

Abstract Submitted
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Excitation of the $3p^5 5p$ levels of Argon from the $3p^5 4s$ metastable levels¹ RAJESH SRIVASTAVA, LALITA SHARMA, Physics Department, Indian Institute of Technology Roorkee, Roorkee 247667. India, ALLAN STAUFFER, Department of Physics and Astronomy, York University, Toronto, Canada M3J 1P3 — In the light of recent experimental results of Jung et al [1] we have extended our relativistic distorted wave (RDW) calculations [2] to the electron impact excitation of the ten higher-lying fine-structure levels of the $3p^5 5p$ configuration of argon from the lowest metastable states (the $J = 0, 2$ levels of the $3p^5 4s$ configuration). We compare our theoretical results with their experimental results and discuss the differences from the similar excitation to the $3p^5 4p$ levels from the same metastable states [2]. [1] R. O. Jung, J. B. Boffard, L; W; Anderson and C. C. Lin, Phys. Rev. A **75**, 052707 (2007). [2] R. Srivastava, A. D. Stauffer and L. Sharma, Phys. Rev. A **74**, 012715 (2006).

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