

$^{165}\text{Ir}$   $\alpha$  decay (0.30 ms) 1997Da07

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 112,2497 (2011)	1-Jun-2011

Parent:  $^{165}\text{Ir}$ : E=180 51;  $J^\pi=11/2^-$ ;  $T_{1/2}=0.30$  ms 6;  $Q(\alpha)=6826$  51; % $\alpha$  decay=13 4

$^{165}\text{Ir}$ -Q( $\alpha$ ): Q( $\alpha$ ) (for the  $^{165}\text{Ir}$  g.s.) is from 2009AuZZ.

$^{165}\text{Ir}$ -E: Energy of this level above the presumed  $s_{1/2}$  g.s. was computed from the energy separation of the  $h_{11/2}$  and  $s_{1/2}$  states in  $^{161}\text{Re}$  and the energy of the  $\alpha$  transition connecting the two  $11/2^-$  states.

$^{165}\text{Ir}$ - $T_{1/2}$ : Weighted average of 0.29 ms 6, from p(t), and 0.39 ms 16, from  $\alpha$ (t), (1997Da07).

$^{165}\text{Ir}$ -% $\alpha$  decay: from the measured relative intensity of the protons and  $\alpha$  particles deexciting this level. (see  $^{165}\text{Ir}$  Adopted Levels.).

[Additional information 1.](#)

1997Da07:  $^{165}\text{Ir}$  source produced in  $^{92}\text{Mo}(^{78}\text{Kr},p4n)$  at  $E(^{78}\text{Kr})=384$  MeV. Used recoil mass separator with PPAC/DSSD detectors.

 $^{161}\text{Re}$  Levels

E(level)	$J^\pi$	$T_{1/2}$
123.8 13	$11/2^-$	15.6 ms 9

 $\alpha$  radiations

$E_\alpha$	E(level)	$I_\alpha^\dagger$	Comments
6715 7	123.8	100	$E_\alpha$ : from 1997Da07.

$^\dagger$  For absolute intensity per 100 decays, multiply by 0.13 4.