

Shape of the magnetic resonance line in a thin film on the surface of an anisotropic superconductor

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Abstract

The shape of the EPR line in a thin ($d = \lambda/2$, where λ is the London penetration depth of the magnetic field in the superconductor) paramagnetic film deposited on the surface of an anisotropic superconductor is calculated in an oblique magnetic field with allowance for the inhomogeneity of the local magnetic field of the Abrikosov vortex lattice. It is shown that, as the tilt angle of the external magnetic field is varied, the shape of the EPR line changes noticeably. This fact can give additional information about the superconductor parameters (the symmetry type of the vortex lattice and the anisotropy parameter of the superconductor). © 1999 American Institute of Physics.
