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Development of a High-Rate Ionization Counter[1] SABRINA STRAUSS, Rutgers University, D.W. BARDAYAN, K.Y. CHAE, Oak Ridge National Laboratory, J.A. CIZEWSKI, Rutgers University, W.A. PETERS, ORAU, K.T. SCHMITT, University of Tennessee, M.S. SMITH, Oak Ridge National Laboratory — Ionization counters are useful for the determination of beam composition and beam normalization in many nuclear physics experiments. At the Holifield Radioactive Ion Beam Facility (HRIBF), we have developed and are currently testing a new ionization counter that will count and accurately identify particles at rates up to 10^6 pps. The new ion counter is based on the tilted electrode gas ion chamber (TEGIC) model developed at RIKEN [1] and consists of alternating anodes and cathodes, effectively creating a stack of ion chambers. Design and results from preliminary testing will be presented.

[1] Kimura *et al.*, Nucl. Instr. And Methods A **538** 608 (2005).

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