

Abstract Submitted
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Cyclotron mass and g-factor of high mobility holes in SiGe/Ge/SiGe in tilted magnetic field¹ A. SUSLOV, NHMFL-FSU, Tallahassee, FL 32310, USA, I. DRICHKO, V. MALYSH, I. SMIRNOV, L. GOLUB, S. TARASENKO, A.F. Ioffe Physical Technical Institute of RAS, 194021 St.Petersburg, Russia, O. MIRONOV, Warwick SEMINANO R&D Centre, University of Warwick Science Park, Coventry CV4 7EZ, UK, M. KUMMER, H. VON KANEL, LFKP ETH Zurich, CH-8093 Zurich, Switzerland — Complex ac conductivity of a high quality single quantum well p-GeSi/Ge/GeSi ($p=6\cdot 10^{11}\text{cm}^{-2}$) is measured using the surface acoustic wave technique at frequencies 30 and 85 MHz in magnetic fields of up to 18 T in the temperature range 0.3 - 5.8 K. In minima of the conductivity oscillations with small filling factors in integer quantum hall regime the ac conductivity is of the hopping nature and is described within the “two-site” model. In tilted fields for odd filling factors 3 and 5 increase of conductivity in the minima of the oscillations is due to effect of the in-plane field component on the g-factor. The same in-plane component causes rising of the cyclotron effective mass and damping of the oscillation magnitudes at even filling factors larger than 8.

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