

# "Nanotechnology and nanomaterials"

## Dependence of the coefficient of reflection and roughness of Ti and TiN coatings depending on the application method

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In this work are studied the reflection and roughness coefficients[1,2] of Ti and TiN are investigated depending on the deposition method: a) from the direct vacuum arc flow with a constant negative bias on the substrate -150 V; B) from a forward flow with a pulse bias on the substrate:  $U_{\text{smech}} = -500$  V,  $t_{\text{simp}} = 2$  s,  $t_{\text{pause}} = 2$  s; B) from the separated stream with fluorine[2-4]. The reflection coefficient of SS was also studied depending on the purification method: a) using a 1kV high-frequency discharge:[5] B) using ion bombardment of 1kV by titanium ions.

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