

Chalcogenide Superlattice and Topological Electronics



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1:30 – 2:30PM

Auditorium, WPI-MANA bldg., Namiki Site

Chalcogenide superlattice consisting of GeTe and Sb₂Te₃ layers was originally invented to improve the switching performance of phase-change nonvolatile electric memory. However, it has been attracted as a platform to examine topological insulating and new spintronics, recently. Ge, Sb and Te are usually nonmagnetic at room temperature. However, once the atoms are built up as the superlattice, the memory device indicates a large magnetoresistance at room temperature. In seminar, the functionalities of the device and the ab-initio simulation models are presented.

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