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A (e,2e+ion) study of low-energy electron-impact ionization of THF[1] ESAM ALI, Missouri Univ of Sci & Tech, XUEGUANG REN, Max Planck Institute for Nuclear Physics, Heidelberg, Germany, CHUANGANG NING, Tsinghua University, Beijing, China, ALEXANDER DORN, Max Planck Institute for Nuclear Physics, Heidelberg, Germany, DON MADISON, Missouri Univ of Sci & Tech — We have investigated the Fully Differential Cross Sections (FDCS) for electron impact induced ionization of THF (C4H8O) by low-energy (E_o=26 eV) for three different orbital states of the highest, next highest, and next-next highest occupied molecular orbitals (HOMO, NHOMO, and Next NHOMO). Theoretical results are compared with experiment for in plane scattering with projectile scattering angles of 15°, 25°, 35°, and 50°. Different theoretical models are examined - the molecular 3 body distorted wave (M3DW), and the distorted wave Born approximation (DWBA), with the effects of the post collision interaction (PCI) treated either exactly or with the Ward-Macek approximations.

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