The invention relates to the electronics, in particular to the sensor obtaining technologies, and may be used for obtaining sensors on base of metal or semiconductor oxide layers.

The process for sensor obtaining, according to the first variant, includes deposition of chemical components of the metal or semiconductor oxide layers in the presence of ultra-violet rays. Then, it is carried out the rapid photothermal treatment of the obtained materials in vacuum, in the air or in the gas chamber, for example, with oxygen.

The process for sensor obtaining, according to the second variant, includes deposition of chemical components of the metal or semiconductor oxide layers in the presence of ultra-violet rays. Additionally, there takes place doping of the obtained material with at least one donor or acceptor impurity, simultaneously with the deposition of chemical components. Then, it is carried out the rapid photothermal treatment of the obtained materials in vacuum, in the air or in the gas chamber, for example, with oxygen.

The process for sensor obtaining, according to the third variant, includes deposition of chemical components of the metal or semiconductor oxide layers in the presence of ultra-violet rays. Additionally, there takes place doping of the obtained material with at least one donor or acceptor impurity, and then is carried out the rapid photothermal treatment of the obtained materials in vacuum, in the air or in the gas chamber, for example, with oxygen.

The process for sensor obtaining, according to the fourth variant, includes deposition of chemical components of the metal or semiconductor oxide layers in the presence of ultra-violet rays. Then, there is additionally carried out the rapid photothermal treatment of the obtained materials in vacuum, in the air or in the gas chamber, for example, with oxygen, and simultaneously their doping with at least one donor or acceptor impurity.

The process for sensor obtaining, according to the fifth variant, includes deposition of chemical components of the metal or semiconductor layers in the presence of ultra-violet rays. Additionally, there takes place doping of the obtained materials with at least one donor or acceptor impurity, the concentration of the impurities being maximum possible for the obtained material, and then it is carried out the rapid photothermal treatment of the obtained materials, which takes place in the conditions of temperature lowering from the doping temperature up to the ambient temperature in vacuum, in the air or in the gas chamber, for example, with oxygen.

Claims: 5 Fig.: 4