

$^{192}\text{Ir}$  IT decay (1.45 min) 1954Mi85,1971Ge11

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 1871 (2012)	15-Jun-2012

Parent:  $^{192}\text{Ir}$ : E=56.720 5;  $J^\pi=1^-$ ;  $T_{1/2}=1.45$  min 5; %IT decay=100.0

Others: 1948Ho37, 1950Ca10, 1953We02, 1960He08, 1961Sc07, 1963Ke08, 1987Re05.

1954Mi85: sources from neutron capture by  $^{191}\text{Ir}$ ; measured  $E_\gamma$  (scin), E(ce), Ice (mag spect).

1971Ge11: sources from neutron capture by  $^{191}\text{Ir}$ ; measured x-ray/ $\gamma$ -ray intensity ratios (Si(Li)).

1987Re05: sources from  $^{193}\text{Ir}(n,2n)$ , E(n)=14.73 MeV; measured x-ray spectrum; deduced %( $\text{Ir } L_\alpha$  x ray)=8.0 12, %( $\text{Ir } L_\beta$  x ray)=11.6 6.

 $^{192}\text{Ir}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	$T_{1/2}$	Comments
0.0	4 <sup>+</sup>	73.829 d 11	$T_{1/2}$ : from Adopted Levels.
56.71 3	1 <sup>-</sup>	1.45 min 5	%IT=99.9825; % $\beta^-$ =0.0175 $T_{1/2}$ : from 1953We02, 1954We10. Other value: 1.42 min 10 (1961Sc07). Others: 1937Mc04, 1948Ho37, 1954Mi85.

<sup>†</sup> From  $E_\gamma$ .

<sup>‡</sup> From Adopted Levels.

 $\gamma(^{192}\text{Ir})$ 

I( $\gamma$ +ce) normalization: from  $\Sigma$  (I( $\gamma$ +ce) to g.s.)=99.9825%.

$E_\gamma$	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.	$\alpha$ <sup>‡</sup>	$I_{(\gamma+ce)}$ <sup>†</sup>	Comments
56.71 3	56.71	1 <sup>-</sup>	0.0	4 <sup>+</sup>	E3	$2.85 \times 10^3$	100	ce(L)/( $\gamma$ +ce)=0.727 8; ce(M)/( $\gamma$ +ce)=0.212 4; ce(N+)/( $\gamma$ +ce)=0.0601 12 ce(N)/( $\gamma$ +ce)=0.0523 11; ce(O)/( $\gamma$ +ce)=0.00779 16; ce(P)/( $\gamma$ +ce)= $1.002 \times 10^{-5}$ 21 $E_\gamma$ : from Adopted Gammas. Other $E_\gamma$ : 58.0 4 (1958Mi85). Mult.: from measured $\alpha$ (L)exp and subshell ratios. $\alpha$ (L)exp=2040 430 (from I( $\text{Ir } L$ x ray)/I(56.7 $\gamma$ )=632 105 and L fluorescence yield=0.31 5) (1971Ge11); $\alpha$ (L)exp=1660 250, ( $\alpha$ (L+...))exp $\alpha$ (M)exp=2030 230 (1968Wi10); L2/L3=1.1 (1954Mi85). (L2M2)/L2(double conversion)=0.029 9, (L3M3)/L3(double conversion)=0.034 10 (1975Pr06).

<sup>†</sup> For absolute intensity per 100 decays, multiply by 0.999825.

<sup>‡</sup> Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on  $\gamma$ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

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Decay Scheme

%IT=100.0

