306. Title:Terahertz photoresponse dependence on magnetic and electric fields in graphene-based devices

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Abstract:In this study, the influence of a magnetic field on Landau levels (LLs) in graphene-based devices is described via the magneto-optical response induced by terahertz (THz) radiation. For single-layer graphene, the resonance energies of the transitions between the LLs such as L1, L2 and L3, fit quite well to the terahertz spectral range. The scattering rate of the spectral lines of LLs is taken into account. Based on a theoretical analysis we argue that the fingerprints of the THz radiation in single-layer graphene can be improved to be observed at low magnetic fields.