Reaction : ^{7}Li(α,γ)^{11}B

The parameters reported by PA67 and HA84 for the resonances at $E_r = 0.255$, 0.518, 0.607, 1.590, 1.667, 1.782, and 1.936 MeV are adopted (for a discussion of the BE51 data, see HA84). In DE95, the non-resonant capture is shown to be well approximated by the tail of low-energy resonances only. The difference between our adopted rates and the CA88 ones at low temperatures are mainly due to the contribution of the resonance at $E_r = 1.590$ MeV, for which CA88 use a total width of 200 keV [PA63], whereas our adopted width is 433 keV [PA67]. Although PA67 reports in one table a width of 200 keV, this value is rejected in the text, and the value $\Gamma = 433$ keV is recommended there. A small difference in energy of the $E_r = 0.255$ MeV resonance (0.2565 MeV in CA88) has also a significant effect at higher temperatures.

E_r (MeV)	$\omega\gamma$ (eV)	Ref.	
0.255 ± 0.002	0.0088 ± 0.0013	HA84	I
0.518 ± 0.001	$0.31^{+0.12}_{-0.09}$	HA84	M
0.607 ± 0.001	1.73 ± 0.24	HA84	M
1.590 ± 0.012	17.0 ± 3.4	PA67	M
1.667 ± 0.012	1.5 ± 0.3	PA67	M
1.782 ± 0.032	2.5 ± 0.5	PA67	M
1.936 ± 0.032	$0.04^{+0.36}_{-0.04}$	PA67	M

T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio
0.015	1.95	3.06	4.40	-25	2.7	0.14	3.55	4.26	5.00	-6	1.3	1	0.85	1.04	1.27	2	1.1
0.016	0.98	1.53	2.21	-24	2.7	0.15	1.31	1.57	1.83	-5	1.3	1.25	2.14	2.62	3.19	2	1.1
0.018	1.69	2.65	3.83	-23	2.7	0.16	4.06	4.87	5.70	-5	1.3	1.5	3.91	4.78	5.79	2	1.0
0.02	1.98	3.09	4.45	-22	2.7	0.18	2.66	3.18	3.71	-4	1.2	1.75	5.90	7.21	8.70	2	1.0
0.025	2.70	4.21	6.09	-20	2.7	0.2	1.17	1.40	1.63	-3	1.2	2	7.95	9.71	11.7	2	1.0
0.03	1.15	1.79	2.59	-18	2.7	0.25	1.62	1.93	2.25	-2	1.2	2.5	1.20	1.48	1.77	3	1.0
0.04	2.68	4.18	6.07	-16	2.7	0.3	0.89	1.06	1.23	-1	1.1	3	1.63	2.00	2.43	3	1.1
0.05	1.30	2.02	2.93	-14	2.6	0.35	2.91	3.47	4.03	-1	1.1	3.5	2.08	2.57	3.17	3	1.1
0.06	2.49	3.88	5.63	-13	2.6	0.4	6.98	8.31	9.66	-1	1.1	4	2.57	3.15	3.95	3	1.2
0.07	2.64	4.11	5.95	-12	2.6	0.45	1.38	1.64	1.92	0	1.1	5	3.52	4.21	5.45	3	1.4
0.08	1.95	2.99	4.30	-11	2.5	0.5	2.42	2.89	3.39	0	1.1	6	4.21	4.91	6.45	3	1.5
0.09	1.49	2.13	2.91	-10	2.1	0.6	6.15	7.45	8.88	0	1.1	7	4.48	5.30	6.79	3	1.7
0.1	1.62	2.10	2.63	-9	1.7	0.7	1.38	1.69	2.04	1	1.1	8	4.48	5.52	6.79	3	1.9
0.11	1.71	2.11	2.54	-8	1.5	0.8	2.80	3.44	4.19	1	1.1	9	4.43	5.61	6.76	3	2.2
0.12	1.34	1.63	1.93	-7	1.4	0.9	5.13	6.28	7.67	1	1.1	10	4.46	5.58	6.77	3	2.4
0.13	7.83	9.45	11.1	-7	1.4												