THE DESIGN STUDY OF SUPERCONDUCTING MAGNET SYSTEM FOR AN ADVANCED ECR ION SOURCE*

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Abstract

The Korea Basic Science Institute is developing a superconducting magnet system for 28 GHz Electron Cyclotron Resonance Ion Source (ECRIS). We are investigating in order to realize compact size, economic operation and generation of high current beam. Although companies and researchers have valuable experience, skill and ability in designing of superconducting magnet for ECRIS, they did not exactly proposed a excellent superconducting magnet system for ECRIS because many superconducting magnets were not required. Of course they do if we required many magnets for the various applications of ECRIS. In this presentation, we have filed reports of former researcher and we have discussed the realization of ECRIS over 35 GHz.

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