

## Retention of the Potential Energy of Multiply Charged Argon Ions Incident on Copper

U. Kentsch,<sup>1,2</sup> H. Tyrroff,<sup>2</sup> G. Zschornack,<sup>1</sup> and W. Möller<sup>1,2,\*</sup>

<sup>1</sup>*Technical University of Dresden, Institute of Nuclear and Particle Physics, Mommsenstrasse 13, D-01069 Dresden, Germany*

<sup>2</sup>*Research Center Rossendorf, Institute of Ion Beam Physics and Materials Research, P.O. Box 510119, 01314 Dresden, Germany*

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The retained fraction of the potential energy of argon ions incident on copper has been measured using stationary calorimetry at charge states up to 9+ and kinetic energies ranging from 75 to 240 eV per ionic charge. An average fraction of 30% to 40% is found with little dependence on the charge number and on the kinetic energy. The retention of the total energy ranges from 60% to 75% and can mainly be accounted for by the retained fraction of the potential energy and the collisional energy lost by reflected ions and sputtered target atoms.