

The invention relates to means for obtaining materials of coating for semiconductor devices that operate in near and medium IR region of spectrum. Optical coating on basis of component chalcogenide glass for coating of devices of semiconductor photonics is formed of chalcogenide glass-like alloy of multi-component system $\text{Ge(Pb)-Sb(Bi,Ga)-S(Se)}$, that does not include volatile toxic components. In method of application of optical coating on basis of chalcogenide glass-like alloy one uses selected pieces of chalcogenide glass for application to preliminarily heated to needed temperature semiconductor element. Milled pieces of chalcogenide glass are placed to quartz reactor, mass of chalcogenide glass, inner diameter of cone-like lower part of quartz reactor and dimensions of optical coating are agreed with each other, at that quartz reactor is placed coaxially with heater and performs vertical displacements through its upper chamber to direct contact with semiconductor element that is in its lower chamber and performs horizontal displacements, temperature of the upper chamber of heater is kept not smaller that by 100°C higher that temperature of softening of chalcogenide glass and temperature of lower chamber of heater is kept not less than 10°C smaller that temperature of melting of solder of electric contacts of semiconductor element. The invention provides increase of manufacturability of application of optical coating.

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