Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 158, 1 (2019)	16-May-2019

S(n)=14140 *CA*; S(p)=910 *SY*; Q(α)=−1940 *SY* 2017Wa10,2019Mo01
S(n) from 2019Mo01. S(p) and Q(α) from 2017Wa10.
Estimated uncertainties (2017Wa10): 640 for S(p), 570 for Q(α).
S(2p)=200 *420*, Q(εp)=14700 *400* (syst,2017Wa10).
1991WiZZ: ^{73}Sr produced and identified in ^{58}Ni(^{78}Kr,X) reaction at E=65 MeV/nucleon, followed by fragment, mass and charge analysis.
1993Ba61: ^{73}Sr produced in ^{40}Ca(^{36}Ar,3n) reaction at E=245 MeV, He-jet, particle telescope.

^{73}Sr Levels

E(level)	$T_{1/2}$	Comments
0	≈25 ms	%ε+%β^+=100; %εp=? Delayed proton group reported by 1993Ba61 at E(p)(lab)=3750 *40*, but percent decay mode was not deduced. J^π: $\Omega_{neutron}$=3/2$^-$ (theory,2019Mo01). 1/2$^-$ from systematics (2017Au03). $T_{1/2}$: estimated from total transit time of ≈25 ms (1993Ba61). From systematics and decreasing trend of half-lives of Sr isotopes as the neutron number decreases, value is expected to be <30 ms. $T_{1/2}$ values are: 27 ms for ^{74}Sr, 88 ms for ^{75}Sr, 7.89 s for ^{76}Sr, 9.0 s for ^{77}Sr and 160 s for ^{78}Sr. Theoretical value for β decay=42.8 ms (2019Mo01).