

## Fabrication of reactor target from enriched $^{50}\text{Cr}$ for artificial neutrino source

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In the report the current state of fabrication of the enriched  $^{50}\text{Cr}$  target for the artificial  $^{51}\text{Cr}$  neutrino source with activity  $> 3$  MCi for the experiment BEST is presented. The processes of obtaining a target in the form of disks with a thickness of 4 mm and a diameter of 84 and 88 mm required to achieve the necessary activity using the reactor SM-3 are considered, including: enrichment of natural chromium in the form of oxyfluoride by gas centrifugation, electrolytic reduction and refining of metallic chromium, as well as the formation of chromium disks by spark plasma sintering.

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