

Adopted Levels

$Q(\beta^-) = -21910$ syst; $S(n) = 17770$ syst; $S(p) = 1.03 \times 10^3$ 11; $Q(\alpha) = -8.94 \times 10^3$ 11 2021Wa16

$S(p), Q(\alpha)$: 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), $Q(\alpha) = -8560$ 280 (syst).

$\Delta Q(\beta^-) = 450$, $\Delta S(n) = 360$ (syst, 2021Wa16).

$S(2p) = 417$ 105, $Q(\varepsilon) = 15950$ 105, $Q(\varepsilon p) = 15866$ 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), $Q(\varepsilon) = 16360$ 200 (syst), $Q(\varepsilon p) = 16280$ 200 (syst).

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

Isotope discovery (2011Am01): $^{40}\text{Ca}(^3\text{He}, \alpha 4n)^{35}\text{Ca}$ 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 LevelsCross Reference (XREF) Flags

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

E(level)	J^π	$T_{1/2}$	XREF	Comments
0.0	$1/2^+$	25.7 ms 2	AB	$\% \varepsilon + \% \beta^+ = 100$; $\% \varepsilon p = 95.9$ 14; $\% \varepsilon 2p = 4.1$ 6 $T_{1/2}$: from implant-decay correlation in 1999Tr04. Other: 50 ms 30 estimated by comparison with the ^{22}Al yield from 1985Ay01. J^π : $L(^{36}\text{Ca}, ^{35}\text{Ca}) = 0$ from 0^+ . $\% \varepsilon p$, $\% \varepsilon 2p$: from 1999Tr04.
2.09×10^3 10	$3/2^+$		A C	E(level): weighted average of $2.24\text{E}3$ 33 from $^1\text{H}(^{37}\text{Ca}, t)$ and $2.08\text{E}3$ 10 from $(^{37}\text{Ca}, X)$. J^π : $L = 0$ from $3/2^+$ in $^1\text{H}(^{37}\text{Ca}, t)$.