

## Synthesis and characterization of composite with Ni and Al, implanted into stainless steel

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### Abstract

The study of coatings on the basis of aluminum and nickel produced by ion implantation is presented. The methods of synthesis of the samples on a stainless steel substrate are discussed. The synthesized composite was studied by X-ray photoelectron spectroscopy, scanning electron microscopy, visible microscopy, atomic force microscopy, X-ray analysis. We considered the activity of the sample in the reaction of catalytic decomposition of ethanol to hydrogen.