

INTERACTION OF MOLECULAR  
OXYGEN WITH Si(001) SURFACE COVERED  
WITH A CHROMIUM OR TITANIUM MONOLAYER

*I.P. Koval, Yu.A. Len,  
M.G. Nakhodkin, M.O. Svishevs'kyi, M.Yu. Yakovenko*

Taras Shevchenko National University of Kyiv,  
Faculty of Radiophysics, Electronics,  
and Computer Systems  
(4g, Academician Glushkov Ave., Kyiv 03022, Ukraine;  
e-mail: len@mail.univ.kiev.ua)

S u m m a r y

The results of experimental researches concerning the initial stages of the interaction between the Si(001) surface covered with a chromium or titanium monolayer and molecular oxygen at exposures to  $10^7$  L (Langmuir) are reported. On the basis of experimental data, the coefficient of molecular oxygen sticking is calculated. It is shown that not only silicon but also titanium oxides are formed on the Si(001) surface covered with a titanium monolayer. The researches are carried out, by using the Auger electron spectroscopy method.