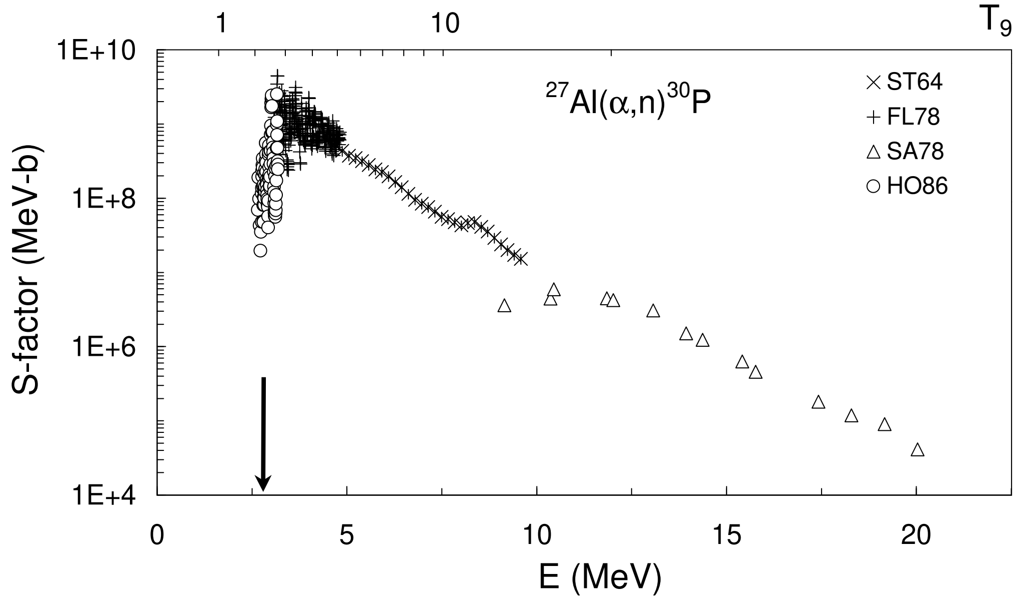
Reaction: ^{27}Al(α,n)^{30}P

The experimental cross sections of ST64, FL78, SA78 and HO86 from threshold ($Q = -2.643$ MeV) to $E = 24$ MeV are used in the calculation of the rates. Thick target experiments [HO74] with larger uncertainties are disregarded. The reaction rate uncertainties relate to the experimental uncertainties. In the $0.4 \leq T_9 \leq 1$ range, our rates are 20 to 60 % smaller than the CA88 ones. Our thermalization effects are a factor $r_{tt} = 1.10 - 1.19$ for $T_9 = 4$ to 10 (CA88 adopt $r_{tt} = 1$ at all temperatures).



T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio
0.45	0.79	1.34	1.89	-25	0.5	1.25	2.75	3.14	3.52	-6	0.9	4	1.31	1.40	1.50	3	1.1
0.5	0.74	1.20	1.66	-22	0.5	1.5	2.60	2.88	3.16	-4	0.9	5	1.09	1.18	1.27	4	1.2
0.6	2.25	3.37	4.50	-18	0.6	1.75	7.26	7.90	8.54	-3	0.9	6	4.81	5.29	5.76	4	1.3
0.7	3.88	5.41	6.94	-15	0.6	2	0.93	1.00	1.07	-1	1.0	7	1.46	1.62	1.78	5	1.4
0.8	1.11	1.46	1.81	-12	0.7	2.5	3.68	3.92	4.16	0	1.0	8	3.47	3.89	4.32	5	1.5
0.9	0.97	1.21	1.45	-10	0.7	3	4.68	4.98	5.27	1	1.0	9	6.96	7.88	8.80	5	1.6
1	3.59	4.33	5.07	-9	0.8	3.5	3.07	3.27	3.47	2	1.1	10	1.24	1.41	1.58	6	1.6