

Abstract Submitted
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Single and Double Photoionization of Mg¹ SHAHIN ABDEL-NABY,
Department of Physics, Auburn University, Auburn, Alabama 36849, USA, M.S.
PINDZOLA, Department of Physics, Auburn University, Auburn, Alabama 36849,
J. COLGAN, Theoretical Division, Los Alamos National Laboratory, Los Alamos,
New Mexico 87545, USA — Single and double photoionization cross sections for
Mg are calculated using a time-dependent close-coupling method. The correlation
between the two $3s$ subshell electrons of Mg is obtained by relaxation of the close-
coupled equations in imaginary time. An implicit method is used to propagate the
close-coupled equations in real time to obtain single and double ionization cross
sections for Mg. Energy and angle triple differential cross sections for double pho-
toionization at equal energy sharing of $E_1 = E_2 = 16.4$ eV are compared with
Elettra experiments and previous theoretical calculations [1].

[1] E. Sokell *et al.*, Phys Rev. Letts. **110**, 083001 (2013).

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Shahin Abdel-Naby
Department of Physics, Auburn University, Auburn, Alabama 36849

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