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In-situ environmental radiation background measurement in the second phase of CJPL

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China Jinping Underground Laboratory (CJPL), with a rock overburden of about 2400 m, provides low radiation background environment necessary to frontier scientific researches, such as dark matter direct detection and neutrinoless double beta decay experiments. Due to almost filled space of the first phase of CJPL and the requirement of future physical experiments, construction of the second phase of CJPL (CJPL-II) funded by National Major Science and Technology Infrastructure Construction Projects of China was started in December 2020. The civil engineering of CJPL-II was completed at the end of 2023. In this work, we report the measured results of major environmental radiation, including cosmic-ray muons, gamma-rays and radon, in CJPL-II.

Collaboration you are representing

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