

#### ERRATUM

# Improved formulas for fusion cross-sections and thermal reactivities

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#### Nuclear Fusion 32 (1992) 611.

### IMPROVED FORMULAS FOR FUSION CROSS-SECTIONS AND THERMAL REACTIVITIES

#### H.-S. Bosch, G.M. Hale

Since the publication of this paper two minor errors have been found which should be corrected:

(1) In Table VIII on page 625 the two lines for  $T_i = 1.3$  and 1.8 keV contained some incorrect values (i.e. the data for 1.25 and 1.75 keV, respectively), and the table should be replaced by the table shown here.

It should be mentioned, however, that this does not change anything on the fit parameters. The error is restricted only to the table, which was shown for comparison with the reader's own calculations.

T <sub>i</sub> (keV)	$D(t, n)\alpha$ (cm <sup>3</sup> /s)	$^{3}$ He(d, p) $\alpha$ (cm $^{3}$ /s)	D(d, p)T (cm <sup>3</sup> /s)	$D(d, n)^{3}He$ (cm <sup>3</sup> /s)
0.2	$1.254 \times 10^{-26}$	$1.414 \times 10^{-35}$	$4.640 \times 10^{-28}$	$4.482 \times 10^{-28}$
0.3	$7.292 \times 10^{-25}$	$1.033 \times 10^{-32}$	$2.071 \times 10^{-26}$	$2.004 \times 10^{-26}$
0.4	$9.344 \times 10^{-24}$	$6.537 \times 10^{-31}$	$2.237 \times 10^{-25}$	$2.168 \times 10^{-25}$
0.5	$5.697 \times 10^{-23}$	$1.241 \times 10^{-29}$	$1.204 \times 10^{-24}$	$1.169 \times 10^{-24}$
0.6	$2.253 \times 10^{-22}$	$1.166 \times 10^{-28}$	$4.321 \times 10^{-24}$	$4.200 \times 10^{-24}$
0.7	$6.740 \times 10^{-22}$	$6.960 \times 10^{-28}$	$1.193 \times 10^{-23}$	$1.162 \times 10^{-23}$
0.8	$1.662 \times 10^{-21}$	$3.032 \times 10^{-27}$	$2.751 \times 10^{-23}$	$2.681 \times 10^{-23}$
1.0	$6.857 \times 10^{-21}$	$3.057 \times 10^{-26}$	$1.017 \times 10^{-22}$	$9.933 \times 10^{-23}$
1.25	$2.546 \times 10^{-20}$	$2.590 \times 10^{-25}$	$3.387 \times 10^{-22}$	$3.319 \times 10^{-22}$
1.3	$3.174 \times 10^{-20}$	$3.708 \times 10^{-25}$	$4.143 \times 10^{-22}$	$4.660 \times 10^{-22}$
1.5	$6.923 \times 10^{-20}$	$1.317 \times 10^{-24}$	$8.431 \times 10^{-22}$	$8.284 \times 10^{-22}$
1.75	$1.539 \times 10^{-19}$	$4.813 \times 10^{-24}$	$1.739 \times 10^{-21}$	$1.713 \times 10^{-21}$
1.8	$1.773 \times 10^{-19}$	$6.053 \times 10^{-24}$	$1.976 \times 10^{-21}$	$1.948 \times 10^{-21}$
2.0	$2.977 \times 10^{-19}$	$1.399 \times 10^{-23}$	$3.150 \times 10^{-21}$	$3.110 \times 10^{-21}$
2.5	$8.425 \times 10^{-19}$	$7.477 \times 10^{-23}$	$7.969 \times 10^{-21}$	$7.905 \times 10^{-21}$
3.0	$1.867 \times 10^{-18}$	$2.676 \times 10^{-22}$	$1.608 \times 10^{-20}$	$1.602 \times 10^{-20}$
4.0	$5.974 \times 10^{-18}$	$1.710 \times 10^{-21}$	$4.428 \times 10^{-20}$	$4.447 \times 10^{-20}$
5.0	$1.366 \times 10^{-17}$	$6.377 \times 10^{-21}$	$9.024 \times 10^{-20}$	$9.128 \times 10^{-20}$
6.0	$2.554 \times 10^{-17}$	$1.739 \times 10^{-20}$	$1.545 \times 10^{-19}$	$1.573 \times 10^{-19}$
8.0	$6.222 \times 10^{-17}$	$7.504 \times 10^{-20}$	$3.354 \times 10^{-19}$	$3.457 \times 10^{-19}$
10.0	$1.136 \times 10^{-16}$	$2.126 \times 10^{-19}$	$5.781 \times 10^{-19}$	$6.023 \times 10^{-19}$
12.0	$1.747 \times 10^{-16}$	$4.715 \times 10^{-19}$	$8.723 \times 10^{-19}$	$9.175 \times 10^{-19}$
15.0	$2.740 \times 10^{-16}$	$1.175 \times 10^{-18}$	$1.390 \times 10^{-18}$	$1.481 \times 10^{-18}$
20.0	$4.330 \times 10^{-16}$	$3.482 \times 10^{-18}$	$2.399 \times 10^{-18}$	$2.603 \times 10^{-18}$
30.0	$6.681 \times 10^{-16}$	$1.363 \times 10^{-17}$	$4.728 \times 10^{-18}$	$5.271 \times 10^{-18}$
40.0	$7.998 \times 10^{-16}$	$3.160 \times 10^{-17}$	$7.249 \times 10^{-18}$	$8.235 \times 10^{-18}$
50.0	$8.649 \times 10^{-16}$	$5.554 \times 10^{-17}$	$9.838 \times 10^{-18}$	$1.133 \times 10^{-17}$

# TABLE VIII. THERMAL REACTIVITIES FOR ALL REACTIONS AS A FUNCTION OF THE ION TEMPERATURE

(2) Equation (16) on page 628 is valid only for ion temperatures between 0.5 and 100 keV (not for those up to 200 keV).

We would like to thank Dr. E. Pedretti for making us aware of the errors in the table and Dr. O.N. Jarvis who found the error in the validity limit of Eq. (16).