Erratum: "Spin-orbit relaxation of Cl($^2P_{1/2}$) and F($^2P_{1/2}$) in a gas of H_2" [J. Chem. Phys. 126, 184303 (2007)]

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We have found that the factor $g(j')$ in the denominator of Eq. 9 in Ref. 1 was erroneously omitted in the numerical calculations. This error affected the results presented in the first line of Table VI of Ref. 1. Here, we reproduce the part of Table VI of Ref. 1 with the corrected values of the rate coefficients (Table I). The different experimental measurements of the rate coefficient for Cl($^2P_{1/2}$) quenching in H_2 cited in Ref. 1 differ from each other by a factor of 3. The incorrectly computed rate coefficient was in agreement with the measurement of Ref. 63 and disagreed with the data of Refs. 62, 64, and 65. The corrected value of the rate coefficient is in good agreement with the measurements of Refs. 62 and 65.

TABLE I. Room temperature rate coefficients (in units of 10^{-11} cm^3 s^{-1}) for the $X(^2P_{1/2}) \rightarrow X(^2P_{3/2})$ (X=F,Cl) relaxation in a thermal gas of H_2 and D_2.

Reference	Cl+H_2	Cl+D_2	F+H_2
This work	5.386	0.5434	11.40

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