

$^{252}\text{Cf}$  SF decay 1998Hw04

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne and A. Negret		NDS 109, 943 (2008)	1-May-2007

Parent:  $^{252}\text{Cf}$ :  $E=0.0$ ;  $J^\pi=0^+$ ;  $T_{1/2}=2.645$  y 8; %SF decay=?

$^{252}\text{Cf}$ -%SF decay=3.092 8.

Measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$  using Gammasphere array of 72 Compton suppressed Ge detectors.

 $^{106}\text{Tc}$  Levels

<u>E(level)<sup>†</sup></u>	<u>E(level)<sup>†</sup></u>	<u>E(level)<sup>†</sup></u>	<u>E(level)<sup>†</sup></u>
0.0+x <sup>‡</sup>	368.3+x <sup>#</sup> 15	649.0+x <sup>@</sup> 15	1349.8+x <sup>&amp;</sup> 17
92.1+x <sup>‡</sup> 10	407.3+x <sup>@</sup> 14	807.4+x <sup>&amp;</sup> 16	1551.7+x <sup>#</sup> 20
162.0+x <sup>#</sup> 10	498.5+x <sup>&amp;</sup> 14	890.0+x <sup>#</sup> 17	1622.5+x <sup>@</sup> 18
256.9+x <sup>‡</sup> 14	601.4+x <sup>#</sup> 17	1061.9+x <sup>@</sup> 16	2339.5+x <sup>@</sup> 20

<sup>†</sup> From least-squares fit by evaluators to  $E_\gamma$ 's, assuming  $\Delta(E_\gamma)=0.3$  keV.

<sup>‡</sup> Band(A): Band #1.

<sup>#</sup> Band(B): Band #2.

<sup>@</sup> Band(C): Band #3a.

<sup>&</sup> Band(c): Band #3b.

 $\gamma(^{106}\text{Tc})$ 

<u><math>E_\gamma</math></u>	<u><math>I_\gamma</math></u>	<u><math>E_i(\text{level})</math></u>	<u><math>E_f</math></u>	<u><math>E_\gamma</math></u>	<u><math>I_\gamma</math></u>	<u><math>E_i(\text{level})</math></u>	<u><math>E_f</math></u>	<u><math>E_\gamma</math></u>	<u><math>I_\gamma</math></u>	<u><math>E_i(\text{level})</math></u>	<u><math>E_f</math></u>
91.2		498.5+x	407.3+x	241.5	51.0	498.5+x	256.9+x	412.9	5.42	1061.9+x	649.0+x
92.1		92.1+x	0.0+x	241.7	4.43	649.0+x	407.3+x	521.6		890.0+x	368.3+x
150.5	72.2	649.0+x	498.5+x	254.5	28.3	1061.9+x	807.4+x	542.5	13.0	1349.8+x	807.4+x
158.4	48.3	807.4+x	649.0+x	272.8	16.4	1622.5+x	1349.8+x	560.5	4.22	1622.5+x	1061.9+x
162.0		162.0+x	0.0+x	288.0	12.6	1349.8+x	1061.9+x	661.7		1551.7+x	890.0+x
164.8	65.3	256.9+x	92.1+x	288.6		890.0+x	601.4+x	717.0	2.91	2339.5+x	1622.5+x
206.3		368.3+x	162.0+x	308.9	11.6	807.4+x	498.5+x				
233.2		601.4+x	368.3+x	315.2	100	407.3+x	92.1+x				

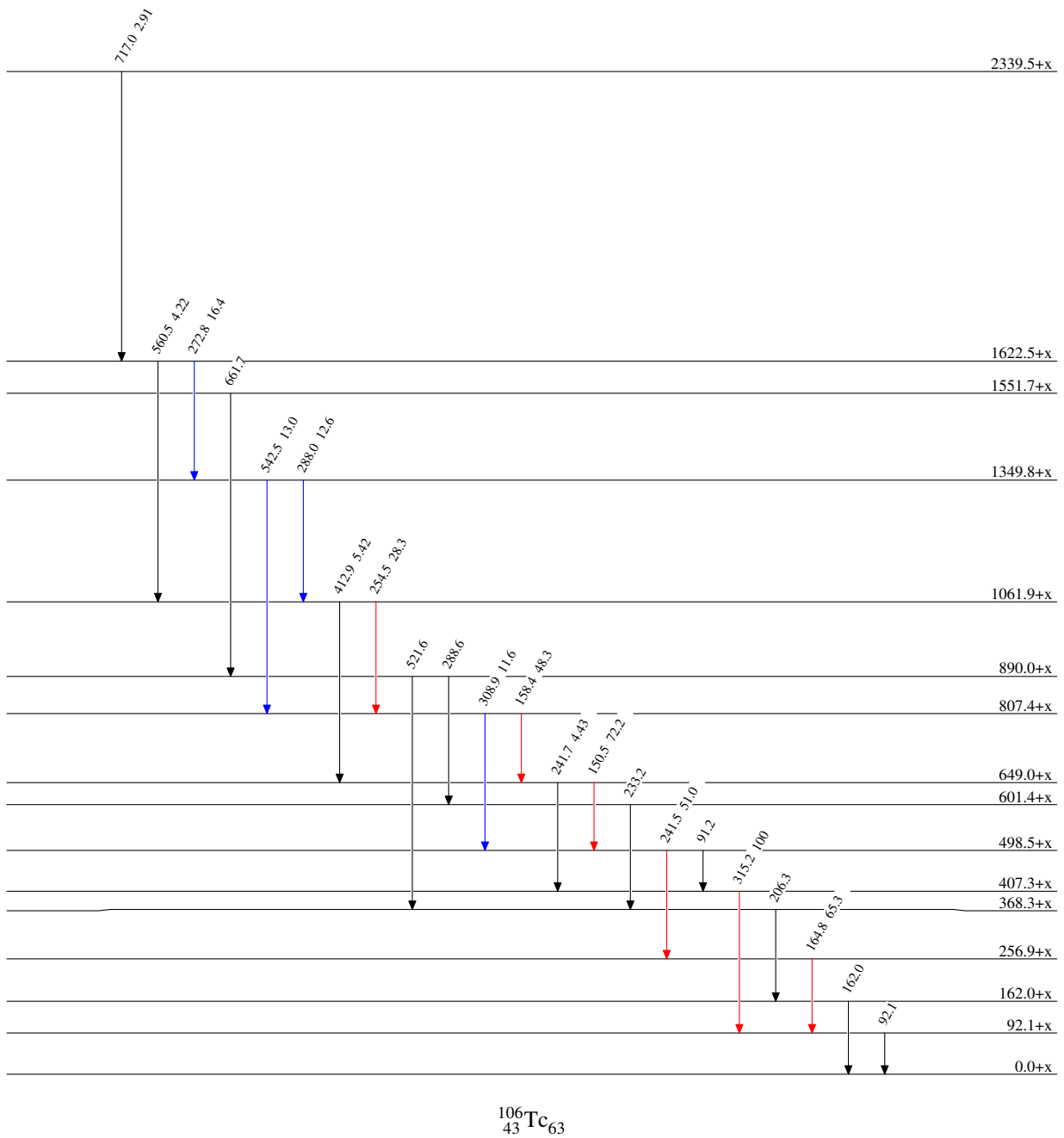
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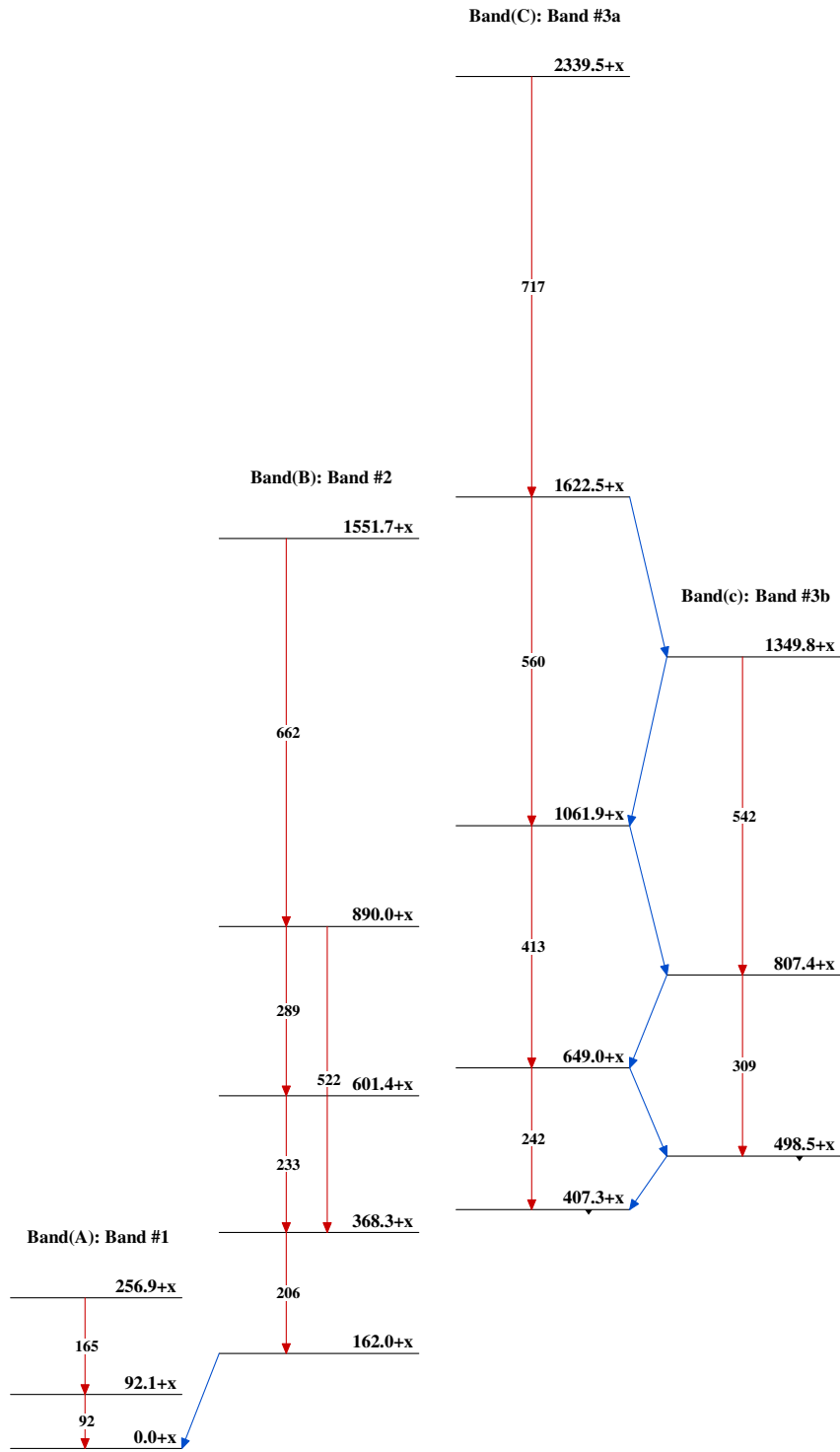
## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$



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