

Abstract Submitted
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Electron stripping at MeV/u energies for U^{28+} and Xe^{18+} ions

¹ ROBERT DUBOIS, OSCAR DE LUCIO, MARK THOMASON, UMR — Beam lifetimes were measured for 10 MeV/u to 75 MeV/u Xe^{18+} and 10 MeV/u to 50 MeV/u U^{28+} . Lifetimes resulting from interactions with background gases at base pressures in the GSI ESR storage ring and for molecular hydrogen and molecular nitrogen were measured. For H_2 and N_2 , ion beams were injected in the ESR and a fast valve was opened to admit the supersonic jet from the ESR gas target. The N_2 results imply that the stripping cross section has approximately a v^{-1} dependence, whereas the H_2 results imply nearly a v^{-2} dependence.

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