^{217}Po α decay 2004Li28,1997Li23,1977Vy02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 181, 475 (2022)	1-Jan-2022

Parent: ^{217}Po: E=0.0; J^π=(9/2$^+$); $T_{1/2}$=1.53 s *5*; Q(α)=6662.1 *24*; %α decay=97.5 *25*

^{217}Po-J^π,$T_{1/2}$: From 2018Ko01 (A=217 evaluation).

^{217}Po-Q(α): From 2021Wa16.

^{217}Po-%α decay: Based on %α > 95 (2018Ko01 − A=217 evaluation) and using uniform probability distribution.

2004Li28: Parent: ^{221}Rn; studied ^{217}Po level structure and g.s. of ^{213}Pb through α decay; measured $T_{1/2}$ of ^{217}Po, α-γ coin.

1997Li23: Parent: ^{221}Rn; studied ^{217}Po level structure and g.s. of ^{213}Pb through α decay, α-γ coin.

1977Vy02: Parent: ^{221}Rn; studied ^{217}Po, ^{213}Pb, and ^{213}Po level structure, Eα, Eγ, Iγ. ^{213}Pb through α decay.

^{213}Pb Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(9/2$^+$)	10.2 min *3*	J^π,$T_{1/2}$: From Adopted Levels.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
6539 *4*	0.0	100	1.39 *6*	Eα: Weighted average of 6537 keV *4* (1977Vy02 − Eα=6539 *4*) is decreased by 2 keV, as recommended by 1991Ry01, because of a change in calibration energy), 6543 keV *4* (2003Ku25), and 6540 keV *20* (1956Mo15), 6537 keV *4* (1997Li23). Uncertainty is the lowest input value. Iα: No other α groups were observed; if they exist, Iα≤5% of the Iα(6537α) (1977Vy02).

[†] Using r_0(^{213}Pb)=1.5395 *4*; average of r_0(^{212}Pb)=1.5412 *3* and r_0(^{214}Pb)=1.5379 *2* (2020Si16).

[‡] For absolute intensity per 100 decays, multiply by 0.975 *25*.