

Experimental studies of slow neutron detector based on thin-film CVD diamond

Wednesday, 12 October 2016 15:30 (30)

The paper presents the research results of slow neutrons detector based on thin film CVD-diamond with a deep graphitized layer. It is shown the low sensitivity of the detector to the γ - and β - radiation. As a converter of slow neutrons used boron isotope ^{10}B and lithium carbonate $^6\text{Li}_2\text{CO}_3$. In both cases, the efficiency of slow neutrons registration was about 3%

Primary author(s) : Mr. TYURIN, Evgeny (National Research Nuclear University "MEPhI"); Mr. ZYABLYUK, Konstantin (Industrial - Technology Center "UralAlmazInvest"); Mr. NEDOSEKIN, Pavel (Industrial - Technology Center "UralAlmazInvest"); Mr. KOLYUBIN, Vladimir (Industrial - Technology Center "UralAlmazInvest"); Mr. KADILIN, Vladimir (NRNU MEPhI)

Presenter(s) : Mr. TYURIN, Evgeny (National Research Nuclear University "MEPhI")

Session Classification : Poster session - III

Track Classification : Methods of experimental physics