

# Magnetic resonance of paramagnetic ion-nuclei in metals and superconductors

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## Abstract

The magnetic resonance lineshape of paramagnetic ion-nuclei in metals is calculated using the temperature Green functions method and is analyzed for limiting cases of fast and slow spin lattice relaxation of localized moments. The longitudinal spin lattice relaxation rate for paramagnetic ion-nuclei in type II superconductors due to the hyperfine coupling with local moments is calculated. The influence of the fluctuation coupling of electrons on relaxation of paramagnetic ion-nuclei in "dirty" type II superconductors is investigated in magnetic field slightly above the upper critical field  $H_{c2}$ . © 1990 J.C. Baltzer A.G., Scientific Publishing Company.

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