

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao		NDS 121, 395 (2014)	1-Mar-2014

$Q(\beta^-)=3930$ SY; $S(n)=6410$ SY; $S(p)=8340$ SY; $Q(\alpha)=-1510$ SY [2012Wa38](#)

[2009St16,2008StZY](#) thesis: ^{195}Re nuclide identified in the reaction $^9\text{Be}(^{208}\text{Pb},X)$ 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: ^{206}Hg , ^{203}Ir , ^{202}Os , ^{199}Os , ^{192}W , and ^{185}Lu . Nuclides halted in a passive stopper surrounded by the RISING array in “Stopped Beam” configuration.

Experimental identification in a similar experiment at GSI in [2008St20](#) and [2009Al30](#).

[2009Ku28](#): ^{195}Re was produced by the in-flight fragmentation of relativistic heavy projectiles. The Beam was ^{208}Pb at 1 GeV/A bombarding a ^9Be target. Fragment Recoil Separator (FRS) was used to identify ^{195}Re residues. The ^{195}Re nuclei were implanted into an array of four double-sided silicon strip detectors with a surface of 25 cm², 1 mm thickness each. Measured half-life from position-time correlations between the implanted fragments and the subsequent β decay.

[2008KuZY](#), [2007KuZW](#), [2007KuZZ](#) and [2005KuZU](#) superseded by [2009Ku28](#).

 ^{195}Re LevelsCross Reference (XREF) Flags

A $^9\text{Be}(^{208}\text{Pb},X)$

E(level)	J^π	$T_{1/2}$	XREF	Comments
0	$[3/2^-]$	6 s <i>l</i>	A	$\% \beta^- = 100?$ Approximate number of nuclei implanted in the plastic stopper reported to be 60800 <i>200</i> (2009St16,2008StZY). E(level): the observed fragments are assumed to be in the ground state of ^{195}Re nuclei. The β^- decay is the only decay mode expected. $T_{1/2}$: deduced from position-time correlations between the implanted fragments and the subsequent β -decay (2009Ku28). Others: $T_{1/2}=3.29$ s is predicted by 1997Mo25 , 30 s from systematics (2011AuZY). J^π : $3/2^-$ predicted in 1997Mo25 calculations.