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Corrigendum

Production of excited atomic hydrogen and deuterium from H_2 and D_2 photodissociation

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In the above paper [1], we reported the relative cross sections for the total production of Lyα and Hα from the photodissociation of H_2 and D_2. Figures 2–5 of [1] contain these data. We have discovered an error in our analysis of the experimental results. Incident photon flux was monitored by a calibrated photodiode (IRD AXUV100), with quantum efficiency (Q) having units of number of electrons per photon. The fluorescence signals (S) from both the Lyα and Hα detectors were normalized to the photodiode signal (D). Correcting for the efficiency of the diode requires the diode signal (D) to be normalized to the quantum efficiency (Q). After appropriate background subtraction, the cross section should be proportional to SQ/D. Instead, we reported values proportional to S/QD. Figures 1–4 below contain the corrected experimental data whose peak is normalized to the peak of the total theoretical cross section.

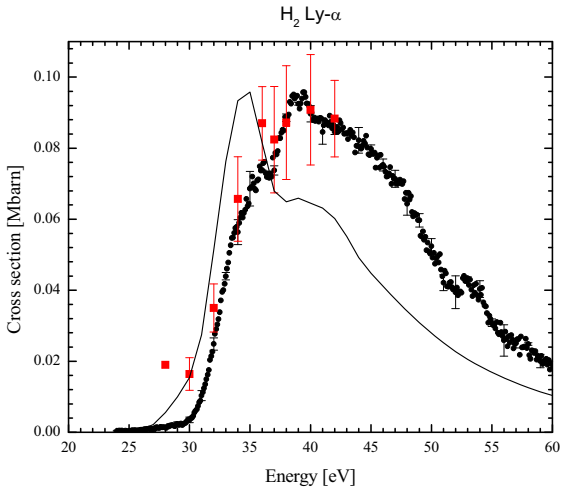

Figure 1. Modified figure 2 from [1] without subcomponents of the theory. Experimental data (circles) are normalized to the peak of the total theoretical cross section (line). Squares: absolute results of Glass-Maujean *et al* [2].

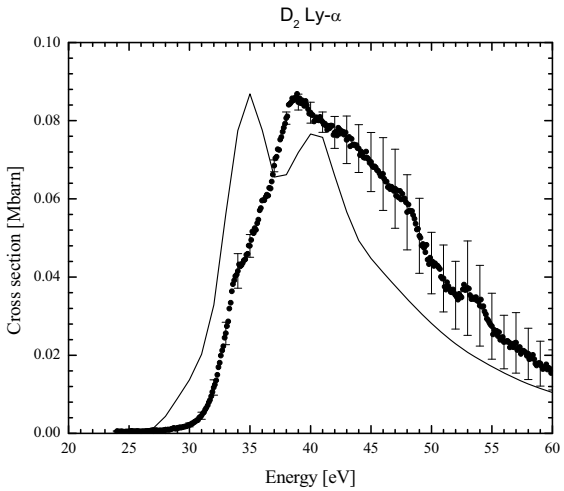

Figure 2. Modified figure 3 from [1] without subcomponents of the theory. Experimental data (circles) are normalized to the peak of the total theoretical cross section (line).

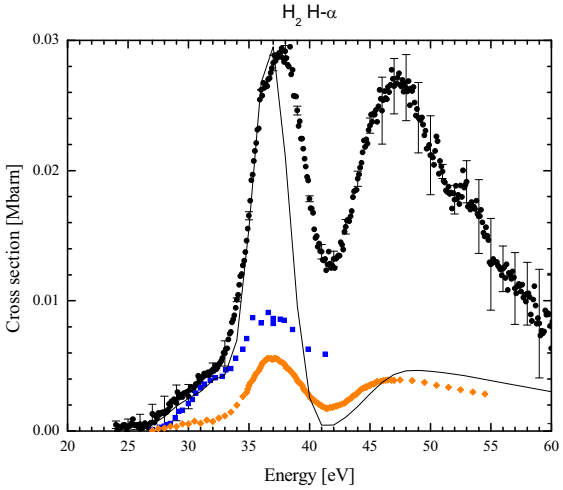

Figure 3. Modified figure 4 from [1] without subcomponents of the theory. Experimental data (circles) are normalized to the peak of the total theoretical cross section (line). Squares: absolute results of Glass-Maujean *et al* [3]. Diamonds: absolute results of Melero Garcia *et al* [4]

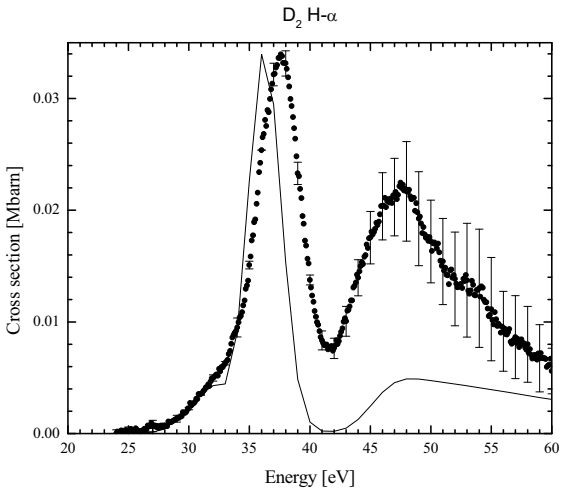

Figure 4. Modified figure 5 from [1] without subcomponents of the theory. Experimental data (circles) are normalized to the peak of the total theoretical cross section (line).

References

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[3] Glass-Maujean M, Frohlich H and Martin P 1995 *Phys. rev.* A **52** 4622
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