## Adopted Levels

| Type | Author | History Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | Jun Chen | NDS 179, 1 (2022) | 30-Nov-2021 |

Q($\beta^-$)=18080 *SY*; S(n)=2770 *SY*; S(p)=18770 *SY*; Q($\alpha$)=−17820 *SY* 2021Wa16
ΔQ($\beta^-$)=500, ΔS(n)=540, ΔS(p)=ΔQ($\alpha$)=640 (syst,2021Wa16).
S(2n)=6690 *510*, S(2p)=41700 *710*, Q($\beta^-$n)=13020 *500* (syst,2021Wa16).
1989Gu03: $^{181}$Ta($^{48}$Ca,X), E=2.64 GeV. Observed projectile-like fragments (29≤A≤51) at 0°; mag spect, ΔE-E telescope (Si,Si(Li)), tof. Z identified by telescope. Mass identified by total energy and tof and by magnetic rigidity and tof.
Theoretical calculations: 2018Yo06, 2012Ch48, 2010Af01,

### $^{48}$Cl Levels

| E(level) | Comments |
|---|---|
| 0.0? | %$\beta^-$=?<br>$T_{1/2}$: ≥200 ns estimated from time of flight in 1988Gu03. Other: 30 ms (2021Ko27, syst).<br>Theoretical $T_{1/2}$=25.6 ms (2019Mo01), 70.9 ms (2016Ma12).<br>Theoretical %$\beta^-$n=69, %$\beta^-$2n=14 (2019Mo01).<br>Theoretical %$\beta^-$n=43, %$\beta^-$2n=6 (2016Ma12). |