

Studying the nature of some graphite materials using Raman spectroscopy

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Abstract

This work is a review of the application of Raman spectroscopy to identify the nature of some carbon materials such as: commercial graphite with various compositions. The RAMAN spectra show four bands D, G, D' and 2D bands. The G and 2D Raman peaks change in shape, position and relative intensity with number of graphene layers. These results were confirmed using XRD and FTIR. The samples were analyzed using a scanning electron microscopy to identify their morphologies.

Keywords: Raman spectroscopy; Graphite; Reduced graphite oxide.