



European thin film roadmap

Thursday 25 September 2025 14:30 (3 hours)

Superconducting thin film (TF) technology for Superconducting radio-frequency (SRF) applications is under intense development in many research centres around the world. TF SRF technology can not only drastically reduce cryogenic costs but also opens the door to simplified alternative cooling schemes with reduced helium inventory. Up to today, TF development have been considered within two High Energy Roadmaps (CERN and Snowmass), without taking into account other possible applications. Within the framework of the European H2020 project IFAST, an “European TF-SRF Roadmap” has been developed that also covers all applications aspects including high-intensity hadron/neutron sources, light sources, cavity detectors, quantum computing or emerging fields like compact accelerators poised to revolutionize industrial processes and medical diagnostics, and commercial applications. This work proposes a comprehensive approach focused on the expertise and collaborative network that has been built in Europe and in the entire world over the past years. Ten priority topics have been identified on TF development. This talk will briefly describe the main feature of the roadmap and expecting for returns from the international community to improve our initial document and disseminate it on a larger scale.

I have read and accept the Privacy Policy Statement

Yes

Footnotes

Thin Film SRF

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