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Electron paramagnetic resonance of Yb3+ ions in a concentrated YbRh2Si2 compound with heavy fermions

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Abstract

The EPR signal from localized ytterbium ions was observed in an undoped YbRh2Si2 compound with heavy fermions in the temperature range from 1.5 to 25 K. The exponential contribution dominating the temperature dependence of EPR line width at temperatures above 15 K was shown to be caused by the random transitions from the ground to the first excited Stark sublevel of the Yb3+(4f13) ion with the activation energy Δ = 115 K. © 2003 MAIK "Nauka/Interperiodica".

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