum Matter, Johns Hopkins University, PRISCILA ROSA, ZACHARY FISK, University of California, Irvine — SmB_6 is a proposed topological Kondo insulator where the presence of topological nontriviality can be tuned by variations in the Sm valence. A range of samples where Sm valence was varied by increasing numbers of Sm vacancies was investigated using Raman spectroscopy over a temperature range of 10 to 300 K. We show a possibility to characterize the presence of Sm vacancies on the order of 1

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