

Abstract Submitted
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Using a collisional-radiative model to validate e-Xe⁺ cross sections calculated by the Dirac B-spline R-matrix approach¹ YANG WANG, YAN-FEI WANG, XI-MING ZHU, Harbin Institute of Technology, OLEG ZAT-SARINNY, KLAUS BARTSCHAT, Drake University — Experimental studies of e-Xe⁺ collisions are difficult to carry out. Consequently, a direct comparison between cross-section data obtained theoretically and experimentally is hard to achieve. In this work, a collisional-radiative (CR) model based on e-Xe+ cross sections calculated by the Dirac B-Spline R-Matrix method is used to validate the predicted cross sections. This is achieved by comparing level density distributions predicted by the CR model and those determined experimentally.

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