

Magneto-Acoustic Resonances in Antimony

著者	FUKASE T., FUKUROI T.
journal or	Science reports of the Research Institutes,
publication title	Tohoku University. Ser. A, Physics, chemistry
	and metallurgy
volume	19
page range	273-273
year	1967
URL	http://hdl.handle.net/10097/27390

Magneto-Acoustic Resonances in Antimony*

T. FUKASE and T. FUKUROI

The Research Institute for Iron, Steel and Other Metals

Abstract

Spike-like sharp absorption peaks have been observed in an ultrasonic attenuation coefficient of antimony in a weak magnetic field range. This type of resonance is not caused by the electron in an extremal orbit as has been observed in many cases of geometric resonance, but it is probably due to the particular kind of selective coupling predicted by Kaner *et al.* On applying the Kaner's formula, we can get the cyclotron mass which is in agreement with the value derived from the Shoenberg's results within 13 per cent.

^{*} The 1339th report of the Research Institute for Iron, Steel and Other Metals. Published in the Journal of the Physical Society of Japan, 21-S (1966), 751. Proceedings of the International Conference on the Physics of Semiconductors, Kyoto, 1966.