

TEMPERATURE
DEPENDENCE OF THE SHAKE-OFF EFFECT
FOR CONDUCTIVITY ELECTRONS IN METALS

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S u m m a r y

We analyzed the emission of the conduction electrons in metals caused by any nuclear decay. The refraction of the electron wave at the crystal surface, as well as its attenuation due to scattering by phonons, are taken into account. It is shown that the energy distribution of ejected shake-off electrons contains a peak at the energy of the order of 1 eV, whose intensity falls down with growing temperature. The dependence of the yield of conduction electrons on the thickness of a radioactive source is studied as well.