

Abstract Submitted
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K-Shell Photoabsorption in O, Ne, Mg, Si, and S Ions TOM GORCZYCA, Western Michigan University, BRENDAN MCLAUGHLIN, The Queen's University of Belfast — We report on new photoabsorption calculations for neutral and ionized elements of importance for X-ray astronomy observations. Within our R-matrix calculations, spectator Auger broadening effects are taken into account by using an optical potential, and core relaxation is included by using pseudoorbitals and a pseudoresonance elimination method. The resultant photoabsorption cross sections are used in modeling of observed spectra from distant sources to predict elemental abundances in the interstellar medium.

Tom Gorczyca
Western Michigan University

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