

Abstract Submitted
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Work of an Energetic Charged Particle Penetrating Graphene V.
FESSATIDIS, Fordham University, Bronx, USA, N.J.M. HORING, Stevens Institute of Technology, Hoboken, USA — The energy loss of a fast charged particle probe incident on a two-dimensional graphene sheet is examined here. The fast particle motion is taken to be perpendicular to the graphene sheet, which is considered to be in the degenerate limit of zero temperature. The response dynamics of the graphene layer are described in the random phase approximation and the energy loss for particle motion perpendicular to the graphene layer is calculated as a function of the velocity of the charged particle.

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