

NUCLEAR-RADIATION TECHNIQUES IN NANOTECHNOLOGY

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Dimension studied in the field of nanotechnology is equal of 1-billionth of material meter share and naturally, the tools in nanoanalytics must be commensurate with it. One of the ways of researches is the electron-positron annihilation method of spectral substances structure and properties analysis. There's a precision radionuclide source of gamma radiation and particles developed for that- patent № 2540660 enabling to get from point to line sources of radiation and particles. Changing the angles to the surface of radiation we get the scan of the surface and depths of the materials in the nanoregions of substances. While manufacturing coatings of nanolayers diffusion the use of the nuclear radiation stimulation of multilayer nanostructures is needed, which is very important in the micro-nanoelectronics. Patent № 2540660 is the most appropriate when dealing with these issues; it's for the gamma-stimulated diffusion in multilayer systems. It is hard to overestimate the role and importance of nanotechnology in the modern world. The author developed the methods and mechanisms of know-how of manufacturing sources.

Persons concerned, organizations and firms are welcome to contact the editorial office or the author's e-mail.