Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Agda Artna-cohen	NDS 88,155 (1999)	31-Jul-1999

Q(β^-)=−5.13×10^3 *syst*; S(n)=6.61×10^3 *3*; S(p)=2.96×10^3 *syst*; Q(α)=9714 *15* 2012Wa38
Note: Current evaluation has used the following Q record −5200 syst 6400 syst 2800 syst 9800 syst 1995Au04.
Estimated ΔQ(β^-)=400, ΔS(n)=300, ΔS(p)=400, ΔQ(α)=70 (1995Au04).

Calculations, compilations:
Favored α decay: 1993Bu09.
g.s. properties: 1997Mo25, 1995Mo29.
Pion decay: 1991Io03.
Single-particle Nilsson levels: 1994Cw02.

1994Cw02 calculate the following single-particle level sequence: g.s. 1/2[620], 0.02 MeV *3*/2[622], 0.03 MeV *11*/2[725], 0.07 MeV *7*/2[613], 0.29 MeV *9*/2[615], 0.87 MeV *9*/2[734].

Assignment: ^{208}Pb(^{54}Cr,n) 4.8 to 5.0 MeV/A, α correlation with daughter ^{257}Rf and granddaughter ^{253}No (1985Mu11,1984Mu17). ^{208}Pb(^{58}Fe,n)^{265}Hs E=5.04 *2* MeV/A, daughter of ^{265}Hs, parent of ^{257}Rf (1987Mu15). ^{208}Pb(^{54}Cr,n) E=5.5 MeV/A, α's observed (1984Og03).
1997Ho13, 1997Ho03 report a 34 ms *9*.468 MeV α in the decay chain from ^{269}110 and assign it to ^{261}Sg.

^{261}Sg Levels

Cross Reference (XREF) Flags

A ^{265}Hs α decay (2.0 ms)
B ^{265}Hs α decay (0.75 ms)

E(level)†	$T_{1/2}$	XREF	Comments
0.0	0.23 s *6*	AB	%α≈100; %SF<1 $T_{1/2}$: from 0.26 s *+11−6* (1985Mu11,1984Mu17) and 0.11 s *+14−4* (1987Mu15). %α: only α decay observed (1985Mu11). %SF: from 1999He11; no unambiguous indication for SF found (1999He11). Other: <10 (1985Mu11), <50 (1984Og03). Calculated: $T_{1/2}(\alpha)$=0.5 s, $T_{1/2}(\varepsilon+\beta^+)$=32 s (1997Mo25); $T_{1/2}(\alpha)$=0.2 s, $T_{1/2}(\varepsilon+\beta^+)$=30 s, $T_{1/2}$(SF)=50 s (1995KoZL); $T_{1/2}$(SF)≈1 s (1988Lo03). Both ^{265}Hs isomers seem to feed the g.s. of ^{261}Sg. No significant difference is observed between the Eα and $T_{1/2}$ of the daughter, ^{261}Sg, from the decay of either ^{265}Hs isomer (1999He11).
56 *21*		A	
127 *21*		A	
156 *21*		B	
185 *21*		A	
212 *21*		B	
396 *21*		B	

† From ^{265}Hs decays. Based on the assumption that the highest energy α group from ^{265}Hs goes to the g.s. of ^{261}Sg.