

Abstract Submitted
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Vibrational and Rotational as well as Linear Kinetic Energies Should be Included in Compton Effect Energy Formula STEWART BREKKE, Northeastern Illinois University (former grad student) — In Compton scattering the incident photon will affect the vibration and rotation of the impacted particle as well as its linear motion. Therefore, the energy equation for the Compton Effect must be modified to include the change in vibrational and rotational kinetic energy of the particle before and after photon impact. The Compton Effect equation should then be as follows. $hc/\lambda_1 + m_0c^2 + 1/2mv_1^2 + 1/2I\omega_r1^2 + 1/2k_1x_01^2 = hc/\lambda_2 + m_0c^2 + 1/2mv_2^2 + 1/2I\omega_2^2 + 1/2k_2x_02^2$.

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