Photoconductivity on K-Feldspar

Afam Uzorka¹

¹Kampala International University

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Abstract

In this paper the details of photoconductivity experiments on K crystal are presented. Photoconductivity measurements were inconclusive as to whether or not there was a current flowing during the 850 nm excitation of a feldspar sample. However there was a clear current when exciting the same sample with 515 nm light, but there was a complex relationship between the magnitude of the current and the number of emission photons counted. A model was developed to explain the photoconductivity results where electrons migrate through the conduction band aided by thermal excitation and tunneling.

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