

Performance of the super-conducting RIKEN heavy-ion Linac at the RIKEN Radioactive Isotope Beam Factory

Thursday 29 August 2024 16:00 (2 hours)

The RIKEN superconducting heavy-ion linear accelerator (SRILAC) has been steadily supplying beams for super-heavy element synthesis experiments since its commission in January 2020 by addressing relevant issues. The over- all availability of the accelerator during beam supply periods, excluding regular maintenance and downtime due to major malfunctions, is approximately 90%, with the availability exceeding 99% for SRILAC alone. The decrease in the available acceleration voltage due to the increase in X- rays i.e. field emission (FE) from superconducting (SC) cavities has been a major issue. However, this issue has been mitigated via high-RF power processing (HPP). This presentation reports on the current performance of SRILAC and its prospects.

Footnotes

Funding Agency

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