

Abstract Submitted
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Creating inner shell vacancy by inelastic X-ray photons scattering

S.A. NOVIKOV, Department of Physics, Clark Atlanta University — The absolute values and shapes of the differential cross section for the process of inelastic X-ray photons scattering by neon atom accompanied by the creation of 1s-vacancy are calculated. The effects of the rearrangement of electron shells of the atomic residues in the field of creating virtual vacancies and the decay of vacancies via Auger and/or radiative channels are taken into account. Velocity form have been used for matrix elements of electromagnetic field interaction operator in both dipole and non-dipole approximations.

Sergey Novikov
Department of Physics, Clark Atlanta University

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