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Development of a novel DC Current Monitor device, based on Tunnelling MagnetoResistive sensors, for ion beam current measurement

Monday 8 September 2025 16:00 (2 hours)

In this work, the development of a non-invasive DC Current Monitor device (DCCM), based on Tunnelling MagnetoResistive (TMR) sensors, is presented. The device is primarily intended for measuring the current intensity of an ion beam without the need of intercepting it (therefore not altering its characteristics), making it suitable for online current monitoring. Details are given about the design of the device and its performance assessment, namely the linearity of its static response and its frequency-domain behavior.

Footnotes

Funding Agency

I have read and accept the Conference Policies

Yes

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