

## Search for the chiral doublet bands in odd-odd nucleus $^{78}\text{Br}$

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The fusion-evaporation reaction  $^{70}\text{Zn}(^{12}\text{C}, 1p3n)$  at beam energies of 60 and 65 MeV was used to populate the excited states in  $^{78}\text{Br}$ . The previously known level scheme has been extended and two new rotational bands have been identified. The triaxial particle-rotor model (PRM) was used for the analysis of the positive parity doublet bands in  $^{78}\text{Br}$ . The energy spectra  $E(I)$ , energy staggering parameter  $S(I) = [E(I) - E(I - 1)]/2I$  and the intraband  $B(M1)/B(E2)$  ratios of the doublet bands have been calculated. Good agreement has been obtained between the calculated results and the available data. The positive parity doublet bands in  $^{78}\text{Br}$  have been tentatively interpreted as a pair of chiral bands based on the  $\pi g_{9/2} \nu g_{9/2}$  configuration.

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