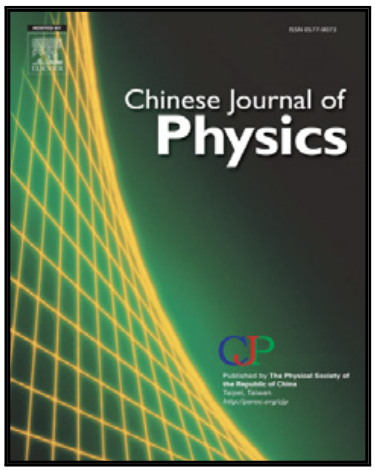

The Crystal-Field Dependency of Sound Attenuation in the Spin-3/2 Ising Model

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Highlights

- Sound attenuation (SA) effects are studied for spin-3/2 Ising model on Bethe lattice.
- The Onsager theory of irreversible thermodynamics is used.
- Order-parameters are defined in terms of exact recursion relations on Bethe lattice.
- Two relaxation times are found to calculate the sound attenuation coefficient.
- Critical behaviors of SA are studied near second- and first-order phase transitions.