

10. NUCLEAR g -FACTORS AND STRUCTURE OF THE HIGH-SPIN 10^+ , 12^+ AND 7^- STATES IN ISOTOPS $^{196,198}\text{Hg}$

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The integral perturbed angular distribution (IPAD) method in an external magnetic field has been used to measure the g -factors of isomers in the $^{196,198}\text{Hg}$ nuclei, populated in the $(\alpha, 2n)$ -reaction. The results are as follows: ^{196}Hg , $g(12^+$ and $10^+) = -0.19(6)$, $g(7^-) = -0.030(17)$; ^{198}Hg , $g(12^+$ and $10^+) = -0.18(8)$, $g(7^-) = -0.033(14)$. The intrinsic structure of the isomers is discussed. Measured g -factors of 12^+ and 10^+ states support model “axial-symmetric oblate rotor + two-quasiparticles”. Measured g -factors of 7^- states in mercury allows to confirm prediction of model “axial-symmetric rotor plus two-quasiparticles” for Hg nuclei and transient form in the platinum nuclei.