Charge Transfer in Mg+12 + H Collisions

M. S. PINDZOLA, M. FOGLE, Auburn University, Auburn AL — A time-dependent lattice method is used to calculate state selective charge transfer cross sections in Mg+12 collisions with H atoms. Mg+11 (nl) capture cross sections are obtained for n = 1,9 at incident energies of 1.0, 3.0, and 5.0 keV/amu. Using standard radiative transition rates, Lyman line ratios are calculated in support of Clemson CUEBIT experiments.

Date submitted: 15 Jan 2019

Michael Pindzola
Auburn University