^{100}Ru(n,γ) E=thermal 1982Ba69

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	ENSDF	1-Jul-2006

Enriched target (93%).

^{101}Ru Levels

E(level)‡	J$^\pi$†	Comments
0	5/2$^+$	J$^\pi$: from Adopted Levels.
127.2 *14*	3/2$^+$	
535.0 *12*	3/2$^+$	
720.0 *24*	1/2,3/2	E(level): different from the 720 level seen in (α,3nγ) with J^π(9/2$^+$), because of primary γ from level with J^π=1/2$^+$.
973.4 *12*	1/2,3/2	
1499.3 *11*	1/2,3/2	E(level): different from the level 1500 seen in (α,3nγ). See comment with 720 level.
1843.4 *16*	1/2,3/2	
1880.1 *10*	1/2,3/2	
1961.5 *11*	1/2,3/2	
1971.0 *12*	1/2,3/2	
1997.0 *10*	1/2,3/2	
2017.0 *13*	1/2,3/2	
2086.7 *10*	1/2,3/2	
2317.7 *10*	1/2,3/2	
2326.8 *9*	1/2,3/2	
2560.9 *9*	1/2,3/2	
2601.3 *15*	1/2,3/2	
2625.5 *15*	1/2,3/2	
2659.6 *9*	1/2,3/2	
2768.5 *13*	1/2,3/2	
2878.4 *11*	1/2,3/2	
3285.9 *13*	1/2,3/2	
3395.4 *11*	1/2,3/2	
4043.9 *12*		
(6802.0)	1/2$^+$	

† All levels fed by primary γ's have J=1/2,3/2.
‡ As given by 1982Ba69 from Eγ using S(n)=6802.0 7; The adopted value is 6802.1 7.

γ(^{101}Ru)

Eγ	Iγ†	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Eγ	Iγ†	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
3406.6 *4*	0.6 *1*	(6802.0)	1/2$^+$	3395.4	1/2,3/2	4715.3‡ *3*	3.0 *1*	(6802.0)	1/2$^+$	2086.7	1/2,3/2
3516.1 *6*	0.8 *2*	(6802.0)	1/2$^+$	3285.9	1/2,3/2	4785.0 *6*	0.3 *1*	(6802.0)	1/2$^+$	2017.0	1/2,3/2
3923.6 *4*	0.8 *1*	(6802.0)	1/2$^+$	2878.4	1/2,3/2	4805.0‡ *3*	1.5 *1*	(6802.0)	1/2$^+$	1997.0	1/2,3/2
4033.5 *6*	1.3 *3*	(6802.0)	1/2$^+$	2768.5	1/2,3/2	4831.0 *5*	0.4 *1*	(6802.0)	1/2$^+$	1971.0	1/2,3/2
4043.9 *12*	0.5 *1*	4043.9		0	5/2$^+$	4840.5‡ *4*	0.5 *1*	(6802.0)	1/2$^+$	1961.5	1/2,3/2
4142.4‡ *2*	1.6 *1*	(6802.0)	1/2$^+$	2659.6	1/2,3/2	4921.9 *3*	2.4 *1*	(6802.0)	1/2$^+$	1880.1	1/2,3/2
4176.5 *8*	0.6 *1*	(6802.0)	1/2$^+$	2625.5	1/2,3/2	4958.6 *9*	0.4 *1*	(6802.0)	1/2$^+$	1843.4	1/2,3/2
x4187.0 *4*	1.2 *1*					5302.7 *4*	4.1 *1*	(6802.0)	1/2$^+$	1499.3	1/2,3/2
4200.7 *8*	0.4 *1*	(6802.0)	1/2$^+$	2601.3	1/2,3/2	5826.6 *5*	0.9 *1*	(6802.0)	1/2$^+$	973.4	1/2,3/2
4241.1‡ *2*	1.6 *1*	(6802.0)	1/2$^+$	2560.9	1/2,3/2	6081.8 *17*	0.2	(6802.0)	1/2$^+$	720.0	1/2,3/2
4475.2 *2*	1.4 *1*	(6802.0)	1/2$^+$	2326.8	1/2,3/2	6267.0‡ *5*	6.9 *2*	(6802.0)	1/2$^+$	535.0	3/2$^+$
4484.3‡ *3*	2.2 *1*	(6802.0)	1/2$^+$	2317.7	1/2,3/2	6674.8‡ *7*	0.5 *1*	(6802.0)	1/2$^+$	127.2	3/2$^+$

Continued on next page (footnotes at end of table)

^{100}Ru(n,γ) E=thermal 1982Ba69 (continued)

$\gamma(^{101}Ru)$ (continued)

† Relative intensity.
‡ Seen by 1974Ba22.
^{x} γ ray not placed in level scheme.

^{100}Ru(n,γ) E=thermal 1982Ba69

Level Scheme

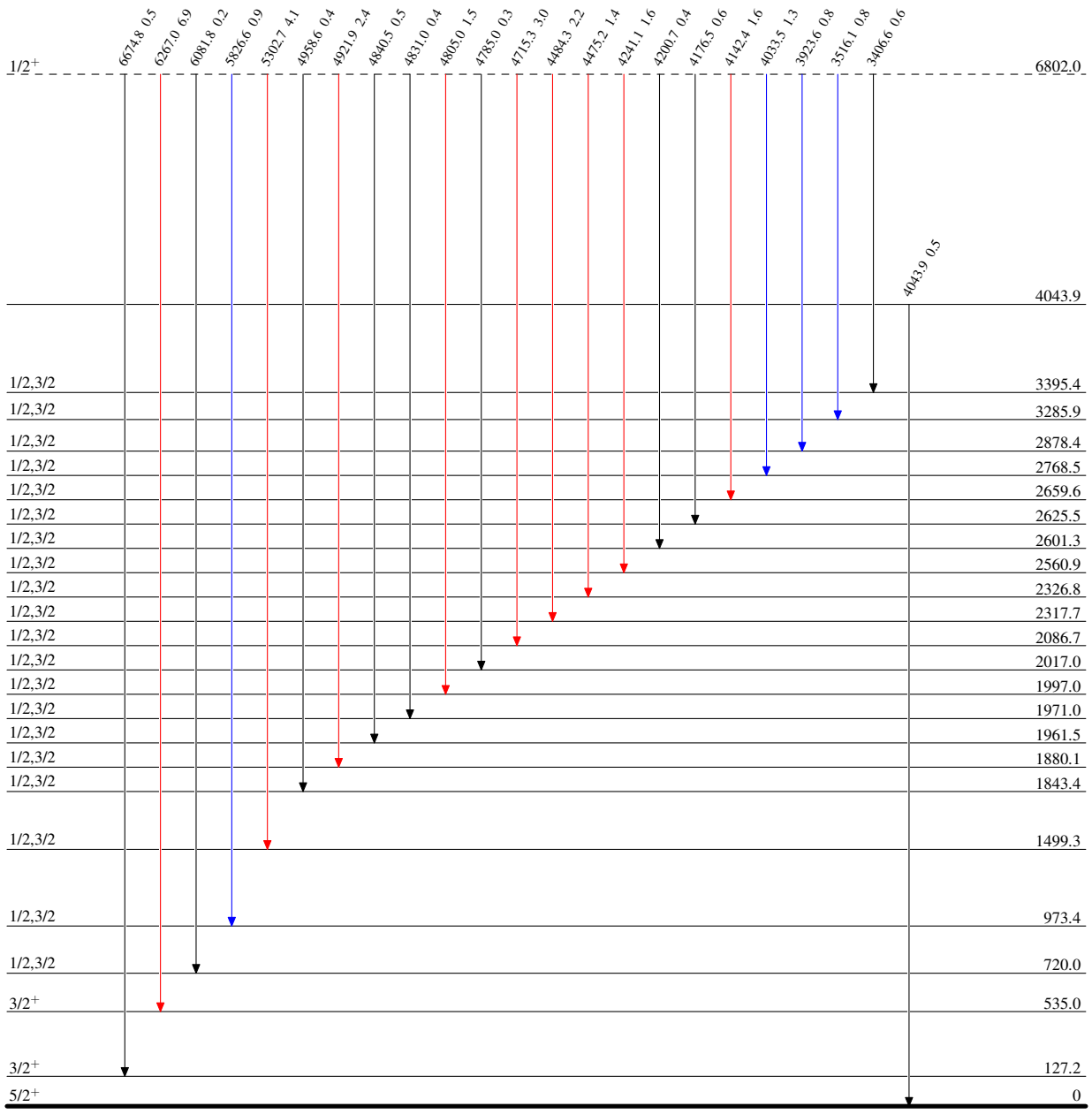
Intensities: Relative I_γ

Legend

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

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

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



$^{101}_{44}Ru_{57}$