

^{195}Ir IT decay (3.67 h) 1973Ja10

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao		NDS 121,395 (2014)	1-Mar-2014

Parent: ^{195}Ir : E=100 5; $J^\pi=11/2^-$; $T_{1/2}=3.67$ h 8; %IT decay=5 5

^{195}Ir -%IT decay: IT DECAY unobserved; %IT<10 deduced from ce spectrum (1973Ja10).

Sources generally produced by the following reactions: $^{198}\text{Pt}(d,\alpha n)$ (1968Ja06), $^{198}\text{Pt}(p,\alpha)$ (1973Ja10) and $^{192}\text{Os}(\alpha,p)$ (1968Ho01).

Decay of isomer investigated with Ge(Li) and Si(Li) by observing β and γ rays as well as ce in single and coin measurements.

See also ^{195}Ir β decay (3.67 h).

 ^{195}Ir Levels

E(level)	J^π †	$T_{1/2}$ †	Comments
0.0	$3/2^+$	2.29 h 17	
100 5	$11/2^-$	3.67 h 8	%IT=5 5 E(level): from (t, α). Other: 120 40 derived from $Q(\beta^-,^{195}\text{Ir g.s.})=1110$ 30 and $Q(\beta^-,3.67\text{-h }^{195}\text{Ir})=1230$ 20. IT decay unobserved; %IT<10 deduced from ce spectrum (1973Ja10). This branching yields $B(M4)(W.u.)\leq 8.8$ compared to 2.05 7, 2.2 8, and 2.35 19 for analogous transitions in ^{193}Ir , ^{195}Au , and ^{197}Au , respectively.

† From Adopted Levels.

 $\gamma(^{195}\text{Ir})$

$I(\text{K x ray},^{195}\text{Ir})/I\gamma(433\gamma,^{195}\text{Pt})<0.7$ (1973Ja10).

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	α^\ddagger	$I_{(\gamma+ce)}^\dagger$	Comments
100 5	100	$11/2^-$	0.0	$3/2^+$	(M4)	5.0×10^3 20	100	ce(K)/($\gamma+ce$)=0.048 19; ce(L)/($\gamma+ce$)=0.67 21; ce(M)/($\gamma+ce$)=0.22 11; ce(N+)/($\gamma+ce$)=0.06 4 E_γ : undetermined; calculated from Adopted Levels.

† For absolute intensity per 100 decays, multiply by 0.05 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.

^{195}Ir IT decay (3.67 h) 1973Ja10

Decay Scheme

%IT=5.5

