

Inorganic Materials 2002 vol.38 N1, pages 78-82

Effect of synthesis temperature on the transport properties of copper ferrites

Parfenov V., Nazipov R.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Copper ferrites were prepared from equimolar oxide mixtures at different temperatures, and their electrical conductivity and thermoelectric power were measured. The transport properties of the ferrites were found to vary systematically with the synthesis temperature. A model for charge transport in copper ferrite spinels was proposed. The conductivity and thermoelectric power data, together with earlier Mössbauer results, were used to assess the cation distribution in the ferrites.

<http://dx.doi.org/10.1023/A:1013615930587>
