

Abstract Submitted
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Micro-Fabricated Surface Electrode Y-Junction Ion Traps DAVID MOEHRING, MATTHEW BLAIN, ROBERT COOK, KEVIN FORTIER, RAYMOND HALTLI, CLARK HIGHSTRETE, DANIEL STICK, CHRIS TIGGES, Sandia National Laboratories — We will present results of the design, operation, and performance of two different Y-Junction surface ion micro-traps fabricated at Sandia. Recent progress in the testing of the micro-traps will be highlighted, including the successful shuttling of single and multiple ions, ion-chain splitting and recombination, and the validation of simulations with experiments. Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

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