^{117}Ba β^+ decay

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	ENSDF	1-Mar-2009

Parent: ^{117}Ba: E=0; J^π=(3/2); $T_{1/2}$=1.75 s *7*; Q(β^+)=9.2×10^3 *3*; %β^+ decay=?
1985Ti02,1982Ti05: 290-MeV ^{58}Ni on ^{58}Ni or ^{63}Cu, ms.
Measurements: coincidences between β+ delayed p and γ-rays.
1978Bo20,1977Bo02: 190-MeV ^{32}s on ^{92}Mo, ms.
2005Ja06: total absorption gamma spectra and delayed proton spectra.
1997Ja12: ^{63}Cu(^{58}Ni,xnp), E=4.3-4.9 MeV/nucleon. They assigned five gamma rays in ^{117}Cs without a level scheme.
The intensity ratio limits of the β+ delayed p and α have been established: $\beta p/\beta\alpha$ is between 350 and 1200 (1985Ti02).
β-strength function: see 1985Ti02, 1982Ti05, 1978Bo20, 1976Iv02.

^{117}Cs Levels

E(level)	J^π	$T_{1/2}$
0.0	(9/2$^+$)	8.4 s *6*

γ(^{117}Cs)

E_γ †	I_γ †	E_i(level)
^{x}45.7 *1*	12 *2*	
^{x}78.0 *1*	12 *2*	
^{x}87.5 *1*	34 *3*	
^{x}94.9 *1*	100 *7*	
^{x}101.6 *1*	70 *6*	
^{x}363.6 *2*	113 *18*	

† From 1997Ja12.
^{x} γ ray not placed in level scheme.