

Emission Phenomena

Electron ejection in collisions between swift heavy ions and atoms
P. Sigmund, A. Schinner. Nucl. Instrum. Methods B **258** (2007) 116-120

Ionization of neon by intermediate energy carbon ions
S.L.McLawhorn, L.H.Toburen, J.L.Shinpaugh, E.L.B.Justitiano, M.Dingfelder, K.Tökesi, B.Sulik, P.Sigmund, A.Schinner, C.O.Reinhold, D.R.Schultz. ICPEAC- Photonic, Electronic and Atomic Collisions (2007)

Primary electron spectra from swift heavy-ion impact: Scaling relations and estimates from modified Bohr theory
M.S. Weng, A. Schinner, A. Sharma, P. Sigmund. Europ. Phys. J. D **39** (2006) 209-221

Isotope Sputtering
P.Sigmund, V.I.Shulga. UNI*C Scientific Computing Report 1995-1997 (1998) 104-109

Analysis of a 'Perfect' Sputter Experiment
L.G.Glazov, V.I.Shulga, P.Sigmund. Surf. Interf. Analysis **26** (1998) 512-517

Effect of Composition Gradient in Alloys on Differential Sputter Parameters
M.Vicanek, M.W.Sckerl, P.Sigmund. Nucl. Instrum. Methods B **140** (1998) 61-69

Analysis of the Primary Process in Isotope Sputtering. Erratum
V.I.Shulga, P.Sigmund. Nucl. Instrum. Methods B **124** (1997) 145

Nonlinear Transmission Sputtering
I.S.Bitensky, P.Sigmund. Nucl. Instrum. Methods B **112** (1996) 12-15

Analysis of the Primary Process in Isotope Sputtering
V.I.Shulga, P.Sigmund. Nucl. Instrum. Methods B **119** (1996) 359-374

Simulation of Energy-Dependent Isotope Sputtering
V.I.Shulga, P.Sigmund. Nucl. Instrum. Methods B **103** (1995) 383-386

Alloy Sputtering at High Fluence: Preferential Sputtering and Competing Effects
P.Sigmund, A.Oliva. Nucl. Instrum. Methods B **82** (1993) 242-254

Momentum Asymmetry and the Isotope Puzzle in Sputtering by Ion Bombardment
P.Sigmund, M.W.Sckerl. Nucl. Instrum. Methods B **82** (1993) 269-282

Note on Isotope Sputtering
P.Sigmund. Nucl. Instrum. Methods B **82** (1993) 192-193

Round Robin Computer Simulation of Ejection Probability in Sputtering
P.Sigmund, M.T.Robinson, M.I.Baskes, M.Hautala, F.Z.Cui, W.Eckstein, Y.Yamamura, S.Hosaka, T.Ishitani, V.I.Shulga, D.E.Harrison, I.R.Chakarov, D.S.Karpuzov, E.Kawatoh, R.Shimizu, S.Valkealahti, R.M.Nieminen, G.Betz, W.Husinsky, M.H.Shapiro, M.Vicanek, and H.M.Urbassek. Nucl. Instrum. Methods B **36** (1989) 110-123

Depth of Origin and Angular Spectrum of Sputtered Atoms
M.Vicanek, J.J.Jimenez-Rodriguez, P.Sigmund. Nucl. Instrum. Methods B **36** (1989) 124-136

Collision Cascades and Sputtering Induced by Larger Cluster Ions
P.Sigmund. J. Physique C **2-50** (1989) 175-182

Inelastic Background Signal in x-Ray Photoelectron Spectroscopy
P.Sigmund. Phys. Rev. B **38** (1988) 11140-11146

Preferential Sputtering from Isotopic Mixtures and Alloys of Near-Neighbor Elements
P.Sigmund. Nucl. Instrum. Methods B **18** (1987) 375-387

A Note on Rotational and Vibrational Motion of Sputtered or Desorbed Diatomic Molecules
P.Sigmund, H.M.Urbassek, and D.Matragrano. Nucl. Instrum. Methods B **14** (1986) 495-499

Elastic and Inelastic Scattering of Electrons Emitted from Solids: Effects on Energy Spectra and Depth Profiling in XPS/AES
A.L.Tofteup, S.Tougaard, and P.Sigmund. Surf. Interf. Anal. **9** (1986) 130

Sputtering of Multicomponent Materials. Elements of a Theory: Erratum
P.Sigmund, A.Oliva, and G.Falcone. Nucl. Instrum. Methods B **9** (1985) 354

Temperature Dependent Sputtering of Metals and Insulators
P.Sigmund and M.Szymonski. Appl. Phys. A **33** (1984) 141-152

A Note on Evaporation from Heated Spikes
M.Urbassek and P.Sigmund. Appl. Phys. A **35** (1984) 19-25

Sputtering of Multicomponent Materials. Elements of a Theory
P.Sigmund, A.Oliva, and G.Falcone. Nucl. Instrum. Methods **194** (1982) 541-548

Influence of Elastic and Inelastic Scattering on Energy Spectra of Electrons Emitted from Solids
S.Tougaard and P.Sigmund. Phys. Rev. B **25** (1982) 4452-4466

Sputtering from Elastic-Collision Spikes
P.Sigmund and C.Claussen. J. Appl. Phys. **52** (1981) 990-993

Comment on the Energy Distribution of Excited Recoil Atoms
P.Sigmund. Inelastic Particle-Surface Collisions. Springer Ser. Chem. Phys. **17** (1981) 251-257

Depth of Origin of Sputtered Atoms
G.Falcone and P.Sigmund. Appl. Phys. **25** (1981) 307-310

Direct and Recoil-Induced Electron Emission from Ion-Bombarded Solids
G.Holmén, B.Svensson, J.Schou, and P.Sigmund. Phys. Rev. B **20** (1979) 2247-2254

Momentum Deposition in Ion-Bombarded Solids and an Application to Sputtering
U.Littmark and P.Sigmund. J. Physics D **8** (1975) 241-245

The Sputtering of Chemisorbed Gas (Nitrogen on Tungsten) by Low-Energy Ions
H.F.Winters and P.Sigmund. J. Appl. Phys. **45** (1974) 4760-4766

Sputtering and Backscattering of Light Ions Bombarding Random Targets
R.Weissmann and P.Sigmund. Radiat. Eff. **19** (1973) 7-14

A Mechanism of Surface Micro-Roughening by Ion Bombardment
P.Sigmund. J. Mater. Sci. **8** (1973) 1545-1553

Broadband Optical Radiation from Low-Energy Ion-Metal Collisions
N.H.Tolk, C.W.White, and P.Sigmund. Bull. Am. Phys. Soc. **18** (1973) 686

Deduction of Heavy-Ion x-Ray Production Cross Sections from Thick-Target Yields
K.Taulbjerg and P.Sigmund. Phys. Rev. A **5** (1972) 1285-1289

Deduction of Heavy-Ion x-Ray Production Cross Sections from Thick-Target Yields. Erratum
K.Taulbjerg and P.Sigmund. Phys. Rev. A **6** (1972) 1257

Zerstäubungstheorie
P.Sigmund. Verhandl. DPG (vi) **5** (1970) 405-406

Theory of Sputtering. I. Sputtering Yield of Amorphous and Polycrystalline Targets
P.Sigmund. Phys. Rev. **184** (1969) 383-416

Theory of Sputtering. I. Sputtering Yield of Amorphous and Polycrystalline Targets. Erratum
P.Sigmund. Phys. Rev. **187** (1969) 768

Sputtering Efficiency of Amorphous Substances
P.Sigmund. Can. J. Phys. **46** (1968) 731-737

Sputtering Yield for Amorphous and Polycrystalline Targets
P.Sigmund. Bull. Am. Phys. Soc. **13** (1968) 1445

On the Mechanism of Sputtering
C. Lehmann and P.Sigmund. phys. stat. sol. **16** (1966) 507-511