Contribution ID: **30** Type: **Poster**

PHOTOELECTRIC PROPERTIES OF IRON AND CHROMIUM OXIDES NANOMETRIC FILMS ON THE SI <100> SUBSTRATE.

The nanometric films based on iron and chromium oxides (Fe2O3-X(0≤x≤1) and Cr3-XO3-Y (0≤x≤2; 0≤y≤2)) with variable thickness, stoichiometry and photoelectrical properties were synthesized using ultraviolet photons of KrF-laser (248 nm) on the silicon substrate Si <100> at the substrate's temperature TS = 293°K. The samples of mono- and hybrid systems of the alternate layers Fe2O3-X(0≤x≤1)/Cr3-XO3-Y(0≤x≤2; 0≤y≤2) demonstrate photoelectric properties. The kinetics (λ = 470 nm) of the photo-e.m.f. of the observable samples was studied and the spectral dependencies (500 ÷ 1200 nm) of the photo-e.m.f. of these samples were obtained.

Primary authors: Mrs SADOVNIKOVA, Maria L. (Institute of High Technologies, Taras Shevchenko National University of Kyiv); Dr SMIRNOV, Alexey B. (V. Lashkaryov Institute of Semiconductor Physics, NAS of Ukraine); Dr SAVKINA, Rada K. (V. Lashkaryov Institute of Semiconductor Physics, NAS of Ukraine); Prof. MULENKO, Sergii A. (G.V. Kurdumov Institute of Metals Physics of NAS Ukraine)

Co-authors: Dr VASILJEV, Anatoliy G. (Institute of High Technologies, Taras Shevchenko National University of Kyiv); Mr LEDINYOV, Dmitriy M. (V. Lashkaryov Institute of Semiconductor Physics NAS of Ukraine); Dr VDOVENKOV, Anatoliy A. (Institute of High Technologies, Taras Shevchenko National University of Kyiv)

Presenter: Mrs SADOVNIKOVA, Maria L. (Institute of High Technologies, Taras Shevchenko National University of Kyiv)

Track Classification: Surface Physics, Nano- and Microelectronics