

OPTICAL CONDUCTIVITY OF METALLIC NANOTUBES

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S u m m a r y

Explicit expression for optical conductivity of a metallic nanotube as a function of its inner and outer radii and the ratio between the photon energy and the Fermi energy is obtained. A correction to the expression of optical conductivity caused by quantization of electrons' energy inside a metallic nanotube is obtained in an explicit form; the oscillation of the correction as a function of the light frequency is established.