NMR study of cation motions in ferroic $[C(NH_2)_3]_3Bi_2Br_9$.

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Streszczenie

The proton NMR second moment and spin-lattice relaxation time of polycrystalline $[C(NH_2)_3]_3Bi_2Br_9$ were studied in a wide-temperature range. Dynamical inequivalence of two crystallographically different guanidinium cations has been revealed . The C3 reorientation of the two types of cations was found to be hindered by different potential barriers (25.1 kJ/mol and 34.7 kJ/mol). At higher temperatures an overall reorientation of the cations was revealed. The existence and order-disorder character of the phase transitions at 333, 350, 415, and 425 K have been confirmed.

Słowa kluczowe

Phase Transitions, Nuclear Magnetic Resonance

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