^{189}Os IT decay (5.81 h)   1960Ne04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson, Balraj Singh	NDS 142, 1 (2017)	15-Apr-2017

Parent: ^{189}Os: E=30.81 4; J$^{\pi}$=9/2$^-$; T$_{1/2}$=5.81 h 10; %IT decay=100.0
^{189}Os-%IT decay: %IT=100.

^{189}Os Levels

E(level)	J$^{\pi\dagger}$	T$_{1/2}$†
0.0	3/2$^-$	
30.81 4	9/2$^-$	5.81 h 10

† From Adopted Levels.

$\gamma(^{189}$Os)

I(γ+ce) normalization: I(γ+ce)(30.8γ)=100.

E$_{\gamma}$‡	E$_i$(level)	J$^{\pi}_i$	E$_f$	J$^{\pi}_f$	Mult.	δ	$\alpha^{\dagger}$	I$_{(\gamma+ce)}$$^{\#}$	Comments
30.81 4	30.81	9/2$^-$	0.0	3/2$^-$	M3+E4	0.04 2	3.12×10^5 10	100	ce(L)/(γ+ce)=0.707 19; ce(M)/(γ+ce)=0.227 11 ce(N)/(γ+ce)=0.057 3; ce(O)/(γ+ce)=0.0085 5; ce(P)/(γ+ce)=0.000152 6 α(L)=2.21×10^5 6; α(M)=7.1×10^4 4 α(N)=1.78×10^4 9; α(O)=2.66×10^3 10; α(P)=47.5 8 L1:L2:L3:M1:M3:N1:N3:O3=30:2:100:7:33: 3:12:3. Mult.: deduced by the evaluators assuming 50% uncertainty for the conversion electron intensities. In 1960Ne04, the authors state the uncertainties are large due to a steep efficiency curve, but do not give the values. δ: from Adopted Gammas. Other: >0.46 from subshell ratios in 1960Ne04.

† From BrIcc v2.3b (16-Dec-2014) 2008Ki07, "Frozen Orbitals" appr.
‡ Weighted average of values from β-decay (1962Cr02), IT decay (1960Ne04) and ^{189}Ir ε decay (1970Ma37).
$^{\#}$ Absolute intensity per 100 decays.

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Decay Scheme

%IT=100.0

9/2⁻   30.81   5.81 h *10*

3/2⁻   0.0

30.81 M3+E4 *102*

$^{189}_{76}$Os$_{113}$