

## ELECTRICAL CONDUCTIVITY AND EMISSION PROPERTIES OF CARBON NANOTUBES

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### S u m m a r y

Electrical conductivity and photon emission, as well as electron emission from carbon nanotubes, have been studied under the passage of current through them before and after their dispersion. It has been shown that the dispersion changes properties of C-nanotubes and causes the appearance of electron and photon emissions in the voltage region, where the conduction current-voltage characteristic becomes superlinear. There is a maximum in the photon emission spectrum ( $\lambda \approx 580$  nm), which differs from the Planck black-body radiation spectrum registered for the initial C-nanotubes. The model of hot electrons has been proposed to explain the mechanism of electron and photon emissions.