Adopted Levels

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	20-Dec-2015

S(n)=8360 *SY*; S(p)=1420 *80*; Q(α)=8790 *50* 2012Wa38
Estimated uncertainty=210 for S(n) (2012Wa38).
S(2n)=15150 *210* (syst), S(2p)=5310 *100* Q(εp)=440 *70* (2012Wa38).
1994Ye08: ^{225}Np produced and identified in ^{236}U(^{22}Ne,xn), E=124 MeV reaction; measured Eα, Iα.
2015De22: ^{225}Np nuclide formed in the α decay of ^{229}Am, and in the decay chain of ^{233}Bk; both ^{233}Bk and ^{229}Am produced and identified in deep-inelastic multinucleon transfer reaction ^{248}Cm(^{48}Ca,X),E(^{48}Ca)=270 MeV from UNILAC at GSI, followed by separation of reaction products using velocity filter SHIP at GSI, and implanted in position-sensitive silicon strip detector. Measured energy, position, time of the implanted nuclei, Eα correlated with reaction products.

^{225}Np Levels

E(level)	$T_{1/2}$	Comments
0	3.6 ms *+76−27*	%α≈100; %ε+%β^+=? Evidence for only the α decay mode in 1994Ye08 and 2015De22. E(level): detected activity is assumed to correspond to the g.s. of ^{225}Np. J^π: 9/2$^-$ proposed from systematic trend (2012Au07), 1/2 proton orbital in theoretical calculations (1997Mo25). $T_{1/2}$: from (reaction products)$\alpha\alpha$ correlated events (2015De22); unweighted average of 3.3 ms *+76−27* and 3.8 ms *+76−27*. Eα=8630 keV *20* from ^{225}Np to ^{221}Pa decay (1994Ye08); only one α decay line is reported.