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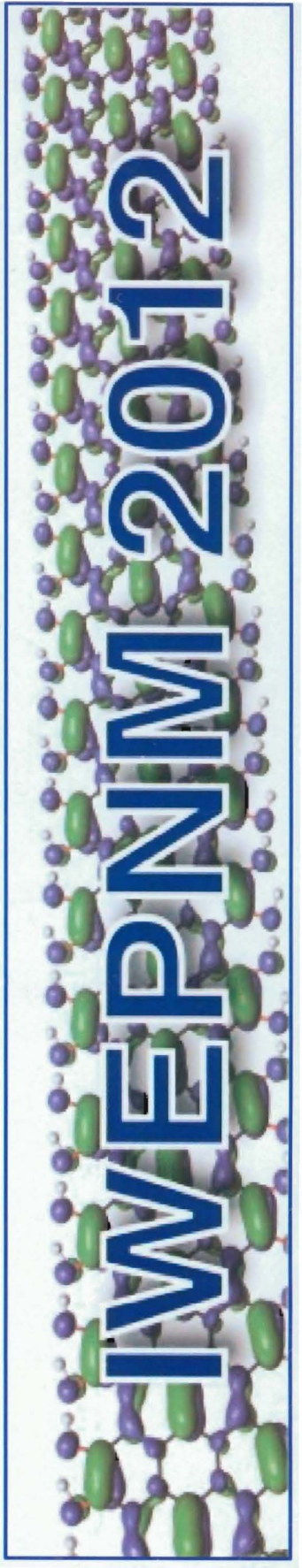

with a cell survival $\geq$80%, a dose-dependent impact on the mitochondrial activity of the cells and a cell-type and dose-dependent induction of cell death including apoptotic and necrotic mechanisms.

MON 47

RF plasma: emission spectroscopy diagnostics and CVD process of carbide and carbon nanofilms growth

Andrzej Huczko[1], Magdalena Kurcz[1], Hubert Lange[1]
[1]Department of Chemistry, Warsaw University, Warsaw

RF inductively coupled low-temperature plasma can be an interesting environment for growing not only thin films but even graphene layers. Process variables, such as: discharge power, or chamber pressure allows us to control a structure and a stoichiometry of a product. SiC is an interesting material, which is used not only as a wear-resistant coating but also as a high-temperature, wide band-gap semiconductor. Thus, it has been extensively studied and much attention has been focused on methods of its growth. A systematic study of the influence of selected parameters of plasma process on a growth of SixCy thin films is presented. For comparison, thin pure carbon/graphite films have been also produced. The films were characterized by various methods to investigate the effects of the process parameters on their growth. Optical emission spectroscopy provides an excellent means of understanding the basic transformations of excited reactants. Thus, the special attention was paid to plasma diagnostic.
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MON 48

Raman scattering measurements of electronically separated SWNTs

Martin Hulman[1], H. Kuzmany[2], A. Chernov[2], T. Pichler[2], H. Kataura[3], Y. Yanagi[3]
[1]International Laser Centre, Bratislava, Slovakia
[2]Fakultät für Physik, Universität Wien, Austria
[3]Nanosystem Research Institute/ AIST, Japan

In our contribution, we present results of Raman scattering experiments on electronically separated single-walled carbon nanotubes. The spectra were excited with laser lines across the entire visible range. For semiconducting nanotubes, we found a couple of strongly dispersive (more than 100 cm^{-1}/eV) modes at about 400 cm^{-1}. In contrast to the D line, these modes reveal a negative dispersion, e.g. their frequency decreases with the increasing laser energy.
We also recorded spectra of HNO_3-doped samples. The Raman response is markedly different depending on the electronic character of the sample. For semiconducting