

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alexandru Negret, Balraj Singh		NDS 114, 841 (2013)	30-Jun-2013

$S(n)=13860$ SY; $S(p)=1.99\times 10^3$ 22; $Q(\alpha)=-2.72\times 10^3$ 25 [2012Wa38](#)

Estimated uncertainty=240 for S(n).

$Q(\epsilon p)=8420$ 220, $S(2n)=30810$ 460 (syst), $S(2p)=4640$ 220 ([2012Wa38](#)).

[1991Mo10](#), [1995B123](#): ^{75}Sr identified by analyzing fragments by a fragment separator from reaction $^{58}\text{Ni}(^{78}\text{Kr},X) E=73$ MeV/nucleon. [1995B123](#) measured $T_{1/2}$ and $\% \epsilon p$.

[2003Hu01](#): ^{75}Sr produced by spallation of a proton beam (1 and 1.4 GeV) at the ISOLDE facility (CERN). ^{75}Sr was implanted in a moving tape. Plastic scintillators, HPGe detectors and Si detectors were used to detect β , γ and protons. Measured E, t, $\% \epsilon p$, and $\% \epsilon$ to the first excited state in ^{75}Rb . Deduced Gamow-Teller strength.

Theoretical calculations: [1996Po13](#) (mass excess), [1999Ha28](#) (B(GT)).

 ^{75}Sr Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(3/2 ⁻)	88 ms 3	$\% \epsilon + \% \beta^+ = 100$; $\% \epsilon p = 5.2$ 9 (2003Hu01) $\% \epsilon p$: other: 6.5 33 (1995B123). $T_{1/2}$: from decay curves of $\beta\gamma$ and $p\gamma$ spectra (2003Hu01), weighted average of 87 ms 3 and 89 ms 5. Others: 80 ms +400-40 (2001Ki13 , 2002Fa13 , 2007WeZX), 71 ms +71-24 (1995B123). J^π : from mirror analogy between T=1/2 ground states of ^{75}Sr and ^{75}Rb , the latter assigned (3/2 ⁻) in high-spin measurements. See also review article by 2008Se10 about Ft values of the T=1/2 mirror β transitions.