

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



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Investigation of the yields of nuclei obtained using targets ^{238}U , ^{209}Bi at JINR accelerators: "Phasotron" ($E_p=660$ MeV) and "Linak-200"

Investigation of the yields of nuclei obtained using targets ^{238}U , ^{209}Bi at JINR accelerators: "Phasotron" ($E_p=660$ MeV) and "Linak-200"

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The experiments were carried out within the framework of the Energy-Transmutation program at JINR accelerators and at the YASNAPP experimental complex, created on the basis of the JINR nuclear power Plant phasotron, in "on-line" and "off-line" modes.

In using the ^{238}U target on the proton beam with $E = 660$ MeV and on the electron beams with $E = 140$ MeV, the yields of fission products were determined [1], their half-lives and their gamma spectra were studied, the yield ratio of the capture and fission reactions was estimated, studying the processes of obtaining ^{239}Np have been continued.

References

1. S.I. Tyutyunnikov, V.I. Stegailov et al., // "NUCLEUS-2021". St-Petersburg, 131 (2021).

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