

(HI,xn γ):SD 1996CI01,2004PrZY

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong	NDS 108, 1093 (2007)	1-Jan-2006

1996CI01 (see also **1995CI01**): $^{183}\text{W}(^{19}\text{F},6n\gamma)$ E=108 MeV and $^{181}\text{Ta}(^{20}\text{Ne},5n\gamma)$ E=123 MeV. Measured E_γ , I_γ , $\gamma\gamma\gamma$ with EUROGAM array (36 Compton suppressed detectors). Deduced SD band.

2004PrZY: $^{184}\text{W}(^{19}\text{F},7n\gamma)$ E=114 MeV. Measured E_γ , I_γ , $\gamma\gamma\gamma$ with EUROBALL array of 71 Ge detectors and 210 BGO inner-ball detectors. Lowest transition at 124.0 keV reported.

 ^{196}Bi Levels

E(level)	$J^\pi^\dagger$	Comments
$x^\ddagger$	$J\approx(7)$	Additional information 1. J^π : From 2004PrZY , value is within 2 units.
124.0+x 3	J+2	
289.7+x ‡ 5	J+4	J^π : Other: $\approx(6,7)$ (1995CI01).
497.3+x ‡ 7	J+6	
746.8+x ‡ 8	J+8	
1037.7+x ‡ 9	J+10	
1370.3+x ‡ 10	J+12	
1743.8+x ‡ 11	J+14	
2157.1+x ‡ 11	J+16	
2611.7+x ‡ 12	J+18	
3106.5+x ‡ 13	J+20	
3641.6+x ‡ 14	J+22	
4216.5+x ‡ 15	J+24	
4830.5+x ‡ 16	J+26	
5484.7+x ‡ 18	J+28	

† From Harris expansion, 7 ± 2 for the lowest member. From estimate of maximum spin transferred in the recoiling nucleus, spin of the highest state is estimated as 35 ± 2 .

‡ Band(A): SD band (**1996CI01,2004PrZY**). percent population<2 (**1996CI01**) of ^{196}Bi channel.

 $\gamma(^{196}\text{Bi})$

$E_\gamma^\ddagger$	$I_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
124.0 3	0.62 11	124.0+x	J+2	x	$J\approx(7)$	E_γ, I_γ : γ From 2004PrZY only.
165.7 4	1.04 10	289.7+x	J+4	124.0+x	J+2	E_γ : 166.2 3 (1996CI01).
207.6 4	1.00 10	497.3+x	J+6	289.7+x	J+4	E_γ : 208.0 3 (1996CI01).
249.5 4	0.98 15	746.8+x	J+8	497.3+x	J+6	E_γ : 249.7 3 (1996CI01).
290.9 4	0.90 10	1037.7+x	J+10	746.8+x	J+8	E_γ : 291.3 3 (1996CI01).
332.6 4	1.08 11	1370.3+x	J+12	1037.7+x	J+10	E_γ : 332.6 3 (1996CI01).
373.5 4	0.85 11	1743.8+x	J+14	1370.3+x	J+12	E_γ : 373.8 3 (1996CI01).
413.3 4	1.04 10	2157.1+x	J+16	1743.8+x	J+14	E_γ : 414.3 3 (1996CI01).
454.6 5	1.11 10	2611.7+x	J+18	2157.1+x	J+16	E_γ : 455.0 3 (1996CI01).
494.8 5	0.82 8	3106.5+x	J+20	2611.7+x	J+18	E_γ : 495.2 3 (1996CI01).
535.1 5	0.60 6	3641.6+x	J+22	3106.5+x	J+20	E_γ : 535.4 3 (1996CI01).
574.9 5	0.55 6	4216.5+x	J+24	3641.6+x	J+22	E_γ : 574.3 3 (1996CI01).
614.0 6	0.42 4	4830.5+x	J+26	4216.5+x	J+24	E_γ : 614.3 5 (1996CI01).
654.2 8	0.38 4	5484.7+x	J+28	4830.5+x	J+26	E_γ : 653 1 (1996CI01).

Continued on next page (footnotes at end of table)

(HI,xn γ):SD 1996CI01,2004PrZY (continued) $\gamma(^{196}\text{Bi})$ (continued)

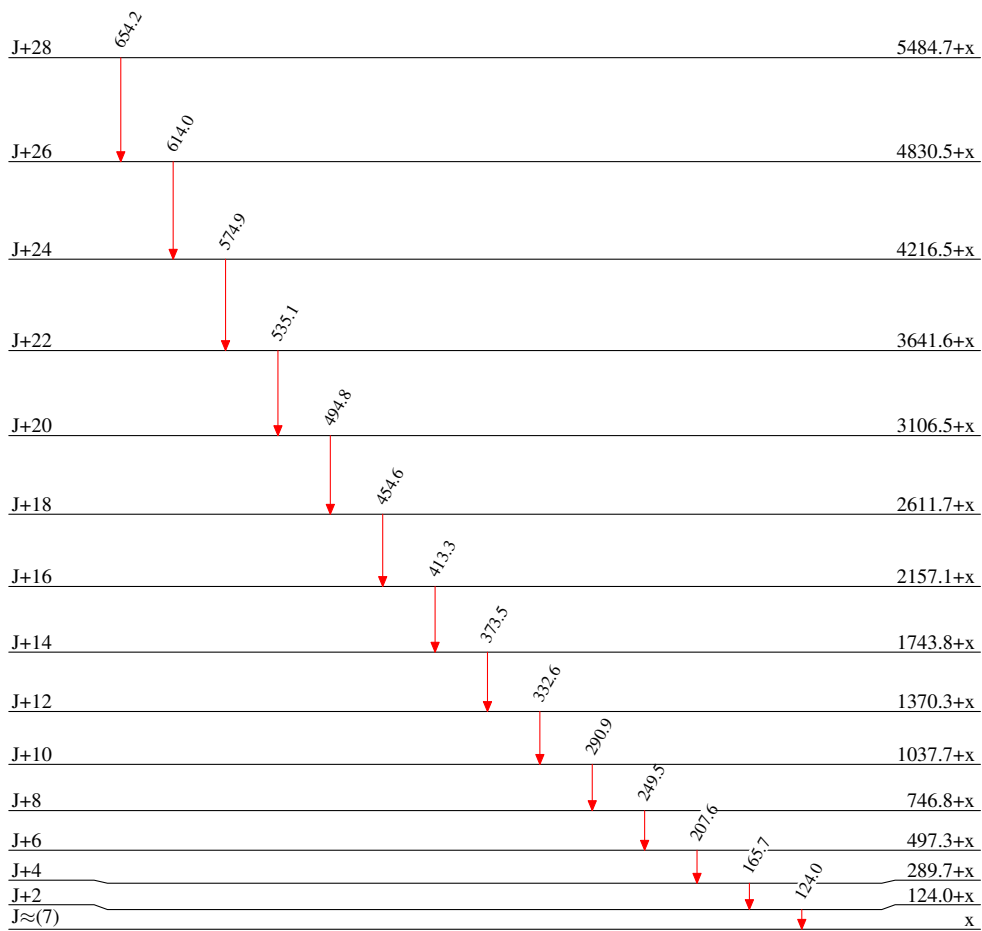
[†] From 2004PrZY, relative transition intensities within the SD band. Other: 1996CI01.

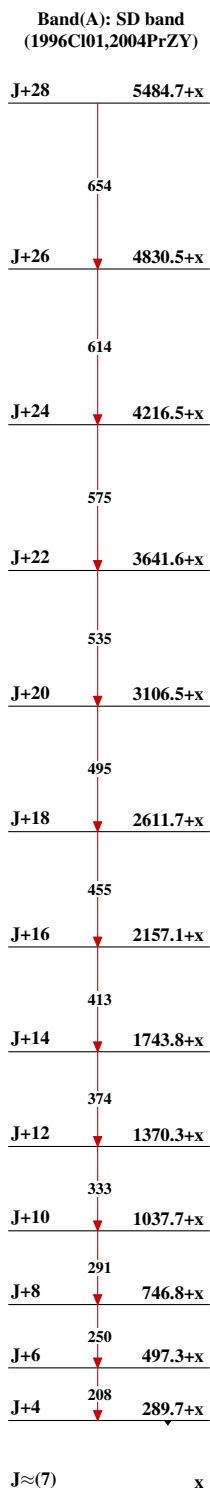
[‡] From 2004PrZY. Other: 1996CI01 in agreement with 2004PrZY, but 124.0 γ was only seen in 2004PrZY.

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Legend

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

 $^{196}_{83}\text{Bi}_{113}$

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