

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Janos Timar and Zoltan Elekes, Balraj Singh		NDS 121, 143 (2014)	31-May-2014

S(n)=11480 SY; S(p)=1640 SY; Q(α)=3030 SY [2012Wa38](#)

Estimated ([2012Wa38](#)) uncertainties: 710 for S(n), 590 for S(p), 640 for Q(α) ([2012Wa38](#)).

S(2p)=1180 590, Q(ep)=10880 540 (syst,[2012Wa38](#)). S(2n)=25290 ([1997Mo25](#),theory).

[1999Xu05](#) (also [2005Xu04](#)): ^{129}Sm produced in $^{96}\text{Ru}(^{36}\text{Ar},3\text{n})$ reaction at E(^{36}Ar)=165 MeV at NLHIAL, China. Helium-jet transport system. Measured py coin, half-life using silicon and HPGe detectors. Statistical model calculations.

Additional information 1.

 ^{129}Sm LevelsCross Reference (XREF) Flags

[A](#) ^{130}Eu p decay (0.90 ms)

E(level)	J $^\pi$	T _{1/2}	XREF	Comments
0	(1/2 $^+$,3/2 $^+$)	0.55 s I0	A	% ε +% β^+ =100; % εp >0 E(level): it is assumed that the observed events corresponds to the g.s. J $^\pi$: from fitting of experimental delayed-proton spectrum with statistical-model calculations (1999Xu05). 1/2 $^+$ proposed in theoretical calculations (1997Mo25). T _{1/2} : from timing of 134 γ in ^{128}Nd (1999Xu05,2005Xu04). Average proton energy of a wide peak=3.7 MeV. Measured production cross section \approx 70 nb.