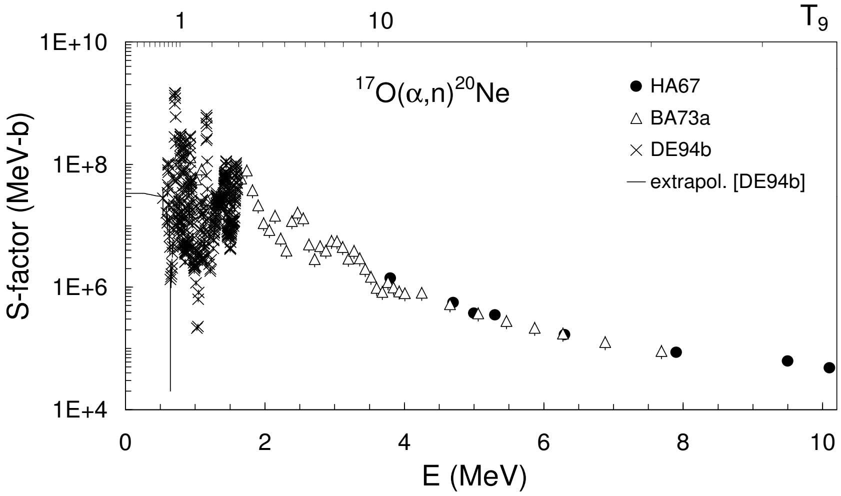
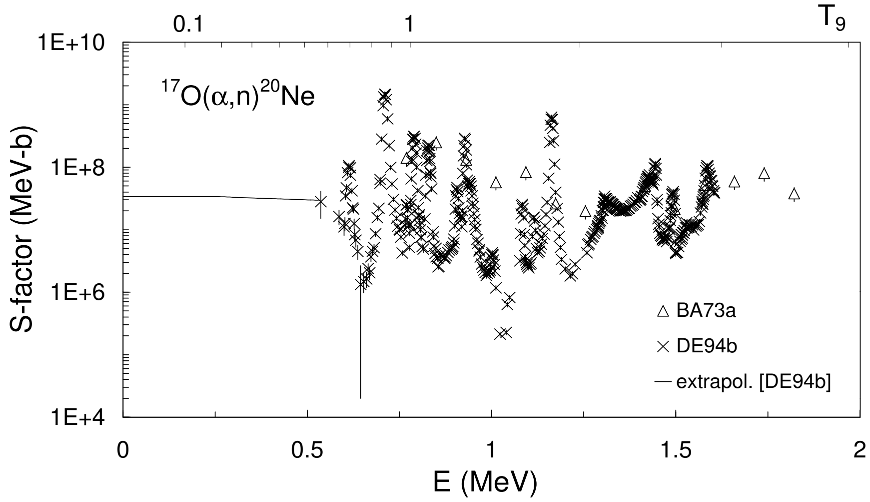
Reaction: $^{17}O(\alpha,n)^{20}Ne$

Data from HA67, BA73a and DE94b covering the energy range $0.56 \leq E \leq 10.1$ MeV are adopted. The results of DE94b are partially documented in KU95. Below 0.56 MeV, the extrapolation of DE94b, based on a statistical model calculation, is adopted for the recommended rates. The lower limit of the rates relies on a three-cluster microscopic calculation by DE93c. The upper limit of the rates is obtained by including all possible resonances with strengths equal to the Wigner limit. The differences between the CA88 and adopted rates at low temperatures are probably due to a different extrapolation, while the discrepancy at high temperatures likely results from the higher accuracy of our numerical treatment.





T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio	T_9	low	adopt	high	exp	ratio
0.07	0.09	2.27	38.9	-24	0.5	0.3	1.01	1.64	6.95	-8	0.7	2	2.34	2.90	3.45	3	1.0
0.08	0.06	1.41	30.0	-22	0.5	0.35	3.30	4.21	9.30	-7	1.0	2.5	1.30	1.65	2.00	4	1.0
0.09	0.21	4.60	105	-21	0.5	0.4	4.92	5.77	8.74	-6	1.4	3	4.38	5.65	6.93	4	0.9
0.1	0.46	9.25	210	-20	0.5	0.45	4.16	4.72	6.01	-5	1.6	3.5	1.11	1.44	1.78	5	0.9
0.11	0.07	1.27	27.5	-18	0.5	0.5	2.34	2.62	3.09	-4	1.6	4	2.30	3.02	3.74	5	0.9
0.12	0.08	1.30	25.7	-17	0.5	0.6	3.34	3.69	4.12	-3	1.4	5	6.90	9.12	11.3	5	1.1
0.13	0.07	1.03	18.3	-16	0.5	0.7	2.49	2.74	3.00	-2	1.1	6	1.53	2.02	2.52	6	1.3
0.14	0.55	6.67	105	-16	0.5	0.8	1.29	1.42	1.55	-1	1.0	7	2.80	3.73	4.65	6	1.6
0.15	0.34	3.63	51.5	-15	0.5	0.9	5.33	5.87	6.41	-1	0.9	8	4.56	6.06	7.57	6	2.0
0.16	0.18	1.71	22.3	-14	0.5	1	1.87	2.07	2.28	0	0.9	9	6.80	9.05	11.3	6	2.6
0.18	0.36	2.64	31.2	-13	0.5	1.25	2.43	2.79	3.14	1	0.9	10	0.95	1.27	1.58	7	3.4
0.2	0.48	2.79	31.1	-12	0.5	1.5	1.68	1.98	2.29	2	1.0						
0.25	1.16	3.33	27.5	-10	0.5	1.75	7.35	8.91	10.5	2	1.0						