

$^{102}\text{Y} \beta^-$ decay (0.298 s) [1991Hi02](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110, 1745 (2009)	31-Dec-2008

Parent: ^{102}Y : $E=0.0+y$; $T_{1/2}=0.298$ s 9; $Q(\beta^-)=9850$ 70; $\% \beta^-$ decay=100.0

Assignment: mass-separated samples of $A=102$ from $^{235}\text{U}(\text{n},\text{F})$. ^{102}Sr was selected using a high temperature ionization source. The existence of a second ^{102}Y isomer is based mainly on a different $I(152\gamma)/I(326\gamma)$ ratio for each isomer. Measured: $E\gamma$, $I\gamma$, $\gamma\gamma$, $T_{1/2}$. Deduced: ^{102}Zr levels.

Others: [1991Hi02](#) supersedes [1988HiZQ](#), [1989HiZY](#), [1974GrZN](#), [1992Ba28](#).
performed β - γ coincidences.

 ^{102}Zr Levels

$E(\text{level})^\dagger$	$J^\pi^\ddagger$	Comments
0.0	0^+	
151.77 13	2^+	
478.41 20	4^+	
894.78 22	(0^+)	J^π : γ decay to 2^+ but not to 4^+ suggests (0^+) for this level. (1^+) cannot be excluded.
1159.50 22		
1211.04 13	(2^+)	J^π : based on systematics: from γ decay to 0^+ and 2^+ .

† From a least-squares procedure using measured gammas.

‡ From Adopted Levels.

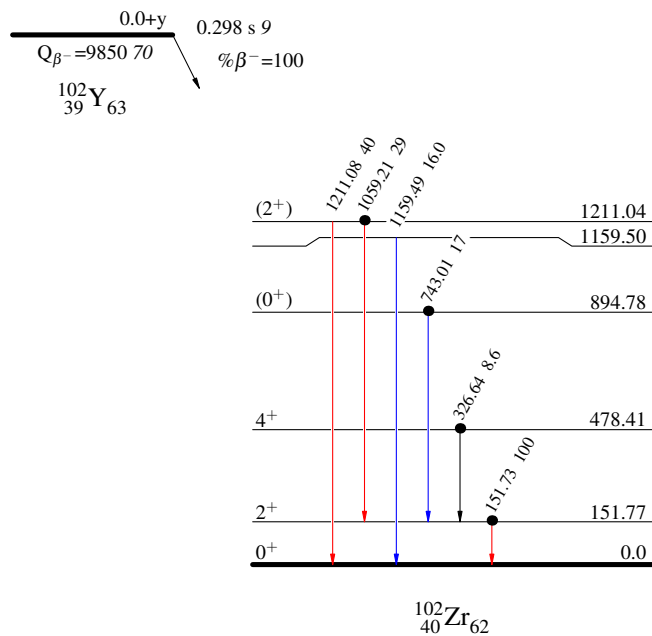
 $\gamma(^{102}\text{Zr})$

$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
151.73 14	100 4	151.77	2^+	0.0	0^+
326.64 15	8.6 9	478.41	4^+	151.77	2^+
743.01 18	17 4	894.78	(0^+)	151.77	2^+
1059.21 18	29 3	1211.04	(2^+)	151.77	2^+
1159.49 22	16.0 19	1159.50		0.0	0^+
1211.08 16	40 4	1211.04	(2^+)	0.0	0^+

† From [1991Hi02](#).

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Decay Scheme

Intensities: Relative I_γ 

Legend

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