<div align="center">

^{151}**Eu(^{3}He,3nγ)**　　**1978Ke12**

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	Type	Author	History Citation	Literature Cutoff Date
	Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

1978Ke12: ^{151}Eu(α,4nγ) E(α)=45-55 MeV and ^{151}Eu(^{3}He,3nγ) E(^{3}He)=24-32 MeV. Measured γ, $\gamma\gamma$, ce, $\gamma(\theta)$ in (α,4nγ) and γ, $\gamma\gamma$, $\gamma\gamma$(t), excitation functions.

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^{151}Tb Levels

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E(level)[†]	J$^{\pi}$[‡]	T$_{1/2}$	E(level)[†]	J$^{\pi}$[‡]	E(level)[†]	J$^{\pi}$[‡]
0.0	1/2$^{(+)}$		1319.5 5	(19/2$^-$)	2375.3[#] 2	
22.92 2	3/2$^{(+)}$		1693.3 5	(19/2$^+$)	2468.5 6	(25/2$^+$)
72.39 3	(5/2$^+$)		2001.9 5	(23/2$^-$)	2782.3 6	(27/2$^+$)
99.5 1	(11/2$^-$)	25 s 3	2045.7 6	(21/2$^+$)	2847.3[#] 2	
703.7 3	(15/2$^-$)		2120.3 5	(23/2$^-$)	3115.8 8	(31/2$^+$)
887.3 3	(13/2$^-$)		2180.5 6	(25/2$^-$)	3128.7 8	(31/2$^-$)
1096.5 4	(15/2$^+$)		2219.7 6	(23/2$^+$)		

† From least-squares fit to Eγ's.
‡ From 'Adopted Levels'.
# From 'Adopted Levels'.

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γ(^{151}Tb)

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E$_{\gamma}$	I$_{\gamma}$	E$_i$(level)	J$^{\pi}_i$	E$_f$	J$^{\pi}_f$	Comments
22.92[†] 2		22.92	3/2$^{(+)}$	0.0	1/2$^{(+)}$	
27.1[†] 1		99.5	(11/2$^-$)	72.39	(5/2$^+$)	
49.46[†] 2		72.39	(5/2$^+$)	22.92	3/2$^{(+)}$	
72.5[†] 1		72.39	(5/2$^+$)	0.0	1/2$^{(+)}$	
178.6 3	4.0	2180.5	(25/2$^-$)	2001.9	(23/2$^-$)	
209.2 3	4.8	1096.5	(15/2$^+$)	887.3	(13/2$^-$)	
248.8 3	3.3	2468.5	(25/2$^+$)	2219.7	(23/2$^+$)	
268.4 3	1.0	3115.8	(31/2$^+$)	2847.3		
352.4 3	3.8	2045.7	(21/2$^+$)	1693.3	(19/2$^+$)	
392.8 3	20	1096.5	(15/2$^+$)	703.7	(15/2$^-$)	
526.4 3	7.5	2219.7	(23/2$^+$)	1693.3	(19/2$^+$)	
562.6 3	6	2782.3	(27/2$^+$)	2219.7	(23/2$^+$)	
596.8 3	29	1693.3	(19/2$^+$)	1096.5	(15/2$^+$)	
604.2 3	100	703.7	(15/2$^-$)	99.5	(11/2$^-$)	
615.8 3	36	1319.5	(19/2$^-$)	703.7	(15/2$^-$)	
682.4 3	16	2001.9	(23/2$^-$)	1319.5	(19/2$^-$)	
753.4 3	2.1	3128.7	(31/2$^-$)	2375.3		
787.8 3	17	887.3	(13/2$^-$)	99.5	(11/2$^-$)	
800.8 3	3.0	2120.3	(23/2$^-$)	1319.5	(19/2$^-$)	
[x]823.2	3.0					Deexcitation from a 1527 level (1978Ke12) seems incorrect. a γ ray of a similar energy deexcites a 5985 level (1994Pe17).

† From 'adopted gammas'.
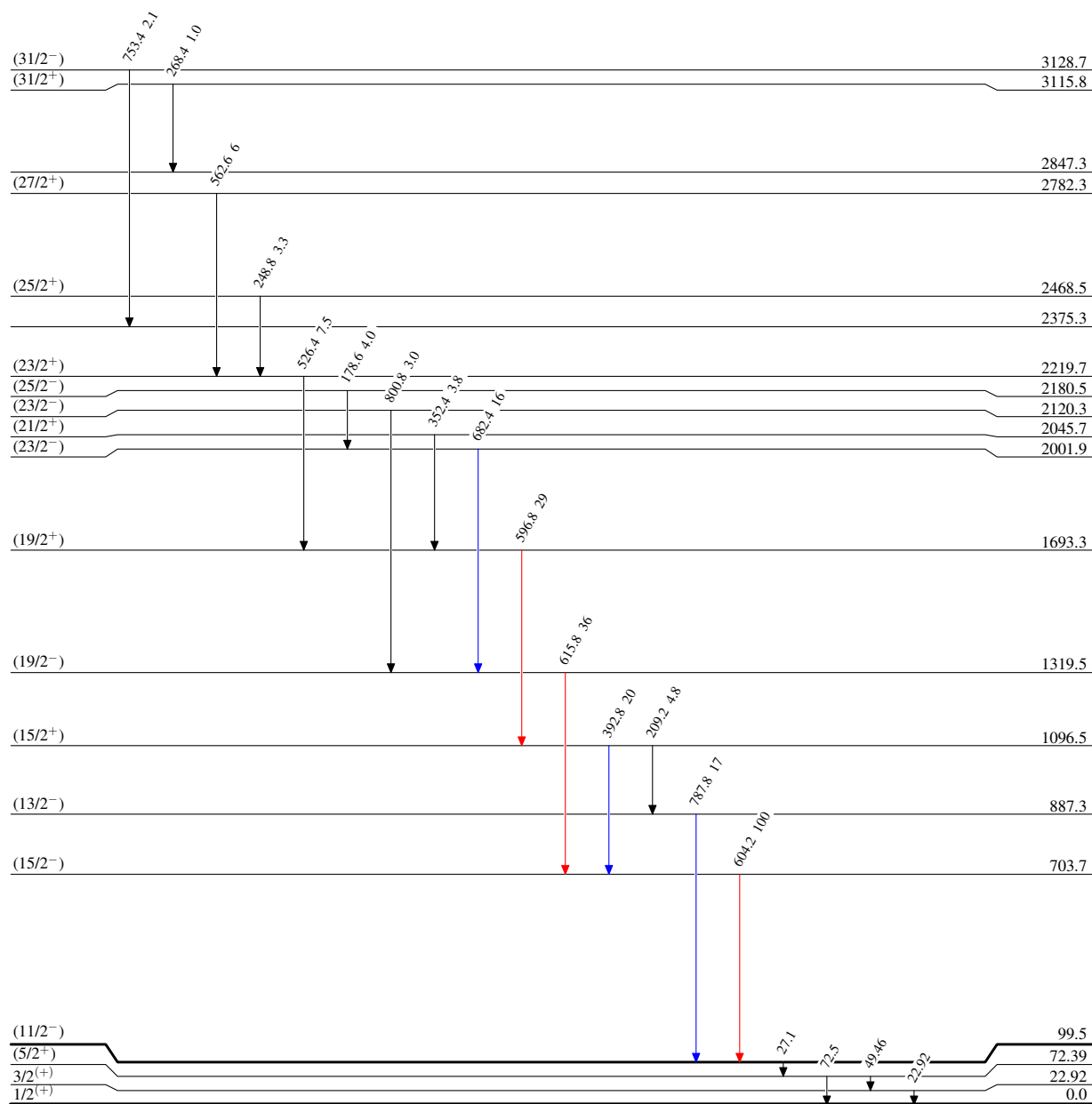x γ ray not placed in level scheme.

^{151}Eu(^{3}He,3nγ)   1978Ke12

Level Scheme
Intensities: Relative I$_\gamma$

Legend

→ I$_\gamma$ < 2%×I$_\gamma^{max}$
→ I$_\gamma$ < 10%×I$_\gamma^{max}$
→ I$_\gamma$ > 10%×I$_\gamma^{max}$

(31/2$^-$)   3128.7
(31/2$^+$)   3115.8

753.4 2.1
268.4 1.0

562.6 6

2847.3
(27/2$^+$)   2782.3

248.8 3.3

(25/2$^+$)   2468.5
2375.3

526.4 7.5
178.6 4.0
800.8 3.0
352.4 3.8
682.4 16

(23/2$^+$)   2219.7
(25/2$^-$)   2180.5
(23/2$^-$)   2120.3
(21/2$^+$)   2045.7
(23/2$^-$)   2001.9

596.8 29

(19/2$^+$)   1693.3

615.8 36

(19/2$^-$)   1319.5

392.8 20
209.2 4.8

(15/2$^+$)   1096.5

787.8 17

(13/2$^-$)   887.3

604.2 100

(15/2$^-$)   703.7

(11/2$^-$)   99.5   25 s 3
(5/2$^+$)   27.1   72.39
3/2$^{(+)}$ 72.5   22.92
1/2$^{(+)}$ 49.46   22.92   0.0

$^{151}_{65}$Tb$_{86}$