

Abstract Submitted
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Five Photon Double Ionization of Helium¹ YE LI, M. S. PINDZOLA, Auburn University, J. COLGAN, Los Alamos National Laboratory — The five photon double ionization of the He atom is investigated in the photon energy range of 15.0 eV to 19.0 eV using a time-dependent close-coupling method. The five photon double ionization cross section is found to exhibit resonance peaks corresponding to four photon excitation of the n=2 and n=3 subshells of He⁺. At select photon energies near the n=2 and n=3 subshell resonance peaks, energy and angle differential cross sections are calculated using fixed intensity femtosecond light pulses, while energy and angle differential probabilities are also calculated using peaked intensity attosecond light pulses.

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