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Design and EM simulations of 750 MHz IH-DTL tank for carbon ion in medical applications

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This paper presents the design of 750 MHz IH-DTL (Interdigital H-mode Drift Tube Linac) tank, specifically developed to be part of a carbon ion injector for medical treatment applications. These sections provide a highly efficient solution for ion acceleration in the 5 to 10 MeV per nucleon energy range, offering a high shunt impedance. The study includes simulations of electromagnetic fields using CST Software, and beam dynamics simulations through a KONUS-type configuration

Footnotes

Paper preparation format

LaTeX

Region represented

Europe

Funding Agency

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