

Sputtering of titanium and tungsten carbide films from the surface titanium and tungsten by helium ions of medium energies bombardment

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The analytical model of sputtering of binary layered inhomogeneous targets is applied to the case of sputtering of metal carbide films from the metal surface with helium ions. On the basis of the model, an analytical formula was obtained that allows to calculate the complete and partial sputtering yields of inhomogeneous targets by light ions. The calculation results of the total sputtering yields of titanium and tungsten carbide films from the surface of metals by helium ions are given in comparison with the results of computer simulation.

Keywords: modified surface, ion bombardment, sputtering, light ions, layered surface, metal carbide, sputtering yield, partial sputtering yield.

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