Adopted Levels:not observed

		History	
Туре	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 152, 1 (2018)	30-Sep-2017

 $S(p) = -60 SY; Q(\alpha) = -5410 SY = 2017Wa10$

 $\Delta S(p) = \Delta Q(\alpha) = 420 \ (2017Wa10).$

 $Q(\beta^+)=15120\ 360,\ S(2p)=-2740\ 300,\ Q(\varepsilon p)=16720\ 300\ (syst,2017Wa10).$ Others: $S(p)=270\ 27,\ S(2p)=-2691\ 27\ (calc,2013Ti01).$ ³⁸Ti has not yet been identified.

1996B121 used reaction ⁹Be(⁵⁸Ni,X) E=650 MeV/nucleon to measure fragment production cross section of ³⁸Ti, but there was no evidence of the presence of this nuclide in their mass spectra. An upper limit of half-life was estimated as <120 ns from estimate of cross section for ³⁸Ti in comparison with production trends for other nuclides such as ⁵⁸Ni.

Mass predictions: 2013Ti01, 1971En01.

Calculations for 2-proton decay: 2013Ti01, 2012Si16, 2006Xu15, 2003Gr24, 2001Gr29, 1997Or04, 1997Co19. Other structure calculations: 2013Xu15, 1998La02.

With $S(2p) = -2540 \ 300 \ (syst, 2017Wa10)$, ³⁸Ti is expected to be unstable to two-proton emission.

³⁸Ti Levels

E(level)	T _{1/2}	
0?	<120 ns	%2p=?

 $T_{1/2}$: from estimate of cross section for ³⁸Ti in comparison with production trends for other nuclides such as ⁵⁸Ni (1996Bl21).

Comments