Erratum: "Quenching of rotationally excited CO by collisions with H_2" [J. Chem. Phys. 124, 104304 (2006)]

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(Received 9 June 2006; accepted 13 June 2006; published online 18 August 2006)

[DOI: 10.1063/1.2220569]

A numerical error occurred in the calculation of the state-to-state cross sections for collision energies between 20 and 30 cm^{-1} for the quenching of CO ($j_2=3$) by collisions with para-H_2 reported in Fig. 5(c). This introduced spurious features in the cross sections in the above indicated energy range and also affected state-to-state rate coefficients at temperatures between 5 and 100 K for the quenching of CO ($j_2=3$) by collisions with para-H_2 reported in Fig. 7(c). The corrected cross sections and rate coefficients are given, respectively, in Figs. 5(c) and 7(c) which replace the corresponding figures in the original manuscript. The corrected rate coefficients are 3%–57% lower than the previously reported values in the temperature range of 5–100 K with the largest deviation occurring for $T=20$–30 K. The corrected results are also in good agreement with those recently reported by Wernli *et al.*[1] The overall conclusions are unchanged.

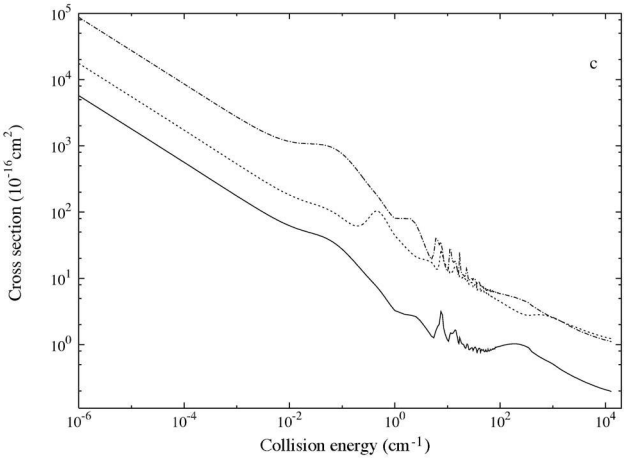

FIG. 5. (c) Cross sections for the quenching of CO(j_2) by collisions with para-H_2 ($j_1=0$) as functions of collision energy evaluated using the V_{04} PES. Solid line: $j_2=3\rightarrow j_2'=0$, dashed line: $j_2=3\rightarrow j_2'=1$, dash dotted line: $j_2=3\rightarrow j_2'=2$.

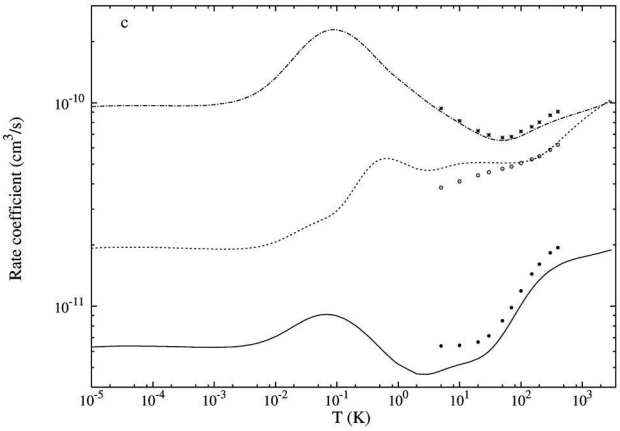

FIG. 7. (c) Rate coefficients for the quenching of CO(j_2) by collisions with para-H_2 ($j_1=0$) as functions of the temperature. Lines indicate current calculations on potential V_{04}, symbols denote Flower's results (Ref. 2) on potential V_{98}. Solid line: $j_2=3\rightarrow j_2'=0$, dashed line: $j_2=3\rightarrow j_2'=1$, dash dotted line: $j_2=3\rightarrow j_2'=2$, solid circles: $j_2=3\rightarrow j_2'=0$, open circles: $j_2=3\rightarrow j_2'=1$, stars: $j_2=3\rightarrow j_2'=2$.

The authors would like to thank Dr. Alexander Lapinov for pointing out this discrepancy.

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