
Magnetic Behavior of Some Biotite Samples from West Thrace, N.E. Greece

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Abstract: The magnetic behavior of some biotite samples, from volcanic rocks of W. Thrace area, N.E. Greece, was studied in the temperature range from 85 to 270° K and compared with the chemical composition. The magnetization of the samples depends linearly on the applied field, and the magnetic susceptibility obeys the Curie law, showing a typical paramagnetic behavior which is due to Fe²⁺, Fe³⁺ and Mn²⁺. The effective magnetic moment was calculated from the structural formulas of the samples and deviation from the experimental values is discussed.

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