

FIG. 14. Experimental curves for the Hall resistance $R_H = \rho_{xy}$ and the resistivity $\rho_{xx} \sim R_x$ of a heterostructure as a function of the magnetic field at a fixed carrier density corresponding to a gate voltage $V_g = 0$ V. The temperature is about 8 mK.



FIG. 1 (color online). Device demonstrating quantum anomalous Hall effect. (a) Photograph of 10-nm-thick film of $(Cr_{0.12}Bi_{0.26}Sb_{0.62})_2Te_3$ on a GaAs substrate, scratched by hand into a Hall bar shape, with indium metal Ohmic contacts. Schematic measurement setup included. (b) Longitudinal resistivity ρ_{xx} and transverse resistivity ρ_{yx} of the device at base temperature as a function of the applied magnetic field $\mu_0 H$ in each sweep direction, forming a ferromagnetic hysteresis loop. As the field approaches zero from either starting point, ρ_{yx} reaches its quantized value h/e^2 and ρ_{xx} approaches zero.

図は <u>Bestwick et al. Phys.Rev.Lett. 114(2015)187201</u>より。