

Electric Field Gradients at the In Site in Au-In Compounds*

P. Wodniecki, A. Kulińska, B. Wodniecka, and A. Z. Hryniewicz

H. Niewodniczański Institute of Nuclear Physics, 31-342 Cracow, Radzikowskiego 152, Poland

Z. Naturforsch. **53a**, 349–354 (1998); received October 31, 1997

The quadrupole interaction in Au-In compounds of different stoichiometries was studied with the perturbed angular correlation technique. The electric field gradients at ^{111}Cd probes were measured and the temperature dependences of the quadrupole frequencies were determined. A new high temperature phase of AuIn above 630 K and a new metastable modification of Au_7In_3 were found.

Key words: Perturbed Angular Correlations; EFG; Intermetallic Compounds; Au-In System.

Reprint requests to Dr. P. Wodniecki; Fax: 048-12-6 37 02 22.