

Abstract Submitted
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Atomic processes under varying plasma environments TU-NAN CHANG, USC, T.K. FANG, Fu Jen Catholic U., Taiwan — We present a quantitative estimate for a number of atomic properties based on the use of Debye-Huckel (DH) screening Coulomb and modified DH screening potential for a charged particle in a plasma [1]. We will examine the variation of the ionization thresholds and the resulting reduction in the number of bound excited states of atoms. The effect on the atomic transitions and doubly excited resonance widths will also be studied in detail.

[1] P. K. Shukla and B. Eliasson, Phys. Lett. A 372, 2897 (2008).

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