

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 166, 1 (2020)	20-Apr-2020

$Q(\beta^-)=5803$  SY;  $S(n)=3120$  SY;  $S(p)=10570$  SY;  $Q(\alpha)=-150$  SY [2017Wa10](#)

[2010A124](#):  $^{205}\text{Pt}$  nuclide identified in  $^9\text{Be}(^{238}\text{U},X)$  reaction with a beam energy of 1 GeV/nucleon produced by the SIS synchrotron at GSI facility. Target=2500 mg/cm<sup>2</sup>. The fragment residues were analyzed with the high resolving power magnetic spectrometer Fragment separator (FRS). The identification of nuclei was made on the basis of magnetic rigidity, velocity, time-of-flight, energy loss and atomic number of the fragments using two plastic scintillators and two multisampling ionization chambers. The FRS magnet was tuned to center on  $^{210}\text{Au}$ ,  $^{216}\text{Pb}$ ,  $^{219}\text{Pb}$ ,  $^{227}\text{At}$  and  $^{229}\text{At}$  nuclei along the central trajectory of FRS.

[2011Mo18](#):  $^{208}\text{Pb}$  beam, E=1 GeV/nucleon, delivered by the SIS-18 synchrotron at GSI to a 1.6 g/cm<sup>2</sup> Be target. Reaction products identified by the magnetic spectrometer fragment separator (FRS) by A/Q, energy loss and magnetic rigidity measurements.

[2017Ca12](#):  $^{238}\text{U}$  beam, E=1 GeV/nucleon, from SIS-18 synchrotron at GSI on a  $^9\text{Be}$  target of thickness 1.6 g/cm<sup>2</sup>. Reaction products were separated and identified by GSI Fragment Separator (FRS) using  $B\rho-\Delta E-B\rho$  technique. The FRS tracking detectors were four time-projection chambers (TPCs), two ionization chambers, and thin plastic scintillators for tof measurement. Mass-over-charge (A/Q) ratios were measured for ions analyzed on an event-by-event basis. Finally selected ions of interest were implanted into a stack of double-sided silicon strip detectors SIMBA, which also detected  $\beta$ -decay events.

 $^{205}\text{Pt}$  Levels

E(level)	$J^\pi$	Comments
0.0	(9/2 <sup>+</sup> )	$\% \beta^- = 100$ ; $\% \beta^- n = ?$ $J^\pi$ : From systematics of single-particle structures above N=126. $T_{1/2}$ : >300 ns from the time-of-flight in <a href="#">2017Ca12</a> , but the actual lifetime is expected to be much longer. configuration: $\nu(g_{9/2}^{+1})$ and spherical shape.