PLEOCHROISM IN POTASSIUM COBALT SULFATE HEXAHYDRATE CRYSTALS

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S u m m a r y

A new method of growing potassium cobalt sulfate hexahydrate crystals from an aqueous solution of K_2SO_4 and $CoCl_2$ salts has been proposed. On the basis of X-ray diffraction researches, the chemical composition of crystals grown was confirmed. The corresponding transmission spectra in the range 200–800 nm were obtained for the crystallographic orientations (001) and (011). The pleochroism phenomenon associated with Co^{2+} absorption bands has been revealed. A relationship between the structural and optical spectral properties of the crystals obtained has been found.