Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. K. Tuli, E. Browne	NDS 157, 260 (2019)	1-Mar-2019

Q(β^-)=16994 *SY*; S(n)=1971 *SY* 2017Wa10
ΔQ(β^-)=600 syst; ΔS(n)=781 syst (2017Wa10).
Based on evaluation by B. Singh (McMaster U.) (August, 2010).
2010Oh02: ^{82}Cu nuclide identified in Be(^{238}U,F) and Pb(^{238}U,F) reactions with a $^{238}U^{86+}$ beam energy of 345 MeV/nucleon produced by the cascade operation of the RIBF accelerator complex of the linear accelerator RILAC and four cyclotrons RRC, fRC, IRC and SRC. Identification of ^{82}Cu nuclei was made on the basis of magnetic rigidity, time-of-flight and energy loss of the fragments using BigRIPS fragment separator. Experiments performed at RIKEN facility.
Based on A/Q spectrum and Z versus A/Q plot, 2 counts were assigned to ^{82}Cu isotope. (Q=charge state).
2014XuZZ: ^{9}Be(^{238}U,X), E=345 Mev/nucleon. Measured β-, γ; deduced $T_{1/2}$, delayed-n emission probabilities.
2005Bo19: calculated half-life, β-delayed neutron emission probability.

^{82}Cu Levels

E(level)	$T_{1/2}$	Comments
0	33 ms +7−6	%β^-=100; %β^-n=?; %β^-2n=? Measured σ=3 pb (2010Oh02), systematic uncertainty≈50%. $T_{1/2}$: From β^- measurement (2014XuZZ); Calculated values: 46.8 ms (1997Mo25), 40 ms (2002Pf04). Since no events were observed for neighboring hydrogen-like peaks, the misidentification of ^{82}Cu is not possible (2010Oh02). Calculated: %β^-n=45 *9* (2014XuZZ), 52.8 (2014Mi23), 98.9 (2002Pf04), 28.1 (1997Mo25); %β^-2n=30 *8* (2014XuZZ), 39.3 (2014Mi23), 63.6 (1997Mo25).