Adopted Levels

Q(β^-)=−21910 *syst*; S(n)=17770 *syst*; S(p)=1.03×10^3 *11*; Q(α)=−8.94×10^3 *11* 2021Wa16

S(p),Q(α): Deduced by the evaluator using mass excesses of 4777 *105* for ^{35}Ca measured by 2023La09, −1487 *17* for ^{34}K measured by 2024Dr01, and 11290 *16* for ^{31}Ar measured by 2024Yu13. Values from 2021Wa16: S(p)=880 *280* (syst), Q(α)=−8560 *280* (syst).

ΔQ(β^-)=450, ΔS(n)=360 (syst,2021Wa16).

S(2p)=417 *105*, Q(ε)=15950 *105*, Q(εp)=15866 *105*, from mass excesses of 4777 *105* for ^{35}Ca measured by 2023La09; −9384.3 *4* for ^{33}Ar, −11172.9 *5* for ^{35}K, and −18378.29 *8* for ^{34}Ar from 2021Wa16. Values from 2021Wa16: S(2p)=00 *200* (syst), Q(ε)=16360 *200* (syst), Q(εp)=16280 *200* (syst).

S(2n)=41980 *450* (syst) (2021Wa16).

Isotope discovery (2011Am01): ^{40}Ca(^{3}He,α4n)^{35}Ca at Berkeley (1985Ay01).

Other isotope identifications: Projectile fragmentation of a ^{40}Ca beam on a nickel target at GANIL (1986La17,1986AnZV,1999Tr04,1998Le45).

Mass measurements: 2023La09, 1985Ay01.

Theoretical studies: 2003Sm02, 1998Co30, 1997Co19, 1991De26, 1990Br26.

^{35}Ca Levels

Cross Reference (XREF) Flags

A ^{1}H(^{37}Ca,t)
B ^{9}Be(^{36}Ca,^{35}Ca)
C ^{9}Be(^{37}Ca,X)

E(level)	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0	1/2$^+$	25.7 ms *2*	AB	%ε+%β^+=100; %εp=95.8 *3*; %ε2p=4.2 *3* T$_{1/2}$: from implant-decay correlation in 1999Tr04. Other: 50 ms *30* estimated by comparison with the ^{22}Al yield from 1985Ay01. J$^\pi$: L(^{36}Ca,^{35}Ca)=0 from 0$^+$. %εp and %ε2p are derived from the renormalization of %ΣI(1p)+%ΣI(2p)=100.6 in 1999Tr04 to 100. The original decay branching ratios in 1999Tr04: %ΣI(1p)=96.4 *18* and %ΣI(2p)=4.2 *3*.
2.09×10^3 *10*	3/2$^+$		A C	E(level): weighted average of 2.24E3 *33* from ^{1}H(^{37}Ca,t) and 2.08E3 *10* from (^{37}Ca,X). J$^\pi$: L=0 from 3/2$^+$ in ^{1}H(^{37}Ca,t).