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Correction

Correction to: Strong field non-Franck–Condon ionization of H_2: a semi-classical analysis

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We would like to point out an error in our paper recently published in Eur. Phys. J. Special Topics. The laser intensity values given in the original article had to be multiplied by 4 for all calculations performed in circular polarisation. For example, in Fig. 6 the results obtained in circular polarisation are for an intensity of $6.4 \times 10^{14}\,\mathrm{W/cm^2}$, not $1.6 \times 10^{14}\,\mathrm{W/cm^2}$ (correction made). This adjustment of the laser intensity in the case of circular polarisation affected the abscissa scales in Figs. 3, S3, 5 and S2. In Figs. 3 and S3, the intensity scale I shown on the x-axis is now $I/4$ in the circular polarisation case (panel b) and I in the linear case (panel a). Similarly, the log intensity scale in Figs. 5 and S2 is now $\log_{10}(I/4)$ and not $\log_{10}(I)$. Taking these corrections into account, we can conclude that for an identical fluence, ionisation is more efficient in linear polarisation than in circular polarisation. The main conclusion of our paper, that the ionisation of H_2 produces lower v_+ vibrational levels of the H_2^+ ion than predicted by a simple Franck–Condon approach remains unchanged.

The original article has been corrected.

The original article can be found online at https://doi.org/10.1140/epjs/s11734-022-00750-z.

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