Progress Report

ON THE STARK BROADENING OF SOME Cr II SPECTRAL LINES IN PLASMA

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New electron-impact line widths for some Cr II multiplets have been calculated within the modified semiempirical (MSE) approach. Needed energy levels and radial integrals are calculated by different methods. The Stark widths are obtained as a function of temperature, for perturber density of $10^{17}~\rm cm^{-3}$ and have been compared with recent experimental, approximate formula of Cowley and semiclassical perturbation (SCP) approach results.

The obtained data will be included in the STARK-B database, which is part of the Virtual Atomic and Molecular Data Center VAMDC.