Erratum: Quantum-tunneling isotope-exchange reaction $H_2 + D^- \rightarrow HD + H^-$ [Phys. Rev. A 97, 022705 (2018)]

Chi Hong Yuen, Mehdi Ayouz, Eric S. Endres, Olga Lakhmanskaya, Roland Wester, and Viatcheslav Kokoouline

(Received 13 November 2020; published 1 December 2020)

DOI: 10.1103/PhysRevA.102.069901

We have realized that the thermally averaged rate coefficients shown in Fig. 7 of the original article were not converged at low temperatures due to an insufficient number of energy points in evaluation of integrals. Figure 7 shows updated and converged results. The expected $1/\sqrt{T}$ threshold behavior is evident here. The updated rate coefficients are about a factor of 2 larger than the previous results at 10 K. The conclusion of the article is unaffected by the updated values of the rate coefficients.

We thank R. Wild for pointing out the mistake.

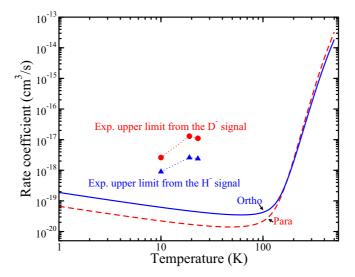


FIG. 7. Thermally averaged rate coefficients for ortho- H_2 and para- H_2 as a function of temperature. The red circles and blue triangles represent the experimental upper limits obtained from the D^- signal and from the H^- signal at 10, 19, and 23 K.