

Abstract Submitted
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Large crystal growth, physical properties, and doping studies of SnSe₂ HANLIN WU, SHENG LI, BING LV, The University of Texas at Dallas, Richardson, Texas 75080, THE UNIVERSITY OF TEXAS AT DALLAS TEAM — Two dimensional (2D) layered metal dichalcogenides, exhibiting diverse physical properties in charge-density-wave (CDW), superconductivity (SC), topology, and thermoelectrics, are attracting great attention in the past few years. In this presentation, we will primarily focus on CdI₂-type SnSe₂. We have successfully grown high quality large size single crystals up to several centimeters using modified Bridgman technique, and carried out systematical doping studies on the SnSe₂ crystal through chemical interactions. The resulting physical properties of the grown crystals and intercalated samples will be presented. The potential high thermoelectric properties and superconductivity will also be discussed.

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