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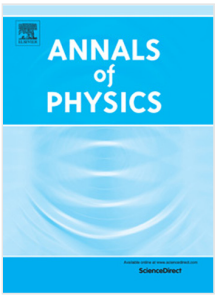

Strain induced novel quantum magnetotransport properties of topological insulators

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Highlights:

1. The strain removes the degeneracy in inversion symmetric Dirac cones.
2. The strain gives rise to the splitting and mixture of the Landau levels.
3. The strain leads to the asymmetric spectrum of the dc conductivity.
4. Shubnikov de Haas oscillations are shown to be superimposed on Weiss oscillations for small enough Fermi energy.
5. Interplay between electric field and inversion symmetry breaking causes different occupancy of the electron and hole states.