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Discharge creeping along the surface in the process for producing nanomaterials

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Abstract

© Published under licence by IOP Publishing Ltd. In this paper, we propose a new principle of assembling carbon nanoparticles in the plasma of a glow discharge creeping along the surface. In this paper, it is shown that carbon nanoparticles (fullerenes and nanotubes), as well as light fractions of oil, can be produced by means of a glow discharge on the surface of the fuel oil. Single-walled carbon nanotubes of about 10 μm in length were obtained.

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