

1. NUCLEAR g-FACTORS AND STRUCTURE OF THE HIGH-SPIN ISOMERS IN ^{190,192,194}Pt

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Integral perturbed angular distribution method in an external magnetic field has been used to measure the g-factors of isomers in the ^{190,192,194}Pt, populated in the (α , 2n)-reaction. The results are as follows: ¹⁹⁰Pt, $g(12^+) = -0,17(12)$, $g(10^-) = -0,0016(36)$, $g(7^-) = +0,62(9)$; ¹⁹²Pt, $g(12^+) = -0,18(9)$, $g(10^-) = -0,0012(10)$, $g(7^-) = 0,48(12)$; ¹⁹⁴Pt, $g(12^+, \text{new assignment}) = 0,17(7)$, $g(7^-) = +0,26(8)$. The 12^+ states have the rotational-aligned ($\nu i_{13/2}^{-2}$) structure. The missing rotation-aligned ($\nu i_{13/2}^{-2}$) 12^+ state is suggested to be isomeric in ¹⁹⁴Pt (instead of the 10^+ state) and to which the $g = -0,17(6)$ value has to be attributed. From the g-factors of the 10^- states in ¹⁹⁰Pt and ¹⁹²Pt, which have the configuration $\nu 9/2^- [505] \otimes \nu 11/2^+ [615]$, the anomalous g_{I} -factor for neutrons has been derived as $\delta g_{\text{I}} = -0,028(6)$. Positive values of g-factors of the 7 isomers confirm the prediction of the non-axial rotor + 2 quasiparticles model about the change of the intrinsic structure from mainly ($\nu i_{13/2}, \nu j$) to mainly ($\pi h_{11/2}, \pi j$) in transition from Hg to Pt nuclei.