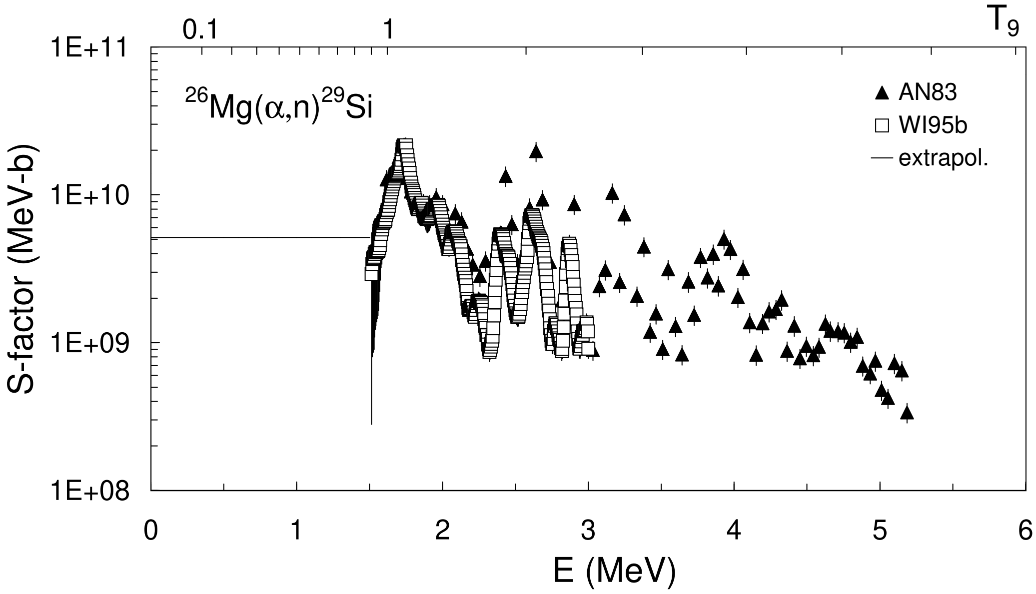
Reaction: $^{26}Mg(\alpha,n)^{29}Si$

The experimental data of AN83 and WI95b are adopted. They cover the energy ranges from 1.51 to 5.2 MeV and from 0.87 to 3 MeV, respectively. The AN83 data are disregarded in the WI95b data range: (1) Below 2.2 MeV, the background contribution from the target backing [mainly from $^{13}C(\alpha,n)^{16}O$] indeed dominates the neutron yield in the AN83 and VA81 experiments. (2) In contrast, WI95b minimize the background by using gold plated backings. In addition, this background is measured and subtracted. Below 1.5 MeV, we adopt a constant S-factor of 5.15×10^9 MeV b, which is an average of the measured S-factors between 1.5 and 3 MeV. The lower limit of the rates is obtained by assuming that the S-factor is the sum of the tails of the measured resonances. The upper limit of the rates results from the selection of the value $S = 10^{11}$ MeV b, which is the WI95b highest measured S-factor at $E < 1.19$ MeV. Above $T_9 = 2$, HF estimates are used (see Sect. 2.5). The differences with CA88 are probably due to the new data of WI95b.



T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio
0.14	0.003	5.19	102	-25	0.1	0.5	0.06	6.54	120	-10	0.3	2.5	1.68	1.90	2.15	2	2.5
0.15	0.004	5.15	102	-24	0.1	0.6	0.16	3.13	46.7	-8	0.4	3	1.19	1.34	1.51	3	2.8
0.16	0.003	4.20	83.0	-23	0.1	0.7	1.18	7.19	75.2	-7	0.5	3.5	5.37	6.03	6.79	3	3.1
0.18	0.001	1.72	34.1	-21	0.1	0.8	3.23	10.0	67.3	-6	0.7	4	1.78	2.00	2.24	4	3.4
0.2	0.003	4.22	83.6	-20	0.1	0.9	4.39	9.38	40.7	-5	0.9	5	1.08	1.20	1.34	5	3.9
0.25	0.003	2.56	50.8	-17	0.1	1	3.63	6.28	18.9	-4	1.1	6	3.90	4.33	4.82	5	4.3
0.3	0.004	3.38	67.3	-15	0.2	1.25	1.77	2.41	4.13	-2	1.5	7	1.03	1.14	1.26	6	4.8
0.35	0.003	1.67	33.2	-13	0.2	1.5	2.68	3.31	4.45	-1	1.7	8	2.21	2.43	2.67	6	5.4
0.4	0.01	4.16	82.3	-12	0.2	1.75	2.17	2.53	3.04	0	1.9	9	4.08	4.46	4.89	6	5.9
0.45	0.02	6.30	122	-11	0.3	2	1.20	1.36	1.54	1	2.0	10	6.77	7.37	8.04	6	6.5