

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Ota and E. A. Mccutchan		NDS 203,1 (2025)	1-Apr-2025

$Q(\beta^-)=21610$ syst; $S(n)=2101$ syst; $Q(\alpha)=-21885$ syst [2021Wa16](#)

$\Delta Q(\beta^-)=721$, $\Delta S(n)=781$, $\Delta Q(\alpha)=848$ ([2021Wa16](#)).

$S(2n)=3293$ (syst) 781, $Q(\beta^-n)=20099$ (syst) 721 ([2021Wa16](#)).

2018Ta17: ^{47}P formed in fragmentation of $^{70}\text{Zn}^{30+}$ beam at 345 MeV/nucleon from RIKEN-RIBF accelerator complex incident on ^9Be target located at the BigRIPS two-stage ion separator. Particle identification from measurements of time of flight (tof), energy loss (ΔE), total kinetic energy (TKE), and magnetic rigidity ($B\rho$). Fragments were stopped in a 76-mm thick CsI crystal after passing through six 1-mm thick silicon p-i-n diodes, while the magnetic rigidity ($B\rho$) of the fragments was reconstructed from position and angle measurements at foci using two sets of position-sensitive parallel plate avalanche counters (PPACs).

 ^{47}P Levels

E(level)	Comments
0.0	$\% \beta^- = 100$; $\% \beta^- n = ?$ Theoretical calculations predict $J^\pi = 3/2^+$; $T_{1/2} = 5.5$ ms; $\% \beta^- = 100$; $\% \beta^- n = 45$ (2019Mo01). E(level): observed events assumed to correspond to g.s. a total of 12 events assigned to ^{47}P (2018Ta17).