FIZIKA, Suppl. 1 (1969) 49

E4 E0 Admixture in the $2^{+\prime} \rightarrow 2^{+}$ Transition in ¹⁹⁴Pt

Đ. M. KRMPOTIĆ, L. G. MARINKOV and A. H. KUKOČ, Institute "Boris Kidrič", Beograd

In the O_S-Pt region, several measurements were performed to establish the E0 components in equi-spin transitions. The conversion coefficient measurements indicated that small multipole mixtures would be present and therefore the $e^--\gamma$ directional correlation method was considered to be appropriate.

We analyzed $2^{+\prime} \rightarrow 2^{+}$ transition of the ¹⁹⁴Pt from the decay of ¹⁹⁴Ir using an electron-gamma correlation stand¹⁾ with a magnetic lens and a NaI detector.

In order to establish the multipolarities in the $2^+ \rightarrow 2^+$ transition we measured the correlation $293\gamma-328\,\mathrm{e_R}$ as well as $293\,\mathrm{e_R}-328\gamma$. Since the former is not sensitive to the E0 component we used it for M1 component determination and found two possible values: 0.28% and 80%. Former was accepted since it agreed with the conversion coefficient. The $293\,\mathrm{e_R}-328\,\gamma$ correlation yielded one value for the E0 component, $q=0.03^{+0.1}_{-0.05}$, showing that it is also negligible.

References

- 1) A. Kukoč and L. Marinkov, Nucl. Instr. Meth. 37 (1965) 77.
- E5 The Electric Monopole Component in the 2+'→2+ Transition in 192Pt

 L. MARINKOV, I. ANIČIN, I. BEKIT and R. STEPIĆ, Institute "Boris Kidrič",
 Beograd
- E6 Internal Conversion Studies of Double Decay Processes in 114In
 - R. VUKANOVIĆ*, L. SAMUELSSON, M. MIGAHED, L. WESTERBERG and L. O. EDVARDSON, Institute of Phusics, University of Uppsala, Uppsala, Sweden
 - * Present address: Institute "Boris Kidrič", Beograd
- E7 The 371 keV 2+-2+ Transition in ¹⁹⁰Os Investigated by Electron-Electron and Gamma-Electron Directional Correlations
 - L. SAMUELSSON, R. VUKANOVIĆ*, M. MIGAHED, M. ŽUPANČIĆ*, L. O. EDVARDSON and L. WESTERBERG, Institute of Physics, University of Uppsala, Uppsala, Sweden
 - * Present address: Institute "Boris Kidrič", Beograd