

Adopted Levels, Gammas

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	10-Feb-2015

S(n)=16950 SY; S(p)=2040 SY; Q(α)=-2300 SY [2012Wa38](#)

Estimated uncertainties ([2012Wa38](#)): 410 for S(n), 140 for S(p)=140, 220 for Q(α).

S(2p)=1470 100, Q(ϵ p decay)=8440 100 (syst,[2012Wa38](#)). S(2n)=31700 (theory,[1997Mo25](#)).

[1995BI06](#): ^{74}Sr produced and identified at GANIL in Ni(^{78}Kr ,X) E=73 MeV/nucleon reaction, time-of-flight method.

[2014He29](#): ^{74}Sr produced in $^{40}\text{Ca}(^{36}\text{Ar},2n)$,E(^{36}Ar)=105 MeV reaction at Jyvaskyla K130 cyclotron facility. Measured E γ correlated with implanted recoils, or with charged particles. Recoil- β tagging technique.

[2005Ro39](#): deduced mass excess=-40830 keV 100 from measured mass excess of mirror nucleus ^{74}Kr using ISOLTRAP at ISOLDE-CERN.

[Additional information 1.](#)

 ^{74}Sr LevelsCross Reference (XREF) Flags

[A](#) $^{40}\text{Ca}(^{36}\text{Ar},2n\gamma)$

E(level) [†]	J π [‡]	T _{1/2}	XREF	Comments
0.0	0 ⁺	27 ms 8	A	$\% \epsilon + \% \beta^+ = 100$; $\% \epsilon p = ?$ T _{1/2} : measured by 2014He29 from events in the whole DSSD and a β -energy threshold of 3 MeV. Low statistics prevented use of decay curve method, instead method proposed by 1984Sc13 was used. Authors mention (ref. 18 in paper) that this value is in agreement with a recent (unpublished) measurement at RIKEN.
471 1	(2 ⁺)		A	
1043 2	(4 ⁺)		A	

[†] From E γ data.

[‡] From systematics of even-even nuclei and comparison with shell-model calculations.

 $\gamma(^{74}\text{Sr})$

E _i (level)	J π _i	E γ	E _f	J π _f
471	(2 ⁺)	471 1	0.0	0 ⁺
1043	(4 ⁺)	572 1	471	(2 ⁺)

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Level Scheme

