

XXV International Baldin Seminar on High Energy Physics Problems  
"Relativistic Nuclear Physics and Quantum Chromodynamics"



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## Studies of superconducting properties of high-temperature conductors by methods of nuclear spectroscopy at the accelerator the NICA complex .

Studies of superconducting properties of high-temperature conductors by methods of nuclear spectroscopy at the accelerator the NICA complex .

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Dubna JINR

The research was carried out on the basis of the first stage of the NICA accelerator complex. The results were compared with the data obtained on the proton beam of the JINR phasotron. Currently, the received unique information about the yields of nuclei and isotopes of the students in the process of reactions is being processed.

This report discusses one of the stages of work on the creation of artificial pinning centers in superconducting tapes, for the possible creation of a series of superconducting magnets based on them, operating at temperatures up to 65 K.

Literature.

Literature : S.I.Tyutyunnikov, V.I.Stegailov, V.V. Kobets, T.N. Tran , B.S. Yuldashev, N.G. Shakun, S.V. Rozov, A.A. Smirnov, A.G. Letov, F.A. Rasulova, I.A. Kryachko. An investigation of products of (n, f), (n,  $\gamma$ ) and ( $\gamma$ , f), ( $\gamma$ , xn, p) reactions on samples of uranium and bismuth using the phasotron and linac-200 accelerators at JINR: experiments and calculations. Tashkent, Uzbekistan, November 23-25, 2021.

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