**Fig. 1** (Continued)

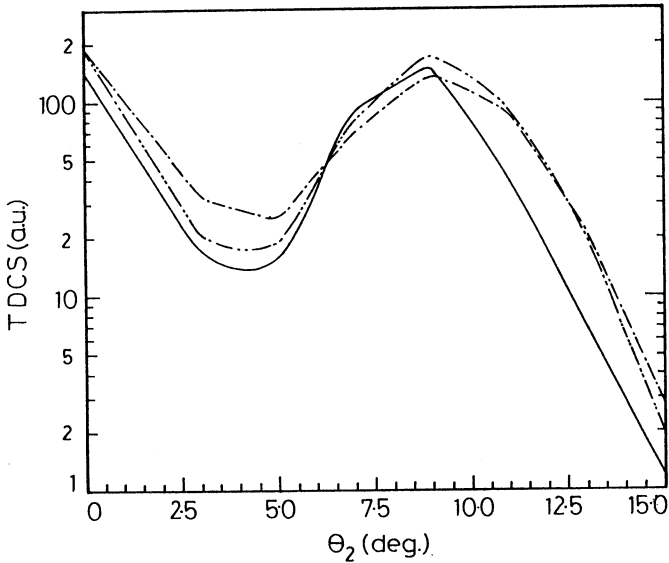


Fig. 2. Binary peak values versus peak angles for the triple differential cross section for electron impact energy 250 eV and ejected electron energy 5 eV. Continuous curve, present calculation; dash-dot curve, first Born calculation; and dash-double-dot curve, second Born calculation.

the first Born calculation. Experimental measurements of the peak values will give an additional test of the validity of different theories.

4. Conclusions

The present calculation reveals additional possible features of the cross section curves for small momentum transfer in the ionisation of the hydrogen atom in the metastable 2s state by 250 eV electron impact. New experimental results will be valuable and will add a new dimension to the study of the ionisation problem. Calculations for other kinematic conditions or for other atomic species will also be interesting.

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