

$^{101}\text{Ru}(n,\gamma)$ E=thermal 2007ChZX

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110, 1745 (2009)	31-Dec-2008

Measured: E_γ , I_γ , neutron separation energies. Deduced: ^{102}Ru levels.

Other: 1991Is05.

 ^{102}Ru Levels

E(level)	J^π	E(level)	J^π	E(level)	J^π	E(level)
0.0		1603.37 18	(3,4 ⁺)	2240.78 12		2944.75 4
475.0962 10		1799.08 4		2261.09 5	2 ⁽⁺⁾	3033.52 4
943.76 3	0 ⁺	1873.25 7	6 ⁺	2420.0 4	(3,4 ⁺)	3056.73 5
1103.047 13	2 ⁺	1969.01 16	(0) ⁺	2467.389 25		9219.52 10
1106.43 3		2036.73 9	2 ⁺	2591.79 5		
1521.6000 22		2043.393 25	3 ⁻	2614.74 12		
1580.56 4		2219.03 9	5 ⁺	2676.3 3	(0,1,2) ⁺	

 $\gamma(^{102}\text{Ru})$

Intensities quoted per 100 neutron captures.

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
415.23 11	0.0064 11	1521.6000		1106.43	
418.47 10	0.033 4	1521.6000		1103.047	2 ⁺
420.4 2	0.0014 3	2219.03	5 ⁺	1799.08	
456.16 12	0.0103 18	2036.73	2 ⁺	1580.56	
468.68 3	0.049 5	943.76	0 ⁺	475.0962	
475.095 1	0.98 9	475.0962		0.0	
497.13 20	0.0068 16	1603.37	(3,4 ⁺)	1106.43	
548.44 5	0.0128 15	2591.79		2043.393	3 ⁻
627.974 16	0.176 16	1103.047	2 ⁺	475.0962	
631.24 3	0.30 3	1106.43		475.0962	
636.84 5	0.033 3	1580.56		943.76	0 ⁺
680.57 9	0.0162 22	2261.09	2 ⁽⁺⁾	1580.56	
692.25 6	0.025 3	1799.08		1106.43	
696.50 6	0.039 5	1799.08		1103.047	2 ⁺
697.30 11	0.020 3	2219.03	5 ⁺	1521.6000	
739.44 6	0.0196 20	2261.09	2 ⁽⁺⁾	1521.6000	
766.82 6	0.019 3	1873.25	6 ⁺	1106.43	
865.96 16	0.0054 10	1969.01	(0) ⁺	1103.047	2 ⁺
930.5 3	0.0032 20	2036.73	2 ⁺	1106.43	
940.30 3	0.038 4	2043.393	3 ⁻	1103.047	2 ⁺
1046.498 2	0.103 9	1521.6000		475.0962	
1103.03 3	0.100 9	1103.047	2 ⁺	0.0	
1105.36 7	0.055 5	1580.56		475.0962	
1112.5 3	0.0046 15	2219.03	5 ⁺	1106.43	
1127.5 4	0.0013 4	1603.37	(3,4 ⁺)	475.0962	
1158.12 10	0.0139 19	2261.09	2 ⁽⁺⁾	1103.047	2 ⁺
1318 3	0.0029 11	2420.0	(3,4 ⁺)	1103.047	2 ⁺
1323.3 3	0.0066 18	1799.08		475.0962	
1511.68 14	0.0108 18	2614.74		1103.047	2 ⁺
1561.48 17	0.0118 19	2036.73	2 ⁺	475.0962	
1568.39 4	0.044 4	2043.393	3 ⁻	475.0962	

Continued on next page (footnotes at end of table)

$^{101}\text{Ru}(\text{n},\gamma)$ E=thermal 2007ChZX (continued) $\gamma(^{102}\text{Ru})$ (continued)

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1580.64 16	0.0083 14	1580.56		0.0	
1944.9 4	0.0049 14	2420.0	(3,4 ⁺)	475.0962	
1992.02 10	0.0150 19	2467.389		475.0962	
2037.0 3	0.0032 20	2036.73	2 ⁺	0.0	
2140.00 25	0.015 4	2614.74		475.0962	
2201.2 3	0.0086 16	2676.3	(0,1,2) ⁺	475.0962	
6161.9 6	0.0032 13	9219.52		3056.73	
6185.5 4	0.0070 16	9219.52		3033.52	
6274.2 3	0.017 3	9219.52		2944.75	
6607.5 7	0.0050 17	9219.52		2614.74	
6627.84 14	0.093 9	9219.52		2591.79	
6751.4 4	0.0080 14	9219.52		2467.389	
6957.8 5	0.0084 17	9219.52		2261.09	2 ⁽⁺⁾
6978.08 18	0.041 5	9219.52		2240.78	
7176.6 5	0.0122 23	9219.52		2043.393	3 ⁻
7697.2 6	0.0044 10	9219.52		1521.6000	
8112.7 4	0.0069 11	9219.52		1106.43	

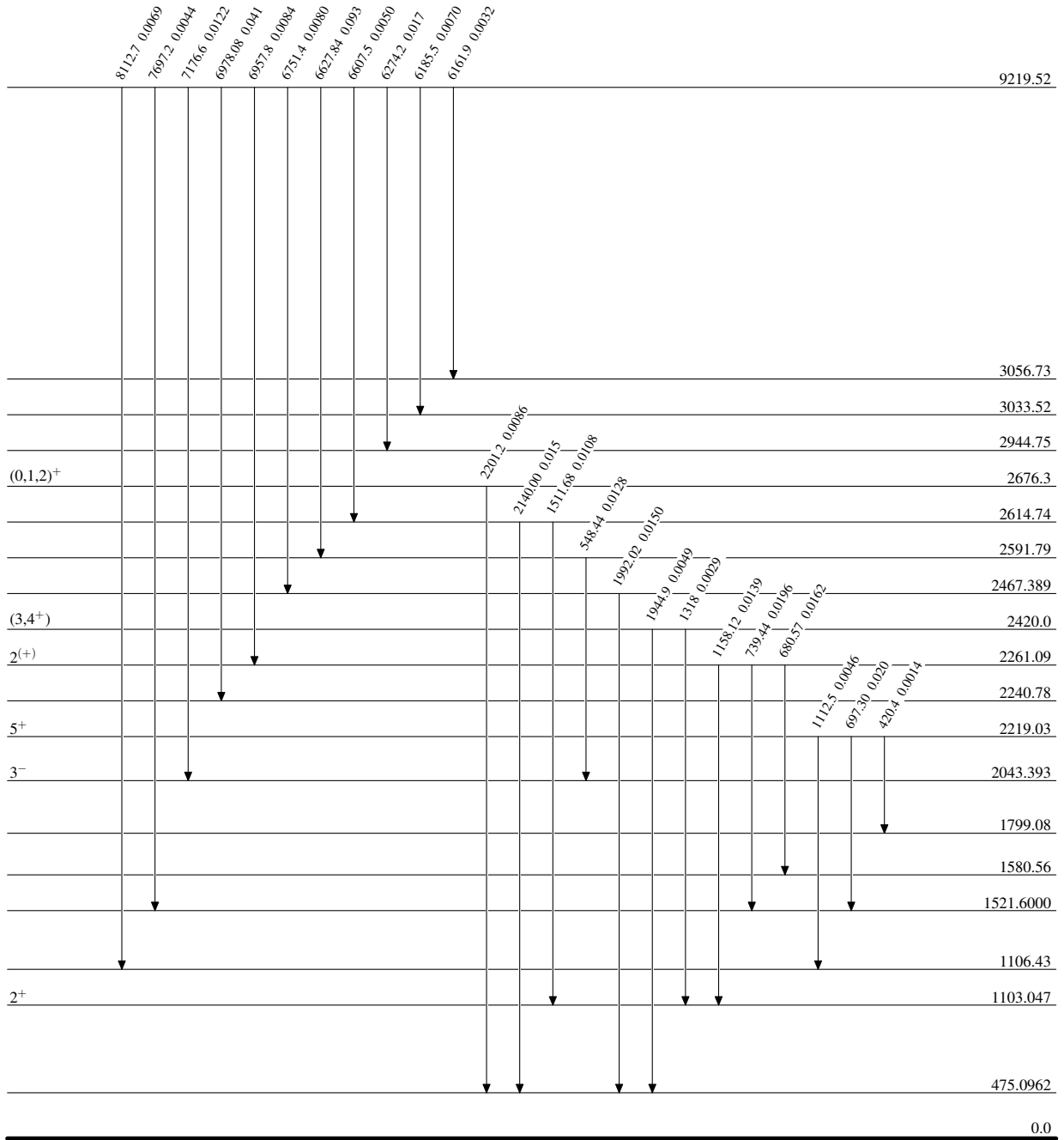
$^{101}\text{Ru}(\text{n},\gamma) \text{ E=thermal}$ 2007ChZX

Level Scheme

Intensities: Type not specified

Legend

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



¹⁰¹Ru(n, γ) E=thermal 2007ChZX

Level Scheme (continued)

Intensities: Type not specified

Legend

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

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

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

