



**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
ФАКУЛЬТЕТ ІНОЗЕМНОЇ ФІЛОЛОГІЇ
ТА СОЦІАЛЬНИХ КОМУНІКАЦІЙ**



СОЦІАЛЬНО-ГУМАНІТАРНІ АСПЕКТИ РОЗВИТКУ СУЧАСНОГО СУСПІЛЬСТВА

**МАТЕРІАЛИ ВСЕУКРАЇНСЬКОЇ НАУКОВОЇ КОНФЕРЕНЦІЇ ВИКЛАДАЧІВ,
АСПІРАНТІВ, СПІВРОБІТНИКІВ ТА СТУДЕНТІВ**

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receiving increased attention from researchers and end-users. Nitride systems were deposited via magnetron as well as reactive spraying with the help of ion implantation (CMSII). Spraying was performed in an atmosphere of Ar/ and it is worth noting that the variation of partial pressure leads to the formation of multi-phase coatings with amorphous, crystalline and quasi-amorphous phase. The study of the structure and the physico-chemical properties were performed using the SEM, XPS, XRD and AES techniques. The coatings were deposited on a steel substrate 4140 and Cr12MoV, by depositing monolayers one by one. For the multilayer system Ta/TaN, a transition layer was fabricated using ion bombardment of Ta at 20 keV. After deposition the wear resistance was measured using the ball-on-disc method. The results showed that the strengthening of adhesion of a multilayer film of Ta/TaN - is a result of a reduction in stress and an increased plasticity after depositing alternating layers of Ta. To further improve adhesion, deposition of alternating layers of Ta was performed with ion implantation. Measurements of corrosion and polarization resistance were also taken. It was found that an improvement in corrosion resistance could be obtained with the help of multi-element systems as well as through an increase in the number of layers in the multilayer coating. This can be explained by a decrease in the size of the pores which facilitate the penetration of aggressive environments. It is worth noting that the analysis of polarization and corrosion resistance was performed using theoretical methods as well as being confirmed experimentally. An important factor in increasing the corrosion resistance is the quantity as well as the composition of the interfaces of the monolayers that causes a decrease in pore size.

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INFORMATION WARFARE

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During the radical changes, which are taking place in our country, we are clashed with the phenomenon of information aggression in the media of our neighbor, Russia.

Information and psychological confrontation is a form of confrontation parties representing the use of special (political, economic, diplomatic, and other) methods, ways and means to influence the

information-psychological environment of opposing sides in order to achieve their own goals [1].

We have analyzed the content of the newspaper «Komsomolskaya Pravda in Russia» on the subject of Malaysian Boeing falling and misinformation on the fact that it was allegedly hit by Ukrainian aircraft. In the material for November 5, 2014, «Witnesses: at the time of the «Boeing» collapse near Donetsk a gray plane disappeared in the clouds» by Elena Krivyakina, variations of the phrase «other aircraft», «military aircraft» are used. In this material, the journalist does not mention that it is a hypothesis. According to the material, this is a real fact. In the article «Malaysian «Boeing» shot down near Donetsk...» by Nicholas Varsegov for November 11, the words «Ukrainian fighter» were used. In the other article Nicholas Varsegov renounces this thesis. In his vocabulary there appear words with the connotation of uncertainty and doubt. In the article «So what is actually a «Boeing»? by Georgy Bovt for November 17, the journalist recognizes this as a fake. But in the article we see aggressive rejection of this fact.

The newspaper «Komsomolskaya Pravda» is a typical representative of the Russian media. Fake news produced by Russian media have become a new phenomenon of Russian ideological propaganda. There is strong resistance to this trend in Ukraine.

1. Bulletin SIAC № 100 «Information war and the future of Ukraine»;
http://siac.com.ua/index.php?option=com_content&task=view&id=1054&Itemid=44

THE AGE OF SMART TOYS

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Information technology has become an integral part of our lives, so there is no surprise that different computers are widely used in various areas of daily life from the industrial production to household. From the early childhood kids deal with lots of mobile devices that has led to the emergence of smart toys, such as robots and interactive toys. The modern toys have a little bit in common with their forerunners. The main difference is in the presence of a built-in artificial intelligence.

Today such a toy is more than a blinking and talking bear, mostly it is an Internet connected clever friend that behaves like real. Examples of