Abstract Submitted
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Triple Differential Cross Sections for Ionization of Laser-Aligned Mg Atoms by electron impact[1] SADEK AMAMI, DON MADISON, Missouri University of Science and Technology, Rolla, Mo, USA, KATE NIXON, ANDREW MURRAY, University of Manchester, Manchester, United Kingdom — 3DW (3-body distorted wave) triple differential cross sections have been calculated for electron impact ionization of magnesium atoms aligned by lasers. Calculations have been performed for the kinematics of the experiment performed by Kate Nixon and Andrew Murray at Manchester, England [K. L. Nixon and A. J. Murray 2011 Phys. Rev. Lett. 106, 123201]. An incident projectile was produced with energy of 41.91eV, scattered and ejected electrons were detected with equal energies (E1=E2=20eV), the scattered projectile was detected at a fixed angle of 30deg, and the ejected electrons were detected at angles ranging between 0^o – 180^o. The theoretical 3DW results will be compared with the experimental data.

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