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OBSERVABILITY OF PARAMAGNETIC ACOUSTIC RESONANCE IN LIQUID CRYSTALS.

Kochelaev B., Khasanov B.

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

Abstract

The observability of paramagnetic acoustic resonance in liquid crystals was studied. The resonance change in the penetration depth of an ultrasonic shear wave in a nematic liquid crystal, and the ultrasound resonance absorption coefficient in a smectic A liquid crystal, were calculated in the hydrodynamic approximation. The conditions for observability of the effect were determined.