

Erratum: “HD ($v = 1, j = 2, m$) orientation controls HD–He rotationally inelastic scattering near 1 K” [J. Chem. Phys. 150, 174301 (2019)]

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The values of the scattering matrix elements and partial wave expansion coefficients presented in Tables I and II in the original paper¹ need to be corrected. The error occurred while converting the S-matrix elements extracted from fitting our experimental data to Euler's notation. It is important to note that our method of partial wave analysis and our extraction of the S-matrix by fitting the experimental scattering angular distribution remain correct as published. Additionally, the curves in Figs. 1–4 are not impacted by this change, nor are the specifics of any of the claims made in the text. Some entries in Tables I and II should be changed as follows: In Table I, the complex amplitude $c_{\nu m \nu'}$ for Y_{20} is $0.69 \exp(-0.5i)$, for Y_{40} it is $0.22 \exp(0.14i)$, for Y_{22} it is $0.32 \exp(-2.0i)$, and for Y_{42} it is $0.14 \exp(0.14i)$. In Table II, the relative amplitudes and phases of the scattering matrix elements $S^J(jl; j'l')$ should be changed to $S^{J=2}(20; 02) = 0.39 \exp(-0.92i)$, $S^{J=2}(22; 02) = 0.31 \exp(-0.06i)$, and $S^{J=4}(22; 04) = 0.14 \exp(0.14i)$.

REFERENCE

¹W. E. Perreault, N. Mukherjee, and R. N. Zare, J. Chem. Phys. 150, 174301 (2019).