Adopted Levels:not observed

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 199,1 (2025)	30-Sep-2024

Q(β^-)=−23490 *syst*; S(n)=22520 *syst*; S(p)=−2450 *syst*; Q(α)=−8910 *syst* 2021Wa16
ΔQ(β^-)=450, ΔS(n)=450, ΔS(p)=200, ΔQ(α)=280 (syst,2021Wa16).
S(2n)=42860 *360*, S(2p)=00 *200*, Q(ε)=16930 *200*, Q(εp)=13590 *200* (syst,2021Wa16).
1996PoZZ: re-analysis of upper limits for $T_{1/2}$ (1986La17) obtained at LISE (GANIL). Unbound for one-proton emission.
1986La17: ^{58}Ni(^{40}Ca,X),E=77.4 MeV/nucleon ^{40}Ca beam was produced at GANIL. Target was 68% enriched ^{58}Ni. Reaction products were identified using the LISE spectrometer.
Theoretical calculations:
2022Zo01, 2021Ma33, 2016Si02, 1997Co19: calculated S(p), S(2p), mass excess.
1998Co30: calculated binding energy.
Additional information 1.

^{33}K Levels

E(level)	$T_{1/2}$	Comments
0?	<25 ns	%p=? S(p)=−2450 *200* (syst, 2021Wa16) suggests that ^{33}K is unbound for one-proton emission. $T_{1/2}$: estimated by 1996PoZZ from limit of detection. J^π: $3/2^+$ from theory in 2019Mo01 and systematics in 2021Ko07. Theoretical $T_{1/2}(\beta$ decay)=36.3 ms (2019Mo01).