

Abstract:

This work deals with studies MoS₂ layers prepared by mechanical exfoliation was detected by optical microscopy and the number of layers was determined from AFM measurement. The layers were characterized by Raman spectroscopy in various wavelengths. A spectroelectrochemical cell for the sandwich sample consisting of a MoS₂ layer and two layers of graphene with various isotope composition and Raman spectra measurements were performed at voltages from 0.0 V to 0.9 V. A larger shift of the G band of graphene was observed on the layers containing MoS₂ than on layers consisting just from graphene layers.

Keywords: MoS₂, graphene, Raman, spectroscopy, spectroelectrochemistry