

Progress in LLRF system development for Korea-4GSR

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The Korean 4th Generation Storage Ring (4GSR) aims to generate an ultra-low emittance beam of 58 pm rad with a beam energy of 4 GeV and a beam current of 400 mA. Currently, the construction of this facility is underway, with plans for commissioning by the end of 2027. The RF system of the 4GSR consists of 10 normal conducting cavities and associated RF systems, including a high-power RF source, Low-Level RF (LLRF) system, and ancillary equipment. This paper provides an overview of the 4GSR RF system, presents the current status of its development, and focuses on the design of the LLRF system for digital feedback control.

Keyword

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