

Dipole magic echo in thermodynamical systems

Skrebnev V.

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

Abstract

The irreversible evolution component of the subsystem of nonsecular dipole-dipole interactions under conditions of time inversion is considered on the basis of the nonequilibrium thermodynamics methods. The abridged description of the spin system evolution is effected with the help of projection operators and the introduction of the temperatures of secular, nonsecular and Zeeman subsystems. Consideration of cross-correlation attenuation during the emergence of the temperature in the sub-system leads to a good agreement with experiment.

<http://dx.doi.org/10.1088/0953-8984/2/8/010>
