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The invention relates to the electronics, in particular to the nanotechnologies for obtaining nanostructurized materials and nanocomposites.

The nanotechnology for obtaining nanostructurized materials and nanocomposites, according to the first variant, includes deposition of the chemical components onto a substrate in the presence of ultra-violet rays. Then, it is carried out the rapid photothermal processing of the obtained materials in vacuum or in the air, or in the gas chamber, for example, with oxygen.

The nanotechnology for obtaining nanocomposites, according to the second variant, includes deposition of the chemical components onto a substrate in the presence of ultra-violet rays, and simultaneously with deposition of the chemical components it is carried out doping of the obtained materials with at least one donor or acceptor impurity. Then it is carried out the rapid photothermal processing of the ob tained materials in vacuum or in the air, or in the gas chamber, for example, with oxygen.

The nanotechnology for obtaining nanostructurized materials and nanocomposites, according to the third variant, includes deposition of the chemical components onto a substrate in the presence of ultra-violet rays, then it is carried out doping of the obtained materials with at least one donor or acceptor impurity and simultaneously with doping it is carried out the rapid photothermal processing of the obtained materials in vacuum or in the air, or in the gas chamber, for example, with oxygen.

The nanotechnology for obtaining nanostructurized materials and nanocomposites, according to the fourth variant, includes deposition of the chemical components onto a substrate in the presence of ultra-violet rays, and then it is carried out doping of the obtained materials with at least one donor or acceptor impurity. The impurity concentration introduced during the doping is maximum possible for the obtained material. The subsequent rapid prhotothermal processing of the obtained materials is carried out in conditions of bringing down from the dopping temperature up to the ambient temperature in vacuum or in the air, or in the gas chamber, for example, with oxygen.

Claims: 10
Fig.: 3