

Abstract Submitted  
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**Influence of Hydrostatic Pressure on Transport Properties of  $\text{Sb}_{2-x}\text{V}_x\text{Te}_3$  and  $\text{Ga}_{1-x}\text{Mn}_x\text{As}$**  J.S. DYCK, T.J. MITCHELL, P.A. SPEERO, John Carroll University, Department of Physics, M.C. ARONSON, C. UHER, University of Michigan, Department of Physics, C. DRASAR, P. LOSTAK, University of Pardubice, Faculty of Chemical Technology, X. LIU, J.K. FURDYNA, University of Notre Dame, Department of Physics — We present results on the transport properties of two types of ferromagnetic diluted magnetic semiconductors (DMS) under hydrostatic pressures up to 1.6 GPa. High pressure measurements afford a reversible way to tune both the electronic structure and magnetic interactions of these materials. The behavior of the Curie temperature can be monitored via the position of the peak in the resistance data associated with the ferromagnetic transition. In the case of  $\text{Sb}_{2-x}\text{V}_x\text{Te}_3$  with  $x = 0.03$ , pressure strongly affects the electrical resistivity and Curie temperature. For  $\text{Ga}_{1-x}\text{Mn}_x\text{As}$  with  $x = 0.09$ , little change is seen in the properties. Measurements in magnetic field will also be presented and discussed.

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