Stand: oct. 21, 2010

Prof. Dr. J. A. Schaefer

P u b l i c a t i o n s i n r e f e r e e d j o u r n a l s

1. ***"A contribution to the dependence of secondary electron emission from the work function and Fermi energy"***
   J. A. Schaefer, J. Hölzl; Thin Solid Films 13 (1972) 81-86

2. ***"Experimental and Theoretical study of the Angular Resolved Secondary Electron Spectroscopy (ARSES) for W(100) in the energy range 0≤E≤20eV"***
   J. A. Schaefer, R. Schoppe, J. Hölzl, R. Feder; Surf. Sci. 107 (1981) 290-304

3. ***"Angular Resolved Secondary Electron Spectroscopy (ARSES) on O/W(100) at various annealing temperatures"***
   J. Hölzl, J. A. Schaefer; Surf. Sci.108 (1981) L387-L392

4. ***"Identification of surface vibrations on clean and oxygen covered Pt(111) surfaces with High Resolution Electron Energy Loss Spectroscopy (EELS)"***
   J. A. Schaefer, W. Göpel; J. Electr. Spectroscopy and Related Phenomena 29 (1983) 279-285

5. ***"Monohydride- and dihydride formation at Si(100) (2x1); a high resolution electron spectroscopy study"***
   F. Stucki, J. A. Schaefer, J.R. Anderson, G.J. Lapeyre, W. Göpel;
   Solid State Commun. 47 (1983) 795-801

6. ***"Final density of states fluctuations in the energy range 0≤E<20 eV and work function variations (Δϕ) for O/W(100) studied in situ with angular resolved secondary electron spectroscopy (ARSES)"*** *J. A. Schaefer; Surf. Sci. 148 (1984) 581-600*

7. ***"Coverage- and temperature-dependent vibrational spectra of hydrogen chemisorbed on Si(100) (2x1)"*** *J.A. Schaefer, F. Stucki, J. R. Anderson, G. J. Lapeyre, W. Göpel;*
   Surf. Sci. 140 (1984) 207-215

8. ***"Localized and delocalized vibrations on TiO_2(110) studied by High Resolution Electron Energy Loss Spectroscopy (EELS)"*** *G. Rocker, J.A. Schaefer, W. Göpel;*
   Phys. Rev. B30 (1984) 3704-3708

9. ***"Surface defects of TiO_2(110): a combined XPS, XAES and EELS study"***
   Göpel, J.R. Anderson, D. Frankel, M. Jaehnig, K. Phillips, J.A. Schaefer,G. Rocker;
   Surf. Sci. 139 (1984) 333-346

10. ***"Chemical Shifts of Si-H stretching frequencies at Si(100)-surfaces preexposed to oxygen in the submonolayer range"****J. A. Schaefer, D. Frankel, F. Stucki, W. Göpel, G.J. Lapeyre;*
    Surf. Sci. 139 (1984) L209-L218

11. ***"Adsorption of H, O and H_2O at Si(100) and Si(111) (2x1) surfaces in the submonolayer range (0≤θ≤1); a combined EELS, LEED and XPS study"****J. A. Schaefer, F. Stucki, D.J. Frankel, W. Göpel, G.J. Lapeyre;*
    J. Vac. Sci. & Technol. B2 (1984) 359-365

12. ***"Water adsorption on cleaved silicon surfaces"***
J. A. Schaefer, J.R. Anderson, G.J. Lapeyre;
J. Vac. Sci. & Technol. A3 (1985) 1443-1447

13. ***"Initial stages of oxidation of Si(100) (2x1): A combined vibrational (EELS) and electron binding energy (XPS) study"***
J. A. Schaefer, W. Göpel; Surf. Sci. 155 (1985) 535-552

14. ***"Hydrogen interaction with semiconductor surfaces"***
J. A. Schaefer; Surf. Sci. 178 (1986) 90-100

15. ***"Electronic excitations on Ge_xSi_{1-x}(100) (2x1)"***
H.H. Farrell, J.Q. Broughton, J.A. Schaefer, J.C. Bean;
J. Vac. Sci. & Techn. A4 (1986) 123-126

16. ***"Formation and decomposition of Ge_xSi_{1-x}(100) (2x1): H and Ge_xSi_{1-x}(100) (1x1): 2H"***
J. A. Schaefer, J.Q. Broughton, J.C. Bean, H.H. Farrell;
Phys. Rev. B33 (1986) 2999-3005

17. ***"Surface phonons at cleaved silicon: new observations"***
J. A. Schaefer, J.R. Anderson, G.J. Lapeyre;
J. Electr. Spectroscopy and Related Phenomena 38 (1986) 21-28

18. ***"The formation and decomposition of water and hydrogen on Ge_xSi_{1-x}(100) (2x1)"***
J. A. Schaefer, J.Q. Broughton, J.C. Bean, H.H. Farrell;
J. Electr. Spectroscopy and Related Phenomena 39 (1986) 127-130

19. ***"Chemisorption of H_2O on Ge_xSi_{1-x}(100) (2x1)"***
J.Q. Broughton, J. A. Schaefer, J.C. Bean, H.H. Farrell;
Phys. Rev. B33 (1986) 6841-6845

20. ***"Atomic hydrogen - A local probe for interface characterization"***
J. A. Schaefer; Surf. Sci. 189/190 (1987) 127-136

21. ***"Oxidation of Si(100) (2x1) and Ge_xSi_{1-x}(100) (2x1)"***
J. A. Schaefer; J. Electr. Spectroscopy and Related Phenomena 44 (1987) 163-174

22. ***"Surface Phonons and electronic surface states at Si(111) (2x1): Energy shifts and polarization effects"****J. A. Schaefer, J.R. Anderson, G.J. Lapeyre;*
J. Electr. Spectroscopy and Related Phenomena 44 (1987) 373-382

23. ***"Adsorbate vibrations at semiconductor surfaces"***
J. A. Schaefer; Vuoto XVIII (1988) 12-14

24. ***"Characterization of semiconductor surfaces"***
J. A. Schaefer; Fresenius Zeitschrift für Analytische Chemie 333 (1989) 516-517

25. ***"Surface anisotropy of III - V compounds"***
S. Nannarone, S. D'Addato, J.A. Schaefer, Y. Chen, J.R. Anderson, G.J. Lapeyre;
Surf. Sci. 211/212 (1989) 524-533

26. ***"Electronic and vibrational properties of the K/GaAs system"***
M. G. Betti, U. del. Pennino, C. Mariani, S. Valeri, J.A. Schaefer;
Surf. Sci. 211/212 (1989) 659-665

27. ***"Catalytic oxidation of Si(100) and InP(100) surfaces"***
J. A. Schaefer, F. Lodders, Th. Allinger, S. Nannarone, J.R. Anderson, G.J. Lapeyre,
Surf. Sci. 211/212 (1989) 1075-1082

28. ***"Anisotropy of the electronic structure of the GaP(110) surface: A high-resolution electron-energy-loss spectroscopy study"***
S. Nannarone, S. D´Addato, J. A. Schaefer, Y. Chen, G. J. Lapeyre,
Phys. Rev. B 39 (1989) 5975-5979

29. ***"Coupled plasmon and phonon excitations in the space-charge layer on GaAs(110) surfaces"***
Y. Chen, S. Nannarone, J.A. Schaefer, J.C. Hermanson, G.J. Lapeyre,
Phys. Rev. B39 (1989) 7653-7657

30. ***"Active sites of adsorption on cleaved and sputtered indium phosphide surfaces"***
J. A. Schaefer, D. J. Frankel, G.J. Lapeyre; Z. Phys. B79 (1990) 259-264

31. ***"Microscopic structure of semiconductor surfaces"***
J. A. Schaefer; Applied Physics A 51 (1990) 305-316

32. ***"Etching of GaAs(100) by activated hydrogen"***
J. A. Schaefer, V. Persch, S. Stock, Th. Allinger, A. Goldmann,
Europhys. Letters 12 (1990) 563-568

33. ***"Oxide removal from GaAs(100) by atomic hydrogen"***
J. A. Schaefer, V. Persch, S. Stock, Th. Allinger, A. Goldmann; SPIE Vol. 1361 Physical Concepts of Materials for Novel Optoelectronic Applications I (1990) 1026-1032

34. ***"Interaction of hydrogen at InP(100) surfaces before and after ion-bombardment"***
Th. Allinger, V. Persch, J.A. Schaefer, Y. Meng, H. De, J. Anderson, G.J. Lapeyre; SPIE Vol. 1361 Physical Concepts of Materials for Novel Optoelectronic Applications I (1990) 935-941

35. ***"Hydrogen induced structure changes of GaAs(100) surfaces"***
Th. Allinger, J.A. Schaefer, C. Stuhlmann, U. Beckers, H. Ibach;
Physica B 170 (1991) 481-486

36. ***"Electronic and structural properties of hydrogen on semiconductor surfaces"***
J. A. Schaefer; Physica B170 (1991) 45-68

37. ***"Interaction of hydrogen at GaAs(100) surfaces"***
J. A. Schaefer, Th. Allinger, C. Stuhlmann, U. Beckers, H. Ibach;
Surf. Sci. 251/252 (1991) 1000-1005

38. ***"Band mapping of InP(100) along the ΓX-line"***
F. Lodders, J. Westhof, J.A. Schaefer, H. Höpfinger, A. Goldmann, S.Witzel;
Z. Phys. B 83 (1991) 263-266

39. ***"Interaction of gold with InP(100) (4x2) surfaces"***
H. Engelhard, J.A. Schaefer, F. Stietz, A. Goldmann, R. Fellenberg, W. Braun;
Surf. Sci. 276 (1992) 21-26

40. ***"Hydrocarbon-based etching of InP"***
Th. Allinger, J.A. Schaefer;
Appl. Surf. Sci. 65/66 (1993) 614-618

41. ***"Etching of InP(100) (4x2) and molecular-beam epitaxially grown GaAs(100)-c(4x4) with atomic hydrogen"***
J. A. Schaefer, F. Stietz, J. Woll, H.S. Wu, H. Yu, G.J. Lapeyre;
J. Vac. Sci. & Technol. B11 (1993) 1497-1501

42. ***"High-resolution electron energy-loss spectroscopy - A fascinating tool for studying semi-conductor surfaces and interfaces"***
J.A. Schaefer;
Trends in Vacuum Science and Technology 1 (1993) 417-432

43. ***"Reaction of hydrogen with InP(100) (4x2): Surface properties"***
F. Stietz, V. Persch, Th. Allinger, J.A. Schaefer, G.J. Lapeyre;
J. Electr. Spectroscopy 64/65 (1993) 413-419

44. ***"Hydrogenation of MBE-grown GaAs(100)-c(4x4): A Combined HREELS-, UPS- and LEED-study"***
J. A. Schaefer, F. Stietz, J. Woll, K.H. Bornscheuer, V. Polyakov, H.S. Wu, H. Yu,
G.J. Lapeyre; Formation of Semiconductor Interfaces, World Scientific, Proceedings,
(Editors: B. Lengeler, H. Lüth, W. Mönch, J. Pollmann) (1994) 199-202

45. ***"Experimental study of anisotropy mechanisms during reactive ion etching of silicon in a $SF_6/C_2Cl_3F_3$ plasma"***
V.A. Junkin, I.W. Rangelow, J.A. Schaefer, D. Fischer, E. Voges, S. Sloboshanin;
Microelectronic Engineering 23 (1994) 361-364

46. ***"Deactivation of a palladium-supported alumina catalyst by hydrogen sulfide during the oxidation of methane"***
U. Feuerriegel, W. Klose, S. Sloboshanin, H. Goebel, J.A. Schaefer;
Langmuir 10 (1994) 3567-3570

47. ***"Electronic effects of surface In atoms at clean and hydrogenated InP(100) (4x2) surfaces"***
J. Woll, Th. Allinger, V. Polyakov, J.A. Schaefer, A. Goldmann, W. Erfurth;
Surf. Sci. 315 (1994) 293-301

48. ***"High-resolution study of dipole-active vibrations at the Ag(110) (nx1)O surface"***
F. Stietz, A. Pantförder, J.A. Schaefer, G. Meister, A. Goldmann;
Surf. Sci. 318 (1994) L1201-L1205

49. ***"Activation of the Ga-CH_3 bond using atomic hydrogen - a possible route to III-V semiconductor films with low carbon levels"***
J.T. Yates, Jr., A. Hübner, S.R. Lucas, W.D. Partlow, J. A. Schaefer, W.J. Choyke;
Appl. Surf. Sci. 82/83 (1994) 180-192

50. ***"High-resolution electron energy-loss spectroscopy at epitaxially grown GaAs(100) - A comparison between theory and experiment"***
V. Polyakov, A. Elbe, J.A. Schaefer;
Appl. Phys. A60 (1995) 567-572

51. ***"Core-level photoemission study of hydrogenated GaAs(100)"***
F. Stietz, S. Sloboshanin, H. Engelhard, Th. Allinger, A. Goldmann, J. A. Schaefer;
Solid State Commun. 94 (1995) 643-647

52. ***"Surface anharmonicity: Temperature dependence of dipole active vibrations on Ag(110) and Ag(110) (2x1) O"***
F. Stietz, G. Meister, A. Goldmann, J. A. Schaefer; Surf. Sci. 339 (1995) 1-7

53. ***"Interfacial reaction of Ag with the InP(100) (4x2) surface - a photoemission study"***
H. Engelhard, F. Stietz, S. Sloboshanin, V. Persch, Th. Allinger, J.A. Schaefer,
A. Goldmann; Appl. Surf. Sci. 90 (1995) 89-94

54. ***"GaN patterned film synthesis - carbon depletion by hydrogen atoms produced from NH_3 activated by electron impact"***
A. Hübner, S.R. Lucas, W.D. Partlow, W.J. Choyke, J.A. Schaefer, J.T. Yates, Jr.;
J. Vac. Sci. Technol. A13 (1995) 1831-1836

55. ***"Hydrogen -induced modification of the optical properties of the GaAs(100) surface"***
N. Esser, P.V. Santos, M. Kuball, M. Cardona, M. Arens, D. Pahlke, W. Richter,
F. Stietz, J.A. Schaefer, B.O. Fimland;
J. Vac. Sci. & Technol. B13 (1995) 1666-1671

56. ***"Segregation of In atoms at clean and hydrogen passivated InP(100) surfaces"***
F. Stietz, Th. Allinger, V. Polyakov, J. Woll, A. Goldmann, W. Erfurth, G.J. Lapeyre,
J. A. Schaefer; Appl. Surf. Sci. 104/105 (1996) 169-175

57. ***"Investigation of the space charge regime of epitaxially grown GaAs(100) by high-resolution electron energy-loss spectroscopy"***
V.M. Polyakov, A. Elbe, J. Wu, G. J. Lapeyre, J. A. Schaefer;
Appl. Surf. Sci. 104/105 (1996) 24-34

58. ***"Silicon spreading in δ-doped GaAs(100): A high-resolution electron-energy-loss-spectroscopy study"***
V.M. Polyakov, A. Elbe, J. Wu, G.J. Lapeyre, J. A. Schaefer;
Phys. Rev. B 54 (1996) 2010-2018

59. ***"Reactive intermixing at the Au-InP(100) interface - new photoemission results"***
S. Sloboshanin, H. Engelhard, F. Stietz, J. A. Schaefer, A. Goldmann;
Surf. Sci. 396 (1996) 209-216

60. ***"Atomic chemisorption of chlorine on Ag(110) studied by high-resolution electron energy loss spectroscopy"****F. Stietz, A. Elbe, G. Meister, J.A. Schaefer, A. Goldmann;*
Surf. Sci. 365 (1996) 278-284

61. ***"Submonolayer coadsorption of chlorine and oxygen on Ag(110) studied by electron energy loss vibrational spectroscopy"***
Stietz, A. Elbe, G. Meister, J.A. Schaefer and A. Goldmann;
J. Phys.: Condens. Matter 8 (1996) 7699-7709

62. ***"Chemisorption of chlorine on GaAs(100) surfaces by high resolution electron energy loss spectroscopy"***
F. Stietz, J.A. Schaefer, A. Goldmann; Surf. Sci. 383 (1997) 123-129

63. ***"Interaction of hydrogen and methane with InP(100)- and GaAs(100) - surfaces"***
F. Stietz, J. Woll, V. Persch, Th. Allinger, W. Erfurth, A. Goldmann, J.A. Schaefer;
phys. stat. sol. (a) 159 (1997) 185-194

64. ***"Influence of hydrogen on Si-Doped GaAs(100) in the Space Charge Regime"***
V. Polyakov, A. Elbe, J.A. Schaefer;
phys. stat. sol. (a) 159 (1997) 195-203

65. ***"Production of Atomic Hydrogen and Its Use for the Growth of GaN with Low Carbon Level"***
K. H. Bornscheuer, A. Hübner, S.R. Lucas, W.J. Choyke, W. D. Partlow, J.T. Yates,
J. A. Schaefer; phys. stat. sol. (a) 159 (1997) 133-135

66. ***"Investigation of modified 3C-SiC(100) surfaces by surface-sensitive techniques"***
T. Balster, F.S. Tautz, H. Ibach, J. A. Schaefer;
Diamond and Related Materials 6 (1997) 1353-1357

67. ***"Photoelectron spectroscopy at clean and hydrogenated c(2x2) - SiC(100) surfaces"***
F.S. Tautz, S. Sloboshanin, S. Hohenecker, D. R. T. Zahn, J. A. Schaefer;
Appl. Surf. Sci. 123/124 (1998) 17-21

68. ***"Collective Surface Excitations in 3C-SiC(100)"***
T. Balster, V.M. Polyakov, F.S. Tautz, H. Ibach and J. A. Schaefer;
Materials Sci. Forum 264-268 (1998) 347-350

69. ***"Hydrogen on Semiconductor Surfaces"***
J. A. Schaefer, T. Balster, V.M. Polyakov, U. Rossow, S. Sloboshanin, U. Starke,
F. S. Tautz, invited paper at MRS-Meeting, San Francisco, April 1998
Mat. Res. Soc. Symp. Proc. 513 (1998) 3-15

70. ***"A study of surface band bendings and charge densities of SiC(001) (2x1) and c(2x2) by high-resolution electron-energy-loss spectroscopy"***
T. Balster, V.M. Polyakov, H. Ibach and J. A. Schaefer;
Surf. Sci. 416 (1998) 177-183

71. ***"Ultimate Resolution Electron Energy Loss Spectroscopy at H/Si(100) Surfaces"***
F.S. Tautz and J. A. Schaefer;
J. Appl. Phys. 84 (1998) 6636-6643

72. ***"Surface plasmons at MOCVD-grown GaN*** $(000\bar{1})$ ***"***
V.M. Polyakov, F.S. Tautz, S. Sloboshanin, J. A. Schaefer, A. S. Usikov and B.Ja. Ber;
Semicond. Sci. Technol. 13 (1998) 1396-1400

73. ***"Angular resolved valence-band spectroscopy of different reconstructed 3C-SiC (001) surfaces"***
M. Lübbe, K. Lindner, S. Sloboshanin, S. Tautz, J.A. Schaefer;
J. Vac. Sci. Technol. A16 (1998) 3471-3476

74. ***"Liquid- and Solid-Like Sliding as a Function of Water Layer Thickness"***
*M. Scherge, J.A. Schaefer; Polymer Preprints 39 (1998) 2-3**7***

75. ***Nanotribological Improvements due to Surface Chemistry Modification"***
M. Scherge, X. Li, J. A. Schaefer;
MRS Symp. Proc. 522 (1998) 481-486

76. ***"The Role of Water on the Micro-Tribology of MEMS, Proc. of: MICRO"***
M. Scherge, J.A. Schaefer;
Proceedings of MICRO SYSTEM Technologies 1998, VDE Verlag GmbH, 630-632

77. ***"Surface Modification and Mechanical Properties of Bulk Silicon"***
M. Scherge, J.A. Schaefer; Tribology Issues and Opportunities in MEMS,
Kluwer Academic Publishers 1998, 529-538

78. ***"Microtribological Investigations of Stick/Slip Phenomena using a novel Oscillatory Friction and Adhesion Tester"***
M. Scherge, J. A. Schaefer; Tribology Letters 4 (1998) 37-42

79. ***"Interferometric detection of adhesion induced nano-deflections"***
M. Scherge, H. Büchner, G. Jäger, and J. A. Schaefer;
Journal of Optics 29 (1998) 23-27

80. ***"Initial stages in the carbonisation of (111)Si by solid source molecular epitaxy"***
V. Cimalla, T. Stauden, G. Ecke, F. Scharmann, S. Sloboshanin, J. A. Schaefer,
G. Eichhorn, J. Pezoldt; Appl. Phys. Lett. 73 (1998) 3542-3544

81. ***"Tribologische Untersuchungen zum Einfluß von Wasser auf die Reibung von Siliziummikrobauteilen"***
M. Scherge, X. Li, J. A. Schaefer; Tribologie und Schmierungstechnik 3 (1999) 24-28

82. ***"The effect of water on friction of MEMS"***
M. Scherge, X. Li, J. A. Schaefer; Tribology Letters 6 (1999) 215-220

83. ***"Arsenic interlayers at the Sn/InP(001) interface"***
R.K. Gebhardt, S. Sloboshanin, J. A. Schaefer, T. Chassé;
Appl. Surf. Sci. 142 (1999) 94-98

84. ***"Post-annealing-induced free-carrier compensation in shallow buried δ-layers of GaAs(100)"***
V.M. Polyakov, A. Elbe and J. A. Schaefer;
Surf. Sci. 420 (1999) 43-52

85. ***"Surface-states-derived electronic transitions of SiC(001)"***
V.M. Polyakov, T. Balster, S. Sloboshanin, F.S. Tautz, H. Ibach and J. A. Schaefer;
Surf. Sci. 420 (1999) 87-94

86. ***"Structural, vibrational and electronic properties of faceted GaN*** $(000\bar{1})$ ***surfaces"***
S. Sloboshanin, F.S. Tautz, V.M. Polyakov, U. Starke, A.S. Usikov, B.Ja. Ber,
J. A. Schaefer; Surf. Sci. 427-428 (1999) 250-256

87. ***"Photoemission study of the interface reaction between Ag and H_2S treated InP (001)"***
S. Sloboshanin, R. K. Gebhardt, J. A. Schaefer, T. Chassé
Surface Science 431 (1999) 252-259

88. ***"Interface formation of Ag and Au with InP(100) (2x4): a photoemission study"***
S. Sloboshanin, H. Engelhard, A. Goldmann, J. A. Schaefer;
Appl. Surf. Sci. 143 (1999) 104-114

89. ***"Reflectance Difference Spectroscopy Characterization of $Al_xGa_{1-x}N$-Compound Layers"****U. Rossow, D.E. Aspnes, O. Ambacher, V. Cimalla, N.V. Edwards, M. Bremser, R.F. Davis, J. A. Schaefer, and M. Stutzmann; Phys. stat. sol. (b) 216 (1999) 215-220*

90. ***"Reactivity and morphology of (10$\bar{1}\,\bar{2}$)–faceted and (3x3) reconstructed GaN $(000\bar{1})$ epilayers grown on sapphire (0001)"***
F.S. Tautz, S. Sloboshanin, U. Starke, J.A. Schaefer;
J. Phys.: Condens. Matter 11 (1999) 8035-8048

91. ***"Preparation of conductive tungsten carbide layers for SiC high temperature applications"***
H. Romanus, V. Cimalla, S.I. Ahmed, J.A. Schaefer, G. Ecke, R. Avci, L. Spiess;
MRS Symp. Proc. 572 (1999) 111-116

92. ***"In situ spectroscopic ellipsometry studies of the interaction process of ethene with Si surfaces during SiC formation"***
T. Wöhner, Th. Stauden, V. Cimalla, G. Eichhorn, J.A. Schaefer, J. Pezoldt;
MRS Symp. Proc. 569 (1999) 95-100

93. ***"Micromechanical Thin-Film Characterization"***
M. Scherge, J. A. Schaefer, O. Mollenhauer, F. Spiller
MRS Symp. Proc., 569 (1999), 139-144 '

94. ***"Polarity, Morphology and Reactivity of Epitaxial GaN Films on Al_2O_3(0001)"***
U. Starke, S. Sloboshanin, F.S. Tautz, A. Seubert, J. A. Schaefer;
phys. stat. sol.(a) 177 (2000) 5-14

95. ***"Preparation of single phase tungsten carbide by annealing of sputtered tungsten-carbon layers"****H. Romanus, V. Cimalla, J. A. Schaefer, L. Spieß, G. Ecke, J. Pezoldt;*
Thin Solid Films 359 (2000) 146-149

96. ***"In situ monitoring of the effect of Ge on the SiC growth on (111)Si surfaces"***
T. Wöhner, Th. Stauden, J. A. Schaefer, J. Pezoldt
International Conference of SiC and Related Materials 1999, Materials Science Forum, 338-342(2000) 281-284

97. ***"The influence of Ge on the SiC nucleation on (111)Si surfaces"***
J. Pezoldt, T. Wöhner, T. Stauden, J. A. Schaefer, P. Masri;
International Conference of SiC and Related Materials 1999,
Materials Science Forum, 338-342 (2000) 289-292

98. ***"The influence of foreign atoms on the early stages of SiC growth on Si(111)"***
J. Pezoldt, P. Masri, M. Rouhani Laridjani, M. Averous, T. Wöhner, J. A. Schaefer,
Th. Stauden, G. Ecke, R. Pieterwas, L. Spieß; International Conference of SiC and Related Materials 1999, Materials Science Forum, 338-342 (2000) 289-292

99. ***"Real time spectroscopic ellipsometry monitoring of the SiC growth during the interaction process of elemental carbon with Si surfaces"***
T. Wöhner, V.Cimalla, Th. Stauden, J.A. Schaefer, J.Pezoldt;
MRS Spring Meeting 1999, Sympos. P, San Francisco, Thin Solid Films 364 (2000) 28-32

100. ***"Substrate influence on the ordering of organic submonolayers: A comparative study of PTCDA on Ag(110) and Ag(111) using HREELS"***
F. S. Tautz, S. Sloboshanin, V. Shklover, R. Scholz, M. Sokolowski, J. A. Schaefer,
E. Umbach; Appl. Surf. Sci. 166 (2000) 363-369

101. ***"Differences in vibronic and electronic excitations of PTCDA on Ag(111) and Ag(110)"***
V. Shklover, F.S. Tautz, R. Scholz, S. Sloboshanin, M. Sokolowski, J. A. Schaefer,
E. Umbach; Surf. Sci. 454-456 (2000) 60-66

102. ***"Vibrational properties of ultra-thin PTCDA films on Ag(110)"***
F. S. Tautz, S. Sloboshanin, J.A. Schaefer, R. Scholz, V. Shklover, M. Sokolowski,
E. Umbach; Phys. Rev. B 61 (2000) 16933-16947

103. ***"Re-assessment of core-level photoemission spectra of reconstructed SiC(100) surfaces"***
F.S. Tautz, S. Sloboshanin, U. Starke, J. A. Schaefer;
Surf. Sci. Lett. 470 (2000) L23 - L25

104. ***"Macro and Microtribology - Similar Results different Origins?"***
M. Scherge, J. A. Schaefer,Tribotest journal 7-3 (2001) 245-253

105. ***„Strong K-induced changes in PTCDA films on Ag (110) studies by HREELS and LEED"***
V. Shklover, S. Schmitt, E. Umbach, F. S. Tautz, M. Eremtchenko, Y. Shostak,
J. A. Schaefer, M. Sokolowski; Surf. Sci. 482-485 (2001) 1241-1248

106. ***"Strong electron-phonon coupling at a metal/organic interface: PTCDA/Ag(111)"***
F. S. Tautz, M. Eremtchenko, J. A. Schaefer, M. Sokolowski, V. Sklover, E. Umbach,
Phys. Rev. B 65 (2002) 125405/1-10

107. ***"Friction in thin water films: A nanotribological study"***
A. Opitz, S. I. Ahmed, M. Scherge, J. A. Schaefer,Surf. Sci., 504 (2002) 199-207

108. ***"Integrating Friction and Wear research – 280. WE-Heraeus-Seminar"***
280. WE-Heraeus-Seminar in Ilmenau, May 27-29, 2002, M. Scherge, J. A. Schaefer
Physik-Journal 1 (2002) Nr. 10, Seite 701

109. ***"Microhydrodynamical studies of hydrophilic and hydrophobic surfaces"***
W. Hild, M. Scherge, J. A. Schaefer,
13th International Colloquium Tribology Lubricants, Material and Lubrication Engineering, January 15 – 17, 2002, Stuttgart / Ostfildern, Germany (paper)

110. ***"A comparison of the chemisorption behaviour of PTCDA on different Ag surfaces."***
F. S. Tautz, M. Eremtchenko, J. A. Schaefer, M. Sokolowski, V. Sklover,
K. Glöckler, E. Umbach, Surf. Sci. 502-503 (2002) 176-184

111. ***"Unoccupied electronic states and inelastic scattering effects in SEES of tungsten single crystal"***
O. F. Panchenko, L. K. Panchenko, J. A. Schaefer
Surf Sci. 507-510 (2002) 192-198

112. ***"Nanofriction of silicon oxide surfaces covered with thin water films"***
A. Opitz, S.I-U Ahmed, J.A. Schaefer, M. Scherge
Wear 254 (2003) 924-929

113. ***"The effect of wetting on the microhydrodynamics of surfaces lubricated with water and oil"***
W. Hild, J. A. Schaefer, A. Opitz, M. Scherge
Wear 254 (2003) 871-875

114. ***"Understanding and tuning the epitaxy of large aromatic adsorbates by molecular design"****M. Eremtchenko, J. A. Schaefer, F. S. Tautz*
Nature 425 (2003) 602-605

115. ***"Sputter depth profiling of InN layers"***
R. Kosiba, G. Ecke, V. Cimalla, L. Spieß, S. Krischok, J. A. Schaefer, O. Ambacher, W. J. Schaff;
Nuclear Instruments and Methods in Phyics Research B 215 (2004) 486

116. ***„Die tribologischen Eigenschaften von hydrophoben selbstorganisierten organischen Monoschichten: Einfluss der Gleitgeschwindigkeit und Messungen der Lebensdauer"***
W. Hild, G. Hungenbach, S. I.-U. Ahmed, M. Scherge, J.A. Schaefer
Tribologie und Schmierungstechnik 1 (2004) 5-8

117. ***"Polycyclic aromates on close-packed metal surfaces: functionalisation; molecular chemisorption centres and organic epitaxy"***
M. Eremtchenko, D. Bauer, J.A. Schaefer, F.S. Tautz
New Journal of Physics 6 (2004) 4-19

118. ***"Structure, bonding and growth at a metal-organic interface in the weak chemisorption regime: perylene/Ag(111)"***
M. Eremtchenko, D. Bauer, J.A. Schaefer, F.S. Tautz
Journal of Materials Research 19 (2004) 2028-2039

119. ***"Surface science tools and their application to nanosystems like C_{60} on indium phosphide"***
J. A. Schaefer, G. Cherkashinin, S. Döring, M. Eremtchenko, S. Krischok, D. Malsch, A. Opitz, T. Stolz, R. Temirov
"Frontiers of multifunctional integrated nanosystems",
(ed. E. Buzaneva, P. Scharff) Kluwer Academic Publishers, (2004) 131-138

120. ***"Viscosity effect on GaInSn studied by XPS"***
F. Scharmann, G. Cherkashinin, V. Breternitz, Ch. Knedlik, G. Hartung, Th. Weber, and J.A. Schaefer
Surface and Interface Analysis, Vol. 36 Iss. 8 (2004) 981

121. ***"Investigations of MBE grown InN and the influence of sputtering on the surface composition"***
S. Krischok, V. Yanev, O. Balykov, M. Himmerlich, J.A. Schaefer, R. Kosiba, G. Ecke,
I. Cimalla, V. Cimalla, O. Ambacher, H. Lu, W.J. Schaff, L.F. Eastman
Surf. Sci. 566-568 p.2 (2004) 849-855

122. ***"Influence of the RF Power on the Deposition Rate and the Chemical Surface Composition of Fluorocarbon Films Prepared in Dry Etching Gas Plasma"***
V. Yanev, S. Krischok, A. Opitz, H. Wurmus, J. A. Schaefer, N. Schwesinger, S. I.-U. Ahmed Surf. Sci. 566-568 p.2 (2004) 1229-1233

123. ***"Understanding chemisorption and epitaxy of large aromatic adsorbates"***
F. S. Tautz, M. Eremtchenko, J. A. Schaefer
Pico, 8 (2004) 4-5

124. ***„Grundlagenuntersuchungen an herkömmlichen Hochspannungsleuchtröhren (HSLR)"***
C. Blankenhagen, W. Böhm, D. Gall, G. Hartung, J. A. Schäfer, J. Sommer
aus Licht 3 (2004) S 208-216

125. ***„Heiße Wendelkatoden in modifizierten Entladungslampen"***
C. Blankenhagen, W. Böhm, D. Gall, G. Hartung, J. A. Schäfer, J. Sommer
aus Licht 5 (2004) S 37-S 39

126. ***"Nanotribologische Untersuchungen von ultradünnen Wasserfilmen auf hydrophilem Siliziumoxid"***
A. Opitz, S. I.-U. Ahmed, M. Scherge, J. A. Schaefer,
Tribologie und Schmierungstechnik 5 (2004) 7-10

127. ***"Influence of surface topography on the microtribological properties of Si surfaces"***
W. Hild, G. Hungenbach, J.A. Schaefer, M. Fischer, S. I.-U. Ahmed, M. Scherge
Materialwissenschaft und Werkstofftechnik 35 (2004) 626-631

128. ***"Highly efficient electron field emission from decorated multiwalled carbon nanotube films"***
M. Sveningsson, R.E. Morjan, O.A. Nerushev, E.E.B. Campbell, D. Malsch, J.A. Schaefer Appl. Phys. Lett. 85 (2004) 4487-4489

129. ***"Lithium adsorption on TiO_2: Studies with Electron Spectroscopies (MIES and UPS)"***
S. Krischok, J.A. Schaefer, O. Höfft and V. Kempter
Surface and Interface Analysis 37 (2005) 83-89

130. ***"C_{60} single domain growth on indium phosphide and its reaction with atomic hydrogen"***
M. Eremtchenko, S. Döring, R. Temirov, and J. A. Schaefer
Phys. Rev. B 71 (2005) 045410

131. ***"Surface phonons of clean and hydrogen terminated Si(110) surfaces"***
M. Eremtchenko, F.S. Tautz, R. Öttking, V.M. Polyakov, F. Schwiertz, G. Cherkashinin, and J.A. Schaefer
Surf. Sci. 582/1-3 (2005) 159-172

131 b) "Erratum to Surface phonons of clean and hydrogen terminated Si(110) surfaces"
[Surface Science 582 (2005) 159–172]
M. Eremtchenko, F.S. Tautz, R. Öttking, V.M. Polyakov,F. Schwierz, G. Cherkashinin, J.A. Schaefer
Surface Science 592 (2005) 189

132. ***"Surface reaction of C_{60} with atomic hydrogen: formation of a protecting hydrocarbon layer"***
M. Eremtchenko, R. Öttking, S. Krischok, S. Döring, R. Temirov, and J.A. Schaefer
Fullerenes, Nanotubes, and Carbon Nanostructures 13 Suppl. 1 (2005), 131-138

133. ***„Formation of molecular order on a disordered interface layer: Pentacene/Ag(111)“***
M. Eremtchenko, R. Temirov, D. Bauer, J.A. Schaefer and F.S. Tautz
Phys. Rev. B 72 (2005) 115430

134. ***“Tribological characteristics of WC_{1-x}, W_2C and WC tungsten carbide films”*** *M. Gubisch, Y. Liu, S. Krischok, G. Ecke, L. Spieß, J.A. Schaefer, C. Knedlik in D. Dowson, M. Priest, G. Dalmaz and A. Lubrecht edited, Life cycle tribology: 31th Lyon-Leeds Symposium on tribology, Tribology and Interface Engineering Series No. 48, Elsevier, pp. 409-417, 2005*

135. ***“Tribological performance of selected bearings and bearing materials used for nanopositioning"***
Y. Liu, W. Hild, M. Kitsche, S. Doering, S. Lasse, G. Hungenbach, M. Scherge, J.A. Schaefer in D. Dowson, M. Priest, G. Dalmaz and A. Lubrecht edited, Life cycle tribology: 31th Lyon-Leeds Symposium on tribology,
Tribology and Interface Engineering Series No. 48, Elsevier, pp. 739-750, 2005

136. ***“Nanoscale Multilayer WC/C Coatings Developed for Nano Positioning***
Part I: Microstructures and Mechanical Properties”
M. Gubisch, Y. Liu, L. Spieß, H. Romanus, S. Krischok, G. Ecke, Ch. Knedlik, J. A. Schaefer
Thin Solid Films 488 (2005) 132-139

137. ***“Nanoscale Multilayer WC/C Coatings Developed for Accurate Positioning Part II: Friction and wear”***
Y. Liu, M. Gubisch, W. Hild, L. Spieß, M. Scherge, J. A. Schaefer,
Thin Solid Films 488 (2005) 140-148

138. ***“Nanofriction mechanisms derived from the dependence of friction on load and sliding velocity from air to UHV on hydrophilic silicon”***
A. Opitz, S. I.-U. Ahmed, M. Scherge, and J. A. Schaefer
Tribology Letters 20 (2005) 229-234

139. ***“Surface band bending at nominally undoped and Mg-doped InN by Auger Electron Spectroscopy”***
V. Cimalla, M. Niebelschütz, G. Ecke, V. Lebedev, O. Ambacher,
M. Himmerlich, S. Krischok, J. A. Schaefer, H. Lu, W.J. Schaff
phys. stat. sol. (a) 203 (2006) 59-65

140. ***“Nanocrystalline AlN:Si field emission arrays for vacuum electronics”***
V. Lebedev, F. M. Morales, M. Fischer, M. Himmerlich, S. Krischok, J .A. Schaefer, and O. Ambacher
phys. stat. sol. (a) 203 (2006) 1839-1844

141. ***“Doping efficiency and segregation of Si in AlN grown by molecular beam epitaxy”***
V. Lebedev, F. M. Morales, H. Romanus, G. Ecke, V. Cimalla, M. Himmerlich, S. Krischok, J. A. Schaefer, and O. Ambacher
phys. stat. sol. (c) 3 (2006) 1420-1424

142. ***„Tuning of surface properties of AlGaN/GaN sensors for nano- and picodroplets”***
C. Buchheim, G. Kittler, V. Cimalla, V. Lebedev, M. Fischer, S. Krischok,
V. Yanev, M. Himmerlich, G. Ecke, J. A. Schaefer, and O. Ambacher
IEEE Sensors Journal, 6 (2006) 881-886

143. ***"Strong dispersion of the surface optical phonon of silicon carbidein the near vicinity of the surface Brillouin zone center"***
T. Balster, F.S. Tautz, V.M. Polyakov, H. Ibach, S. Sloboshanin,R. Öttking, J. A. Schaefer
Surface Science, 600 (14) (2006) 2886-2893

144. ***"Electronic structure of the surface of the ionic liquid [EMIM][Tf_2N] studied by metastable impact electron spectroscopy (MIES), UPS and XPS"***
O. Höfft, S. Bahr, M. Himmerlich, S. Krischok, J. A. Schaefer, V. Kempter
Langmuir 22 (2006) 7120-7123

145. ***„Springende Wassertröpfchen"***
W. Hild, D. Duft, T. Leisner, J.A. Schaefer,
Physik in unserer Zeit 2 (2006) 37

146. ***"Electronic properties of C_{60}/InP(001) heterostructures"***
G. Cherkashinin, S. Krischok, M. Himmerlich, O. Ambacher, and J. A. Schaefer
Journal of Physics: Condensed Matter 18 (2006) 9841-9848

147. ***"Effect of dislocations on electrical properties of InN thin film. Part I. Growth: Strain relief and effect of dislocation density on electrical properties of thin InN films."***
V. Lebedev, V. Cimalla, J. Pezoldt, M. Himmerlich, S. Krischok, J. A. Schaefer, O. Ambacher, F. M. Morales, J. G. Lozano, and D. González
Journal of Applied Physics 100 (2006) 094902 p.1-13

148. ***"Impact of Device Technology Processes on the Surface Properties and Biocompatibility of Group III Nitride Based Sensors"***
I. Cimalla, F. Will, K. Tonisch, M. Niebelschütz, V. Cimalla, V. Lebedev, G. Kittler, M. Himmerlich, S. Krischok, J. A. Schaefer, M. Gebinoga, A. Schober, T. Friedrich, O. Ambacher
Materialwissenschaft und Werkstofftechnik 37 (2006) 919-923

149. ***„The sliding friction of thermoplastic polymer composites tested at low speeds"***
Y. Liu and J. A. Schaefer
Wear 26 (2006) 568-577

150. ***„Friction and adhesion of boundary lubrication measured by microtribometers"***
Y. Liu, S. Liu, W. Hild, J. Luo, and J. A. Schaefer
Tribology International 39 (2006) 1674-1681

151. ***"Evaluation of the friction of WC/C solid lubricating films in vacuum"***
Y. Liu, M. Gubisch, T. Haensel, L. Spiess, and J. A. Schaefer
Tribology International 39 (2006)1584-1590

152. ***„A comparative study on the electronic structure of the 1-Ethyl-3-methylimidazolium bis (trifluoromethylsulfonyl)amide RT-ionic liquid by electron spectroscopy and first principles calculations"***
S. Krischok, R. Öttking, W.J.D. Beenken, M. Himmerlich, P. Lorenz, O. Höfft, S. Bahr, V. Kempter, and J. A. Schaefer, Zeit. für Phys. Chem. 220 10-11 (2006) 1407

153. ***"Correlation between structural and transport properties of InN thin films prepared by molecular beam epitaxy"***
V. Lebedev, F. M. Morales, V. Cimalla, J. G. Lozano, D. González, M. Himmerlich, S. Krischok, J. A. Schaefer and O. Ambacher
Superlattices and Microstructures 40 4-6 (2006) 289-294

154. ***"Surface phonons of clean, hydrogen and deuterium terminated Si(001) surfaces"***
M. Eremtchenko, F.S. Tautz, R. Öttking, and J. A. Schaefer
Surf. Sci. 600 (2006) 3446-3455

155. ***"Load Dependence and lifetime studies of self assembled monolayers"***
W. Hild, S.I.-U. Ahmed, G. Hungenbach, M. Scherge, J. A. Schaefer
Tribotest, 12(2) (2006) 161

156. ***„Materials, bearings and lubricants for nanopositioning"***
Y. Liu, J. A. Schaefer, G. Jäger
tm - Technisches Messen, 73 (9) (2006) 500

157. ***"Growth dynamics of Ge islands on Si (001) and Si(113) surfaces investigated by photoelectron emission microscopy"***
M. Himmerlich, A. Sunda Meya, W.-C. Yang, J. A. Schaefer, R. J. Nemanich
Journal of Applied Physics (2006) submitted

158. ***"Electronic properties of organic semiconductor blends: ambipolar mixtures of phthalocyanine and fullerene"***
A. Opitz, M. Bronner, W. Brütting, M. Himmerlich, J. A. Schaefer, S. Krischok
Applied Physics Letters 90 (2007) 212112

159. ***"AlGaN/GaN biosensor - effect of device processing steps on the surface properties and biocompatibility"***
I. Cimalla, F. Will, K. Tonisch, M. Niebelschütz, V. Cimalla, V. Lebedev, G. Kittler, M. Himmerlich, S. Krischok, J.A. Schaefer, M. Gebinoga, A. Schober, T. Friedrich, and O. Ambacher
Sensors and Actuators B 123 (2007) 740-748

160. ***"A comparative investigation of thickness measurements of ultra-thin water films by scanning probe techniques"***
A. Opitz, M. Scherge, S.I.-U. Ahmed, J.A. Schaefer
Journal of Applied Physics, 101 (2007), 064310

161. ***"Microtribological properties of silicon and silicon coated with self-assembled monolayers: Effect of applied load and sliding velocity"***
W. Hild, S.I.-U. Ahmed, G. Hungenbach, M. Scherge, J. A. Schaefer
Tribology Letters, 25(1) (2007) 1

162. ***"Effect of surface oxidation on electron transport in InN thin films***"
V. Lebedev, Ch. Y. Wang, V. Cimalla, S. Hauguth, T. Kups, M. Ali, G. Ecke, M. Himmerlich, S. Krischok, J. A. Schaefer, O. Ambacher, V. M. Polyakov and F. Schwierz
Journal of Applied Physics 101 (2007) 123705

163. ***"Surface composition and electronic properties of indium tin oxide and oxynitride films"***
M. Himmerlich, M. Koufaki, Ch. Mauder, G. Ecke, V. Cimalla, J. A. Schaefer, E. Aperathitis, S. Krischok
Surface Science 601 (2007) 4082

164. ***"Influence of ion implantation on titanium surfaces for medical applications"***
S. Krischok, C. Blank, M. Engel, R. Gutt, G. Ecke, J. Schawohl, L. Spieß, F. Schrempel, G. Hildebrand, K. Liefeith
Surface Science 601 (2007) 3856

165. ***"Morphology and Surface Electronic Structure of MBE grown InN"***
M. Himmerlich, S. Krischok, V. Lebedev, O. Ambacher, and J.A. Schaefer
Journal of Crystal Growth 306 (2007) 6

166. ***"Temperature-Dependent Electronic and Vibrational Structure of the 1-Ethyl-3-methylimidazolium Bis (trifluoromethylsulfonyl)amide Room-Temperature Ionic Liquid Surface: A Study with XPS, UPS, MIES, and HREELS"***
S. Krischok, M. Eremtchenko, M. Himmerlich, P. Lorenz, J. Uhlig, A. Neumann, R. Öttking, W.J.D. Beenken, O. Höfft, S. Bahr, V. Kempter, J.A. Schaefer
Journal of Physical Chemistry B 111 (2007) 4801-4806

167. ***"Impact of confined liquid thin film upon bioadhesive force between insect pads and smooth solid surface"***
X.-H. Zhang, X.-J. Zhang, Y. Liu, J.A. Schaefer, S.-Z. Wen
Acta Physica Sinica 56 (2007) 4722

168. ***"Ion implanted titanium surfaces for hard tissue replacement"***
C. Blank, S. Krischok, R. Gutt, M. Engel, J. A. Schäfer, J. Schawohl, L. Spieß, C. Knedlik, G. Ecke, F. Schrempel, E. Hüger, G. Hildebrand, K. Liefeith
BIOmaterialien 8 (4) (2007) 285

169. ***"Vibrational signature of oxygen on 6H-SiC(0001)"***
M. Eremtchenko, J. Uhlig, A. Neumann, R. Öttking, S.I.-U. Ahmed, J. A. Schaefer
Surface Science 602 (2) (2008) 584

170. ***"Electron transport properties of indium oxide - indium nitride metal-oxide-semiconductor heterostructures"***
V. Lebedev, Ch.Y. Wang, S. Hauguth, V. Polyakov, F. Schwierz, V. Cimalla, T. Kups, F.M. Morales, J.G. Lozano, D. González, M. Himmerlich, J. A. Schaefer, S. Krischok, O. Ambacher
phys. stat. sol. (c) 5(2) (2008) 495

171. ***"Shear strength of thin polytetrafluorethylen films on Si substrate determined by laser interferometry"***
Y. Liu, S.I.-U. Ahmed, J. A. Schaefer
Materials Science and Engineering A 483-484 (2008) 701

172. *"**Effects of X-Ray Radiation on the Surface Chemical Composition of Plasma Deposited Thin Fluorocarbon Films"***
M. Himmerlich, V. Yanev, A. Opitz, A. Keppler, J. A. Schaefer, S. Krischok
Polymer Degradation and Stability 93 (3) (2008) 700

173. *"**Characterization of GaN-based lateral polarity heterostructures"***
P. Lorenz, V. Lebedev, F. Niebelschütz, S. Hauguth, O. Ambacher, J. A. Schaefer, and S. Krischok
phys. stat. sol. (c) 5(6) (2008) 1965

174. ***"MOVPE Growth and Characterization of AlInN FET Structures on Si(111)"***
C. Hums, A. Gadanecz, A. Dadgar, J. Bläsing, H. Witte, T. Hempel, A. Dietz, P. Lorenz, S. Krischok, J. A. Schaefer, J. Christen, A. Krost

MRS symp. proceedings 1068 (2008) C04-03

175. ***"Electronic structure of GaN(0001)-2x2 thin films grown by PAMBE"***
R. Gutt, P. Lorenz, K. Tonisch, M. Himmerlich, J. A. Schaefer, and S. Krischok
phys. stat. sol. (RRL) 2(5) (2008) 21

176. ***"PAMBE growth and in-situ characterisation of clean (2x2) and (√3x√3) R30° reconstructed InN(0001) thin films "***
M. Himmerlich, A. Eisenhardt, J. A. Schaefer, S. Krischok
Phys. Status Solidi B 246(6) (2009) 1173

177. ***"Properties of single crystal $Fe_{1-x}Ga_x$ thin films"***
A. McClure, S. Albert, T. Jaeger, H. Li, P. Rugheimer, J. A. Schaefer, Y. U. Idzerda
Journal of Applied Physics 105 (2009) 07A938

178. ***"AlInN/GaN based multi quantum well structures – growth and optical properties"***
C. Hums, A. Gadanecz, A. Dadgar, J. Bläsing, P. Lorenz, S. Krischok, F. Bertram, A. Franke, J. A. Schaefer, J. Christen, A. Krost
Phys. Status Solidi C 6 (2009) 451

179. ***"Sliding Friction of Nanocomposite WC_{1-x}/C Coatings: Transfer Film and Its Influence on Tribology"***
Y. Liu, M. Gubisch, L. Spiess, J. A. Schaefer
Journal of Nanoscience and Nanotechnology 9 (2009) 3499

180. ***"Pyrolysis of cellulose and lignin"***
T. Haensel, A. Comouth, P. Lorenz, S. I.-U. Ahmed, S. Krischok, N. Zydziak, A. Kauffmann, J. A. Schaefer
Applied Surface Science 255 (2009) 8183

181. ***"Effect of Annealing on the Properties of Indium-Tin-Oxynitride Films as Ohmic Contacts for GaN-Based Optoelectronic Devices"***
M. Himmerlich, M. Koufaki, G. Ecke, C. Mauder, V. Cimalla, J. A. Schaefer, A. Kondilis, N. T. Pelekanos, M. Modreanu, S. Krischok, E. Aperathitis
Applied Materials and Interfaces 7 (2009) 1451

182. ***"Influence of hydrogen on nanocrystalline diamond surfaces investigated with HREELS and XPS"***
T. Haensel, J. Uhlig, R. J. Koch, S. I.-U. Ahmed, J. A. Garrido, D. Steinmüller-Nethl, M. Stutzmann, J. A. Schaefer
Phys. Status Solidi A 206 (2009) 2022

"Angle-resolved photoelectron spectroscopy study of the GaN(0001)-2×2 surface"
P. Lorenz, R. Gutt, M. Himmerlich, J. A. Schaefer, and S. Krischok
Phys. Status Solidi C 7(7-8) (2010) 1881

"Analysis of polar GaN surfaces with photoelectron and high resolution electron energy loss spectroscopy"
P. Lorenz, Th. Haensel, R. Gutt, R.J. Koch, J.A. Schaefer and S. Krischok
Phys. Status Solidi B 247(7) (2010) 1658

"Determination of the valence band offsets at HfO_2/InN(0001) and InN/$In_{0.3}Ga_{0.7}N$(0001) heterojunctions using X-ray photoelectron spectroscopy"
A. Eisenhardt, A. Knübel, R. Schmidt, M. Himmerlich, J. Wagner, J.A. Schaefer, and S. Krischok
Phys. Status Solidi A 207(6) (2010) 1335

"Changes in the valence band structure of as-grown InN(0001)-2×2 surfaces upon exposure to oxygen and water"
A. Eisenhardt, S. Reiß, M. Himmerlich, J. A. Schaefer and S. Krischok
Phys. Status Solidi A 207(5) (2010) 1037

"Analysis of the band offsets between ultrathin GaN(000-1) layers and sapphire (0001) by photoelectron spectroscopy"
C. Hamsen, P. Lorenz, J. A. Schaefer, S. Krischok
Physica Status Solidi C 7(2) (2010) 268

"Electron-phonon-plasmon interaction in MBE-grown indium nitride – A high resolution electron energy loss spectroscopy (HREELS) study"
K. Kloeckner, M. Himmerlich, R.J. Koch, V.M. Polyakov, A. Eisenhardt, T. Haensel, S.I.-U. Ahmed, S. Krischok, and J. A. Schaefer
Physica Status Solidi C 7(2) (2010) 173

"Interaction of GaN(0001)-2×2 surfaces with H_2O"
P. Lorenz, R. Gutt, T. Haensel, M. Himmerlich, J.A. Schaefer, and S. Krischok
Physica Status Solidi C 7(2) (2010) 169

"Pyrolysis of wood-based polymer compounds"
T. Haensel, A. Comouth, N. Zydziak, E. Bosch, A. Kauffmann, J. Pfitzer, S. Krischok, J.A. Schaefer, S.I.-U. Ahmed
Journal of Analytical and Applied Pyrolysis 87 (2010) 124

"HREELS study of graphene formed on hexagonal silicon carbide"
R. J. Koch, T. Haensel, S. I.-U. Ahmed, Th. Seyller, and J. A. Schaefer
Phys. Status Solidi C 7, No. 2, 394–397 (2010)

Conference-Proceedings

"Surface modifications of AlGaN/GaN sensors for water based nano- and picodroplets" *C. Buchheim, G. Kittler, V. Cimalla, V. Lebedev, M. Fischer, S. Krischok, V. Yanev, G. Ecke, J. A. Schaefer, O. Ambacher IEEE Sensors (2004), Wien, Austria, ISBN 0-7803-8692-2; p. 1007-1010*

"A novel class of sensors for system integrative concepts in biotechnological applications"
A. Schober, G. Kittler, C. Buchheim, A. Majdeddin, V. Cimalla, M. Fischer,
V. Yanev, M. Himmerlich, S. Krischok, J.A. Schaefer, H. Romanus, T. Sändig, J. Burgold, F. Weise, H. Wurmus, K.H. Drüe, M. Hintz, H. Thust, J. Gessner, M. Kittler, F. Schwierz, Th. Doll, E. Manske, R. Mastylo, G. Jäger,
Ch. Knedlik, G. Winkler, H. Kern, R. Hoffmann, L. Spiess, A. Spitzmas,
E. Gottwald, K.F. Weibezahn, D. Wegener, A. Schwienhorst, O. Ambacher
12. Heiligenstädter Kolloquium, Heiligenstadt Proceedings (2004) 163

"Thermal decomposition of Indium Phosphide: Monitoring of metallic cluster growth"
M. Himmerlich, M. Eremtchenko, S. Krischok, Th. Stolz, M.C. Zeman,

M. Gubisch, R.J. Nemanich, and J.A. Schaefer;
International Conferenz on Indium Phosphide & related materials (2005), Glasgow, UK, ISBN 0-7803-8891-7 p. 135-138

"A novel class of sensors for system integrative concepts in biotechnological applications"
A. Schober, G. Kittler, C. Buchheim, A. Majdeddin, V. Cimalla, M. Fischer,
V. Yanev, M. Himmerlich, S. Krischok, J.A. Schaefer, H. Romanus, T. Sändig, J. Burgold, F. Weise,
H. Wurmus, K.H. Drüe, M. Hintz, H. Thust,
M. Gebinoga, M. Kittler, A. Spitznas, E. Gottwald, K.-F- Weibezahn,
D. Wegener, A. Schwienhorst, O. Ambacher
NSTI-Nanotech 2005, Anaheim, US, ISBN 0-9767985-0-6 Vol.1, p 489-492

"Plasma Deposition and Properties of Fluorocarbon Films used in Fluidic Sensors"
V. Yanev, S. Krischok, M. Himmerlich, J.A. Schaefer, G. Kittler, C. Buchheim,
O. Ambacher;
p.603 in „Micro System Technologies 2005" Franzis Verlag GmbH (2005)
H. Reichl (Editor.) ISBN 3-7723-7040-3

Diplomthesis, Dissertation, habilitation treatise

"Ergebnisse zum Problem der Austrittsarbeit in der Sekundär-Elektronen-Emission"
J.A. Schaefer; Diploma Thesis, TU Clausthal, 1971

"Angular Resolved Secondary Electron Spectroscopy (ARSES) at clean and oxygen covered W (100)-surfaces"
J.A. Schaefer; Ph. D Thesis, Fachbereich Physik, Gesamthochschule Kassel, 1980

"Mikroskopische Charakterisierung von Halbleiteroberflächen mit Hilfe der hochauflösenden Elektronen-Energieverlust-Spektroskopie"
J.A. Schaefer; Habilitationsschrift, Universität Kassel, 1989

Edited books

"Hydrogen in Solids and at Solid Surfaces: Present States and Future Trends"
Proceedings, Ilmenau May 30 - June 1, 1996, 1-296
guest editors: J.A. Schaefer, M. Stutzmann;
phys. stat. sol. (a) 159 (1997) No.1, 1-274, Akademie Verlag Berlin

"Nitrogen in Solids and at Solid Surfaces: Present States and Future Trends"
Proceedings, Ilmenau May 30 - June 2, 1999
guest editors: J.A. Schaefer, M. Stutzmann, R. Schlögl
phys. stat. sol. (a) 177 (2000) No.1, 1-196, WILEY-VCH Verlag Berlin GmbH

"Integrating Friction and Wear research"
280. WE-Heraeus-Seminar in Ilmenau, May 27-29, 2002, M. Scherge, J. A. Schaefer (edts.)
Wear 254 (2003) 799-929

Patents

"Method and Apparatus for forming pure group III-V compound semiconductor films"
A. Hübner, S.R. Lucas, D. Partlow, W.J. Choyke, J.A. Schaefer, J. T. Yates;
United States Patent No. 5, 573, 592 on November 12, 1996