^{102}Y β^- 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(β^-)=9850 *70*; %β^- decay=100.0

Assignment: mass-separated samples of A=102 from ^{235}U(n,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(152γ)/I(326γ) ratio for each isomer. Measured: Eγ, Iγ, $\gamma\gamma$, $T_{1/2}$. Deduced: ^{102}Zr levels.

Others: 1991Hi02 supersedes 1988HiZQ, 1989HiZY, 1974GrZN, 1992Ba28.

performed β-γ coincidences.

^{102}Zr Levels

E(level)†	J$^\pi$‡	Comments
0.0	0^+	
151.77 *13*	2^+	
478.41 *20*	4^+	
894.78 *22*	(0^+)	J$^\pi$: 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$^\pi$: based on systematics: from γ decay to 0^+ and 2^+.

† From a least-squares procedure using measured gammas.

‡ From Adopted Levels.

$\gamma(^{102}Zr)$

E$_\gamma$†	I$_\gamma$†	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
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