

Observation of Micro-Bunch Structure of 100 MHz Alvarez Linac by a Thin SEEM,
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KEK-TANASHI; Y. SATO, H. SOGA, NIRS - We have developed a secondary electron emission monitor (SEEM) for biophysical experiments with the heavy-ion linac at NIRS. Since biological samples are usually irradiated in an atmospheric circumstance, the dose monitors such as SEEM is necessitated, instead of Faraday cup. Our SEEM consists of three aluminized-polypropylene film electrodes with an active area of 40 x 40 mm² and a thickness of 3 x 10 E-6 g/cm², which are located 2 mm apart from each other. For the C⁶⁺ (6 MeV/n) beam the measured emission rate was about 18, and thus the micro-bunch structure having 10E5 ions of the NIRS Alvarez linac has been clearly observed.