

$^{141}\text{Dy } \varepsilon\text{p decay:0.9 s }$ 2006Xu03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 154, 1 (2018)	20-Nov-2018

Parent: ^{141}Dy : E=0.0; $J^\pi=9/2^-$; $T_{1/2}=0.9$ s 2; $Q(\varepsilon\text{p})=911\times10^1$ 30; % εp decay=?

$^{141}\text{Dy-T}_{1/2}$: from 2006Xu03 and ^{141}Dy Adopted Levels dataset.

$^{141}\text{Dy-Q}(\varepsilon\text{p})$: 9110 300 (syst,2017Wa10).

$^{141}\text{Dy-J}^\pi$: from 2006Xu03 based on comparison of calculated proton branches with measured values. $9/2^+$ is also possible, but possible configuration= $\nu 9/2[514]$ is assigned to this state.

Dataset based on unevaluated XUNDL files compiled from 2006Xu03 by M. Mitchell and B. Singh (McMaster).

^{141}Dy produced from fusion evaporation reaction: $^{106}\text{Cd}(^{40}\text{Ca},\alpha\text{n})$ at E=232 MeV. Measured proton branches, isotopic half-life.

 ^{140}Gd Levels

E(level)	J^π [†]
0.0	0^+
329	2^+
836	4^+
1464	6^+

[†] Adopted values.

 $\gamma(^{140}\text{Gd})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
329	329	2^+	0.0	0^+
508	836	4^+	329	2^+
628	1464	6^+	836	4^+

Delayed Protons (^{140}Gd)

$E(^{140}\text{Gd})$	$I(p)$ [†]
329	50 6
836	39 8
1464	7 4

[†] Normalized to 50 for proton branch to 329 level.

^{141}Dy ϵp decay:0.9 s 2006Xu03Decay Scheme