

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 108,2035 (2007)	30-Mar-2007

Q(β^-)=8531 10; S(n)=4871 6; S(p)=11293 10; Q(α)=-6917 12 [2012Wa38](#)
 Note: Current evaluation has used the following Q record 8100 904980 13110.14e+315-7.35e+314 [2003Au03](#).

 ^{104}Nb LevelsCross Reference (XREF) Flags

A ^{252}Cf SF decay
B ^{104}Zr β^- decay

E(level)	J^π	$T_{1/2}$	XREF	Comments
0.0	(1 ⁺)	4.9 s 3	AB	$\% \beta^- = 100$; $\% \beta^- n = 0.06$ 3 (1996Me09) $T_{1/2}$: av: 5.0 s 4 (1996Me09) and 4.8 s 4 (1976Ah06). J^π : low spin.
8.7 2			B	
37.5 2			B	
109.6 2			B	
2.2×10^2 12		0.94 s 4	B	$\% \beta^- = 100$; $\% \beta^- n = 0.05$ 3 (1996Me09) E(level): from 1987Gr18 , derived from $\beta\gamma$ coin. J^π : high (1982Ke05). $T_{1/2}$: average of: 0.85 s 2 (1976Ah06), 0.91 s 2 (1980BaZL), 0.99 s 7 (1982Ke05), 1.0 s 1 (1996Me09).
250.6 2	(1 ⁺)		B	J^π : from 1986Pe04 from systematics of N=63 isotones showing $K^\pi = 1^+$ band.
311.8 2	(1 ⁺)		B	J^π : strong β via 0 ⁺ parent.
320.1 3			B	
370.0 4			B	
514.3 2	(1 ⁺)		B	J^π : from 1986Pe04 from systematics of N=63 isotones showing $K^\pi = 1^+$ band.

 $\gamma(^{104}\text{Nb})$

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π
8.7		8.7 2	100	0.0	(1 ⁺)	250.6	(1 ⁺)	250.6 2	30 3	0.0	(1 ⁺)
37.5		28.9 2		8.7		311.8	(1 ⁺)	61.1 2	100 10	250.6	(1 ⁺)
		37.4 2	100	0.0	(1 ⁺)			274.2 2	40 4	37.5	
109.6		100.9 2	100	8.7		320.1		210.5 2	100	109.6	
250.6	(1 ⁺)	140.9 2	45 5	109.6		370.0		49.9 2	100	320.1	
		213.0 2	100 10	37.5		514.3	(1 ⁺)	202.4 2	43 5	311.8	(1 ⁺)
		241.9 2	51 5	8.7				263.7 2	100 10	250.6	(1 ⁺)

Adopted Levels, Gammas**Level Scheme**

Intensities: Type not specified

Legend

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

