

Abstract Submitted
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Production yield measurement for neutron-rich nuclei around $Z = 60$ from in-flight fission of a ^{238}U beam at 345 MeV/nucleon¹ DAICHI MURAI, KAZUO IEKI, Department of Physics, Rikkyo University, TOSHIYUKI KUBO, NAOHITO INABE, DAISUKE KAMEDA, NAOKI FUKUDA, HIROYUKI TAKEDA, HIROSHI SUZUKI, KOICHI YOSHIDA, RIKEN Nishina Center, RIKEN, BIGRIPS COLLABORATION — Production yields of the neutron-rich nuclei with the atomic numbers Z around 60 by the in-flight fission of $^{238}\text{U}^{86+}$ beam was measured at the RIBF in the RIKEN Nishina center. The isotopes were produced by $^{238}\text{U}^{86+}$ beam at 345 MeV/nucleon with a Be target and separated using the BigRIPS separator. Particle identification was performed by determining of Z and mass-charge ratio A/Q of each isotope using the $B\rho - \text{TOF} - \Delta E$ method. Production yields were deduced from the A/Q spectrum of each Z obtained by the detailed analysis with correction of the detector efficiency and the lost events for background rejection in analysis and so on. Deduced yields were over two orders of magnitude larger than prediction given by the LISE⁺⁺ (Ver. 8.4.1), which reproduced production yields at the $Z < 50$ region measured in 2008 experiment fairly well.

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