

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 143, 1 (2017)	31-Mar-2017

$Q(\beta^-)=3950$ SY; $S(n)=4710$ SY; $S(p)=1.051\times 10^4$ SY; $Q(\alpha)=-1.55\times 10^3$ SY [2017Wa10](#)

$\Delta Q(\beta^-)=200$ (syst), $\Delta S(n)=280$ (syst), $\Delta S(p)=450$ (syst), $\Delta Q(\alpha)=360$ (syst) ([2017Wa10](#)).

[2009St16](#), [2008StZY](#) thesis: ¹⁹³W nuclide identified in the reaction ⁹Be(²⁰⁸Pb,X) with a beam energy of 1 GeV/nucleon produced by the SIS-18 accelerator at GSI facility. Target thickness=2.5 g/cm². Fragments identified in flight by the Fragment Separator (FRS) operated in achromatic mode based on time-of-flight, $B\rho$ and energy loss. Data collected on six FRS magnetic rigidity settings centered on: ²⁰⁶Hg, ²⁰³Ir, ²⁰²Os, ¹⁹⁹Os, ¹⁹²W, and ¹⁸⁵Lu. Nuclides halted in a passive stopper surrounded by the RISING array in "Stopped Beam" configuration.

Experimental identification using a similar setup is reported in [2009Al30](#).

¹⁹³W Levels

E(level)	Comments
0.0	$\% \beta^- = 100$ The β^- decay is the only decay mode expected. Approximate number of nuclei implanted in the plastic stopper reported to be 9400 <i>100</i> (2009St16,2008StZY). E(level): the observed fragments are assumed to be in the ground state of ¹⁹³ W nuclei. $T_{1/2}$: >300 ns from approximate time-of-flight as given in 2008StZY . Calculated value 18.7 s for β decay (1997Mo25) and the systematic value of 3 s (2017Au03). J^π : $1/2^+$ predicted in 1997Mo25 . Production $\sigma=42$ nb $^9\text{Be}(\text{Pb},X)$ (²⁰⁸ Pb fragmentation, E=1 GeV/nucleon, on Be target – 2014Ku02).