THE MAGNETO-OPTIC CONSTANTS OF SODIUM BROMIDE

The Faraday rotation in a single crystal of sodium bromide of 1.30 mm thickness has been measured for the first time using a magnetic field of 15,400 Oersteds. The magneto-optic constants have been evaluated using the dispersion data available in Landolt and Bornstein Tables. The Verdet constant \( V \) has the values 0.0621 and 0.123 minutes per cm. per Oersted for the wavelengths \( \lambda 5461 \) and \( \lambda 4358 \), while the corresponding values of the magneto-optic anomaly \( \gamma \) are 0.86 and 0.88 respectively. The estimated accuracy is about 2 per cent. It is interesting to note that for sodium chloride \( V_{5461} \) is 0.0410 and \( \gamma \) is 0.91.

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