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## **Stark shifts dependence on the upper level ionization potential and the rest core charge of the emitter within 3s-np transition arrays**

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Stark width and shift simultaneous dependence on the upper level ionization potential and rest core charge of the emitter has been evaluated and discussed. It has been verified that the found relations, connecting Stark broadening parameters with upper level ionization potential and rest core charge of the emitters for particular electron temperature and density, can be used for prediction of Stark line width and shift data in case of ions for which observed data, or more detailed calculations, are not yet available. Stark widths and shifts published data are used to demonstrate the existence of other kinds of regularities within similar spectra of different elements and their ionization stages. The emphasis is on the Stark parameter dependence on the upper level ionization potential and on the rest core charge for the lines from similar spectra of multiply charged ions. The found relations connecting Stark widths and shift parameters with upper level ionization potential, rest core charge and electron temperature were used for a prediction of new Stark broadening data, thus avoiding much more complicated procedures.

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