THE MODIFIED SEMI-EMPIRICAL STARK BROADENING METHOD OF CALCULATIONS: THE EXAMPLE OF ALKALI LIKE IONS

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Abstract. In this work, the modified semi-empirical (MSE) Stark broadening method of calculations is presented. The method is compared to the semi-empirical (SE), semiclassical perturbation (SCP) and fully relativistic methods and with more simplest calculation formula. As an example of calculation, we calculate the widths of some alkali like ions as Sr II, Y III and Zr IV.

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