^{111}Pd IT decay (5.5 h) 1977Kr14

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 110, 1239 (2009)	1-Feb-2008

Parent: ^{111}Pd: E=172.2 *1*; J^π=11/2$^-$; $T_{1/2}$=5.5 h *1*; %IT decay=73 *3*

^{111}Pd Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	5/2$^+$	23.4 min *2*	$T_{1/2}$: 23.4 min *2* (1977Kr14) γ-decay curves.
172.2 *1*	11/2$^-$	5.5 h *1*	%β^-=27 *3*; %IT=73 *3* $T_{1/2}$: from 5.5 h *1* (1952Mc34). Other: 5.5 h *2* (1957Dz14). E(level): Branching: Iγ(172γ,^{111}Pd)/Iγ(391γ,^{111}Ag)=6.3 *6* unweighted av of 6.5 *8* (1977Kr14), 6.1 *2* (1969Be11). Other: 8.7 *6* (1969Sc12).

γ(^{111}Pd)

Iγ normalization: from Iγ(172γ,^{111}Pd)/Iγ(391γ,^{111}Ag)=6.3 *6*.

E_γ	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α[‡]	Comments
172.18 *8*	100	172.2	11/2$^-$	0.0	5/2$^+$	E3	1.15	α(K)= 0.835; α(L)= 0.282; α(M)= 0.0551; α(N+..)=0.00969 Mult.: based on α(exp)=1.32 *14* Iγ(172γ)/Iβ(2170β): 1965Na01, scin; mult=E3 with<2% M4 (1969Be11) from α(K)exp based on K x ray/G. 1969Be11 do not give the α(K)exp explicitly. E_γ: from 1977Kr14. Others: 172.2 *5* (1969Be11), 172.0 *1* (1969Sc12).

[†] For absolute intensity per 100 decays, multiply by 0.46 *5*.

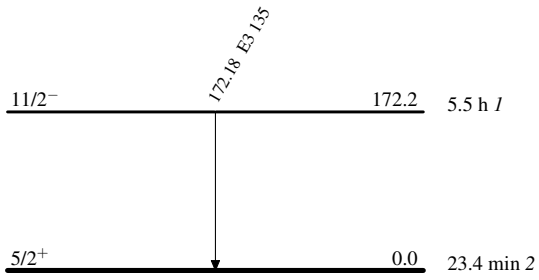
[‡] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

^{111}Pd IT decay (5.5 h) 1977Kr14

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 decays through this branch

%IT=73 *3*



$^{111}_{46}Pd_{65}$