MAGNETIC PROPERTIES OF THE ELECTRONS IN MoS₂ MONOLAYER

© V.V. Karpunin¹, V.A. Margulis²

 ¹ Evseviev Mordovian State Pedagogical University, 430007 Saransk, Russia
² Ogarev Mordovian State University, 430005 Saransk, Russia
E-mail: karpuninvv@mail.ru, theorphysics@mrsu.ru

Received June 23, 2020 Revised July 23, 2020 Accepted for publication July 27, 2020

The magnetic moment of the molybdenum disulfide monolayer (MoS_2) is calculated in the presence of a perpendicular magnetic field **B**. The field **B** leads to a significant increase in the spin splitting in the conduction band, which is reflected in the expression of the magnetic moment. The oscillatory character of the magnetic moment dependences on the magnetic field is investigated.

Keywords: magnetic moment, MoS₂ monolayer.

Full text of the paper will appear in journal SEMICONDUCTORS.