Adopted Levels

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 114, 1041 (2013)	1-Aug-2011

Q(β^-)=−2509 *SY*; S(n)=7002 *SY*; S(p)=2915 *SY*; Q(α)=8584 *SY* 2012Wa38
Estimated ΔQ(β^-)=101, ΔS(n)=124, ΔS(p)=123, ΔQ(α)=71 (2012Wa38).
Additional information 1.

Calculations, compilations:
Favored α decay: 1993Bu09.
g.s. properties: 2009Do22, 2008Do12, 1997Mo25, 1995Mo29.
Pion decay: 1988Io05.
Single-particle Nilsson levels: 1994Cw02, 2004Pa40.
Fission: 1999Zh10.
Nuclear reactions: ^{248}Cm(^{15}N,4n) (2010AsZY, 2004Wa10).
Calculated half-life: 2010Si27, 2008Do12.
Calculated fission half-life: 2005Re16, 2000Ho27.

1994Cw02 calculates the following single particle level sequence: g.s. 7/2[514], 0.08 MeV *1*/2[521], 0.13 MeV *9*/2[624], 0.73 MeV *5*/2[642], 0.83 MeV *7*/2[633].

Assignment: ^{248}Cm(^{15}N,4n), excit (1971Es01). ^{248}Cm(^{15}N,4n), parent of ^{255}Md (α-α correlation), grandparent of ^{255}Fm (1992Gr02).
SF mass distribution broadly symmetric with total kinetic energy 200 *10* (1992Gr02), 216 *3* (1992Ha22).

^{259}Lr Levels

Cross Reference (XREF) Flags

A ^{263}Db α decay
B ^{259}Rf ε decay

E(level)	$T_{1/2}$	XREF	Comments
0.0	6.2 s *3*	B	%α=78 *2*; %SF=22 *2* $T_{1/2}$: weighted average of 6.14 s *36* (1992Ha22), 6.34 s *+46−42* (1992Gr02). Other: 5.4 s *8* (1971Es01). %SF: average of SF/α=0.25 *3* (1992Ha22) and 0.30 *3* (1992Gr02). Additional information 2. %ε+%β^+: not observed. $T_{1/2}(\varepsilon+\beta^+)\approx 1\times10^3$ s from log *ft*≈5.7. J^π: favored α decay to ^{255}Md indicates same configuration as the daughter. See ^{255}Md Adopted Levels.
0.0+x		A	E(level): x=350 *150* from ^{263}Db α decay.