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# Photoionization Cross Section and Resonance Structure of $Mn^+$

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Abstract: A photoionization cross section calculation of $Mn^+$ is performed in the formalism of many-body perturbation theory for photon energies ranging from 48 eV to 56 eV. We consider excitations from the 3p, 3d, and 4s subshells. The effects of the strong 3p→3d and 3p→4s transitions are included as resonant contributions to the total cross sections. Good agreement with experiment is found.

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Key words: many-body perturbation theory, effective single-particle potential, generalized resonance method

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