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**Superconducting property of Sn1-xInxTe compounds** KA-RYEONG KIM, Kyung-Hee Univ. — SnTe has been known as a topological crystalline insulator (TCI). TCI is produced by the inversion symmetry of crystal, instead of time-reversal symmetry and Z2 invariance. Recently, the superconducting properties were discovered in In-doed Sn1-xInxTe compounds, which is believed to be the first superconductor with TCI. We synthesized Sn1-xInxTe (x = 0.1, 0.2, 0.3, 0.4, 0.5, 0.6 and 0.7 ) single like crystals by the flux method. From the electrical resistivity, magnetization, and heat capacity measurements, we obtained superconducting properties such as the critical temperature, upper-critical magnetic fields, coherence length, and Ginzburg-Landau parameters with respect to In-doping concentrations of Sn1-xInxTe in terms of Ginzburg-Landau and Bardeen-Cooper-Shrieffer (BCS) theory.

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