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Dielectric properties of PbBO$_3$ perovskites with mixed-valence substitution in the B position

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Abstract

This paper reports on the synthesis of PbBO$_3$ perovskites with mixed-valence substitution in the B position in which the number of ions n in different valence states occupying oxygen octahedra varies from 2 to 6. The dielectric properties of ceramic samples have been studied at frequencies in the range from 12 Hz to 100 kHz and in the temperature interval 77–450 K. The new compounds have been shown to possess relaxor properties.

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