

**HIGH-DENSITY PLASMA CVD FILMS
OF ALUMINIUM, GALLIUM AND
INDIUM NITRIDES FROM
COORDINATION COMPOUNDS OF
METALS**

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The need for obtaining thin films of aluminum nitrides, gallium and indium considerably has increased recently in view with perspectives of using their electro luminescent and photoelectric properties. One of effective methods of pinch of productivity of precipitation processes is high-density plasma chemical vapor deposition (HDP CVD).

One of this method variants, is implemented by us in setting HF of plasma 13,65 MHz with the help of an evaporator - ionizing agent. Between a substrate and evaporator - ionizing agent there is a potential difference 500-1000 Volts. In an evaporator - ionizing agent the solid reagents (hexamethyl-silasanates, enamineacetates of metals) seat. The ionic stream is provided with an electric field.

The kinetics and mechanism of precipitation in such requirements is investigated. Is shown, that the deposition rate grows, in comparison with (PA CVD) in 5-8 times. Is shown that the morphological characteristics of these precipitates are considerably improved.