

Scattering of Swift Diatomic Molecular Ions from Planar Surfaces at Grazing Incidence

V.I.Shulga, P.Sigmund. Nucl. Instrum. Methods B **88** (1994) 97-106

Scattering and Stopping of Swift Diatomic Molecules under Coulomb Explosion

P.Sigmund. Nucl. Instrum. Methods B **67** (1992) 11-16

Scaling laws governing the multiple scattering of diatomic molecules under Coulomb explosion

P.Sigmund. Phys. Rev. A **46** (1992) 2596-2606

Stopping and Scattering of Slow Cluster Ions

V.I.Shulga, Z.Pan, P.Sigmund. Methods and Mechanisms for Producing Ions from Large Molecules, K.G.Standing & W.Ens, editors, NATO ASI series, Plenum Press **B 269** (1991) 145-146

Interaction of Slow (100 eV/Atom) Copper Clusters with Thin Gold Films: Reflection, Transmission, and Sputtering at Normal and Oblique Incidence

V.I.Shulga, P.Sigmund. Nucl. Instrum. Methods B **62** (1991) 23-34

Penetration of Slow Gold Clusters through Silicon

V.I.Shulga, P.Sigmund. Nucl. Instrum. Methods B **47** (1990) 236-242

Interaction of Slow (100 eV/atom) Carbon Clusters with Gold: Penetration Properties and Collision Cascades

Z.Pan, P.Sigmund. Nucl. Instrum. Methods B **51** (1990) 344-353

Pronounced Nonlinear Behavior of Atomic Collision Sequences in Solids and Molecules

V.I.Shulga, M.Vicanek, P.Sigmund. Phys. Rev. A **39** (1989) 3360-3372

Interplay between Computer Simulation and Transport Theory in the Analysis of Ion-Bombardment-Induced Collision Processes in Solids

P.Sigmund. J. Vac. Sci. Technol. A **7** (1989) 585-597

Generalized Scaling Law for Electronically Elastic Ion-Molecule Collisions in the Sudden Approximation

P.Sigmund. J. Phys. B **14** (1981) L 321- L323

Stopping of Slow Recoil Atoms in Gases

G.Falcone, A.Gras-Marti, P.Sigmund, F.Smend, J.Ahlert, M.Schumacher, P.Rullhusen, and L.Ziegeler. Z.Physik A **301** (1981) 101-107

Small-Angle Multiple Scattering of Ions in the Screened-Coulomb Region. III. Combined Angular and Lateral Spread

P.Sigmund, J.Heinemeier, F.Besenbacher, P.Hvelplund, H.Knudsen. Nucl. Instrum. Methods **150** (1978) 221-231

Scaling Law for Electronically Elastic Ion-Molecule Collisions in the Sudden Approximation

P.Sigmund. J. Phys. B **11** (1978) L 145-148

Classical Scattering of Charged Particles by Molecules. Single and Multiple Scattering at Small Angles

P.Sigmund. Mat. Fys. Medd. Dan. Vid. Selsk. **39** (1977) 1-32

Lateral Distributions of Multiply Scattered Ions: Sensitivity to Atomic Interaction, Z¹-Oscillations, Molecular Effects, Double-Differential Distributions, and Implications to Surface Scattering

N.Andersen, P.Sigmund, J.Heinemeier, P.Hvelplund, H.Knudsen, and G.Sidenius. Nucl. Instrum. Methods **132** (1976) 703-705

Effect of Molecular Geometry on Multiple Scattering of Heavy Energetic Particles

G.Sidenius, N.Andersen, P.Sigmund, F.Besenbacher, J.Heinemeier, P.Hvelplund, and H.Knudsen. Nucl. Instrum. Methods **134** (1976) 597-599

Total Backscattering of Protons from Solid Targets in Single-Collision Approximation

J.Vukanic and P.Sigmund. Physics of Ionized Gases 1976. Contributions. B.Navinsek, ed., J.Stefan Institute, Ljubljana (1976) 134-138

Total Backscattering of keV Light Ions from Solid Targets in Single-Collision Approximation

J.Vukanic and P.Sigmund. Appl. Phys. **11** (1976) 265-272

Small-Angle Multiple Scattering of Ions in the Screened-Coulomb Region. I. Angular distributions. Erratum

P.Sigmund and K.B.Winterbon. Nucl. Instrum. Methods **125** (1975) 491

Small-Angle Multiple Scattering of Ions in the Screened-Coulomb Region. II. Lateral Spread

A.D.Marwick and P.Sigmund. Nucl. Instrum. Methods **126** (1975) 317-323

Inversion of Total Cross Sections for Ion-Atom Collisions in the Classical Regime

P.Sigmund and U.Lillemark. Physica **71** (1974) 258-265

Small-Angle Multiple Scattering of Ions in the Screened-Coulomb Region. I. Angular Distributions

P.Sigmund and K.B.Winterbon. Nucl. Instrum. Methods **119** (1974) 541-558

On the Reflection Coefficient of Heavy Ions Bombarding Solid Targets

J.Bøttiger, J.A.Davies, P.Sigmund, and K.B.Winterbon. Radiat. Eff. **11** (1971) 69-78

A Simple Nonbinary Scattering Model Applicable to Atomic Collisions in Crystals at Low Energies

H.H.Andersen and P.Sigmund. Mat. Fys. Medd. Dan. Vid. Selsk. **34** (1966) 1-50

Nonbinary Atomic Collisions in Crystals

H.H.Andersen and P.Sigmund. Phys. Lett. **15** (1965) 237-238

On the Determination of Interatomic Potentials in Metals by Electron Irradiation Experiments

H.H.Andersen and P.Sigmund. Risø Report **103** (1965) 1-22

Classical Scattering Cross Sections for Radiation Damage Calculations. I. Cut-off Potentials

P.Sigmund and P.Vajda. Risø Report **83** (1964) 1-25

Classical Scattering Cross Sections for Radiation Damage Calculations. II. The Born-Mayer Potential

P.Sigmund and P.Vajda. Risø Report **84** (1964) 1-23