⁹Be(133 Sn,Χ γ) **2013Wa28**

Type Author Citation Literature Cutoff Date
Full Evaluation Balraj Singh ENSDF 15-Jan-2014

Includes ${}^{9}\text{Be}({}^{132}\text{Sn,X}\gamma)$.

2013Wa28: In-beam *γ*-ray spectroscopy from ${}^{9}\text{Be} + {}^{132}, {}^{133}\text{Sn}$ interaction. ${}^{132}, {}^{133}\text{Sn}$ beams at 230 MeV were produced as cocktail beam in the fission of 345 MeV ${}^{238}\text{U}$ beam by tungsten target followed by fragment separation using BigRIPS separator at RIBF-RIKEN facility, by using ΔΕ-E and TOF techniques. The cocktail beam of mainly ${}^{132}, {}^{133}\text{Sn}$ at 230 MeV was incident on a secondary ${}^{9}\text{Be}$ target inducing reactions to produce excitations in ${}^{120}, {}^{122}, {}^{124}, {}^{126}\text{Pd}$ residues, identified through energy loss, TOF and magnetic rigidity using ZeroDegree spectrometer. Measured E*γ*, I*γ*, (particle)*γ*-coin using DALI2 array of 186 NaI(Tl) scintillation detectors. Particles were detected by LaBr₃(Ce) scintillation detectors.

¹²⁴Pd Levels

E(level) $J^{\pi^{\dagger}}$ 0 0^+ 590 11 (2^+) 1300 22 (4^+)

γ (124Pd)

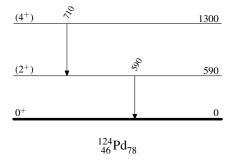
 E_{γ} E_{i} (level)
 J_{i}^{π} E_{f} J_{f}^{π} Comments

 590 11
 590
 (2⁺)
 0
 0⁺
 I_{γ} : most intense peak in γ spectrum figure 2c in 2013Wa28.

 710 19
 1300
 (4⁺)
 590
 (2⁺)
 I_{γ} : weak peak in γ spectrum figure 2c in 2013Wa28.

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Level Scheme



[†] From systematics of even-even nuclei.