

Supplement  
to the  
Annual Report 2003

Berlin 2003



---

## Supplement Index

<b>Preface</b>	<b>4</b>
<b>Publications</b>	<b>5</b>
SF - Structural Research . . . . .	6
SE - Solar Energy Research . . . . .	28
I - Central Scientific-Technical Infrastructure . . . . .	39
<b>Conference Contributions</b>	<b>41</b>
SF - Structural Research . . . . .	42
SE - Solar Energy Research . . . . .	64
<b>Invited Lectures</b>	<b>77</b>
SF - Structural Research . . . . .	78
SE - Solar Energy Research . . . . .	83
<b>Patents and Patent Applications</b>	<b>89</b>
Patents . . . . .	89
Patent applications . . . . .	91
<b>Academic Education</b>	<b>95</b>
Lectures, Courses, ... . . . . .	95
Exams . . . . .	98
Summer students etc. . . . .	101
<b>Awards</b>	<b>103</b>
<b>Participation in external scientific bodies and committees</b>	<b>104</b>
<b>Organization of Scientific Conferences and Meetings</b>	<b>107</b>
<b>Contributions to Exhibitions / Fairs / Events</b>	<b>108</b>
<b>Guests</b>	<b>109</b>
<b>Co-operations</b>	<b>113</b>
<b>External Funding</b>	<b>131</b>

Supplement, Annual Report 2003

HMI - B 597  
Hahn-Meitner-Institut Berlin GmbH  
Glienicke Str. 100  
D-14109 Berlin (Wannsee)

Co-ordination:  
Dr. Michaela Zeh  
Phone: +49 (0)30 - 8062 2658  
Fax: +49 (0)30 - 8062 2047  
E-mail: michaela.zeh@hmi.de

# Preface

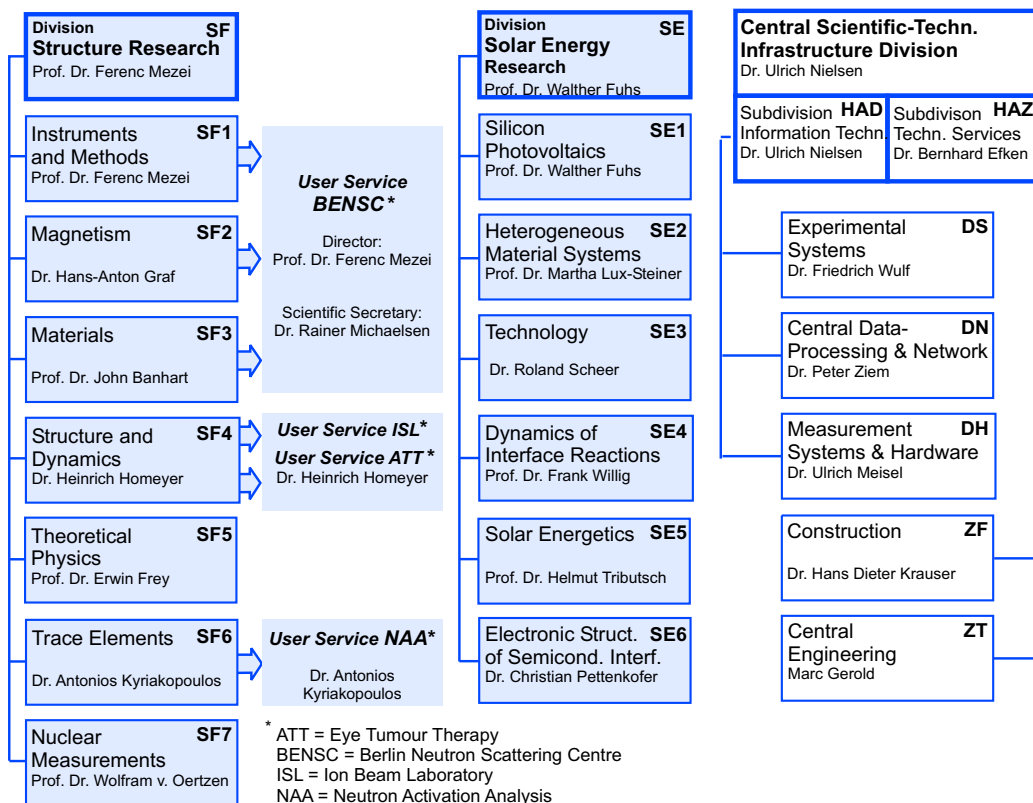
This supplement to the Annual Report 2003 is supposed to provide in addition to the scientific highlights of the HMI a survey of the scientific activities in terms of publications, contributions to conferences etc.

Following the internal organization of the institute, these lists are ordered along the divisions, departments and, wherever reasonable, along the RD-projects within the latter. Publications and conference contributions are ascribed to a definite RD-project. When authors from different departments have contributed, this contribution is listed under all involved departments and the respective RD-project is indicated.

This supplement lists only contributions with at least one author from HMI. For a more complete list of publications based upon the use of our large scale facilities we refer to the Experimental Reports of BENSCH and ISL, respectively.

The supplement was generated mostly from an internal data base installed over the last months. Due to the short implementation phase of the underlying procedures, one or the other contribution may not have found its way into the present edition, which we regret.

## Organisational Chart



# Publications

## SF - Structural Research

### SF - BENSC

#### BENSC.User

*Hahn-Meitner-Institut Berlin / Berlin Neutron Scattering Center. Kirschbaum Y.; Tovar M.; Bischoff D.; Michaelsen R. [Eds.]*

#### **BENSC experimental reports 2002**

(HMI-B 590)

Hahn-Meitner-Institut, Berlin, 2003

*Regulski M.; Przenioslo R.; Sosnowska I.; Hoffmann J.-U.*

#### **Incommensurate magnetic structure of $\beta$ -MnO<sub>2</sub>**

Physical Review B

68 (2003) 172401/1 - 4

#### SF1.BENSC

*Arialdi G.; Karatasos K.; Ryckaert J.-P.; Arrighi V.; Saggio F.; Triolo A.; Desmedt A.; Pieper J.; Lechner R.E.*

#### **Local dynamics of polyethylene and its oligomers : a molecular dynamics interpretation of the incoherent dynamic structure factor**

Macromolecules

36 (2003) 8864 - 8875

*Bourdarot F.; Fak B.; Habicht K.; Prokes K.*

#### **Inflection point in the magnetic field dependence of the ordered moment of URu<sub>2</sub>Si<sub>2</sub> observed by neutron scattering in fields up to 17 T**

Physical Review Letters

90 (6) (2003) 067203/1 - 4

*Doster W.; Diehl M.; Gebhardt R.; Lechner R.E.; Pieper J.*

#### **TOF-elastic resolution spectroscopy: time domain analysis of weakly scattering (biological) samples**

Chemical Physics

292 (2-3) (2003) 487 - 494

*Ehlers G.; Casalta H.; Lechner R.E.; Maletta H.*

#### **Dynamics of frustrated magnetic moments in antiferromagnetically ordered TbNiAl probed by spin echo and time-of-flight spectroscopy**

In: Neutron spin echo spectroscopy : basics, trends and applications, eds. Mezei F. [u.a.]

Springer, Berlin, 2003, 222 - 231

*Feldmann H.; Lechner R.E.; Wilmer D.*

#### **Unusual fast cation conduction in the high-temperature phase of lithium sodium sulfate**

In: Solid state ionics - 2002 : symposium held December 2 - 5, 2002, Boston, Massachusetts, U.S.A., eds. Knauth P. [u.a.]

Materials Research Society, Warrendale, Pa., 2003, 81 - 86

*Fritzsche H.; Van Bael M.J.; Temst K.*

#### **Off-specular polarized neutron reflectometry from periodic arrays of lithographically structured Co dots**

Langmuir

19 (2003) 7789 - 7793

*Fuertes Marrón D.; Meeder A.; Bloeck U.; Schubert-Bischoff P.; Pfänder N.; Würz R.; Babu S.M.; Schedel-Niedrig Th.; Lux-Steiner M.Ch.*

#### **Microstructural properties of CVD-grown CuGaSe<sub>2</sub> based thin film solar cells**

Thin Solid Films

431-432 (2003) 237 - 241

*Habicht K.; Golub R.; Gähler R.; Keller T.*

#### **Space-time view of neutron spin echo, correlation functions and phonon focusing**

In: Neutron spin echo spectroscopy : basics, trends and applications, eds. Mezei F. [u.a.]

Springer, Berlin, 2003, 116 - 132

*Jauch W.; Reehuis M.*

#### **Electron density distribution in paramagnetic and antiferromagnetic MnO: A $\gamma$ -ray diffraction study**

Physical Review B

67 (2003) 184420/1 - 8

*Keller T. ; Keimer B. ; Habicht K. ; Golub R. ; Mezei F.*

**Neutron resonance spin echo - triple axis spectrometry (NRSE-TAS)**

In: Neutron spin echo spectroscopy : basics, trends and applications, eds. Mezei F. [u.a.]  
Springer, Berlin, 2003, 74 - 86

*Khaykovich B. ; Birgeneau R.J. ; Chou F.C. ; Erwin R.W. ; Kastner M.A. ; Lee S.-H. ; Lee Y.S. ; Smeibidl P. ; Vorderwisch P. ; Wakimoto S.*

**Effect of a magnetic field on long-range magnetic order in stage-4 and stage-6 superconducting  $\text{La}_2\text{CuO}_{4+y}$**

Physical Review B  
67 (2003) 054501/1 - 6

*Krasteva N. ; Krustev R. ; Yasuda A. ; Vossmeier T.*

**Vapor sorption in self-assembled gold nanoparticle/dendrimer films studied by specular neutron reflectometry**

Langmuir  
19 (2003) 7754 - 7760

*Lang P. ; Willner L. ; Pyckhout-Hintzen W. ; Krastev R.*

**Isotropic to nematic transition in solutions of cylindrical PB-PEO block copolymer micelles close to a wall**

Langmuir  
19 (2003) 7597 - 7603

*Lebedev V. ; Török G. ; Cser L. ; Len A. ; Orlova D. ; Zgonnik V. ; Melenevskaya E. ; Vinogradova L. ; Treimer W.*

**Fullerene - polymer complexes: fractal crossover in solutions**

Journal of Applied Crystallography  
36 (2003) 646 - 648

*Lebedev V. ; Török G. ; Cser L. ; Treimer W. ; Orlova D. ; Sibilev A.*

**Polymer hydration and microphase decomposition in poly(N-vinylcaprolactam)-water complex**

Journal of Applied Crystallography  
36 (2003) 967 - 969

*Lechner R.E.*

**Preface**

Chemical Physics  
292 (2003) 119 - 120

*Major J. ; Dosch H. ; Felcher G.P. ; Habicht K. ; Keller T. ; te Velthuis S.G.E. ; Vorobiev A. ; Wahl M.*

**Combining of neutron spin echo and reflectivity: a new technique for probing surface and interface order**

Physica B  
336 (2003) 8 - 15

*McKinsey D.N. ; Brome C.R. ; Dzhosyuk S.N. ; Golub R. ; Habicht K. ; Huffman P.R. ; Korobkina E. ; Lamoreaux S.K. ; Mattoni C.E.H. ; Thompson A.K. ; Yang L. ; Doyle J.M.*

**Time dependence of liquid-helium fluorescence**

Physical Review A  
67 (2003) 062716/1 - 10

*Mezei F.*

**Fundamentals of neutron spin echo spectroscopy**

In: Neutron spin echo spectroscopy : basics, trends and applications, eds. Mezei F. [u.a.]  
Springer, Berlin, 2003, 5 - 14

*Mezei F. ; Pappas C. ; Gutberlet, T. [Eds.]*

**Neutron spin echo spectroscopy : basics, trends and applications**

(Lecture notes in physics ; 601)  
Springer, Berlin, 2003

*Narehood D.G. ; Pearce J.V. ; Eklund P.C. ; Sokol P.E. ; Lechner R.E. ; Pieper J. ; Copley J.R.D. ; Cook J.C.*

**Diffusion of  $\text{H}_2$  adsorbed on single-walled carbon nanotubes**

Physical Review B  
67 (2003) 205409/1 - 5

*Ollivier J. ; Rufflé B. ; Longeville S. ; Bourges P. ; Lechner R.E. ; Toudic B.*

**Central peak near the incommensurate displacive phase transition of BCPS**

Chemical Physics  
292 (2003) 171 - 183

*Paciaroni A. ; Orecchini A. ; Cinelli S. ; Onori G. ; Lechner R.E. ; Pieper J.*

**Protein dynamics on the picosecond timescale as affected by the environment: a quasielastic neutron scattering study**

Chemical Physics  
292 (2003) 397 - 404

*Pappas C. ; Triolo A. ; Mezei F. ; Kischnik R. ; Kali G.*

**Wide angle neutron spin echo and time-of-flight spectrometer**

In: Neutron spin echo spectroscopy : basics, trends and applications, eds. Mezei F. [u.a.]  
Springer, Berlin, 2003, 35 - 47

*Peters J.*

**The 'seed-skewness' integration method generalized for three-dimensional Bragg peaks**

Journal of Applied Crystallography  
36 (2003) 1475 - 1479

*Peters J. ; Treimer W.*

**Bloch walls in a nickel single crystal**

In: Recent research developments in physics. Vol. 4  
Transworld Research Network, Trivandrum, Kerala, India, 2003, 309 - 331

*Pieper J. ; Charalambopoulou G. ; Steriotis Th. ; Vasenkov S. ; Desmedt A. ; Lechner R.E.*

**Water diffusion in fully hydrated porcine stratum corneum**

Chemical Physics  
292 (2003) 465 - 476

*Prager M. ; Grimm H. ; Desmedt A. ; Lechner R.E.*

**Methyl rotational potentials of trimethyl metal compounds studied by inelastic and quasielastic neutron scattering**

Chemical Physics  
292 (2003) 161 - 169

*Pynn R. ; Fitzsimmons M.R. ; Fritzsche H. ; Major J. ; Rekveldt M.T.*

**Does beam divergence matter for neutron reflectometry?**

Physica B  
336 (2003) 1 - 7

*Rekveldt M.Th. ; Bouwman W.G. ; Kraan W.H. ; Uca O. ; Grigoriev S.V. ; Habicht K. ; Keller T.*

**Elastic neutron scattering measurements using Larmor precession of polarized neutrons**

In: Neutron spin echo spectroscopy : basics, trends and applications, eds. Mezei F. [u.a.]  
Springer, Berlin, 2003, 87 - 99

*Rüegg Ch. ; Cavadini N. ; Furrer A. ; Güdel H.-U. ; Krämer K. ; Mutka H. ; Wildes A. ; Habicht K. ; Vorderwisch P.*

**Bose-Einstein condensation of the triplet states in the magnetic insulator  $\text{TICuCl}_3$**

Nature  
423 (6935) (2003) 62 - 65

*Schwendel D. ; Hayashi T. ; Dahint R. ; Pertsin A. ; Grunze M. ; Steitz R. ; Schreiber F.*

**Interaction of water with self-assembled monolayers: neutron reflectivity measurements of the water density in the interface region**

Langmuir  
19 (2003) 2284 - 2293

*Schöttl S. ; Meißner M. ; Günther D.*

**Specific heat of normal conducting  $\text{UPt}_3$  revisited**

Physica B  
329-333 (2003) 616 - 617

*Steitz R. ; Gutberlet T. ; Hauss T. ; Klösgen B. ; Krastev R. ; Schemmel S. ; Simonsen A.C. ; Findenegg G.H.*

**Nanobubbles and their precursor layer at the interface of water against a hydrophobic substrate**

Langmuir  
19 (2003) 2409 - 2418

*Toudic B. ; Le Lann H. ; Guillaume F. ; Lechner R.E. ; Ollivier J. ; Bourges P.*

**Coherent neutron scattering analysis of alkane dynamical disorder inside nanoporous urea intergrowth crystals**

Chemical Physics  
292 (2003) 191 - 199

*Treimer W. ; Strobl M. ; Hilger A. ; Seifert C. ; Feye-Treimer U.*

**Refraction as imaging signal for computerized (neutron) tomography**

Applied Physics Letters  
83 (2) (2003) 398 - 400



Wesemann A. ; Ahrens H. ; Steitz R. ; Förster S. ; Helm C.A.

**Internal interface of a compressed PEE-PEO diblock copolymer monolayer**

Langmuir  
19 (2003) 709 - 716

**SF2.BENSC**

Bazela W. ; Dyakonov V. ; Pashchenko V. ; Penc B. ; Szymczak H. ; Hernandez-Velasco J.H. ; Szytula A.

**Neutron diffraction study of crystal and magnetic structure of  $(\text{La}_{0.7}\text{Ca}_{0.3})_{1-x}\text{Mn}_{1+x}\text{O}_3$  ( $x=0, 0.1$ ) systems**

Physica Status Solidi B  
236 (2) (2003) 458 - 461

Bazela W. ; Wawrzynska E. ; Penc B. ; Stüsser N. ; Szytula A. ; Zygmunt A.

**Magnetic structures of  $\text{R}_2\text{RhSi}_3$  ( $\text{R}=\text{Ho}, \text{Er}$ ) compounds**

Journal of Alloys and Compounds  
360 (1-2) (2003) 76 - 80

Dante S. ; Hauss T. ; Dencher N.A.

**Insertion of externally administered amyloid  $\beta$  peptide 25-35 and perturbation of lipid bilayers**

Biochemistry  
42 (2003) 13667 - 13672

Davies S.M.A. ; Harroun T.A. ; Hauß T. ; Kelly S.M. ; Bradshaw J.P.

**The membrane bound N-terminal domain of human adenosine diphosphate ribosylation factor-1 (ARF1)**

FEBS Letters  
548 (2003) 119 - 124

Ehm L. ; Knorr K. ; Mädler F. ; Voigtländer H. ; Busetto E. ; Cassetta A. ; Lausi A. ; Winkler B.

**High-pressure X-ray diffraction study on  $\alpha\text{-PbF}_2$**

Journal of Physics and Chemistry of Solids  
64 (2003) 919 - 925

Gil A. ; Penc B. ; Baran S. ; Hernandez-Velasco J. ; Szytula A. ; Zygmunt A.

**Magnetic structures of  $\text{RNi}_x\text{Sn}_2$  ( $\text{R}=\text{Tb}, \text{Ho}$ ) compounds**

Journal of Alloys and Compounds  
361 (1-2) (2003) 32 - 35

Glavatska N. ; Mogilniy G. ; Glavatsky I. ; Danilkin S. ; Hohlwein D. ; Beskrovnij A. ; Söderberg O. ; Lindroos V.K.

**Temperature dependence of martensite structure and its effect on magnetic-field-induced strain in  $\text{Ni}_2\text{MnGa}$  magnetic shape memory alloys**

Journal de Physique IV  
112 (2003) 963 - 967

Gondek L. ; Duraj R. ; Penc B. ; Stüsser N. ; Tomkowicz Z. ; Szytula A.

**Magnetic properties of  $\text{NdMn}_{2-x}\text{Fe}_x\text{Ge}_2$  ( $x = 0.3, 0.4$  and  $1.0$ ) compounds**

Physica Status Solidi A  
196 (1) (2003) 348 - 351

Gondek L. ; Penc B. ; Stüsser N. ; Szytula A. ; Zygmunt A.

**Magnetic structures and phase transitions in  $\text{TbRhSi}$ ,  $\text{DyRhSi}$  and  $\text{HoRhSi}$**

Physica Status Solidi A  
196 (1) (2003) 305 - 308

Gondek L. ; Szytula A. ; Penc B. ; Hernandez-Velasco J. ; Zygmunt A.

**Magnetic structures of  $\text{RTIn}$  ( $\text{R} = \text{Ce}, \text{Er}$ ;  $\text{T} = \text{Au}, \text{Ni}$ ) compounds**

Journal of Magnetism and Magnetic Materials  
262 (2) (2003) L177 - L180

Graf H.A.

**Single-crystal neutron diffractometry - Recent developments and trends**

Zeitschrift für Kristallographie  
218 (2003) 75 - 83

Hohlwein D. ; Hoffmann J.-U. ; Schneider R.

**Magnetic interaction parameters from paramagnetic diffuse neutron scattering in  $\text{MnO}$**

Physical Review B  
68 (2003) 140408/1 - 4

Hupanu V. ; Gorzel A. ; Klenke J. ; Rupp A.

**Progress of the  $^3\text{He}$  neutron spin filter project at HMI**

Physica B  
335 (2003) 205 - 210

Huster D. ; Vogel A. ; Katzka C. ; Scheidt H.A. ; Binder H. ; Dante S. ; Gutberlet T. ; Zschörnig O. ; Waldmann H. ; Arnold K.

**Membrane insertion of a lipidated ras peptide studied by FTIR, solid-state NMR, and neutron diffraction spectroscopy**

Journal of the American Chemical Society  
125 (2003) 4070 - 4079

Janoušová B. ; Sechovský V. ; Prokes K. ; Komatsubara T.

**Microscopic origin of irreversible GMR effect in CePtSn around 3 T**

Physica B  
328 (2003) 145 - 147

Köbler U. ; Hoser A. ; Hupfeld D.

**A complete description of the order parameter of Heisenberg-type magnets for  $0 < T < T_c$**

Physica B  
328 (2003) 276 - 282

Ling C.D. ; Granado E. ; Neumeier J.J. ; Lynn J.W. ; Argyriou D.N.

**Inhomogeneous magnetism in La-doped  $\text{CaMnO}_3$ . I. Mesoscopic phase separation due to lattice-coupled ferromagnetic interactions**

Physical Review B  
68 (2003) 134439/1 - 8

Lonkai Th. ; Tomuta D.G. ; Hoffmann J.-U. ; Schneider R. ; Hohlwein D. ; Ihringer J.

**Magnetic two-dimensional short-range order in hexagonal manganites**

Journal of Applied Physics  
93 (10) (2003) 8191 - 8193

Maksimov I. ; Litterst F.J. ; Rechenberg H. ; de Melo M.A.C. ; Feyerherm R. ; Hendrikx R.W.A. ; Gortenmulder T.J. ; Mydosh J.A. ; Süllow S.

**Effect of disorder on the magnetic and transport properties of  $\text{UPd}_{2-x}\text{Sn}$**

Physical Review B  
67 (2003) 104405/1 - 10

Maksimov I. ; Litterst F.J. ; Süllow S. ; Feyerherm R. ; Mydosh J.A.

**Structural and magnetic ordering in  $\text{UPd}_{1.85}\text{Sn}$**

Acta Physica Polonica B  
34 (2) (2003) 967 - 970

Manson J.L. ; Chapon L.C. ; Bordallo H.N. ; Feyerherm R. ; Argyriou D.N. ; Loose A.

**Spin ordering in the mixed-ligand antiferromagnet  $\text{Mn}(\text{dca})_2(\text{pyrazine})$**

Journal of Magnetism and Magnetic Materials  
260 (2003) 462 - 466

Matsuura M. ; Dai P. ; Kang H.J. ; Lynn J.W. ; Argyriou D.N. ; Prokes K. ; Onose Y. ; Tokura Y.

**Effect of a magnetic field on the long-range magnetic order in insulating  $\text{Nd}_2\text{CuO}_4$  and nonsuperconducting and superconducting  $\text{Nd}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$**

Physical Review B  
68 (14) (2003) 144503/1 - 13

Penc B. ; Szytula A. ; Hernandez-Velasco J. ; Zygmunt A.

**Antiferromagnetic properties of ternary galides  $\text{RRhGa}$  ( $\text{R}=\text{Tb}, \text{Ho}$  and  $\text{Er}$ )**

Journal of Magnetism and Magnetic Materials  
256 (2003) 373 - 380

Prokes K. ; Muñoz-Sandoval E. ; Aravind D. Chinchure ; Mydosh J.A.

**Magnetic structure and transitions of  $\text{Dy}_2\text{Ni}_2\text{Pb}$**

Physical Review B  
68 (13) (2003) 134427/1 - 10

Reehuis M. ; Krimmel A. ; Büttgen N. ; Loidl A. ; Prokofiev A.

**Crystallographic and magnetic structure of  $\text{ZnV}_2\text{O}_4$**

The European Physical Journal B  
35 (2003) 311 - 316

Reehuis M. ; Wolff M.W. ; Krimmel A. ; Scheidt E.-W. ; Stüsser N. ; Loidl A. ; Jeitschko W.

**Magnetic phase transitions in  $\text{TbFe}_2\text{Al}_{10}$ ,  $\text{HoFe}_2\text{Al}_{10}$  and  $\text{ErFe}_2\text{Al}_{10}$**

Journal of Physics: Condensed Matter  
15 (2003) 1773 - 1782

Sitepu H. ; Schmahl W.W. ; Eggeler G. ; Khalil Allafi J. ; Többens D.M.

**A neutron diffraction study of the martensitic transformations in aged Ni-rich NiTi alloys**

Journal de Physique IV  
112 (2003) 643 - 646

Sittner P. ; Novák V. ; Lukás P. ; Neov D. ;  
Toebbens D.M.

**In-situ neutron diffraction studies of  
martensitic transformations in NiTi**

Journal de Physique IV  
112 (2003) 709 - 712

Stockert O. ; Deppe M. ; Geibel C. ; Steglich F.  
; Hohlwein D. ; Schneider R.

**Neutron diffraction study of the magnetism  
in single-crystalline  $\text{CeCu}_2(\text{Si}_{1-x}\text{Ge}_x)_2$**

Acta Physica Polonica B  
34 (2) (2003) 963 - 966

Svoboda P. ; Honda F. ; Andreev A.V. ;  
Vejpravova J. ; Prokes K. ; Sechovsky V.

**Evolution of magnetic structures in  
 $\text{U}(\text{Ni}_{1-x}\text{Pd}_x)_2\text{Si}_2$  system**

Physica B  
329-333 (2003) 502 - 503

Szytula A. ; Penc B. ; Gondek L. ; Stüsser N.

**Magnetic structure of  $\text{NdMn}_{1.55}\text{Fe}_{0.45}\text{Ge}_2$   
as a function of temperature and pressure**

Journal of Alloys and Compounds  
358 (2003) L1 - L5

Szytula A. ; Penc B. ; Stüsser N.

**Incommensurate magnetic ordering in  
 $\text{NdNiSn}$**

Journal of Magnetism and Magnetic Materials  
265 (1) (2003) 94 - 97

Szytula A. ; Penc B. ; Stüsser N.

**Neutron diffraction studies of magnetic  
structure of  $\text{TbAg}_2\text{Si}_2$**

Journal of Magnetism and Magnetic Materials  
263 (1-2) (2003) 21 - 25

Szytula A. ; Wawrzynska E. ; Penc B. ; Stüsser  
N. ; Zygmont A.

**Magnetic properties of  $\text{R}_3\text{Cu}_4\text{X}_4$  (R = Gd-Er;  
X = Ge, Sn) compounds**

Physica B  
327 (2003) 167 - 170

Troyanchuk I.O. ; Trukhanov S.V. ; Shapovalova  
E.F. ; Khomchenko V.A. ; Tovar M. ; Szymczak  
H.

**The influence of oxygen vacancies on the  
magnetic state of  $\text{La}_{0.50}\text{D}_{0.50}\text{MnO}_{3-\gamma}$  (D =  
Ca, Sr) manganites**

Journal of Experimental and Theoretical  
Physics  
96 (6) (2003) 1055 - 1064

Wawrzynska E. ; Baran S. ; Leciejewicz J. ;  
Sikora W. ; Stüsser N. ; Szytula A.

**Magnetic structures of  $\text{R}_3\text{Mn}_4\text{Sn}_4$  (R = La,  
Pr and Nd)**

Journal of Physics: Condensed Matter  
15 (6) (2003) 803 - 814

Wawrzynska E. ; Hernandez-Velasco J. ; Penc  
B. ; Sikora W. ; Szytula A. ; Zygmont A.

**Magnetic ordering of  $\text{R}_3\text{Cu}_4\text{Sn}_4$  (R = Tb, Dy,  
Ho and Er)**

Journal of Physics: Condensed Matter  
15 (30) (2003) 5279 - 5296

Wawrzynska E. ; Hernandez-Velasco J. ; Penc  
B. ; Szytula A. ; Zygmont A.

**Magnetic structures of  $\text{R}_3\text{Cu}_4\text{Ge}_4$  (R = Tb,  
Dy, Ho, Er)**

Journal of Magnetism and Magnetic Materials  
264 (2-3) (2003) 192 - 201

Wawrzynska E. ; Penc B. ; Hernandez-Velasco  
J. ; Szytula A. ; Zygmont A.

**Neutron diffraction studies of the magnetic  
structure of  $\text{Ho}_3\text{Pd}_4\text{Ge}_4$**

Journal of Alloys and Compounds  
350 (2003) 68 - 71

Wawrzynska E. ; Penc B. ; Stüsser N. ; Szytula  
A. ; Tomkowicz Z.

**Magnetic structure of  $\text{Tb}_3\text{Cu}_4\text{Si}_4$**

Solid State Communications  
126 (9) (2003) 527 - 530

Wolter A.U.B. ; Klauss H.-H. ; Litterst F.J. ;  
Burghardt T. ; Eichler A. ; Feyerherm R. ;  
Süllow S.

**A pressure study of the antiferromagnetic  
phase of  $\text{FePM}_2\text{Cl}_2$  (PM = pyrimidine)**

Polyhedron  
22 (2003) 2139 - 2141

**SF3.BENSC**

*Bellmann D. ; Clemens H. ; Matijasevic B. ; Heinemann A. ; Banhart J.*

**Investigation of early stages of metal foam formation by small-angle neutron scattering techniques**

In: Cellular metals : manufacture, properties, applications. International Conference on Cellular Metals and Metal Foaming Technology, Berlin : 2003.06.23-25. MetFoam, eds. Banhart J. [u.a.]

Verl. MIT Publ., Berlin, 2003, 113 - 118

*Heinemann A. ; Wiedenmann A.*

**Benefits of polarized small-angle neutron scattering on magnetic nanometer scale structure modeling**

Journal of Applied Crystallography  
36 (2003) 845 - 849

*Hoinkis E. ; Ziehl M.*

**A small-angle neutron scattering study of activated carbon fibers**

Carbon  
41 (2003) 2047 - 2056

*Rousseau D. ; Marty J.-D. ; Mauzac M. ; Martinoty P. ; Brandt A. ; Guenet J.-M.*

**Conformation in solution of side-chain liquid crystal polymers as a function of the mesogen-graft amount**

Polymer  
44 (2003) 2049 - 2055

*Schallehn M. ; Winterer M. ; Weirich T.E. ; Keiderling U. ; Hahn H.*

**In-situ preparation of polymer-coated alumina nanopowders by chemical vapor synthesis**

Chemical Vapor Deposition  
9 (1) (2003) 40 - 44

*Strunz P. ; Gilles R. ; Mukherji D. ; Wiedenmann A.*

**Evaluation of anisotropic small-angle neutron scattering data; a faster approach**

Journal of Applied Crystallography  
36 (2003) 854 - 859

*Vertesse B.G. ; Magazù S. ; Mangione A. ; Migliardo F. ; Brandt A.*

**Structure of Escherichia coli dUTPase in solution: a small angle neutron scattering study**

Macromolecular Bioscience  
3 (9) (2003) 477 - 481

<b>SF - ISL</b>
-----------------

**ISL Accelerator**

*Homeyer H.*

**Concluding remarks**

Nukleonika  
48 [Suppl. 2] (2003) S181 - S183

*Homeyer, H.*

**Status of ISL**

Nukleonika  
48 [Suppl. 2] (2003) S127 - S130

**ISL Instruments**

*Bohne W. ; Denker A. ; Lindner S. ; Opitz-Coutureau J. ; Röhrich J. ; Strub E.*

**Materials analysis using fast ions**

In: Application of accelerators in research and industry : 17th international conference. Denton, Texas, 12 - 16 November 2002, eds. Duggan J.L. [u.a.]

American Institute of Physics, Melville, NY, 2003, 424 - 427

*Bundesmann J. ; Hellhammer R. ; Hoffmann V. ; Stolterfoht N.*

**Advanced control of ECR-source and beamline system on high voltage potential**

In: Application of accelerators in research and industry : 17th international conference. Denton, Texas, 12 - 16 November 2002, eds. Duggan J.L. [u.a.]

American Institute of Physics, Melville, NY, 2003, 1030 - 1033

**ISL.PPT**

*Cordini D.; Fuchs H.; Heufelder J.; Kluge H.*  
**Vergleichende CT-gestützte  
 Bestrahlungsplanung in der  
 Augentumorthherapie**  
 In: Medizinische Physik 2003 : 34.  
 wissenschaftliche Tagung der Deutschen  
 Gesellschaft für Medizinische Physik ; 1.-4.  
 Oktober 2003, Heidelberg, eds. Semmler W.  
 [u.a.]  
 2003, 238 - 239

*Heufelder J. ; Stiefel S. ; Pfaender M. ;  
 Lüdemann L. ; Grebe G. ; Heese J.*  
**Use of BANG<sup>®</sup> polymer gel for dose  
 measurements in a 68 MeV proton beam**  
 Medical Physics  
 30 (6) (2003) 1235 - 1240

*Heufelder J. ; Zink K. ; Scholz M. ; Kramer  
 K.-D. ; Welker K.*  
**Eine Methode zur automatisierten  
 Bewertung von CT-basierten  
 Bestrahlungsplänen in der perkutanen  
 Strahlentherapie**  
 Zeitschrift für Medizinische Physik  
 13 (2003) 231 - 239

*Kott P. ; Morgenstern H. ; Heese J. ; Heufelder  
 J. ; Zink K.*  
**Einfluss des Reichweitenschiebermaterials  
 auf die ausgedehnten Bragg-Peaks des  
 68 MeV Protonenstrahls am Hahn-Meitner-  
 Institut Berlin**  
 In: Medizinische Physik 2003 : 34.  
 wissenschaftliche Tagung der Deutschen  
 Gesellschaft für Medizinische Physik ; 1.-4.  
 Oktober 2003, Heidelberg, eds. Semmler W.  
 [u.a.]  
 2003, 12 - 13

*Weber A. ; Cordini D. ; Heese J. ; Heufelder J. ;  
 Homeyer H. ; Kluge H. ; Meseck A. ; Pelzer W.*  
**Designstudie für ein medizinisches 250  
 MeV-Protonentherapiezentrum im Raum  
 Berlin**  
 In: Medizinische Physik 2003 : 34.  
 wissenschaftliche Tagung der Deutschen  
 Gesellschaft für Medizinische Physik ; 1.-4.  
 Oktober 2003, Heidelberg, eds. Semmler W.  
 [u.a.]  
 2003, 248 - 249

**ISL.User**

*Denker A. ; Bohne W. ; Heese J. ; Homeyer H.  
 ; Kluge H. ; Lindner S. ; Opitz-Coutureau J. ;  
 Röhrich J. ; Strub E.*  
**Swift ion beams for solid state and materials  
 science**  
 Nukleonika  
 48 [Suppl. 2] (2003) S175 - S180

*Denker A. ; Hahn O. ; Kanngießler B. ; Malzer  
 W. ; Merchel S. ; Radtke M. ; Röhrs S. ; Reiche  
 I. ; Stege H.*  
**Chemie der Kunst : zerstörungsfreie  
 Analyse von Kunst- und Kulturgütern**  
 Materialprüfung  
 45 (11-12) (2003) 485 - 502

*Heufelder J. ; Bechrakis N.E. ; Cordini D. ;  
 Fuchs H. ; Heese J. ; Höcht S. ; Homeyer H. ;  
 Kluge H.*  
**Erfahrungen nach fünf Jahren  
 Protonentherapie von Augentumoren  
 am Hahn-Meitner-Institut Berlin**  
 In: Medizinische Physik 2003 : 34.  
 wissenschaftliche Tagung der Deutschen  
 Gesellschaft für Medizinische Physik ; 1.-4.  
 Oktober 2003, Heidelberg, eds. Semmler W.  
 [u.a.]  
 2003, 246 - 247

*Hou M.D. ; Klaumünzer S.*  
**Heavy ion-induced deformation of radiation-  
 amorphized U<sub>3</sub>Si**  
 Nuclear Instruments and Methods in Physics  
 Research B  
 209 (2003) 149 - 153

*Opitz-Coutureau J.; Denker A.; Couzon C.; Denk R.; Griesser M.; Winter H.; Nagel E.*

**Zerstörungsfreie Elementanalyse durch Hochenergie-PIXE an mittelalterlichen "Wiener Pfennigen" und altchinesischen Münzen aus Karakorum (Mongolei)**

In: Numismatik und Technologie: Fragen und Antworten = Numismatics and technology: questions and answers. Symposium / Proceedings. 25. und 26. April 2003, KHM, Wien, eds. Griesser M. [u.a.]

Kunsthistorisches Museum Wien, Wien, 2003, 49 - 61

*Opitz-Coutureau J. ; Denker A. ; Nagel E.*

**Fundmünzen aus Karakorum - Zerstörungsfreie Hochenergie-PIXE Analyse**

In: Archäometrie und Denkmalpflege : Kurzberichte, eds. Hahn O. [u.a.]

2003, 89 - 91

*Schattat B. ; Bolse W. ; Klaumünzer S. ; Harbsmeier F. ; Jasenek A.*

**Atomic mixing of Ni<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub>, NiO/SiO<sub>2</sub>, and Ni/SiO<sub>2</sub> interfaces induced by swift heavy ion irradiation**

Applied Physics A  
76 (2003) 165 - 169

*Strub E. ; Bohne W. ; Lindner S. ; Röhrich J.*  
**Possibilities and limitations of ERDA: examples from the ERDA ToF set-up at the Hahn-Meitner-Institut**

Surface and Interface Analysis  
35 (2003) 753 - 756

*Wesch W. ; Kamarou A. ; Wendler E. ; Gärtner K. ; Gaiduk P.I. ; Klaumünzer S.*

**Ionisation stimulated defect annealing in GaAs and InP**

Nuclear Instruments and Methods in Physics Research B  
206 (2003) 1018 - 1023

**SF - BESSY**

**SF2.BESSY**

*Taguchi M. ; van der Laan G. ; Arenholz E. ; Dhesi S.S. ; Dudzik E.*

**Magnetic circular dichroism and spin polarization in 3d to 4f resonant photoemission from Tb metal in the perpendicular geometry**

Physical Review B  
68 (2003) 104408/1 - 9

**SF3.BESSY**

*Rack A. ; Haibel A. ; Matijasevic B. ; Banhart J.*  
**Synchrotron tomography on zinc and aluminium foams**

In: Cellular metals : manufacture, properties, applications. International Conference on Cellular Metals and Metal Foaming Technology, Berlin : 2003.06.23-25. MetFoam, eds. Banhart J. [u.a.]

Verl. MIT Publ., Berlin, 2003, 295 - 300

**SF4.BESSY**

*Chen W. ; Darowski N. ; Zizak I. ; Schumacher G. ; Klingelhöffer H. ; Wanderka N. ; Neumann W.*

**Measurement of  $\gamma/\gamma'$  lattice mismatch in creep deformed single crystal superalloy SC16 using synchrotron X-radiation**

Materials Science Forum  
426-432 (2003) 4555 - 4560

*Darowski N. ; Zizak I. ; Schumacher G. ; Klaumünzer S. ; Wendler E.*

**Surface crystallinity and radiation-amorphization of InP - An X-ray grazing incidence study**

Nuclear Instruments and Methods in Physics Research B  
209 (2003) 131 - 135

*Jenichen B. ; Kaganer V.M. ; Kästner M. ; Herrmann C. ; Däweritz L. ; Ploog K.H. ; Darowski N. ; Zizak I.*

**Structural and magnetic phase transition in MnAs(0001)/GaAs(111) epitaxial films**

Physical Review B  
68 (2003) 132301/1 - 4

**SF1 - Methods and Instruments**

**SF1.Dynamics**

*Bordallo H.N. ; Chapon L. ; Manson J.L. ; Ling C.D. ; Qualls J.S. ; Hall D. ; Argyriou D.N.*

**Structural and magnetic behavior of a quasi-1D antiferromagnetic chain compound Cu(NCS)<sub>2</sub>(pyz)**

Polyhedron  
22 (2003) 2045 - 2049

*Bordallo H.N. ; Kolesnikov A.I. ; Kolomiets A.V. ; Kalceff W. ; Nakotte H. ; Eckert J.*

**Inelastic neutron scattering studies of TbNiAlH<sub>1.4</sub> and UNiAlH<sub>2.0</sub> hydrides**

Journal of Physics: Condensed Matter  
15 (2003) 2551 - 2559

*Heffner R.H. ; Sonier J.E. ; MacLaughlin D.E. ; Nieuwenhuys G.J. ; Mezei F. ; Ehlers G. ; Mitchell J.F. ; Cheong S.-W.*

**Inhomogeneity in the spin channel of ferromagnetic CMR manganites**

Physica B  
326 (2003) 494 - 499

**SF1.Methods**

*Cho S.-J. ; Krist Th. ; Mezei F.*

**Determination of interface growth with atomic resolution in FeCo-Si multilayers**

Thin Solid Films  
434 (2003) 136 - 144

*Cho S.-J. ; Krist Th. ; Mezei F.*

**Dependence of interface layer thickness in FeCo-Si multilayers on sputtering parameters**

Thin Solid Films  
444 (2003) 158 - 164

*Ersez T. ; Kennedy S.J. ; Hicks T.J. ; Fei Y. ; Krist Th. ; Miles P.A.*

**New features of the long-wavelength polarisation analysis spectrometer-LONGPOL**

Physica B  
335 (2003) 183 - 187

*Habicht K. ; Keller T. ; Golub R.*

**The resolution function in neutron spin-echo spectroscopy with three-axis spectrometers**

Journal of Applied Crystallography  
36 (2003) 1307 - 1318

*Krist Th. ; Mezei F.*

**Solid state elements for neutron optics**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]

Forschungszentrum Jülich, Jülich, 2003, 387 - 394

*Russina M. ; Mezei F. ; Kozlowski T. ; Lewis P. ; Penttilla S. ; Füzi J. ; David E. ; Messing G.*

**The experimental test of the coupled moderator performance at LANSCE**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]

Forschungszentrum Jülich, Jülich, 2003, 667 - 675

*Zsigmond G. ; Krist Th. ; Mezei F.*

**Monte Carlo simulation of polarising cavities**

Physica B  
335 (2003) 266 - 269

**SF1.Spallation**

*Fritzsche H. ; Lieutenant K.*

**Performance of reflectometers on different moderators and target stations of the ESS project**

Journal of Neutron Research  
11 (1-2) (2003) 61 - 68

*Herbach C.-M. ; Hilscher D. ; Jahnke U. ; Tishchenko V. ; Bohne W. ; Galin J. ; Letourneau A. ; Lott B. ; Peghaire A. ; Goldenbaum F. ; Pienkowski L.*

**A combination of two  $4\pi$ -detectors for neutrons and charged particles. Part II. The Berlin silicon ball BSiB for light- and heavy-ion detection**

Nuclear Instruments and Methods in Physics Research A  
508 (2003) 315 - 336

*Jahnke U. ; Herbach C.-M. ; Hilscher D. ; Tishchenko V. ; Galin J. ; Letourneau A. ; Lott B. ; Peghaire A. ; Goldenbaum F. ; Pienkowski L.*

**A combination of two  $4\pi$  detectors for neutrons and charged particles. Part I. The Berlin neutron ball - a neutron multiplicity meter and a reaction detector**

Nuclear Instruments and Methods in Physics Research A  
508 (2003) 295 - 314

*Lieutenant K. ; Krist T. ; Monkenbusch M. ; Manoshin S. ; Ohl M. ; Zsigmond G. ; Mezei F.*

**MC simulations of a beamline for a NSE instrument at SNS**  
In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]  
Forschungszentrum Jülich, Jülich, 2003, 505 - 512

*Manoshin S. ; Lieutenant K. ; Zsigmond G. ; Clemens D. ; Mezei F.*

**MC simulations of a new beam line at the Hahn-Meitner-Institut supplied by a multi-spectral beam extraction system**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]  
Forschungszentrum Jülich, Jülich, 2003, 513 - 521

*Manoshin S. ; Zsigmond G. ; Lieutenant K. ; Mezei F.*

**Simulations of a convergent bender as neutron polariser for NSE spectrometers**

Physica B  
335 (2003) 270 - 273

*Mezei F.*

**Fundamental aspects of optimization of long pulse spallation sources**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]  
Forschungszentrum Jülich, Jülich, 2003, 135 - 140

*Ohl M. ; Monkenbusch M. ; Richter D. ; Mezei F. ; Pappas C. ; Lieutenant K. ; Krist Th. ; Zsigmond G.*

**A high resolution neutron spin echo spectrometer for the SNS with  $\tau \zeta = 1$  micro second**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]  
Forschungszentrum Jülich, Jülich, 2003, 207 - 214

*Russina O. ; Mezei F. ; Russina M. ; Lechner R. ; Ollivier J.*

**Experimental emulation of Repetition Rate Multiplication, a novel technique for neutron time-of-flight spectroscopy on pulsed sources**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]  
Forschungszentrum Jülich, Jülich, 2003, 315 - 320



*Tietze-Jaensch H. ; Butzek M. ; Clausen K. ; Conrad H. ; Eccleston R.S. ; Filges D. ; Goldenbaum F. ; Gutberlet T. ; Mezei F.*

**The ESS moderator concept and instrument layout of the short pulse and long pulse target stations**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]

Forschungszentrum Jülich, Jülich, 2003, 267 - 278

*Zsigmond G. ; Lieutenant K. ; Manoshin S. ; Fromme M. ; Bordallo H.N.*

**Neutron virtual instrumentation and experiments: VITESS 2.4**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]

Forschungszentrum Jülich, Jülich, 2003, 473 - 482

*Zsigmond G. ; Rodriguez-Carvajal J. ; Radaelli P.D. ; Lieutenant K. ; Mezei F.*

**MC simulation of ultra-high resolution powder diffractometers at a LPSS**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]

Forschungszentrum Jülich, Jülich, 2003, 541 - 547

**SF2 - Magnetism**

**SF1.Dynamics**

*Bordallo H.N. ; Chapon L. ; Manson J.L. ; Ling C.D. ; Qualls J.S. ; Hall D. ; Argyriou D.N.*

**Structural and magnetic behavior of a quasi-1D antiferromagnetic chain compound Cu(NCS)<sub>2</sub>(pyz)**

Polyhedron  
22 (2003) 2045 - 2049

**SF2.Bulk magnetism**

*Andreev A.V. ; Honda F. ; Sechovský V. ; Prokes K.*

**Magnetization study of a URhSi single crystal**

Acta Physica Polonica B  
34 (2) (2003) 1437 - 1440

*Andreev A.V. ; Sechovský V. ; Prokes K. ; Homma Y. ; Syshchenko O. ; Sebek J. ; Bartashevich M.I. ; Goto T. ; Shiokawa Y. ; Jurek K.*

**Magnetism in UNi<sub>2/3</sub>Rh<sub>1/3</sub>Al single crystal**

Philosophical Magazine  
83 (13) (2003) 1613 - 1630

*Feyerherm R.*

**[Cu(pyrimidine)(NO<sub>3</sub>)<sub>2</sub>]<sub>n</sub>: a coordination polymer with quasi-one-dimensional antiferromagnetic interactions**

Journal of Magnetism and Magnetic Materials  
256 (2003) 328 - 333

*Feyerherm R. ; Loose A. ; Manson J.L.*

**Unusual magnetic-field dependence of partially frustrated triangular ordering in manganese tricyanomethanide**

Journal of Physics: Condensed Matter  
15 (2003) 663 - 673

*Feyerherm R. ; Loose A. ; Rabu P. ; Drillon M.*

**Neutron diffraction studies of canted antiferromagnetic ordering in Co<sup>II</sup> hydroxide terephthalate**

Solid State Sciences  
5 (2003) 321 - 326

*Garcia-Matres E. ; Stüßer N. ; Hofmann M. ; Reehuis M.*

**Magnetic phases in Mn<sub>1-x</sub>Fe<sub>x</sub>WO<sub>4</sub> studied by neutron powder diffraction**

European Physical Journal B  
32 (2003) 35 - 42

*Honda F. ; Andreev A.V. ; Sechovsky V. ; Prokes K.*

**Magnetic properties of a URhSi single crystal**

Physica B  
329-333 (2003) 486 - 488

Kang H.J. ; Dai P. ; Lynn J.W. ; Matsuura M. ; Thompson J.R. ; Shou-Cheng Zhang ; Argyriou D.N. ; Onose Y. ; Tokura Y.

**Antiferromagnetic order as the competing ground state in electron-doped Nd<sub>1.85</sub>Ce<sub>0.15</sub>CuO<sub>4</sub>**

Nature

423 (6939) (2003) 522 - 525

Nakotte H. ; Chang S. ; Alsmadi A.M. ; Jung M.H. ; Lacerda A.H. ; Prokes K. ; Brück E. ; Mihalik M.

**Hard-axis magnetoresistance and metamagnetic transition in UPdSn**

Acta Physica Polonica B

34 (2) (2003) 987 - 990

Prokes K. ; Andreev A.V. ; Honda F. ; Sechovský V.

**Magnetic structure of URhSi single crystal**

Journal of Magnetism and Magnetic Materials

261 (2003) 131 - 138

Prokes K. ; Gukasov A. ; Takabatake T. ; Fujita, T. ; Sechovský V.

**Magnetic form factor of URhGe**

Acta Physica Polonica B

34 (2) (2003) 1473 - 1476

Prokes K. ; Nakotte H. ; Bartashevich M.I. ; Doerr M. ; Sechovsky V.

**Neutron diffraction and magnetization studies of U<sub>2</sub>Pd<sub>2</sub>In single crystals in high magnetic fields**

Physical Review B

68 (1) (2003) 014405/1 - 6

Prokes K. ; Nakotte H. ; Sechovsky V. ; Brück E.

**Neutron scattering studies on uranium compounds in high magnetic fields**

Journal of Physics: Condensed Matter

15 (2003) S1985 - S1989

Sechovsky V. ; Honda F. ; Svoboda P. ; Prokes K. ; Chernyavsky O. ; Doerr M. ; Rotter M. ; Loewenhaupt M.

**Antiferromagnetism and magnetoelasticity of UNiAl**

Physica B

329-333 (2003) 480 - 481

Sechovský V. ; Honda F. ; Janousová B. ; Prokes K. ; Svoboda P. ; Syshchenko O. ; Andreev A.V.

**Magnetic correlations reflected by anomalies in transport and elastic properties of uranium intermetallics**

Physica B

328 (2003) 95 - 99

Wolter A.U.B. ; Rakoto H. ; Costes M. ; Honecker A. ; Brenig W. ; Klümper A. ; Klauss H.-H. ; Litterst F.J. ; Feyerherm R. ; Jerome D. ; Süllow S.

**High-field magnetization study of the S = 1/2 antiferromagnetic Heisenberg chain [PMCu(NO<sub>3</sub>)<sub>2</sub>(H<sub>2</sub>O)<sub>2</sub>]<sub>n</sub> with a field-induced gap**

Physical Review B

68 (2003) 220406/1 - 4

Wolter A.U.B. ; Wzietek P. ; Litterst F.J. ; Süllow S. ; Jérôme D. ; Feyerherm R. ; Klauss H.-H.

**<sup>13</sup>C NMR on the S=1/2 antiferromagnetically coupled spin chain compound [PM Cu(NO<sub>3</sub>)<sub>2</sub>(H<sub>2</sub>O)<sub>2</sub>]<sub>n</sub> (PM = pyrimidine)**

Polyhedron

22 (2003) 2273 - 2276

## SF2.Others

Genzel Ch. ; Reimers W.

**Depth-resolved X-ray residual stress analysis in PVD (Ti,Cr)N hard coatings**

Zeitschrift für Metallkunde

94 (2003) 655 - 661

Wrenger B. ; Fieber-Erdmann M. ; Rossner H. ; Holub-Krappe E.

**Development of an online control system for a multi-element fluorescence detector**

Fizika B

12 (2) (2003) 181 - 192

## SF2.Thin films

Fritzsche H. ; Bonn S. ; Hauschild J. ; Prokes K. ; Klenke J.

**Suppression of incommensurate spin-density waves in thin epitaxial Cr(110) layers of a V/Cr multilayer**

The European Physical Journal B

36 (2003) 175 - 181

*Holub-Krappe E. ; Hahlin A. ; Removic-Langer K. ; Arvanitis D. ; Maletta H. ; Hunter Dunn J.*

**Spin reorientation transition in thin magnetic films**

Bulletin of the Polish Synchrotron Radiation Society

2 (1) (2003) 30 - 31

*Removic-Langer K. ; Hunter Dunn J. ; Langer J. ; Arvanitis D. ; Maletta H. ; Holub-Krappe E.*

**Spin and orbital moments in Au/Co/Au(111)/W(110) across the spin-reorientation transition-temperature**

Nuclear Instruments and Methods in Physics Research B

200 (2003) 210 - 214

**SF4.Structures**

*Koteski V. ; Ivanovic N. ; Haas H. ; Holub-Krappe E. ; Mahnke H.-E.*

**Lattice relaxation around impurity atoms in semiconductors - arsenic in silicon - a comparison between experiment and theory**

Nuclear Instruments and Methods in Physics Research B

200 (2003) 60 - 65

**SE1.Cells**

*Lengsfeld P. ; Brehme S. ; Brendel K. ; Genzel Ch. ; Nickel N.H.*

**Raman spectroscopy of heavily doped polycrystalline and microcrystalline silicon**

Physica Status Solidi B

235 (1) (2003) 170 - 178

**SE5.Energetics**

*Ellmer K. ; Mientus R. ; Weiß V. ; Rossner H.*

**In situ energy-dispersive x-ray diffraction system for time-resolved thin-film growth studies**

Measurement Science and Technology

14 (2003) 336 - 345

**SF3 - Materials**

**SF3.Light weight mat.**

*Banhart J. [u.a.] [Eds.]*

**Cellular metals : manufacture, properties, applications.**

International Conference on Cellular Metals and Metal Foaming Technology, Berlin : 2003.06.23-25. MetFoam

Verl. MIT Publ., Berlin, 2003

*Garcia Moreno F. ; Fromme M. ; Banhart J.*

**Real-time X-ray radioscopy on metallic foams using a compact micro-focus source**

In: Cellular metals : manufacture, properties, applications. International Conference on Cellular Metals and Metal Foaming Technology, Berlin : 2003.06.23-25. MetFoam, eds. Banhart J. [u.a.]

Verl. MIT Publ., Berlin, 2003, 89 - 94

*Helwig H.-M. ; Banhart J.*

**Heat distribution during metal foaming**

In: Cellular metals : manufacture, properties, applications. International Conference on Cellular Metals and Metal Foaming Technology, Berlin : 2003.06.23-25. MetFoam, eds. Banhart J. [u.a.]

Verl. MIT Publ., Berlin, 2003, 165 - 168

*Lehmhus D. ; Banhart J.*

**Properties of heat-treated aluminium foams**

Materials Science and Engineering A

349 (2003) 98 - 110

*Weise J. ; Stanzick H. ; Banhart J.*

**Semi-solid processing of complex-shaped foamable material**

In: Cellular metals : manufacture, properties, applications. International Conference on Cellular Metals and Metal Foaming Technology, Berlin : 2003.06.23-25. MetFoam, eds. Banhart J. [u.a.]

Verl. MIT Publ., Berlin, 2003, 169 - 174

*Wübben Th. ; Stanzick H. ; Banhart J. ; Odenbach S.*

**Stability of metallic foams studied under microgravity**

Journal of Physics: Condensed Matter

15 (2003) S427 - S433

Zhao H. ; Abdennadher S. ; Banhart J.  
**An experimental study of the deformation rate sensitivity of PM aluminium foams**  
 In: Cellular metals : manufacture, properties, applications. International Conference on Cellular Metals and Metal Foaming Technology, Berlin : 2003.06.23-25. MetFoam, eds. Banhart J. [u.a.]  
 Verl. MIT Publ., Berlin, 2003, 463 - 468

von Zeppelin F. ; Hirscher M. ; Stanzick H. ; Banhart J.  
**Desorption of hydrogen from blowing agents used for foaming metals**  
 Composites Science and Technology  
 63 (2003) 2293 - 2300

### SF3.Microstructure

Mattern N. ; Hermann H. ; Roth S. ; Sakowski J. ; Macht M.-P. ; Jovari P. ; Jiang J.  
**Structural behavior of Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub> bulk metallic glass below and above the glass transition**  
 Applied Physics Letters  
 82 (16) (2003) 2589 - 2591

Meyer A. ; Petry W. ; Koza M. ; Macht M.-P.  
**Fast diffusion in ZrTiCuNiBe melts**  
 Applied Physics Letters  
 83 (19) (2003) 3894 - 3896

Reissig L. ; Czubayko U. ; Wanderka N. ; Völkl R. ; Glatzel U.  
**Determination of the local oxygen distribution in a commercial titanium alloy by 3-dimensional atom probe**  
 Zeitschrift für Metallkunde  
 94 (6) (2003) 771 - 773

Wanderka N. ; Davidov E. ; Naundorf V. ; Mechler S. ; Macht M.-P.  
**Microstructural characterization of Zr<sub>46.8</sub>Ti<sub>8.2</sub>Cu<sub>7.5</sub>Ni<sub>10</sub>Be<sub>27.5</sub> bulk glass**  
 Journal of Metastable and Nanocrystalline Materials  
 15-16 (2003) 119 - 124

Wanderka N. ; Schumacher G. ; Czubayko U. ; Naundorf V. ; Schneider R. ; Neumann W.  
**Local chemical and structural gradients in the creep deformed superalloy SC16**  
 Materials Science and Engineering A  
 353 (2003) 146 - 151

### SF3.Nanostructures

Heinemann A. ; Wiedenmann A. ; Kammel M. ; Hoell A.  
**Polarized small-angle neutron scattering (SANS POL) for discrimination of nanosized components in ferrofluids**  
 Magnetohydrodynamics  
 39 (1) (2003) 105 - 110

Hoell A. ; Kammel M. ; Heinemann A. ; Wiedenmann A.  
**Solvent dependent arrangement of shell molecules in ferrofluids studied by small-angle scattering with polarized neutrons**  
 Journal of Applied Crystallography  
 36 (2003) 558 - 561

Wiedenmann A. ; Hoell A. ; Kammel M. ; Boesecke P.  
**Field-induced pseudocrystalline ordering in concentrated ferrofluids**  
 Physical Review E  
 68 (2003) 031203/1 - 10

### SF3.Others

Agosti E. ; Moze O. ; Cadogan J. ; Suzuki K. ; Heinemann A. ; Hoell A.  
**A small angle polarized neutron scattering investigation of magnetic correlations in nanocrystalline Fe<sub>89</sub>Zr<sub>7</sub>B<sub>3</sub>Cu<sub>1</sub>**  
 In: Magnetoelectronics and magnetic materials - novel phenomena and advanced characterization : symposium held December 1 - 5, 2002, Boston Massachusetts, U.S.A., eds. Zhang S. [u.a.]  
 Materials Research Society, Warrendale, Pa., 2003, 219 - 224

*Bergenti I. ; Deriu A. ; Savini L. ; Bonetti E. ; Hoell A.*

**Polarised neutron investigation of iron composite nanoparticles**

Journal of Applied Crystallography  
36 (2003) 450 - 453

*De Stefanis A. ; Tomlinson A.A.G. ; Steriotis Th.A. ; Stefanopoulos K.L. ; Keiderling U.*

**Nanostructures of the montmorillonite-derived restructured clays K10<sup>®</sup>, HMO and the Mg<sup>2+</sup> exchanged analogue Mg-HMO. A SANS, N<sub>2</sub> sorption and XRPD study**

Journal of Materials Chemistry  
13 (2003) 1145 - 1148

*Faupel F. ; Frank W. ; Macht M.-P. ; Mehrer H. ; Naundorf V. ; Rätzke K. ; Schober H.R. ; Sharma S.K. ; Teichler H.*

**Diffusion in metallic glasses and supercooled melts**

Reviews of Modern Physics  
75 (2003) 237 - 280

*Hermann H. ; Mattern N. ; Kühn U. ; Heinemann A. ; Lazarev N.P.*

**Evolution of spatial heterogeneity in a Zr-based metallic glass**

Journal of Non-Crystalline Solids  
317 (2003) 91 - 96

*Hoell A. ; Müller R. ; Heinemann A. ; Wiedenmann A.*

**Structure investigations of barium hexaferrite ferrofluids and its precursors by SANS with polarised neutrons**

Magnetohydrodynamics  
39 (1) (2003) 111 - 118

*Mikhailovskij I.M. ; Smith G.D.W. ; Wanderka N. ; Mazilova T.I.*

**Non-kinkwise field evaporation and kink relaxation on stepped W(112) surface**

Ultramicroscopy  
95 (2003) 157 - 163

*Müller R. ; Hiergeist R. ; Gawalek W. ; Hoell A.*

**Ba-ferrite particles for magnetic liquids with enhanced Néel relaxation time and loss investigations**

Magnetohydrodynamics  
39 (1) (2003) 49 - 52

*Spizzo F. ; Angeli E. ; Bisero D. ; Da Re A. ; Ronconi F. ; Vavassori P. ; Bergenti I. ; Deriu A. ; Hoell A.*

**Small-angle neutron scattering measurements with polarised neutrons on Fe-Ag magnetic granular systems**

Journal of Applied Crystallography  
36 (2003) 826 - 828

*Vernes A. ; Ebert H. ; Banhart J.*

**Electronic conductivity in Ni<sub>x</sub>Cr<sub>1-x</sub> and Ni<sub>x</sub>Cu<sub>1-x</sub> fcc-alloy systems**

Physical Review B  
68 (2003) 134404/1 - 8

## SF2.Bulk magnetism

*Garcia-Matres E. ; Stüßer N. ; Hofmann M. ; Reehuis M.*

**Magnetic phases in Mn<sub>1-x</sub>Fe<sub>x</sub>WO<sub>4</sub> studied by neutron powder diffraction**

European Physical Journal B  
32 (2003) 35 - 42

## SF4 - Structure and Dynamics

### SF4.Dynamics

*Schiwietz G. ; Grande P.L.*

**The role of basic energy-loss processes in layer-resolved surface investigations with ions**

Current Applied Physics  
3 (2003) 35 - 37

*Schiwietz G. ; Roth M. ; Czernski K. ; Staufenberg F. ; Rösler M. ; Grande P.L.*

**Spectroscopy of Si-Auger electrons from the center of heavy-ion tracks**

Nuclear Instruments and Methods in Physics Research B  
209 (2003) 26 - 31

### SF4.Others

*Hahn-Meitner-Institut Berlin / ISL, Ionenstrahllabor. Bertschat H.H. ; Röhrich J. ; Schiwietz G. [Eds.]*

**Annual Report 2002**

(HMI-B 591)

Hahn-Meitner-Institut, Berlin, 2003

**SF4.Structures**

*Bollmann J. ; Knack S. ; Weber J. ; Koteski V. ; Mahnke H.-E. ; Welter E.*

**Limitations of electrical detection of x-ray absorption fine structure**

Physical Review B  
68 (2003) 125206/1 - 9

*Bruno G. ; Schumacher G. ; Cavalcanti Pinto H. ; Schulze C.*

**Measurement of the lattice misfit of the nickel-base superalloy SC16 by high-energy synchrotron radiation**

Metallurgical and Materials Transactions A  
34 (2003) 193 - 197

*Hattendorf J. ; Zeitz W.-D. ; Schröder W. ; Abrosimov N.V.*

**On the formation of boron-germanium pairs in silicon-germanium mixed crystals**

Physica B  
340-342 (2003) 858 - 862

*Koteski V. ; Ivanovic N. ; Haas H. ; Holub-Krappe E. ; Mahnke H.-E.*

**Lattice relaxation around impurity atoms in semiconductors - arsenic in silicon - a comparison between experiment and theory**

Nuclear Instruments and Methods in Physics Research B  
200 (2003) 60 - 65

**SE1.Cells**

*Schwarzkopf J. ; Selle B. ; Bohne W. ; Röhrich J. ; Sieber I. ; Fuhs W.*

**Disorder in silicon films grown epitaxially at low temperature**

Journal of Applied Physics  
93 (3) (2003) 5215 - 5221

**SE1.Hetero**

*Prado A. del ; San Andres E. ; Martil I. ; Gonzalez-Diaz G. ; Bravo D. ; Lopez F.J. ; Bohne W. ; Röhrich J. ; Selle B. ; Martinez F.L.*

**Optical and structural properties of  $\text{SiO}_x\text{N}_y\text{H}_z$  films deposited by electron cyclotron resonance and their correlation with composition**

Journal of Applied Physics  
93 (11) (2003) 8930 - 8938

*San Andrés E. ; del Prado A. ; Martil I. ; González-Díaz G. ; Bravo D. ; López F.J. ; Fernández M. ; Bohne W. ; Röhrich J. ; Selle B. ; Sieber I.*

**Bonding configuration and density of defects of  $\text{SiO}_x\text{H}_y$  thin films deposited by the electron cyclotron resonance plasma method**

Journal of Applied Physics  
94 (12) (2003) 7462 - 7469

**SE2.Semico**

*Rusu M. ; Wiesner S. ; Lindner S. ; Strub E. ; Röhrich J. ; Würz R. ; Fritsch W. ; Bohne W. ; Schedel-Niedrig Th. ; Lux-Steiner M.Ch. ; Giesen Ch. ; Heuken M.*

**Deposition and characterization of  $\text{Ga}_2\text{Se}_3$  thin films prepared by a novel chemical close-spaced vapour transport technique**

Journal of Physics: Condensed Matter  
15 (2003) 8185 - 8193

**SF1.Spallation**

*Herbach C.-M. ; Hilscher D. ; Jahnke U. ; Tishchenko V. ; Bohne W. ; Galin J. ; Letourneau A. ; Lott B. ; Peghaire A. ; Goldenbaum F. ; Pienkowski L.*

**A combination of two  $4\pi$ -detectors for neutrons and charged particles. Part II. The Berlin silicon ball BSiB for light- and heavy-ion detection**

Nuclear Instruments and Methods in Physics Research A  
508 (2003) 315 - 336

**SF3.Microstructure**

*Wanderka N. ; Schumacher G. ; Czubyko U. ; Naundorf V. ; Schneider R. ; Neumann W.*

**Local chemical and structural gradients in the creep deformed superalloy SC16**

Materials Science and Engineering A  
353 (2003) 146 - 151

**SF5.Hard Matter**

*Liu Q.K.K. ; Schumacher G.*  
**Texture evolution during crystallization of thin amorphous films**  
 In: Morphological and compositional evolution of thin films : symposium held December 2 - 5, 2002, Boston, Massachusetts, U.S.A., eds. Aziz M.J. [u.a.]  
 Materials Research Society, Warrendale, Pa., 2003, 195 - 200

**SF5 - Theory****SF5.Biosystems**

*Benetatos P. ; Frey E.*  
**Depinning of semiflexible polymers**  
 Physical Review E  
 67 (2003) 051108/1 - 7

*Falcke M.*  
**On the role of stochastic channel behavior in intracellular  $Ca^{2+}$  dynamics**  
 Biophysical Journal  
 84 (2003) 42 - 56

*Falcke M.*  
**Buffers and oscillations in intracellular  $Ca^{2+}$  dynamics**  
 Biophysical Journal  
 84 (2003) 28 - 41

*Falcke M.*  
**Deterministic and stochastic models of intracellular  $Ca^{2+}$  waves**  
 New Journal of Physics  
 5 (2003) 96.1 - 96.28

*Falcke M.*  
**Building a wave - models of the puff-to-wave transition**  
 In: Understanding calcium dynamics : experiments and theory, eds. Falcke M. [u.a.]  
 Springer, Berlin, 2003, 253 - 289

*Falcke M. ; Li Y. ; Lechleiter J.D. ; Camacho P.*  
**Modeling the dependence of the period of intracellular  $Ca^{2+}$  waves on SERCA expression**  
 Biophysical Journal  
 85 (2003) 1474 - 1481

*Falcke M. [u.a.] [Eds.]*  
**Understanding calcium dynamics : experiments and theory**  
 (Lecture notes in physics ; 623)  
 Springer, Berlin, 2003

*Parmeggiani A. ; Franosch T. ; Frey E.*  
**Phase coexistence in driven one-dimensional transport**  
 Physical Review Letters  
 90 (8) (2003) 086601/1 - 4

*Wilhelm J. ; Frey E.*  
**Elasticity of stiff polymer networks**  
 Physical Review Letters  
 91 (10) (2003) 108103/1 - 4

**SF5.Hard Matter**

*Artemyev A.N. ; Beier T. ; Eichler J. ; Klasnikov A.E. ; Kozhuharov C. ; Shabaev V.M. ; Stöhlker T. ; Yerokhin V.A.*  
**Negative-continuum dielectronic recombination for heavy ions**  
 Physical Review A  
 67 (2003) 052711/1 - 6

*Bünemann J. ; Gebhard F. ; Thul, R.*  
**Landau-Gutzwiller quasiparticles**  
 Physical Review B  
 67 (2003) 075103/1 - 11

*De Martino A. ; Votyakov E.V. ; Gross D.H.E.*  
**The Antonov problem for rotating systems**  
 Nuclear Physics B  
 654 (2003) 427 - 444

*Fröbrich P. ; Kuntz P.J.*  
**Many-body Green's function theory for thin ferromagnetic anisotropic Heisenberg films: treatment of the exchange anisotropy**  
 European Physical Journal B  
 32 (2003) 445 - 455

*Fröbrich P. ; Kuntz P.J.*  
**Spectral theorem of many-body Green's function theory when there are zero eigenvalues of the matrix governing the equations of motion**  
 Physical Review B  
 68 (2003) 014410/1 - 4

*Lipperheide R. ; Wille U.*

**Unified description of ballistic and diffusive carrier transport in semiconductor structures**

Physical Review B  
68 (2003) 115315/1 - 16

*Liu Q.K.K. ; Schumacher G.*

**Texture evolution during crystallization of thin amorphous films**

In: Morphological and compositional evolution of thin films : symposium held December 2 - 5, 2002, Boston, Massachusetts, U.S.A., eds. Aziz M.J. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 195 - 200

*Rudloff D. ; Riemann T. ; Christen J. ; Liu Q.K.K. ; Kaschner A. ; Hoffmann A. ; Thomsen Ch. ; Vogeler K. ; Diesselberg M. ; Einfeldt S. ; Hommel D.*

**Stress analysis of  $\text{Al}_x\text{Ga}_{1-x}\text{N}$  films with microcracks**

Applied Physics Letters  
82 (3) (2003) 367 - 369

*Santoprete R. ; Koiller B. ; Capaz R.B. ; Kratzer P. ; Liu Q.K.K. ; Scheffler M.*

**Tight-binding study of the influence of the strain on the electronic properties of InAs/GaAs quantum dots**

Physical Review B  
68 (2003) 235311/1 - 9

**SF5.Others**

*De Martino A. ; Votyakov E.V. ; Gross D.H.E.*  
**Hierarchy of the equilibrium states of self-gravitating systems**

Europhysics Letters  
62 (1) (2003) 14 - 20

*Gross, D.H.E.*

**Remarkable long-range-systematic in the binding energies of  $\alpha$ -nuclei. II**

Physics Letters B  
574 (2003) 186 - 188

*Gross, D.H.E.*

**Classical Equilibrium Thermostatistics, "Sancta sanctorum of Statistical Mechanics", From Nuclei to Stars**

<http://arxiv.org/abs/cond-mat/0311418>  
(2003)

*Gross, D.H.E.*

**Heat can flow from cold to hot in Microcanonical Thermodynamics of finite systems and the microscopic origin of phase transitions**

<http://arxiv.org/abs/cond-mat/0307054>  
(2003)

*Gross, D.H.E.*

**A New Thermodynamics, From Nuclei to Stars II**

<http://arxiv.org/abs/cond-mat/0306499>  
(2003)

*Gross, D.H.E.*

**No dinosaurs in microcanonical gravitation: No special "microcanonical phase transitions"**

<http://arxiv.org/abs/cond-mat/0307535>  
(2003)

*Gross, D.H.E.*

**A New Thermodynamics, From Nuclei to Stars**

<http://arXiv.org/abs/cond-mat/0302267>  
(2003)

*Gross, D.H.E. ; Votyakov, E.V. ; De Martino, A.*  
**Reply to the comment by I.Ispolatov and M.Karttunen, cond-mat/0303564**

<http://arxiv.org/abs/cond-mat/0304013>  
(2003)

**SF5.Soft Matter**

*Franosch T. ; Latz A. ; Pick R.M.*  
**Light scattering by longitudinal acoustic modes in supercooled molecular liquids II: microscopic derivation of the phenomenological equations**

The European Physical Journal B  
31 (2003) 229 - 246

*Pick R.M. ; Dreyfus C. ; Azzimani A. ; Taschin A. ; Ricci M. ; Torre R. ; Franosch T.*

**Frequency and time resolved light scattering on longitudinal phonons in molecular supercooled liquids**

Journal of Physics: Condensed Matter  
15 (2003) S825 - S834



*Pick R.M. ; Franosch T. ; Latz A. ; Dreyfus C.*  
**Light scattering by longitudinal acoustic modes in molecular supercooled liquids I: phenomenological approach**  
 The European Physical Journal B  
 31 (2003) 217 - 228

### **SE2.Semico**

*Rusu M. ; Wiesner S. ; Lindner S. ; Strub E. ; Röhrich J. ; Würz R. ; Fritsch W. ; Bohne W. ; Schedel-Niedrig Th. ; Lux-Steiner M.Ch. ; Giesen Ch. ; Heuken M.*  
**Deposition and characterization of Ga<sub>2</sub>Se<sub>3</sub> thin films prepared by a novel chemical close-spaced vapour transport technique**  
 Journal of Physics: Condensed Matter  
 15 (2003) 8185 - 8193

## **SF6 - Trace Elements**

### **SF6.Analysis**

*Behne D. ; Alber D. ; Kyriakopoulos A.*  
**Determination of small amounts of selenium-containing proteins by nuclear analytical methods**  
 Transactions of the American Nuclear Society  
 89 (2003) 716 - 717

*Lin X. ; Alber D. ; Henkelmann R.*  
**Calibration of the irradiation channel DBVK at BER-II reactor and feasibility of applying the k<sub>0</sub>-method at this device**  
 Journal of Radioanalytical and Nuclear Chemistry  
 257 (3) (2003) 531 - 538

*Petelenz B. ; Rajchel B. ; Bilski P. ; Misiak R. ; Bartyzel M. ; Wilczek K. ; Alber D.*  
**Physical and chemical limitations to preparation of beta radioactive stents by direct neutron activation**  
 Biomaterials  
 24 (2003) 427 - 433

*Richarz A.-N. ; Wolf C. ; Brätter P.*  
**Determination of protein-bound trace elements in human cell cytosols of different organs and different pathological states**  
 The Analyst  
 128 (2003) 640 - 645

*Wolf C. ; Schaumlöffel D. ; Richarz A.-N. ; Prange A. ; Brätter P.*  
**CZE-ICP-MS separation of metallothioneins in human brain cytosols: comparability of electropherograms obtained from different sample matrices**  
 The Analyst  
 128 (2003) 576 - 580

### **SF6.Clinical app.**

*Savaskan N.E. ; Bräuer A.U. ; Kühbacher M. ; Eyüpoglu I.Y. ; Kyriakopoulos A. ; Ninnemann O. ; Behne D. ; Nitsch R.*  
**Selenium deficiency increases susceptibility to glutamate-induced excitotoxicity**  
 The FASEB Journal  
 17 (2003) 112 - 114

### **SF6.Proteins**

*Kyriakopoulos A. ; Bukalis K. ; Graebert A. ; Kühbacher M. ; Weseloh G. ; Behne, D.*  
**Studies of membrane-bound selenoproteins involved in redox processes and antioxidant system**  
 In: 4th international symposium on trace elements in humans : new perspectives. Part I  
 2003, 884 - 891

*Kyriakopoulos A. ; Graebert A. ; Behne D.*  
**Expression of selenium-containing proteins in rat kidney**  
 In: Signalwirkung von Mineralstoffen und Spurenelementen : Biomarker in der Diagnostik. Molekularbiologische Untersuchungen. Genchips contra Spektrometrie ; 18. Jahrestagung der Gesellschaft für Mineralstoffe und Spurenelemente e.V., Stuttgart 2002, Lindenmuseum, eds. Rückgauer M.  
 Wiss. Verl.-Ges., Stuttgart, 2003, 45 - 52

<b>SF7 - Measurement instrumentation</b>
--

**SF7.ERDA**

Avriganu M. ; von Oertzen W. ; Plompen A.J.M. ; Avriganu V.

**Optical model potentials for  $\alpha$ -particles scattering around the Coulomb barrier on A 100 nuclei**

Nuclear Physics A  
723 (2003) 104 - 126

Bohlen H.G. ; Kalpakchieva R. ; von Oertzen W. ; Massey T.N. ; Gebauer B. ; Grimes S.M. ; Kokalova T. ; Lenske H. ; Lenz A. ; Milin M. ; Schulz Ch. ; Thummerer S. ; Torilov S. ; Tumino A.

**Structure studies of neutron-rich Beryllium and Carbon isotopes**

Nuclear Physics A  
722 (2003) 3c - 9c

Bohlen H.G. ; von Oertzen W. ; Kalpakchieva R. ; Gebauer B. ; Grimes S.M. ; Lenz A. ; Massey T.N. ; Milin M. ; Schulz C. ; Kokalova T. ; Torilov S. ; Thummerer S.

**Structure of neutron-rich Be and C isotopes**

Physics of Atomic Nuclei  
66 (8) (2003) 1494 - 1500

Milin M. ; von Oertzen W.

**Search for oblate and triangular configurations in carbon isotopes**

Fizika B  
12 (2003) 61 - 72

Peter I. ; von Oertzen W. ; Thummerer S. ; Bohlen H.G. ; Gebauer B. ; Gerl J. ; Kaspar M. ; Kozhoukharov I. ; Kröll T. ; Rejmund M. ; Wollersheim H.J. ; Thompson I.J.

**Enhanced neutron pair transfer and collective excitations in the system  $^{206}\text{Pb} + ^{118}\text{Sn}$  at barrier energies**

European Physical Journal A  
16 (4) (2003) 509 - 525

Ramstein B. ; Mosbacher C. ; Hennino T. ; Augustyniak W. ; Bachelier D. ; Bohlen H.G. ; Boyard J.L. ; Dahl R. ; Ellegaard C. ; Gaarde C. ; Gosset J. ; Jourdain J.C. ; Larsen J.S. ; Lemaire M.C. ; L'Hote D. ; Morsch H.P. ; Österlund M. ; Poitou J. ; Radvanyi P. ; Roy-Stephan M. ; Sams T. ; Skousen M. ; Tarle-Rousteau S. ; Zupranski P.

**$^2\text{H} (^3\text{He}, t)2p$  reaction at 2 GeV**

The European Physical Journal A  
16 (2003) 583 - 597

Thummerer S. ; von Oertzen W. ; Kokalova T. ; Bohlen H.G. ; Gebauer B. ; Tumino A. ; Massey T.N. ; Angelis G. de ; Axiotis M. ; Gadea A. ; Kröll Th. ; Marginean N. ; Napoli D.R. ; De Poli M. ; Ur C. ; Bazzacco D. ; Lenzi S.M. ; Rossi Alvarez C. ; Lunardi S. ; Menegazzo R. ; Bizzeti P.G. ; Bizzeti-Sona A.M.

**$\gamma$ -decay study of  $^{21}\text{Na}$  and  $^{21}\text{Ne}$ , octupole bands in  $^{21}\text{Ne}$**

Journal of Physics G  
29 (2003) 509 - 519

Thummerer S. ; von Oertzen W. ; Kokalova T. ; Bohlen H.G. ; Gebauer B. ; Tumino A. ; Massey T.N. ; Angelis G. de ; Axiotis M. ; Gadea A. ; Kröll Th. ; Marginean N. ; Napoli D.R. ; De Poli M. ; Ur C. ; Bazzacco D. ; Lenzi S.M. ; Rossi Alvarez C. ; Lunardi S. ; Menegazzo R. ; Bizzeti P.G. ; Bizzeti-Sona A.M.

**A study of  $\gamma$  decays and octupole bands in  $^{21}\text{Ne}$  and  $^{21}\text{Na}$**

Physics of Atomic Nuclei  
66 (8) (2003) 1428 - 1433

von Oertzen W.

**Clusters and covalently bound nuclear molecules**

Physics of Atomic Nuclei  
66 (9) (2003) 1591 - 1598

von Oertzen W.

**Clusters and covalently bound nuclear molecules**

Jadernaja Fizika  
66 (9) (2003) 1637 - 1645

*von Oertzen W. ; Bohlen H. G. ; Khoa D.T.*

**Nuclear rainbow and the EOS of cold nuclear matter**

Nuclear Physics A  
722 (2003) 202c - 208c

*von Oertzen W. ; Bohlen H.-G.*

**Covalently bound molecular states in beryllium and carbon isotopes**

Comptes Rendus Physique  
4 (4-5) (2003) 465 - 474

**SF7.Others**

---

*Bohlen H.G. ; Kalpakchieva R. ; Gebauer B. ; Grimes S.M. ; Lenske H. ; Lieb K.P. ; Massey T.N. ; Milin M. ; von Oertzen W. ; Schulz Ch. ; Kokalova T. ; Torilov S. ; Thummerer S.*

**Spectroscopy of particle-hole states of  $^{16}\text{C}$**

Physical Review C  
68 (2003) 054606/1 - 10

*Bohlen H.G. ; von Oertzen W. ; Kalpakchieva R. ; Gebauer B. ; Grimes S.M. ; Massey T.N. ; Lenske H. ; Lenz A. ; Milin M. ; Schulz Ch. ; Kokalova T. ; Torilov S. ; Thummerer S.*

**Structure studies of neutron-rich beryllium and carbon isotopes**

In: Nuclear clusters : from light to superheavy nuclei ; symposium, 5 - 9 August, 2002, Rauschholzhausen, Germany, eds. Jolos J. EP Systema, Debrecen, 2003, 53 - 58

*Lepine-Szily A. ; Oliveira J.M. ; Galante D. ; Amadio G. ; Vanin V. ; Lichtenthäler R. ; Guimaraes V. ; Lima G.F. ; Bohlen H.G. ; Ostrowski A.N. ; Di Pietro A. ; Laird A.M. ; Maunoury L. ; de Oliveira Santos F. ; Roussel-Chomaz P. ; Savajols H. ; Trinder W. ; Villari A.C.C. ; de Vismes A.*

**Spectroscopy of light proton-rich unbound nuclei:  $^{15}\text{F}$ ,  $^{10,11}\text{N}$**

Nuclear Physics A  
722 (2003) 512c - 517c

## SE - Solar Energy Research

### SE1 - Silicon photovoltaics

#### SE1.Cells

*Birkholz M. ; Selle B. ; Fenske F. ; Fuhs W.*  
**Structure-function relationship between preferred orientation of crystallites and electrical resistivity in thin polycrystalline ZnO:Al films**  
Physical Review B  
68 (2003) 205414/1 - 8

*Boehme C. ; Lips K.*  
**Electrical detection of spin coherence in silicon**  
Physical Review Letters  
91 (24) (2003) 246603/1 - 4

*Boehme C. ; Lips K.*  
**Theory of time-domain measurement of spin-dependent recombination with pulsed electrically detected magnetic resonance**  
Physical Review B  
68 (24) (2003) 245105/1 - 19

*Brendel K. ; Nickel N.H.*  
**Optical and electronic properties of laser crystallized poly-Si**  
Solid State Phenomena  
93 (2003) 167 - 172

*Brendel K. ; Nickel N.H. ; Lengsfeld P. ; Schöpke A. ; Sieber I. ; Nerding M. ; Strunk H.P. ; Fuhs W.*  
**Excimer laser crystallization of amorphous silicon on metal coated glass substrates**  
Thin Solid Films  
427 (2003) 86 - 90

*Brendel K. ; Nickel N.H. ; Lips K. ; Fuhs W.*  
**Photoluminescence of doped and undoped laser crystallized polycrystalline silicon**  
Solid State Communications  
126 (2003) 499 - 502

*Brendel K. ; Nickel N.H. ; Lips K. ; Fuhs W.*  
**Electron-spin-resonance investigation of laser crystallized polycrystalline silicon**  
In: Amorphous and nanocrystalline silicon-based films - 2003 : Symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Abelson J.R. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 69 - 74

*Fenske F. ; Reinig P. ; Selle B. ; Fuhs W.*  
**Pulse-sputter deposition of highly  $\mu$ -oriented crystalline silicon films**  
Surface and Coatings Technology  
174-175 (2003) 801 - 804

*Lengsfeld P. ; Boehme S. ; Brendel K. ; Genzel Ch. ; Nickel N.H.*  
**Raman spectroscopy of heavily doped polycrystalline and microcrystalline silicon**  
Physica Status Solidi B  
235 (1) (2003) 170 - 178

*Lengsfeld P. ; Nickel N.H.*  
**Structural and electronic properties of laser-crystallized poly-Si**  
In: Laser crystallization of silicon, eds. Nickel N.H.  
Elsevier Acad. Press, Amsterdam, 2003, 119 - 172

*Lips K. ; Boehme C.*  
**Recombination echoes in disordered silicon**  
Journal of Materials Science: Materials in Electronics  
14 (2003) 635 - 639

*Lips K. ; Boehme C. ; Fuhs W.*  
**Recombination in silicon thin-film solar cells: a study of electrically detected magnetic resonance**  
IEE Proceedings-Circuits, Devices and Systems  
150 (4) (2003) 309 - 315

*Lips K. ; Kanschä P. ; Fuhs W.*  
**Defects and recombination in microcrystalline silicon**  
Solar Energy Materials and Solar Cells  
78 (2003) 513 - 541

*Nickel N.H.*

**Introduction to laser crystallization of silicon**

In: Laser crystallization of silicon, eds. Nickel N.H.  
Elsevier Acad. Press, Amsterdam, 2003, 1 - 10

*Nickel N.H.*

**Wasserstoff in Zinkoxid**

In: Workshop TCO für Dünnschichtsolarzellen II : 16. - 17.09.2002 in Jülich ; FVS workshop 2002 / Forschungsverbund Sonnenenergie, eds. Rech B. ; Stadermann G.  
FVS, Berlin, 2003, 30 - 31

*Nickel N.H. ; Brendel K.*

**Hydrogen density-of-states distribution in zinc oxide**

Physical Review B  
68 (19) (2003) 193303/1 - 4

*Nickel N.H. ; Brendel K.*

**Hydrogen bonding and grain-boundary defects in laser crystallized poly-Si**

Solid State Phenomena  
93 (2003) 191 - 196

*Nickel N.H. ; Brendel K.*

**Hydrogen density-of-states in polycrystalline silicon**

Applied Physics Letters  
82 (18) (2003) 3029 - 3031

*Nickel N.H. ; Brendel K.*

**Influence of laser annealing on hydrogen bonding in disordered silicon thin films**

In: Amorphous and nanocrystalline silicon-based films - 2003 : Symposium April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Abelson J.R. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 693 - 698

*Nickel N.H. ; Brendel K.*

**The role of hydrogen in laser crystallized polycrystalline silicon**

In: Progress in semiconductors II - electronic and optoelectronic applications : Symposium held December 2 - 5, 2002, Boston, Massachusetts, U.S.A., eds. Weaver B.D. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 249 - 254

*Nickel N.H. ; Fleischer K.*

**Hydrogen local vibrational modes in zinc oxide**

Physical Review Letters  
90 (19) (2003) 197402/1 - 4

*Nickel N.H. [Ed.]*

**Laser crystallization of silicon**

(Semiconductors and semimetals ; 75)  
Elsevier Acad. Press, Amsterdam, 2003

*Rebien M.*

**Optische Materialuntersuchungen für Si-Dünnschichtsolarzellen : ZnO, Ga<sub>2</sub>O<sub>3</sub> und Lichteinfang**

Berlin, Humboldt-Univ., Diss., XXIII, 134 S.

*Reinig P. ; Fenske F. ; Fuhs W. ; Schöpke A. ; Selle B.*

**Crystalline silicon films sputtered on molybdenum. A study of the silicon-molybdenum interface**

Applied Surface Science  
210 (2003) 301 - 306

*Reinig P. ; Fenske F. ; Schöpke A. ; Selle B. ; Fuhs W. ; Nerding M. ; Strunk H.P.*

**Growth of highly (100)-oriented crystalline silicon thin-films on molybdenum by pulsed dc-magnetron sputtering**

Solid State Phenomena  
93 (2003) 287 - 292

*Saleh R. ; Nickel N.H.*

**Raman spectroscopy of B-doped microcrystalline silicon films**

Thin Solid Films  
427 (2003) 266 - 269

*Schwarzkopf J. ; Selle B. ; Bohne W. ; Röhrich J. ; Sieber I. ; Fuhs W.*

**Disorder in silicon films grown epitaxially at low temperature**

Journal of Applied Physics  
93 (3) (2003) 5215 - 5221

*Schwarzkopf J. ; Selle B. ; Schmidbauer M. ; Fuhs W.*

**Low-temperature epitaxial growth of B doped Si films on Si(1 0 0) and Si(1 1 1)**

Thin Solid Films  
427 (2003) 274 - 278

*Sieber I. ; Schneider R. ; Doerfel I. ; Schubert-Bischoff P. ; Gall S. ; Fuhs W.*

**Preparation of thin polycrystalline silicon films on glass by aluminium-induced crystallisation-an electron microscopy study**

Thin Solid Films  
427 (2003) 298 - 302

**SE1.Hetero**

*Angermann H. ; Henrion W. ; Rebien M. ; Röseler A.*

**Effect of preparation-induced surface morphology on the stability of H-terminated Si(111) and Si(100) surfaces**

Solid State Phenomena  
92 (2003) 179 - 182

*Fenske F. ; Brehme S. ; Henrion W. ; Schmidt M.*

**Al-dotierte ZnO-Schichten für a-Si/c-Si Solarzellen**

In: Workshop TCO für Dünnschichtsolarzellen II : 16. - 17.09.2002 in Jülich ; FVS workshop 2002 / Forschungsverbund Sonnenenergie, eds. Rech B. ; Stadermann G.  
FVS, Berlin, 2003, 16 - 21

*Prado A. del ; San Andres E. ; Martil I. ; Gonzalez-Díaz G. ; Bravo D. ; Lopez F.J. ; Bohne W. ; Röhrich J. ; Selle B. ; Martinez F.L.*

**Optical and structural properties of  $\text{SiO}_x\text{N}_y\text{H}_z$  films deposited by electron cyclotron resonance and their correlation with composition**

Journal of Applied Physics  
93 (11) (2003) 8930 - 8938

*San Andrés E. ; del Prado A. ; Mártil I. ; González-Díaz G. ; Bravo D. ; López F.J. ; Fernández M. ; Bohne W. ; Röhrich J. ; Selle B. ; Sieber I.*

**Bonding configuration and density of defects of  $\text{SiO}_x\text{H}_y$  thin films deposited by the electron cyclotron resonance plasma method**

Journal of Applied Physics  
94 (12) (2003) 7462 - 7469

*Schmidt M. ; Schoepke A. ; Milch O. ; Lussy T. ; Fuhs W.*

**Photoelectron spectroscopic investigations of very thin a-Si:H layers**

In: Amorphous and nanocrystalline silicon-based films - 2003 : symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Abelson J.R. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 125 - 130

*Yahyaoui F. ; Dittrich Th. ; Aggour M. ; Chazalviel J.-N. ; Ozanam F. ; Rappich J.*

**Etch rates of anodic silicon oxides in dilute fluoride solutions**

Journal of The Electrochemical Society  
150 (2003) B205 - B210

**SE1.Others**

*Fiechter S. ; Martinez M. ; Schmidt G. ; Henrion W. ; Tomm Y.*

**Phase relations and optical properties of semiconducting ternary sulfides in the system Cu-Sn-S**

Journal of Physics and Chemistry of Solids  
64 (2003) 1859 - 1862

*Lips K.*

**Photovoltaik - Energie der Zukunft**

Vom Wissen zum Handeln : Neues aus dem Bundes-Umwelt-Wettbewerb  
(Nr. 12) (2003) 7 - 11

**SE2 - Heterogeneous material systems**

**SE2.Analytics**

*Glatzel T. ; Sadewasser S. ; Lux-Steiner M.C.*

**Amplitude or frequency modulation-detection in Kelvin probe force microscopy**

Applied Surface Science  
210 (2003) 84 - 89

*Glatzel Th. ; Sadewasser S. ; Shikler R. ; Rosenwaks Y. ; Lux-Steiner M.Ch.*

**Kelvin probe force microscopy on III-V semiconductors: the effect of surface defects on the local work function**

Materials Science and Engineering B  
102 (2003) 138 - 142

Porti M. ; Nafria M. ; Blüm M.C. ; Aymerich X. ;  
Sadewasser S.

**Atomic force microscope topographical artifacts after the dielectric breakdown of ultrathin SiO<sub>2</sub> films**

Surface Science  
532-535 (2003) 727 - 731

Sadewasser S.

**Quantitative work function measurements on a nanometer scale: Kelvin probe force microscopy in ultrahigh vacuum**

In: Science, technology and education of microscopy : an overview, eds. Mendez-Vilas A.

Formatex, Badajoz, 2003, 725 - 733

Sadewasser S. ; Glatzel T. ; Shikler R. ;  
Rosenwaks Y. ; Lux-Steiner M.C.

**Resolution of Kelvin probe force microscopy in ultrahigh vacuum: comparison of experiment and simulation**

Applied Surface Science  
210 (2003) 32 - 36

Sadewasser S. ; Glatzel Th. ; Schuler S. ;  
Nishiwaki S. ; Kaigawa R. ; Lux-Steiner M.Ch.

**Kelvin probe force microscopy for the nano scale characterization of chalcopyrite solar cell materials and devices**

Thin Solid Films  
431-432 (2003) 257 - 261

Sadewasser S. ; Ishii K. ; Glatzel Th. ; Lux-  
Steiner M.Ch.

**Electronic surface properties of ultrahigh vacuum grown polycrystalline CuGaSe<sub>2</sub>**

In: Polycrystalline semiconductors VII : proceedings of the seventh international conference, Nara, Japan, September 10 - 13, 2002, eds. Fuyuki T. [u.a.]

Scitech Publ., Zürich-Uetikon, 2003, 319 - 324

Sadewasser S. ; Lux-Steiner M.Ch.

**Correct height measurement in noncontact atomic force microscopy**

Physical Review Letters  
91 (26) (2003) 266101/1 - 4

**SE2.Concepts**

Dittrich Th. ; Duzhko V.

**Photovoltage in free-standing mesoporous silicon layers**

Physica Status Solidi A  
197 (1) (2003) 107 - 112

Dloczik L. ; Lux-Steiner M.C. ; Koenenkamp R.

**Study on the preparation of structured CuInS<sub>2</sub> films by ion exchange processes**

Thin Solid Films  
431-432 (2003) 131 - 134

Garcia-Belmonte G. ; Kytin V. ; Dittrich T. ;  
Bisquert J.

**Effect of humidity on the ac conductivity of nanoporous TiO<sub>2</sub>**

Journal of Applied Physics  
94 (8) (2003) 5261 - 5264

Kytin V. ; Dittrich Th. ; Bisquert J. ; Lebedev  
E.A. ; Koch F.

**Limitation of the mobility of charge carriers in a nanoscaled heterogeneous system by dynamical Coulomb screening**

Physical Review B  
68 (2003) 195308/1 - 5

**SE2.Contacts**

Nishiwaki S. ; Siebentritt S. ; Walk P. ; Lux-  
Steiner M.Ch.

**A stacked chalcopyrite thin-film tandem solar cell with 1.2 V open-circuit voltage**

Progress in Photovoltaics: Research and Applications  
11 (2003) 243 - 248

Rusu M. ; Rumberg A. ; Schuler S. ; Nishiwaki  
S. ; Würz R. ; Babu S.M. ; Dziedzina M. ; Kelch  
C. ; Siebentritt S. ; Klenk R. ; Schedel-Niedrig  
T. ; Lux-Steiner M.Ch.

**Optimisation of the CBD CdS deposition parameters for ZnO/CdS/CuGaSe<sub>2</sub>/Mo solar cells**

Journal of Physics and Chemistry of Solids  
64 (2003) 1849 - 1853

**SE2.Semico**

Artaud-Gillet M.C. ; Duchemin S. ; Odedra R. ; Orsal G. ; Rega N. ; Rushworth S. ; Siebentritt S.

**Evaluation of copper organometallic sources for CuGaSe<sub>2</sub> photovoltaic applications**

Journal of Crystal Growth  
248 (2003) 163 - 168

Beckers I.E. ; Fiedeler U. ; Siebentritt S. ; Lux-Steiner M.Ch.

**Voltage dependent electromodulated photoluminescence of chalcopyrite solar cells**

Journal of Physics and Chemistry of Solids  
64 (2003) 2031 - 2035

Beckers I.E. ; Fiedeler U. ; Siebentritt S. ; Lux-Steiner M.Ch.

**Electromodulated photoluminescence of CuGaSe<sub>2</sub> solar cells**

Thin Solid Films  
431-432 (2003) 205 - 209

Bär M. ; Fischer Ch.-H. ; Muffler H.-J. ; Zweigart S. ; Karg F. ; Lux-Steiner M.C.

**Replacement of the CBD-CdS buffer and the sputtered i-ZnO layer by an ILGAR-ZnO WEL: optimization of the WEL deposition**

Solar Energy Materials and Solar Cells  
75 (2003) 101 - 107

Fischer Ch.-H. ; Bär M. ; Muffler H. ; Steigert H. ; Niesen Th. ; Karg F. ; Lux-Steiner M.Ch.

**ILGAR (Ion Layer Gas Reaction), ein low-cost-Verfahren zur Deposition von Oxidschichten - Rekord-Ergebnisse für CIGSSe-Solarzellen mit ILGAR-ZnO-Puffern**

In: Workshop TCO für Dünnschichtsolarzellen II : 16. - 17.09.2002 in Jülich ; FVS workshop 2002 / Forschungsverbund Sonnenenergie, eds. Rech B. ; Stadermann G.  
FVS, Berlin, 2003, 69 - 73

Fischer Ch.-H. ; Muffler H.-J. ; Bär M. ; Kropp T. ; Schönmann A. ; Fiechter S. ; Barbar G. ; Lux-Steiner M.Ch.

**Spray-ion layer gas reaction (ILGAR)-a novel low-cost process for the deposition of chalcopyrite layers up to the micrometer range for photovoltaic applications**

Journal of Physical Chemistry B  
107 (2003) 7516 - 7521

Laueremann I. ; Bär M. ; Ennaoui A. ; Fiedeler U. ; Fischer Ch.-H. ; Grimm A. ; Kötschau I. ; Lux-Steiner M.Ch. ; Reichardt J. ; Sankapal B.R. ; Siebentritt S. ; Sokoll S. ; Weinhardt L. ; Fuchs O. ; Heske C. ; Jung C. ; Gudat W. ; Karg F. ; Niesen T.P.

**Analysis of zinc compound buffer layers in Cu(In,Ga)(S,Se)<sub>2</sub> thin film solar cells by synchrotron-based soft X-ray spectroscopy**

In: Compound semiconductor photovoltaics : symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Noufi R. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 175 - 180

Meeder A. ; Fuertes Marron D. ; Lux-Steiner M.Ch. ; Kunst M.

**Optoelektronic properties of CuGaSe<sub>2</sub> thin films studied by time-resolved microwave conductivity**

In: Compound semiconductor photovoltaics : symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Noufi R. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 41 - 46

Meeder A. ; Fuertes Marron D. ; Tezlevan V. ; Arushanov E. ; Rumberg A. ; Schedel-Niedrig T. ; Lux-Steiner M.Ch.

**Radiative recombination in CVT-grown CuGaSe<sub>2</sub> single crystals and thin films**

Thin Solid Films  
431-432 (2003) 214 - 218

Meeder A. ; Jäger-Waldau A. ; Tezlevan V. ; Arushanov E. ; Schedel-Niedrig T. ; Lux-Steiner M.Ch.

**Temperature dependence of the exciton gap in monocrystalline CuGaSe<sub>2</sub>**

Journal of Physics: Condensed Matter  
15 (2003) 6219 - 6227

Meeder A. ; Weinhardt L. ; Stresing R. ; Fuertes Marrón D. ; Würz R. ; Babu S.M. ; Schedel-Niedrig T. ; Lux-Steiner M.Ch. ; Heske C. ; Umbach E.

**Surface and bulk properties of CuGaSe<sub>2</sub> thin films**

Journal of Physics and Chemistry of Solids  
64 (2003) 1553 - 1557



*Neisser A. ; Klenk R. ; Lux-Steiner M.Ch.*

**Diffusion of Ga and In in sequentially prepared Cu(In,Ga)S<sub>2</sub> thin films for photovoltaic applications**

In: Compound semiconductor photovoltaics : symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Noufi R. [u.a.]

Materials Research Society, Warrendale, Pa., 2003, 269 - 274

*Nishiwaki S. ; Ennaoui A. ; Schuler S. ; Siebentritt S. ; Lux-Steiner M.Ch.*

**Surface treatments and properties of CuGaSe<sub>2</sub> thin films for solar cell applications**

Thin Solid Films

431-432 (2003) 296 - 300

*Nishiwaki S. ; Siebentritt S. ; Giersig M. ; Lux-Steiner M.Ch.*

**Growth model of CuGaSe<sub>2</sub> grains in a Cu-rich/Cu-poor bilayer process**

Journal of Applied Physics

94 (10) (2003) 6864 - 6870

*Nishiwaki S. ; Siebentritt S. ; Lux-Steiner M.Ch.*

**Preparation and characterization of Cu-Ga-Se films of ordered vacancy compound**

In: Compound semiconductor photovoltaics : symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Noufi R. [u.a.]

Materials Research Society, Warrendale, Pa., 2003, 219 - 224

*Rega N. ; Siebentritt S. ; Albert J. ; Lux Steiner M.*

**Photoluminescence of Cu(In<sub>1-x</sub>Ga<sub>x</sub>)Se<sub>2</sub> epitaxial thin films grown by MOVPE**

In: Compound semiconductor photovoltaics : symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Noufi R. [u.a.]

Materials Research Society, Warrendale, Pa., 2003, 183 - 188

*Rega N. ; Siebentritt S. ; Beckers I. ; Beckmann J. ; Albert J. ; Lux-Steiner M.*

**MOVPE of epitaxial CuInSe<sub>2</sub> on GaAs**

Journal of Crystal Growth

248 (2003) 169 - 174

*Rega N. ; Siebentritt S. ; Beckers I.E. ; Beckmann J. ; Albert J. ; Lux-Steiner M.*

**Defect spectra in epitaxial CuInSe<sub>2</sub> grown by MOVPE**

Thin Solid Films

431-432 (2003) 186 - 189

*Rusu M. ; Wiesner S. ; Lindner S. ; Strub E. ; Röhrich J. ; Würz R. ; Fritsch W. ; Bohne W. ; Schedel-Niedrig Th. ; Lux-Steiner M.Ch. ; Giesen Ch. ; Heuken M.*

**Deposition and characterization of Ga<sub>2</sub>Se<sub>3</sub> thin films prepared by a novel chemical close-spaced vapour transport technique**

Journal of Physics: Condensed Matter

15 (2003) 8185 - 8193

*Siebentritt S. ; Schuler S.*

**Defects and transport in the wide gap chalcopyrite CuGaSe<sub>2</sub>**

Journal of Physics and Chemistry of Solids

64 (2003) 1621 - 1626

*Weinhardt L. ; Bär M. ; Muffler H.-J. ; Fischer Ch.-H. ; Lux-Steiner M.C. ; Niesen T.P. ; Karg F. ; Gleim Th. ; Heske C. ; Umbach E.*

**Impact of Cd<sup>2+</sup>-treatment on the band alignment at the ILGAR-ZnO/CuIn(S,Se)<sub>2</sub> heterojunction**

Thin Solid Films

431-432 (2003) 272 - 276

*Weinhardt L. ; Gleim Th. ; Fuchs O. ; Heske C. ; Umbach E. ; Bär M. ; Muffler H.-J. ; Fischer Ch.-H. ; Lux-Steiner M.C. ; Zubavichus Y. ; Niesen T.P. ; Karg F.*

**CdS and Cd(OH)<sub>2</sub> formation during Cd treatments of Cu(In,Ga)(S,Se)<sub>2</sub> thin-film solar cell absorbers**

Applied Physics Letters

82 (4) (2003) 571 - 573

*Würz R. ; Fuertes Marrón D. ; Meeder A. ; Rumberg A. ; Babu S.M. ; Schedel-Niedrig Th. ; Bloeck U. ; Schubert-Bischoff P. ; Lux-Steiner M.Ch.*

**Formation of an interfacial MoSe<sub>2</sub> layer in CVD grown CuGaSe<sub>2</sub> based thin film solar cells**

Thin Solid Films

431-432 (2003) 398 - 402

Xue C. ; Papadimitriou D. ; Raptis Y.S. ; Esser N. ; Richter W. ; Siebentritt S. ; Lux-Steiner M.Ch.

**Compositional dependence of Raman scattering and photoluminescence emission in  $\text{Cu}_x\text{Ga}_y\text{Se}_2$  thin films**

Journal of Applied Physics  
94 (7) (2003) 4341 - 4347

**SE1.BENSC**

Fuertes Marrón D. ; Meeder A. ; Bloeck U. ; Schubert-Bischoff P. ; Pfänder N. ; Würz R. ; Babu S.M. ; Schedel-Niedrig Th. ; Lux-Steiner M.Ch.

**Microstructural properties of CVD-grown  $\text{CuGaSe}_2$  based thin film solar cells**

Thin Solid Films  
431-432 (2003) 237 - 241

**ISL.User**

Denker A. ; Bohne W. ; Heese J. ; Homeyer H. ; Kluge H. ; Lindner S. ; Opitz-Coutureau J. ; Röhrich J. ; Strub E.

**Swift ion beams for solid state and materials science**

Nukleonika  
48 [Suppl. 2] (2003) S175 - S180

**SE3 - Technology**

**SE3.Baseline**

Alvarez-Garcia J. ; Barcones B. ; Romano-Rodriguez A. ; Calvo-Barrio L. ; Perez-Rodriguez A. ; Morante J.R. ; Scheer R. ; Klenk R.

**Sulfurization of Cu/In precursors for  $\text{CuInS}_2$ -based solar cells**

Journal of The Electrochemical Society  
150 (7) (2003) G400 - G403

Barcones B. ; Romano-Rodriguez A. ; Arbiol J. ; Alvarez-Garcia J. ; Perez-Rodriguez A. ; Morante J.R. ; Scheer R.

**Transmission electron microscopy and image simulation study of CuAu domains in  $\text{CuInS}_2$  epitaxial layers**

Thin Solid Films  
431-432 (2003) 226 - 230

Klaer J. ; Luck I. ; Boden A. ; Klenk R. ; Gavilanes Perez I. ; Scheer R.

**Mini-modules from a  $\text{CuInS}_2$  baseline process**

Thin Solid Films  
431-432 (2003) 534 - 537

**SE3.Control**

Alvarez-Garcia J. ; Rudigier E. ; Rega N. ; Barcones B. ; Scheer R. ; Perez-Rodriguez A. ; Romano-Rodriguez A. ; Morante J.R.

**Growth process monitoring and crystalline quality assessment of  $\text{CuInS}(\text{Se})_2$  based solar cells by Raman spectroscopy**

Thin Solid Films  
431-432 (2003) 122 - 125

**In situ XRD study of mixed  $\text{CuInSe}_2$ - $\text{CuInS}_2$  formation**

Journal of Physics and Chemistry of Solids  
64 (2003) 1843 - 1848

**In-situ XRD studies of sequential  $\text{CuIn}(\text{Se,S})_2$  formation**

In: Compound semiconductor photovoltaics : symposium held April 22 - 27, 2003, San Francisco, California, U.S.A., eds. Noufi R. [u.a.]

Materials Research Society, Warrendale, Pa., 2003, 383 - 389

Rudigier E. ; Luck I. ; Scheer R.

**Quality assessment of  $\text{CuInS}_2$ -based solar cells by Raman scattering**

Applied Physics Letters  
82 (24) (2003) 4370 - 4372

Rudigier E. ; Pietzker Ch. ; Wimbor M. ; Luck I. ; Klaer J. ; Scheer R. ; Barcones B. ; Jawhari Colin T. ; Alvarez-Garcia J. ; Perez-Rodriguez A. ; Romano-Rodriguez A.

**Real-time investigations of the influence of sodium on the properties of Cu-poor prepared  $\text{CuInS}_2$  thin films**

Thin Solid Films  
431-432 (2003) 110 - 115

*Scheer R. ; Neisser A. ; Sakurai K. ; Fons P. ; Niki S.*

**Cu(In<sub>1-x</sub>Gax)Se<sub>2</sub> growth studies by in situ spectroscopic light scattering**

Applied Physics Letters  
82 (13) (2003) 2091 - 2093

*Töben L. ; Hannappel T. ; Eichberger R. ; Möller K. ; Gundlach L. ; Ernstorfer R. ; Willig F.*

**Two-photon photoemission as a probe of unoccupied and occupied surface states of InP(100)**

Journal of Crystal Growth  
248 (2003) 206 - 210

**SE3.Others**

*Gartsman K. ; Cahen D. ; Scheer R. ; Gavilanes Perez I.*

**Extended stable junction regions in CuInSe<sub>2</sub> thin films by electric field application**

Thin Solid Films  
431-432 (2003) 284 - 288

**SE4 - Dynamics of interfacial reactions**

**SE4.Dynamics**

*Ramakrishna S. ; Willig F. ; May V. ; Knorr A.*  
**Femtosecond spectroscopy of heterogeneous electron transfer: extraction of excited-state population dynamics from pump-probe signals**

Journal of Physical Chemistry B  
107 (2003) 607 - 611

*Schwarzburg K. ; Willig F.*

**Reply to comments on "Diffusion impedance and space charge capacitance in the nanoporous dye-sensitized electrochemical solar cell"**

Journal of Physical Chemistry  
107 (2003) 13546 - 13546

*Schwarzburg K. ; Willig F.*

**Diffusion impedance and space charge capacitance in the nanoporous dye-sensitized electrochemical solar cell**

Journal of Physical Chemistry B  
107 (2003) 3552 - 3555

**SE4.Others**

*Alam M.S. ; Rao B.S.M. ; Janata E.*

**\*OH reactions with aliphatic alcohols: evaluation of kinetics by direct optical absorption measurement. A pulse radiolysis study**

Radiation Physics and Chemistry  
67 (2003) 723 - 728

*Bergfeldt T.M. ; Waltz W.L. ; Xiangrong Xu ; Sedlak P. ; Dreyer U. ; Möckel H. ; Lilie J. ; Stephenson J.W.*

**Photobehavior of aqueous uranyl ion and photo-oxygenation of isobutane using light from the visible region**

Canadian Journal of Chemistry  
81 (2003) 219 - 229

*Ershov B.G. ; Gordeev A.V. ; Kelm M. ; Janata E.*

**Rate constant for the reaction of the H atom with H<sub>2</sub>O<sub>2</sub> in aqueous solution**

Radiation Physics and Chemistry  
67 (2003) 613 - 616

*Ershov B.G. ; Janata E.*

**The reduction of I<sub>2</sub> by 1-hydroxyalkyl radicals in aqueous solution. A pulse radiolysis study**

Chemical Physics Letters  
372 (2003) 195 - 198

*Jakubowicz J. ; Giersig M.*

**Structure and magnetic properties of Nd<sub>2</sub>(Fe,Co,Al,Cr)<sub>14</sub>B /  $\alpha$ -Fe nanocomposite magnets**

Journal of Alloys and Compounds  
349 (2003) 311 - 315

*Janata E.*

**Some examples of pulse radiolysis**

Radiation Physics and Chemistry  
67 (2003) 287 - 290

*Janata E.*

**Structure of the trimer silver cluster  $\text{Ag}_3^{(2+)}$**

Journal of Physical Chemistry B  
107 (30) (2003) 7334 - 7336

*Janata E.*

**Instrumentation of kinetic spectroscopy-17.  
The use of a diode array multichannel  
detector in kinetic experiments**

Radiation Physics and Chemistry  
66 (2003) 145 - 148

*Janata E.*

**Instrumentation of kinetic spectroscopy-18.  
A wideband dc-coupled amplifier**

Radiation Physics and Chemistry  
66 (2003) 215 - 218

*Janata E.*

**Instrumentation of kinetic spectroscopy-19.  
A method for the simulation of kinetics of  
reaction mechanisms**

Radiation Physics and Chemistry  
66 (2003) 219 - 222

*Kempa K. ; Kimball B. ; Rybczynski J. ; Huang  
Z.P. ; Wu P.F. ; Steeves D. ; Sennett M. ; Giersig  
M. ; Rao D.V.G.L.N. ; Carnahan D.L. ; Wang  
D.Z. ; Lao J.Y. ; Li W.Z. ; Ren Z.F.*

**Photonic crystals based on periodic arrays  
of aligned carbon nanotubes**

Nano Letters  
3 (1) (2003) 13 - 18

**SE2.Semico**

*Nishiwaki S. ; Siebentritt S. ; Giersig M. ;  
Lux-Steiner M.Ch.*

**Growth model of  $\text{CuGaSe}_2$  grains in a  
Cu-rich/Cu-poor bilayer process**

Journal of Applied Physics  
94 (10) (2003) 6864 - 6870

**SE5 - Solar energy**

**SE5.Energetics**

*Barkschat A. ; Pohlmann L. ; Tributsch H. ;  
Dohrmann J.K.*

**Photoelectrochemically induced periodical  
deposition patterns of platinum on p-InP.  
Part 1: experiment and observations**

Physical Chemistry Chemical Physics  
5 (2003) 1259 - 1263

*Barkschat A. ; Tributsch H. ; Dohrmann J.K.*

**Imaging of catalytic activity of platinum  
on p-InP for photocathodical hydrogen  
evolution**

Solar Energy Materials and Solar Cells  
80 (2003) 391 - 403

*Bogdanoff P. ; Hilgendorff M. ; Schulenburg H.  
; Fieber-Erdmann M. ; Dorbandt I. ; Tributsch  
H. ; Fiechter S.*

**Noble metal free catalysts for oxygen  
reduction in PEM fuel cells**

In: Technical session: fuel cell systems of  
the World Renewable Energy Congress VII :  
proceedings 7, 2002, Köln, eds. Stolten D.  
[u.a.]

Forschungszentrum Jülich GmbH, Jülich,  
2003, 129 - 132

*Colbeau-Justin C. ; Kunst M. ; Huguenin D.*

**Structural influence on charge-carrier  
lifetimes in  $\text{TiO}_2$  powders studied by  
microwave absorption**

Journal of Materials Science  
38 (2003) 2429 - 2437

*Ellmer K. ; Mientus R. ; Weiß V. ; Rossner H.*

**In situ energy-dispersive x-ray diffraction  
system for time-resolved thin-film growth  
studies**

Measurement Science and Technology  
14 (2003) 336 - 345

*Fabregat-Santiago F. ; Garcia-Belmonte G. ;  
Bisquert J. ; Bogdanoff P. ; Zaban A.*

**Mott-Schottky analysis of nanoporous  
semiconductor electrodes in dielectric  
state deposited on  $\text{SnO}_2(\text{F})$  conducting  
substrates**

Journal of the Electrochemical Society  
150 (6) (2003) E293 - E298

*Hagen A. ; Barkschat A. ; Dohrmann J.K. ;  
Tributsch H.*

**Imaging UV photoactivity and  
photocatalysis of  $\text{TiO}_2$ -films**

Solar Energy Materials and Solar Cells  
77 (2003) 1 - 13

*Hilgendorff M. ; Bogdanoff P. ; Bron M. ; Dorbandt I. ; Tributsch H. ; Fiechter S.*

**Preparation, structure and performance of Ru-based oxygen reduction catalysts in PEM fuel cells**

In: Technical session: fuel cell systems of the World Renewable Energy Congress VII : proceedings ; 7, 2002, Köln, eds. Stolten D. [u.a.]

Forschungszentrum Jülich GmbH, Jülich, 2003, 227 - 230

*Kraft D. ; Weiler U. ; Tomm Y. ; Thissen A. ; Klein A. ; Jaegermann W.*

**Alternative back contacts for CdTe solar cells: a photoemission study of the VSe<sub>2</sub>/CdTe and TiSe<sub>2</sub>/CdTe interface formation**

Thin Solid Films

431-432 (2003) 382 - 386

*Kunst M. ; Wünsch F. ; Jokisch D.*

**Lateral scanning of Si based systems by measurements of the microwave photoconductance**

Materials Science and Engineering B

102 (2003) 173 - 178

*Lewerenz H.J. ; Jungblut H. ; Aggour M. ; Goncalves E. ; Rütther E. ; Kanis M. ; Murrell C. ; Gaul M. ; Winkelnkemper M. ; Jakubowicz J. ; Cox P.A.*

**Synchrotron radiation photoelectron spectroscopy and AFM investigation on electrochemical nanoroughening of float zone n-Si(111)**

In: BESSY Annual Report

2003, 259 - 261

*Perfetti L. ; Georges A. ; Florens S. ; Biermann S. ; Mitrovic S. ; Berger H. ; Tomm Y. ; Höchst H. ; Grioni M.*

**Spectroscopic signatures of a bandwidth-controlled Mott transition at the surface of 1T-TaSe<sub>2</sub>**

Physical Review Letters

90 (16) (2003) 166401/1 - 4

*Pohlmann L. ; Barkschat A. ; Tributsch H. ; Dohrmann J.K.*

**Photoelectrochemically induced periodical deposition patterns of platinum on p-InP. Part 2: kinetic model**

Physical Chemistry Chemical Physics

5 (2003) 1264 - 1269

*Schrage M. ; Tributsch H. ; Klein M.P. ; Wünsch F. ; Kunst M.*

**Measurement of the microwave Hall effect for the characterization of semiconductors**

Materials Science and Engineering B

102 (2003) 409 - 412

*Sirimanne P.M. ; Jeranko T. ; Bogdanoff P. ; Fiechter S. ; Tributsch H.*

**On the photo-degradation of dye sensitized solid-state TiO<sub>2</sub>/dye/CuI cells**

Semiconductor Science and Technology

18 (2003) 708 - 712

*Sirimanne P.M. ; Soga T. ; Jimbo T.*

**Identification of various luminescence centers in CuI films by cathodoluminescence technique**

Journal of Luminescence

105 (2003) 105 - 109

*Tributsch H.*

**Coupling bio-geochemical processes to regenerative energy for an industrial carbon cycle**

Hydrometallurgy

71 (2003) 293 - 300

*Tributsch H.*

**Solare Energiewirtschaft : worüber sich zukünftige Generationen wundern werden**

21 : das Magazin für zukunftsfähige Bildung.

Nr.4 (2003) 26 - 28

*Tributsch H.*

**The microwave-look into the photo electrode: What can we learn about interfacial electron transfer?**

Electrochimica Acta

49 (2003) 153 - 165

*Tributsch H.*

**Solare Architektur und urbane Nachhaltigkeit: Die Natur als Vorbild**

In: Solare Stadterneuerung - eine soziale und ökologische Aufgabe : Europäisches Symposium und Ausstellung für Solare Architektur und Solares Bauen ; 17. - 21. September 2002, Wirtschaftsuniversität Wien

Eurosolar Austria, Wien, 2003, 185 - 192

*Tributsch H. ; Fiechter S. ; Jokisch D. ; Rojas-Chapana J. ; Ellmer K.*

**Photoelectrochemical power, chemical energy and catalytic activity for organic evolution on natural pyrite interfaces**

Origins of Life and Evolution of the Biosphere  
33 (2003) 129 - 162

*Wünsch F. ; Alonso-Vante N. ; Tributsch H.*

**Surface state capture cross sections at Si/electrolyte interfaces determined by combined microwave reflection/photocurrent measurements**

Physical Chemistry Chemical Physics  
5 (2003) 3984 - 3987

**SE5.Interfaces**

*Jakubowicz J. ; Jungblut H. ; Lewerenz H.J.*  
**Initial surface topography changes during divalent dissolution of silicon electrodes**  
Electrochimica Acta  
49 (2003) 137 - 146

*Lewerenz H.J. ; Aggour M. ; Murrell C. ; Jakubowicz J. ; Kanis M. ; Campbell S.A. ; Cox P.A. ; Hoffmann P. ; Jungblut H. ; Schmeißer D.*  
**High resolution surface analysis of Si roughening in dilute ammonium fluoride solution**

Journal of Electroanalytical Chemistry  
540 (2003) 3 - 6

*Lewerenz H.J. ; Aggour M. ; Murrell C. ; Kanis M. ; Jungblut H. ; Jakubowicz J. ; Cox P.A. ; Campbell S.A. ; Hoffmann P. ; Schmeißer D.*

**Initial stages of structure formation on silicon electrodes investigated by photoelectron spectroscopy using synchrotron radiation and in situ atomic force microscopy**

Journal of the Electrochemical Society  
150 (3) (2003) E185 - E189

**SE1.Others**

*Fiechter S. ; Martinez M. ; Schmidt G. ; Henrion W. ; Tomm Y.*

**Phase relations and optical properties of semiconducting ternary sulfides in the system Cu-Sn-S**

Journal of Physics and Chemistry of Solids  
64 (2003) 1859 - 1862

**SE2.Semico**

*Meeder A. ; Fuertes Marron D. ; Lux-Steiner M.Ch. ; Kunst M.*

**Optoelectronic properties of CuGaSe<sub>2</sub> thin films studied by time-resolved microwave conductivity**

In: Compound semiconductor photovoltaics : symposium held April 22 - 25, 2003, San Francisco, California, U.S.A., eds. Noufi R. [u.a.]  
Materials Research Society, Warrendale, Pa., 2003, 41 - 46

**SE6.BESSY**

*Calvet W. ; Lewerenz H.-J. ; Pettenkofer C.*  
**Surface vs. volume stoichiometry of MBE grown CuInS<sub>2</sub> films on Si**  
Thin Solid Films  
431-432 (2003) 317 - 320

*Calvet W. ; Pettenkofer C. ; Lewerenz H.-J.*  
**Initial phases of CuInS<sub>2</sub> - Si heteroepitaxy**  
Journal of Vacuum Science and Technology B  
21 (4) (2003) 1335 - 1343

**SE6 - Electronic structure of semiconductor interfaces**

**SE6.BESSY**

*Calvet W. ; Lewerenz H.-J. ; Pettenkofer C.*  
**Surface vs. volume stoichiometry of MBE grown CuInS<sub>2</sub> films on Si**  
Thin Solid Films  
431-432 (2003) 317 - 320

*Calvet W. ; Pettenkofer C. ; Lewerenz H.-J.*  
**Initial phases of CuInS<sub>2</sub> - Si heteroepitaxy**  
Journal of Vacuum Science and Technology B  
21 (4) (2003) 1335 - 1343

## I - Central Scientific-Technical Infrastructure

### DN - Central Data-Processing and Network

#### SF1.Spallation

*Zsigmond G. ; Lieutenant K. ; Manoshin S. ; Fromme M. ; Bordallo H.N.*

#### **Neutron virtual instrumentation and experiments: VITESS 2.4**

In: Proceedings of the 16th Meeting of the International Collaboration on Advanced Neutron Sources ICANS - XVI : Zeughaus - Convention Center, Düsseldorf-Neuss, Germany, May 12 - 15, 2003. Vol. 1, eds. Mank G. [u.a.]

Forschungszentrum Jülich, Jülich, 2003, 473 - 482

#### SF2.BENSC

*Ehm L. ; Knorr K. ; Mädler F. ; Voigtländer H. ; Busetto E. ; Cassetta A. ; Lausi A. ; Winkler B.*

#### **High-pressure X-ray diffraction study on $\alpha$ -PbF<sub>2</sub>**

Journal of Physics and Chemistry of Solids  
64 (2003) 919 - 925

### DS - Experimental Systems

#### DS

*Hahn-Meitner-Institut Berlin. Wulf F. [Ed.]*

#### **Bericht der Frühjahrstagung der Studiengruppe für Elektronische Instrumentierung 24. bis 26. März 2003, Forschungszentrum Jülich, Zentrallabor für Elektronik (ZEL)**

(HMI-B 592)

Hahn-Meitner-Institut, Berlin, 2003

*Hahn-Meitner-Institut Berlin. Wulf F. [Ed.]*

#### **Bericht der Herbsttagung der Studiengruppe für Elektronische Instrumentierung 22. bis 24. September 2003, am Lehrstuhl für Netz- und Datensicherheit der Ruhr-Universität Bochum**

(HMI-B 594)

Hahn-Meitner-Institut, Berlin, 2003





# Conference Contributions

## SF - Structural Research

### SF - BENSC

#### SF1.BENSC

Invited Talk

*Bordallo, H.N.*

#### Lattice Dynamics Simulation on the Layered Manganite, $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ , $x=0.4$

2nd Berlin Workshop on Orbital Physics and Novel Phenomena in Transition Metal Oxides  
Berlin (Germany) 24. Sep - 24. Sep 2003

Invited Talk

*Bordallo, H.N.*

#### Benchmark simulation of a Fermi-Chopper instrument

SCANS Meeting

Nyköping (Sweden) 26. Sep - 26. Sep 2003

Invited Talk

*Bordallo, H.N.*

#### What are neutrons used for?

XXVI National Meeting in Condensed Matter, Caxambu  
Brazil 06. May - 10. May 2003

Poster

*Bowers, J.; Howse, J.R.; Neilson, M.M.; Manzanares-Papayanopoulos, E.; Clements, P.J.; Steitz, R.; Findenegg, G.H.; Burgess, A.N.; Zarbakhsh, A.; Christenson, H.K.; Cubitt, R.; McLure, I.A.*

#### Long-tail adsorption from near critical liquid mixtures at free and modified Si/SiO<sub>2</sub> interfaces

BENSC User's Meeting 2003  
Berlin 16. May - 16. May 2003

Invited Talk

*Clemens, D.; Mezei, F.; Peters, J.; Manochine, S.; Lieutenant, K.; Mokrani, L.; Zsigmond, G.*

#### Very Small-Angle Neutron Scattering Instrument for BENSC/HMI

1. Workshop of the International Consortium on Ultra-Small-Angle Scattering  
Oak Ridge, USA 09. Jul - 10. Jul 2003

Poster

*Dante, S.; Hauss, T.; Gutberlet, T.; Schemmel, S.; Dencher, N. A.; Steitz, R.;*

#### Lipid Membranes and Beta-Amyloid

BENSC User's Meeting 2003  
Berlin 16. May - 16. May 2003

Poster

*G. Zsigmond, K. Lieutenant, H. Bordallo, S. Manoshin, F. Mezei*

#### The future: Monte Carlo simulations for analysis of experimental data

3rd European Conference on Neutron Scattering  
Montpellier, France 03. Sep - 06. Sep 2003

Poster

*Habicht, K.; Keller, T.; Golub, R.; Keimer, B.; Mezei, F.*

#### Phonon lifetime measurement with neutron resonance spin echo - anharmonic lattice dynamics of dispersive phonon modes

ECNS 2003

Montpellier, France 03. Sep - 06. Sep 2003

Poster

*Habicht, K.; Golub, R.; Keller T.*

#### The resolution matrix for neutron spin-echo three-axis spectroscopy

ECNS 2003

Montpellier, France 03. Sep - 06. Sep 2003

Invited Talk

*Jauch, W.*

#### Electron density distributions in relation to magnetism: Results from gamma-ray diffraction

Third European Charge Density Meeting  
Sandberg Estate (Denmark) 24. Jun - 29. Jun 2003

Poster

*Krist, Th.; Cho, S. J. .; Hoffmann, J. E.; Mezei, F.*

#### Determination of interface growth with atomic resolution in FeCo-Si multilayers

BENSC User meeting

Berlin 16. May - 16. May 2003

Invited Talk

*Lechner, R. E.*

#### Time Structure of Source Pulse and Technique of Observation Time Variation in QENS Experiments at Spallation Sources

ICANS XVI, The 16th Meeting of the International Collaboration on Advanced Neutron Sources

Neuss, Deutschland 12. May - 15. May 2003

Invited Talk

*Lechner, R. E.*

**Multichopper-TOF Spectrometers for QENS Experiments on Complex Systems**

IPN2003, International Symposium on Pulsed Neutron Science and Instruments

Tsukuba, Japan 27. Oct - 30. Oct 2003

Invited Talk

*Lechner, R. E.*

**Observation Time Variation in QENS Experiments on Complex Systems**

International Workshop on the Scientific Opportunities with Cold neutron Time-of-Flight Spectroscopy

Washington DC, USA 13. Jul - 16. Jul 2003

Invited Talk

*Lechner, R. E.*

**Löslichkeitsverhalten und Hydratisierungsdynamik von Cyclodextrinen; Nutzung der variablen Auflösung bei Untersuchungen mit Quasielastischer Neutronenstreuung**

Projekt-Workshop, Treffen des Kompetenzverbands zur Unterstützung des NEAT2005-Projekts

HMI Berlin 04. Jul - 04. Jul 2003

Poster

*Schemmel, S.; Shi, H.; Akcakayiran, D.; Zhang, S.; Steitz, R.; Findenegg, G.H.*

**Self Organising Surface Structures of a Triblock Copolymer from Aqueous Solutions**

BENSC User's Meeting 2003

Berlin 16. May - 16. May 2003

Invited Talk

*Schneider, R.; Genzel, C.*

**Non-destructive analysis of residual stress profiles using neutron and synchrotron radiation**

Workshop Springback

Inpro GmbH, Berlin 13. Mar - 14. Mar 2003

Invited Talk

*Schneider, R.; Genzel, C.*

**Non-Destructive Residual Stress and Texture Analysis using Neutron and Synchrotron Radiation**

DGzFP Fachauschuss Durchstrahlungsprüfung

Garbsen 03. Dec - 04. Dec 2003

Poster

*Schneider, R.; Poeste, T.; Freydank, H.*

**Stress and Strain Analysis: The NEW Material Research Diffraktometer E3 at BENSC**

ECNS

Montpellier 03. Sep - 03. Sep 2003

Invited Talk

*Steitz, R.; Gutberlet, T.; Hauss, T.; Klösigen, B.; Krastev, R.; Schemmel, S.; Simonsen, A. C.; Findenegg, G. H.;*

**Nanobubbles and Their Precursor Layer at the Solid/Liquid Interface**

BENSC User's Meeting 2003

Berlin 16. May - 16. May 2003

Oral

*Steitz, R.; Gutberlet, T.; Hauss, T.; Klösigen, B.; Krastev, R.; Schemmel, S.; Simonsen, A. C.; Findenegg, G. H.;*

**Depletion of Water near an Extended Hydrophobic Surface**

3rd European Conference on Neutron Scattering

Montpellier 03. Sep - 06. Sep 2003

Oral

*Steitz, R.; Schemmel, S.; Gutberlet, T.; Hauss, T.; Klösigen, B.; Simonsen, A. C.; Krastev, R.; Findenegg, G. H.;*

**Nanobubbles and Their Precursor Layer at the Interface of Water against a Hydrophobic Substrate**

102. Bunsentagung

Kiel 29. May - 31. May 2003

Poster

*Vorderwisch, P.; Sobolev, O.; Desmedt, A.*

**NH<sub>3</sub> quantum rotators in Hofmann clathrates: intensity and width of rotational transition lines**

3rd European Conference on Neutron Scattering (ECNS 2003)

Montpellier, France 03. Sep - 03. Sep 2003

## Invited Talk

*Vorderwisch, P.; Sobolev, O.*

**NH<sub>3</sub> quantum rotations in Hofmann-type clathrates studied by inelastic neutron scattering**

International Workshop on Quantum Atomic & Molecular Tunneling in Solids(QAMTS XII)  
University of Florida, Gainesville, USA 22. Jun - 25. Jun 2003

---

**SF2.BENSC**

## Poster

*Hutanu V., Rupp A.*

**Studies on optical pumping cells (OPC's) to polarise <sup>3</sup>He**

3rd European Conference on Neutron Scattering  
Montpellier (France) 03. Sep - 06. Sep 2003

## Oral

*Hutanu V., Habicht K., Rupp A.*

**Neutron spin filters (NSF) obtained by metastability-exchange optical pumping (MEOP) and mechanical compressing of <sup>3</sup>He gas**

The 7th Conference on Optics ROMOPTO 2003  
Constanta (Rumaenien) 08. Sep - 11. Sep 2003

## Oral

*Graeme R Blake, Laurent Chapon, Paolo G Radaelli, Matthias J Gutmann, Dimitri N Argyriou, John F. Mitchell*

**Structural and magnetic ordering in Pr<sub>0.65</sub>(Ca<sub>y</sub>Sr<sub>1-y</sub>)<sub>0.35</sub>MnO<sub>3</sub> : quantum critical point versus phase segregation scenarios**

American Physical Society March Meeting  
Austin, Texas 03. Mar - 07. Mar 2003

## Poster

*Hahlin, A.; Holub-Krappe, E.; Maletta, H.; Andersson, C.; Hunter-Dunn, J.; Karis, O.; Arvanitis, D.:*

**The Temperature-driven magnetization in a Co film: an XMCD and XMRS magnetometry study.**

Workshop :Trends in Materials and Nanoscience,  
Strasbourg/Frankreich 01. Oct - 03. Oct 2003

## Poster

*Liu, Y.T., Fritzsche, H., Hauschild, J., Maletta, H.*

**Polarized neutron reflectometry study of thin Fe films prepared on V(100)**

3rd European Conference on Neutron Scattering  
Montpellier, France 03. Sep - 06. Sep 2003

## Poster

*Többens, D. M.*

**The use of sapphire sample holders in powder diffraction**

11. Jahrestagung der Deutschen Gesellschaft für Kristallographie (DGK)  
Berlin 10. Mar - 13. Mar 2003

---

**SF3.BENSC**

## Poster

*De Stefanis, A., Tomlinson, A.G., Steriotis, T.H.A., Stefanopoulos, K.L., Keiderling, U.*

**Nanostructural characterization of catalysts by SANS**

3rd European Conference on Neutron Scattering ECNS 2003  
Montpellier, France 03. Sep - 06. Sep 2003

## Poster

*Garcia-Matres, E.*

**Hard magnetic properties of bulk amorphous Nd<sub>60</sub>Fe<sub>20</sub>Co<sub>10</sub>Al<sub>10</sub> investigated by SANSPOLE**

European Conference on Neutron Scattering  
Montpellier (Frankreich) 03. Sep - 05. Sep 2003

## Oral

*Keiderling, U., Sieger, H., Winterer, M., Hahn, H.*

**Impact of ultrasonic agitation on ultrafine silica powders dispersed in pure water and NaOH aqueous solution, as analyzed with time-resolved SANS**

3rd European Conference on Neutron Scattering ECNS 2003  
Montpellier, France 03. Sep - 06. Sep 2003

<b>SF - ISL</b>
-----------------

**ISL Accelerator**

Oral

*Bundesmann, J.***The CODIAN Program for ECR Sources**

4th Annual LEIF Meeting

Belfast, UK 28. Jun - 01. Jul 2003

Oral

*Busse, W.; Rethfeldt, C.***The ISL-Control-System Upgrade: A Move from an In-House Implementation to a Commercial Control-System**

International Conference on Accelerator and Large Experimental Physics Control Systems 2003 (ICALEPCS-2003)

Gyeongju, Korea 13. Oct - 17. Oct 2003

Invited Talk

*Homeyer, H.***Status of ISL**

ECPM 2002

Warschau/Krakau 17. Sep - 21. Sep 2003

**ISL Instruments**

Oral

*Denker, A.; Opitz-Coutureau, J.***High-energy PIXE: Quantitative Analysis**

16th International Conference on Ion Beam Analysis

Albuquerque, NM, USA 29. Jun - 04. Jul 2003

**ISL.PPT**

Oral

*Cordini, D.; Fuchs, H.; Heufelder, J.; Kluge, H.***Vergleichende CT-gestützte Bestrahlungsplanung in der Augentumorthherapie**

34. Jahrestagung der Deutschen Gesellschaft für Medizinische Physik

Heidelberg 01. Oct - 04. Oct 2003

Oral

*Cordini, D.; Fuchs, H.; Heufelder, J.; Kluge, H.***Comparative CT-aided Planning for Proton Treatment of Uveal Melanoma**

PTCOG 38

Chester, UK 14. May - 16. May 2003

Poster

*Cordini, D.; Heese, J.; Heufelder, J.; Kluge, H.; Bechrakis, N.E.; Fuchs, H.; Nausner, M.***Aktueller Stand und neue Entwicklungen der Protonentherapie von okularen Tumoren am Hahn-Meitner-Institut Berlin**

Symposium on Innovation in Radiation Oncology - Precision and Effectiveness

München 06. Mar - 08. Mar 2003

Oral

*Heufelder, J.; Bechrakis, N.E.; Cordini, D.; Fuchs, H.; Heese, J.; Höcht, S.; Homeyer, H.; Kluge, H.***Erfahrungen nach fünf Jahren Protonentherapie von Augentumoren am Hahn-Meitner-Institut Berlin**

34. Jahrestagung der Deutschen Gesellschaft für Medizinische Physik

Heidelberg 01. Oct - 04. Oct 2003

Oral

*Heufelder, J.; Pfaender, M.; Lüdemann, L.; Grebe, G.; Heese, J.***BANG polymere gel dosimetry in eye tumour therapy**

PTCOG 38

Chester, UK 14. May - 16. May 2003

Oral

*Höcht, S.; Bechrakis, N.E.; Heese, J.; Kluge, H.; Nausner, M.; Heufelder, J.; Cordini, D.; Foerster, M.; Hinkelbein, W.***Protonentherapie am Hahn-Meitner-Institut Berlin: Erste Ergebnisse & Aderhautmelanom (AHM)**

9. Jahrekongress der Deutschen Gesellschaft für Radioonkologie

Essen 28. Jun - 01. Jul 2003

Oral

*Kott, P.; Morgenstern, M.; Heese, J.; Heufelder, J.; Zink K.***Einfluss des Reichweitenschiebermaterials auf die ausgedehnten Bragg-Peaks des 68 MeV Protonenstrahls am Hahn-Meitner-Institut Berlin**

34. Jahrestagung der Deutschen Gesellschaft für Medizinische Physik

Heidelberg 01. Oct - 04. Oct 2003

## Poster

*Runge, S.; Heufelder, J.; Bechrakis, N.E.; Höcht, S.; Hinkelbein, W.*

**Lagerung und Positionierung von Patienten bei der Protonentherapie des Aderhautmelanoms**

MTA-Kongress 2003

Berlin 19. Mar - 21. Mar 2003

## Oral

*Weber, A.; Cordini, D.; Heese, J.; Heufelder, J.; Homeyer, H.; Kluge, H.; Meseck, A.; Pelzer, W.*

**Designstudie für ein medizinisches 250 MeV-Protonentherapiezentrum im Raum Berlin**

34. Jahrestagung der Deutschen Gesellschaft für Medizinische Physik, Heidelberg

Heidelberg 01. Oct - 04. Oct 2003

### ISL.User

## Poster

*Bechrakis, N.E.; Höcht, S.; Martus, P.; Kluge, H.; Foerster, M.H.*

**Endoresection of Large Uveal Melanomas Following Proton Beam Irradiation**

2003 Annual Meetings - American Academy of Ophthalmology

Anaheim, USA 15. Nov - 18. Nov 2003

## Oral

*Bohne, W.; Lindner, S.; Röhrich, J.; Strub, E.*

**Calibration of various analytical methods with Heavy-Ion ERDA**

ECASIA'03 (10th European Conference on Applications of Surface and Interface Analysis), Berlin, 5. - 10. Oktober 2003

Berlin 05. Oct - 10. Oct 2003

## Invited Talk

*Denker, A.*

**Schneller Wasserstoff als Spürhund in der Kunstanalyse**

Chemie der Kunst, Vortragsreihe zum Jahr der Chemie

Berlin 25. Apr - 25. Apr 2003

## Invited Talk

*Denker, A.*

**Nuclear Particles for Art**

Physikalisches Kolloquium der University of Notre Dame

Notre Dame, IN, USA 26. Feb - 26. Feb 2003

## Invited Talk

*Denker, A.*

**Ions and Art**

14. Edgar Lüscher Seminar 2003

Serneus, Schweiz 01. Feb - 06. Feb 2003

## Oral

*Denker, A.; Bohne, W.; Heese, J.; Homeyer, H.; Kluge, H.; Lindner, S.; Opitz-Coutureau, J.; Röhrich, J.; Strub, E.*

**Ion beams for microfilters, tumour therapy, solar cells, and archaeometry**

workshop on the use of ion beams in material sciences, medicine and archaeometry

Namur Belgien 22. May - 24. May 2003

## Poster

*Denker, A.; Opitz-Coutureau, J.*

**Zerstörungsfreie Elementanalyse mit Hochenergie PIXE**

IGAS

Berlin 19. Nov - 19. Nov 2003

## Invited Talk

*Heufelder, J.*

**Entwicklung der Augentumorthherapie am HMI**

Seminar in der AG Brewer, Fachbereich Physik, Freie Universität Berlin

Berlin 05. Jun - 05. Jun 2003

## Poster

*Opitz-Coutureau, J.; Bundesmann, J.; Denker, A.; Homeyer, H.*

**BIBER - The Berlin Ion Beam Exposure and Research Facility**

RADECS 2003: Radiation and Its Effects on Components and Systems

Noordwijk, Niederlande 15. Sep - 19. Sep 2003

## Invited Talk

*Opitz-Coutureau, J.; Denker, A.; Couzon, C.; Denk, R.; Griesser, M.; Winter, H.; Nagel, E.*

**Zerstörungsfreie Elementanalyse durch Hochenergie-PIXE an mittelalterlichen "Wiener Pfennigen" und altchinesischen Münzen aus Karakorum (Mongolei)**

Numismatik & Technologie: Fragen und Antworten

Wien, Österreich 25. Apr - 26. Apr 2003

Oral

*Opitz-Coutureau, J.; Denker, A.; Nagel, E.*  
**Fundmünzen aus Karakorum -  
 Zerstörungsfreie Hochenergie PIXE Analyse**  
 Jahrestagung 2003: Archäometrie und  
 Denkmalpflege  
 Berlin 12. Mar - 14. Mar 2003

Poster

*Strub, E., Bohne, W., Lindner, S., Röhrich, J.*  
**Elemental characterization and depth  
 profiling on thin layers by Heavy-Ion ERDA**  
 ANAKON  
 Konstanz 02. Apr - 05. Apr 2003

Oral

*Strub, E., Bohne, W., Lindner, S., Röhrich, J.*  
**Konzentrations- und  
 Schichtdickenbestimmung mit  
 Schwerionen-ERDA**  
 FKA12  
 Wien 22. Sep - 24. Sep 2003

Poster

*Strub, E., Bohne, W., Röhrich, J.*  
**Analytik mit Schwerionen-ERDA**  
 IGAS-Treffen  
 Berlin 19. Nov - 19. Nov 2003

Poster

*Strub, E., Bär, M., Bohne, W., Fischer, Ch.-H.,  
 Leupolt, B., Lindner, S., Röhrich, J., Schöneich,  
 B.*  
**Characterization of the Stoichiometry of  
 Thin ILGAR-ZnO Layers by Heavy-Ion ERDA**  
 DPG-Tagung  
 Dresden 24. Mar - 28. Mar 2003

Poster

*Strub, E., Bär, M., Bohne, W., Fischer, Ch.-H.,  
 Leupolt, B., Lindner, S., Röhrich, J., Schöneich,  
 B.*  
**Calibration of an FT-IR spectrometer by  
 Heavy-Ion ERDA**  
 IBA  
 Albuquerque 29. Jun - 04. Jul 2003

## SF - BESSY

### SF2.BESSY

Oral

*Rossner, H.H.; Holub-Krappe, E.; Fieber-  
 Erdmann, M.; Krappe, H.J.*  
**Lattice Dynamics Information Obtained  
 from EXAFS Measurements on Ta**  
 12th International Conference on X-ray  
 Absorption Fine Structure  
 Malmö / Schweden 23. Jun - 27. Jun 2003

### SF3.BESSY

Poster

*Haibel A.; Rack A.; Kropf H.; Helwig H.-M.;  
 Riesemeier H.; Weidemann G.; Goebbels J.;  
 Banhart J.*  
**Synchrotron-Tomography on Complex  
 Materials**  
 Bessy User's Meeting 2003  
 BESSY, Berlin, Germany 04. Dec - 05. Dec  
 2003

Poster

*Haibel A.; Rack A.; Riesemeier H.; Weidemann  
 G.; Goebbels J.; Banhart J.*  
**Siliziumcarbidverteilungen in  
 ungeschäumten und geschäumten  
 Aluminiumlegierungen**  
 DPG Frühjahrstagung  
 Dresden, Germany 24. Mar - 28. Mar 2003

Oral

*Haibel, A.; Riesemeier, H.; Goebbels, J.;  
 Helwig, H.; Banhart, J.*  
**Synchrotron-Tomography on Metallic  
 Foams**  
 Computed Tomography and Image Processing  
 for Industrial Radiology  
 Berlin, Germany 23. Jun - 25. Jun 2003

Oral

*Rack, A.; Haibel A.; Matijasevic B.; Riesemeier  
 H.; Weidemann G.; Goebbels J.; Banhart J.*  
**Synchrotron-Tomographie an metallischen  
 Schäumen**  
 DPG Frühjahrstagung  
 Dresden, Germany 24. Mar - 28. Mar 2003

Oral

*Rack, A.; Haibel A.; Matijasevic B; Banhart J.*  
**Synchrotron tomography on zinc and aluminium foams**

3rd International Conference on Cellular Metals and Metal Foaming Technology (MetFoam 2003)

Berlin, Germany 23. Jun - 25. Jun 2003

#### **SF4.BESSY**

Poster

*Darowski, N.; Zizak, I.; Assman, W.; Gerlach, J.; Wenzel, A.*

**Texture modification in Ti layers with swift heavy ions**

Hard Synchrotron X-rays for Texture and Strain Analysis

Hamburg 09. Apr - 11. Apr 2003

Oral

*Darowski, N.; Zizak, I.*

**Swift heavy ion interaction with matter studied with synchrotron radiation**

6th Autumn School on X-Ray Scattering from Surfaces and Thin Layers

Uckley, Slovakia 21. May - 23. May 2003

Invited Talk

*Denker, A.; Bohne, W.; Heese, J.; Homeyer, H.; Kluge, H.; Lindner, S.; Opitz-Coutureau, J.; Röhrich, J.; Strub, E.*

**Energieriche Ionen in Medizin und Materialwissenschaften**

Schwerionen als Werkzeug

Wernigerode 12. May - 13. May 2003

Oral

*P. Arndt*

**Progress in Ion Source Injector Development at the ISL**

SNEAP 2003

Strasbourg 13. Oct - 16. Oct 2003

Oral

*Strub, E., Bohne, W., Lindner, S., Röhrich, J.*

**Elemental depth profiling of thin layers by Heavy-Ion ERDA**

ICCM 14

San Diego 14. Jul - 18. Jul 2003

Oral

*Weber, J.; Bollmann, J.; Mahnke, H.-E.; Koteski, V.; Knack, S.; Welter, E.*

**Grenzen des elektrischen Nachweises von EXAFS**

Arbeitstreffen Forschung mit nuklearen Sonden und Ionenstrahlen FSI 2003 Berlin, 30.9.-1.10.2003

Berlin 30. Sep - 01. Oct 2003

Oral

*Zizak, I.*

**Modification of the texture in thin Ti films using high energy ions**

TRACKS03, Summer school on the evolution of ion tracks in matter

Mühlhausen 08. Sep - 15. Sep 2003

Oral

*Zizak, I.*

**Surface and Interface Physics at BESSY**

3rd Meeting of the Materials Science Network

Valtice, Tschechien 10. Oct - 11. Oct 2003

Poster

*Zizak, I.; Darowski, N.; Assmann, W.; Gerlach, J.; Wenzel, A.*

**Texture modification in Ti layers with swift heavy ions**

BESSY User Meeting

Berlin 04. Dec - 05. Dec 2003

### **SF1 - Methods and Instruments**

#### **SF1.Methods**

Invited Talk

*Clemens, D.*

**Information from the deep - analysis of stratified media using neutron reflectometry**

Central European Training School on Neutron Beam Experiments

Budapest, Ungarn 07. Apr - 11. Apr 2003

Poster

*Clemens, D., Gutberlet, T.; Stahn, J.; Könnecke, M.; Steitz, R.; Gupta, M.*

**AMOR - the time-of-flight (TOF) reflectometer with polarized neutrons**

European Conference on Neutron Scattering

Montpellier, Frankreich 03. Sep - 06. Sep 2003



## Invited Talk

*Clemens, D.; Stahn, J.; Gupta, M., Keller, P., Könnicke, M., Gutberlet, T.*

**Multi Option Time of Flight Reflectometer AMOR at SINQ/PSI**

ICANS XVI

Neuss, Deutschland 12. May - 15. May 2003

## Poster

*Clemens, D.; Stahn, J.; Gupta, M.; Gutberlet, T.*

**AMOR - a multi-option time-of-flight neutron reflectometer at SINQ/PSI**

SPG Jahrestagung

Basel, Switzerland 20. Mar - 21. Mar 2003

## Poster

*Clemens, D.; Stahn, J.; Gupta, M.; Keller, P.; Könnicke, M.; Gutberlet, T.*

**Multi option time-of-flight reflectometer AMOR at SINQ/PSI**

European Conference on Neutron Scattering

Montpellier, Frankreich 03. Sep - 06. Sep 2003

## Poster

*Gupta, M.; Stahn, J.; Könnicke, M.; Clemens, D.; Gutberlet, T.*

**AMOR - the time-of-flight multi-option neutron reflectometer at SINQ/PSI**

PSI Summer School on Neutron Scattering

Zuz, Schweiz 09. Sep - 15. Sep 2003

## Invited Talk

*Krist, Th.*

**Solid state elements for neutron optics**

ICANS-XVI

Düsseldorf-Neuss 12. May - 15. May 2003

## Poster

*Krist, Th.; Cho, S. J. .; Hoffmann, J. E.; Mezei, F.*

**Interface growth in FeCo-Si multilayers determined with atomic resolution**

Polarized Neutrons and Synchrotron X-rays for Magnetism

Venedig 04. Aug - 08. Aug 2003

## Poster

*Krist, Th.; Hoffmann, J. E.; Mezei, F.*

**Solid state neutron optical elements**

BENSC User meeting

Berlin 16. May - 16. May 2003

## Poster

*Krist, Th.; Hoffmann, J. E.; Mezei, F.*

**Solid state neutron optical elements**

European Conference on Neutron Scattering

Montpellier, France 03. Sep - 06. Sep 2003

## Poster

*Schneider, R.; Poeste, T.; Freydank, H.*

**Stress and Strain Analysis: The NEW Material Research Diffraktometer E3 at BENSC**

Meca-Sens

Manchester, UK 08. Sep - 09. Sep 2003

## Oral

*Teichert, A.; Krist, Th.; Mezei, F.*

**Stress dependence on sputter parameters for FeCo and Si single and multi layers**

European Conference on Neutron Scattering

Montpellier, France 03. Sep - 06. Sep 2003

### SF1.Others

## Poster

*Schemmel, S.; Zhang, S.; Steitz, R.; Findenegg, G.H.*

**Self Organising Surface Structures of a Triblock Copolymer from Aqueous Solution**

Annual Meeting of the DFG Priority Program 1052

Günzburg 22. Jul - 26. Jul 2003

## Invited Talk

*Steitz, R.; Wong, J.; Voigt, U.; v.Klitzing, R.*

**Influence of polymer charge and ionic strength on the properties of polyelectrolyte multilayers**

China Germany Bilateral Symposium on Amphiphiles at Interfaces, AI-SCP03

Berlin 23. Apr - 25. Apr 2003

**SF1.Spallation**

Oral

*Herbach, C.-M.; Hilscher, D.; Jahnke, U.; Tishchenko, V.; Galin, J.; Letourneau, A.; Peghaire, A.; Filges, D.; Goldenbaum, F.; Nünighoff, K.; Paul, N.; Schaal, H.; Sterzenbach, G.; Pienkowski, L.; Schröder, W.U.; Töke, J.*

**Composite Particle Emission in GeV-Proton Induced Spallation Reactions - Investigated with the NESSI-Detector at COSY**

Frühjahrstagung der DPG, Physik der Hadronen und Kerne  
Tübingen 17. Mar - 21. Mar 2003

Oral

*Herbach, C.-M.; Hilscher, D.; Jahnke, U.; Tishchenko, V.G.; Galin, J.; Letourneau, A.; Peghaire, A.; Filges, D.; Goldenbaum, F.; Schaal, H.; Sterzenbach, G.; Wohlmuther, M.; Pienkowski, L.; Kostecke, D.; Schröder, W.U.; Töke, J.*

**NESSI - a Multiple Purpose Detector for Measurements of Nuclear Data in Spallation Reactions**

Workshop on Nuclear Data for the Transmutation of Nuclear Waste  
GSI-Darmstadt 02. Sep - 05. Sep 2003

Invited Talk

*Herbach, C.-M.; Hilscher, D.; Jahnke, U.; Tishchenko, V.G.; Galin, J.; Lott, B.; Letourneau, A.; Peghaire, A.; Filges, D.; Goldenbaum, F.; Nünighoff, K.; Schaal, H.; Sterzenbach, G.; Wohlmuther, M.; Pienkowski, L.; Kostecke, D.; Schröder, W.U.; Töke, J.*

**Investigation of GeV-Proton Induced Spallation Reactions**

COSY-Arbeitsgemeinschaft Nordrhein-Westfälischer Universitäten (CANU)  
Bad Honnef 15. Dec - 16. Dec 2003

Invited Talk

*Hilscher, D.; Herbach, C.-M.; Jahnke, U.; Tishchenko, V.G.; Galin, J.; Lott, B.; Letourneau, A.; Peghaire, A.; Filges, D.; Goldenbaum, F.; Nünighoff, K.; Schaal, H.; Sterzenbach, G.; Wohlmuther, M.; Pienkowski, L.; Schröder, W.U.; Töke, J.*

**Investigation of GeV proton induced spallation reactions**

Workshop on New Applications of Nuclear Fission (NANUF03)  
Bucharest, Romania 07. Sep - 12. Sep 2003

Invited Talk

*Lieutenant, K.***Is a RMC-like method necessary to optimize (neutron scattering) instruments numerically?**

The first 15 years of Reverse Monte Carlo  
Budapest 09. Oct - 11. Oct 2003

Poster

*Lieutenant, K.; Krist, T.; Monkenbusch, M.; Zsigmond, G.; Manoshin, S.; Ohl, M.; Mezei, F.*  
**MC simulations of a beamline for a NSE instrument at SNS**

ICANS XVI

Neuss 12. May - 15. May 2003

Poster

*Lieutenant, K.; Zsigmond, G.***Optimisation of Guide Exits by combining MC Simulations and Optimisation Routines**

ECNS 2003

Montpellier 03. Sep - 06. Sep 2003

Invited Talk

*Mezei, F.***Fundamental aspects of optimization of long pulse spallation sources**

International Conference on the Collaboration on Advanced Neutron Sources ICNS-XVI  
Jülich 12. May - 15. May 2003

Poster

*Tishchenko, V.G.; Jahnke, U.; Herbach, C.-M.; Hilscher, D.*

**Study of Ternary and Quaternary Spontaneous Fission of 252-Cf with the NESSI Detector**

VIII International Conference on Nucleus-Nucleus Collisions (NN2003)

Moscow, Russia 17. Jun - 21. Jun 2003

**SF2 - Magnetism****SF2.Bulk magnetism**

Poster

*A. Toader, E.D. Adams, V. Boyko, J. Goff, H. Godfrin, S. Matas, M. Meschke, M. Roger, J. Saunders, R. Schanen, E.A. Schuberth, N. Shannon, T.E. Sherline, K. Siemensmeyer, Y. Takano.*

**Neutron scattering from solid 3He.**

International conference on Magnetism.  
Roma 27. Jul - 01. Aug 2003

Invited Talk

*Argyriou, D. N.*

**The Glass Transition in the Polaron Dynamics of Manganites**

American Physical Society March Meeting  
Austin, Texas 03. Mar - 07. Mar 2003

Invited Talk

*Argyriou, D. N.*

**Structure and Dynamics of Lattice Polarons in Manganites**

International Workshop on Self Organized Strongly Correlated Electron Systems  
Santorini, Greece 24. Aug - 30. Aug 2003

Invited Talk

*Argyriou, D. N.*

**Static and Dynamic Charge and Spin Correlations in Layered Manganites**

Workshop on Single Crystal Diffuse Scattering at Pulsed Neutron Sources - Argonne National Laboratory  
Argonne, USA 13. Jun - 16. Jun 2003

Oral

*E. Granado, C. Ling, J.J. Neumeier, J.W. Lynn, D. Argyriou*

**Phase Segregation in Electron-Doped Manganites: Crossover from Isolated to Overlapping Magnetic Clusters**

American Physical Society March Meeting  
Austin, Texas 03. Mar - 07. Mar 2003

Oral

*F.M. Woodward, J.W. Lynn, M.B. Stone, P. Schiffer, L.C. Chapon, D.N. Argyriou, J.F. Mitchell,*

**Neutron Investigation of Low Temperature Magnetization Steps in PCMO**

American Physical Society March Meeting  
Austin, Texas 03. Mar - 07. Mar 2003

Oral

*Feyerherm, R.; Loose, A.; Manson, J. L.*

**Frustrated triangular ordering in manganese tricyanomethanide**

DPG Frühjahrstagung 2003  
Dresden 24. Mar - 28. Mar 2003

Poster

*Feyerherm, R.; Loose, A.; Manson, J.L.; Nojiri, H.*

**Unusual Magnetic-Field Dependence of Partially Frustrated Triangular Ordering in Manganese Tricyanomethanide**

International conference on magnetism  
Rome 27. Jul - 01. Aug 2003

**SF2.Thin films**

Poster

*Bansmann, J., Kleibert, A., Methling, R.-P., Bulut, F., Gebhardt, K.R., Holub-Krappe, E., Schmitz, D., Maletta, H., Meiwes-Broer, K.-H.*

**Element-specific XMCD-studies of mass-filtered Fe and FeCo alloy clusters on ferromagnetic surfaces**

BESSY Users' Meeting  
Berlin 04. Dec - 05. Dec 2003

Poster

*Hahlin, A.; Holub-Krappe, E.; Maletta, H.; Andersson, C.; Hunter-Dunn, J.; Karis, O.; Arvanitis, D.*

**The Temperature-driven magnetization in a Co film: an XMCD and XMRS magnetometry study.**

12th International Conference on X-ray Absorption Fine Structure Malmö / Schweden, Malmö/Schweden 23. Jun - 27. Jun 2003

Invited Talk

*Holub-Krappe, E.*

**X-Ray Spectroscopy in low-dimensional magnetic systems: perspectives for a new HMI facility at BESSY**

International Workshop: Magnétisme et Rayonnement Synchrotron  
Strasbourg/Frankreich 03. Feb - 04. Feb 2003

Oral

*Holub-Krappe, E.; Hahlin, A.; Maletta, H.; Andersson, C.; Hunter-Dunn, J.; Karis, O.; Arvanitis, D.*

**The Temperature-driven magnetization in a Co film: an XMCD and XMRS magnetometry study**

12th International Conference on X-ray Absorption Fine Structure  
Malmö/Schweden 23. Jun - 27. Jun 2003

Oral

*Holub-Krappe, E.; Hahlin, A.; Maletta, H.; Andersson, C.; Karis, O.; Hunter-Dunn, J.; Arvanitis, D.*

**The transition to perpendicular magnetization in an ultrathin Co film studied by XMCD and SXRR based magnetometry**

European Materials Research Society, E-MRS 2003 Fall Meeting

Warsaw, Poland 15. Sep - 19. Sep 2003

Invited Talk

*Maletta, H.*

**The transition to perpendicular magnetization in an ultrathin Co film studied by XMCD and XRMS based magnetometry**

Intern. Colloquium on Magnetic Films and Surfaces (ICMFS2003)

Madrid, Spanien 22. Jul - 25. Jul 2003

Invited Talk

*Maletta, H.*

**Interfacial effects in magnetic nanostructures studied by synchrotron experiments**

Intern. Colloquium on Low dimensional Magnetism as seen by Photons and Neutrons Bochum 22. May - 23. May 2003

Poster

*Rossner, H., Schmitz, D., Maletta, H.*

**L-edges EXAFS in Fe measured at UE46-PGM**

BESSY Users' Meeting Berlin

Berlin 04. Dec - 05. Dec 2003

Poster

*Schmitz, D., Imperia, P., Maletta, H.*

**Surface and interface magnetism of Fe on V(110) studied with XMCD at UE46-PGM**

BESSY Users' Meeting Berlin

Berlin 04. Dec - 05. Dec 2003

### **SF3.Microstructure**

Invited Talk

*Bansmann, J., Kleibert, A., Methling, R.-P., Bulut, F., Gebhardt, K.R., Getzlaff, M., Holub-Krappe, E., Schmitz, D., Maletta, H., Meiwes-Broer, K.-H.*

**Mass-filtered FeCo alloy nanoparticles - candidates for a soft-magnetic material with very high magnetic moments?**

Intern. Workshop on X-Ray Spectroscopies of Magnetic Solids 2003 (XRMS2003)

Berlin 06. Dec - 07. Dec 2003

### **SF4.Structures**

Oral

*Koteski, V.; Haas, H.; Holub-Krappe, E.; Ivanovic, N.; Mahnke, H.-E.*

**Lattice Relaxation around Arsenic and Selenium in CdTe**

Arbeitstreffen Forschung mit nuklearen Sonden und Ionenstrahlen FSI 2003 Berlin, 30.9.-1.10.2003

Berlin 30. Sep - 01. Oct 2003

Poster

*Koteski, V.; Haas, H.; Holub-Krappe, E.; Ivanovic, N.; Mahnke, H.-E.*

**Lattice Relaxation around Arsenic and Selenium in CdTe**

DPG-Frühjahrstagung, Dresden, 24.-28.03.2003

Dresden 24. Mar - 28. Mar 2003

Poster

*Koteski, V.; Haas, H.; Holub-Krappe, E.; Ivanovic, N.; Mahnke, H.-E.*

**Lattice Relaxation around Arsenic and Selenium in CdTe**

12th Intern. Conf. on X-Ray Absorption Fine Structure XAFS-12, Malmoe, 22.-27.6.2003

Malmoe 22. Jun - 27. Jun 2003

Poster

*Koteski, V.; Haas, H.; Ivanovic, N.; Holub-Krappe, E.; Mahnke, H.-E.*

**Lattice relaxation around impurity atoms in II-VI compounds**

HASYLAB Users Meeting, DESY, Hamburg, 31.01.2003

Hamburg 31. Jan - 31. Jan 2003

<b>SF3 - Materials</b>
------------------------

**SF3.Microstructure**

Oral

Griesche, A.; Macht, M.-P.; Suzuki, S.; Froberg, G.

**Diffusion in Liquid Multicomponent Alloys on Pd-Basis**

EUROMAT 2003, 1.-5.9. 2003, Lausanne, Switzerland

Lausanne, Switzerland 01. Sep - 05. Sep 2003

**SF3.Nanostructures**

Oral

Wanderka, N.; Davidov, E.; Mieke, G.; Naundorf, V.; Macht, M.-P.; Banhart, J.

**Crystallization of Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub> Bulk Glass**

International Symposium on metastable, mechanically alloyed and nanocrystalline materials (ISMANAM 2003)

Foz do Iquacu, Brazil 24. Aug - 28. Aug 2003

**SF3.Others**

Oral

Griesche, A.; Macht, M.-P.; Suzuki, S.; Froberg, G.

**Diffusion in multicomponent Alloys on Pd-Basis near the Liquidus Temperature**

DFG Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

Oral

Kindratschuk, V.; Wanderka, N.; Banhart, J.; Mukherji, D.; Del Genovese, D.; Rösler, J.

**Microstructural characterization of Inconel 706 alloy**

DPG

Dresden 24. Mar - 24. Mar 2003

Oral

Wanderka, N., Davidov, E., Mieke, G., Naundorf, V., Macht, M.-P., Banhart, J.

**Crystallization of Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub>**

ISMANAM2003

Foz do Iquacu, Brazil 24. Aug - 24. Aug 2003

Oral

Wanderka, N., Kindratschuk, V., Schubert-Bischoff, P., Macht, M.-P.

**Präparation der Hochtemperaturlegierung Inconel 706 für die Untersuchung der Korngrenzen-segregation von Bor mit Hilfe der dreidimensionalen Atomsonde**

Metallographie Tagung

Berlin 17. Sep - 17. Sep 2003

<b>SF4 - Structure and Dynamics</b>
-------------------------------------

**SF4.Dynamics**

Oral

Etissa-Debissa, D.; Feyh, A.; Schattat, B.; Bolse, W.; Klaumünzer, S.

**Self-organized restructuring of ceramic layers during irradiation with swift heavy ions**

DPG-Frühjahrstagung des Arbeitskreises Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

Invited Talk

Klaumünzer, S.

**Prospects for materials science**

2nd Workshop

GSI, Darmstadt 14. Oct - 17. Oct 2003

Invited Talk

Klaumünzer, S.

**Ion track effects in SiO<sub>2</sub>**

12th Int. Conf. on Radiation Effects in Solids

Gramado/Brazil 31. Aug - 05. Sep 2003

Oral

Klaumünzer, S.

**Wellenbildung auf Glasoberflächen**

DPG-Frühjahrstagung des Arbeitskreises Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

Invited Talk

Klaumünzer, S.

**Umformung von Nano-Strukturen durch Hochenergie Ionenbestrahlung**

Ionenstrahltreffen

Dresden 10. Oct - 10. Oct 2003

Invited Talk

*Klaumünzer, S.*

**Hochenergie-Ionenstrahlen für die Nano-Technologie**

Ionenstrahltreffen

Augsburg 16. Jun - 16. Jun 2003

Invited Talk

*Mahnke, H.-E.*

**EXAFS analysis of phase modifications**

Summerschool TRACKS03

Muehlhausen 08. Sep - 15. Sep 2003

Oral

*Renz, T.; Schattat, B.; Paulus, H.; Schrempel, F.; Klaumünzer, S.*

**Durchmischung von FeOx-Dünnschichtsystemen unter Hochenergie Ionenbestrahlung**

DPG-Frühjahrstagung des Arbeitskreises Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

Oral

*Roth, M.; Schiwietz, G.; Czernski, K.; Rösler, M.; Staufenbiel, F.; Grande, P.L.*

**Desorption from ion tracks**

EAS 2003

Riezlern, Austria 16. Feb - 21. Feb 2003

Oral

*Roth, M.; Schiwietz, G.; Grande, P.L.*

**Time-of-flight neutral-particle spectroscopy**

TRACKS03

Mühlhausen, Germany 08. Sep - 15. Sep 2003

Oral

*Rumbolz, C.; Bolse, W.; Klaumünzer, S.; Schrempel, F.*

**Durchmischung von Metall/Silizium Grenzflächen mit hochenergetischen Ionen**

DPG-Frühjahrstagung des Arbeitskreises Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

Oral

*Schattat, B.; Bolse, W.; Dhar, S.; Lieb, K.P.; Klaumünzer, S.*

**Hochenergie-Ionenbestrahlung von Ni<sub>3</sub>N/SiX Dünnschichtsystemen**

DPG-Frühjahrstagung, Arbeitskreis Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

Poster

*Schattat, B.; Renz, T.; Rumbolz, C.; Wiesner, J.; Beuttler, M.; Etissa-Debissa, D.; Elsanousi, A.; Paulus H.; Klaumünzer, S.; Bolse, W.*

**Grenzflächen unter Beschuss: Hochenergie-Ionenmischen**

DPG-Frühjahrstagung des Arbeitskreises Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

Oral

*Staufenbiel, F.; Schiwietz, G.; Czernski, K.; Roth, M.*

**Electronic Ion-Track Effects in Be and Al(100)**

Tracks 03

Mühlhausen, Germany 08. Sep - 15. Sep 2003

Oral

*Wiesner, J.; Schattat, B.; Elsanousi, A.; Klaumünzer, S.; Bolse, W.*

**Segregation und Transport von Au-Markerschichten in den Spuren hochenergetischer Ionen**

DPG-Frühjahrstagung des Arbeitskreises Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

Poster

*Zumkley, T.; Schumacher, G.; Klaumünzer, S.*

**Hochenergiebestrahlung von nanokristallinem Nickel mit schweren Ionen**

DPG-Frühjahrstagung des Arbeitskreises Festkörperphysik

Dresden 24. Mar - 28. Mar 2003

**SF4.Structures**

Poster

*Bollmann, J.; Knack, S.; Weber, J.; Koteski, V.; Mahnke, H.-E.; Sielemann, R.; Welter, E.*

**Selective X-ray Absorption Fine Structure of Deep Level Defect Centers**

12th Intern. Conf. on X-Ray Absorption Fine Structure, XAFS-12, Malmoe, 22.-27.6.2003

Malmoe 22. Jun - 27. Jun 2003

Poster

*Bollmann, J.; Knack, S.; Weber, J.; Welter, E.; Mahnke, H.-E.; Koteski, V.; Sielemann, R.*

**Site Selective Detection of Deep Level Centers by X-ray Absorption Fine Structure**

DPG-Frühjahrstagung, Dresden, 24.-28.03.2003

Dresden 24. Mar - 28. Mar 2003

Oral

*Chen, W.; Liu, Q.K.K.; Schumacher, G.; Wanderka, N.; Neumann, W.;*

**Elastic Strain Energy Study of Directional Coarsening of  $\gamma_2$  Precipitates in Single Crystal Superalloys: A 3D Finite Element Analysis**

European Congress and Exhibition on Advanced Materials and Processes: EUROMT 2003

Lausanne, Switzerland 01. Sep - 01. Sep 2003

Poster

*Darowski, N.; Zizak, I; Chen, W.; Schumacher, G.; Klingelhöffer, H.; Neumann, W.*

**Tetragonal Lattice Distortion of gamma prime precipitates in Single Crystal Superalloys after Creep Deformation**

BESSY User Meeting 2003

BESSY, Adlershof, Berlin 04. Dec - 04. Dec 2003

Oral

*Koteski, V., Mahnke, H.-E.*

**Lattice relaxation around Arsenic in Silicon and CdTe**

41. Workshop Pointdefect, TU Dresden, 21.3.-22.3.2003

Dresden 21. Mar - 22. Mar 2003

Oral

*Koteski, V.; Haas, H.; Holub-Krappe, E.; Ivanovic, N.; Mahnke, H.-E.*

**Lattice Relaxation around Arsenic and Selenium in CdTe**

Arbeitsstreffen Forschung mit nuklearen Sonden und Ionenstrahlen FSI 2003 Berlin, 30.9.-1.10.2003

Berlin 30. Sep - 01. Oct 2003

Poster

*Koteski, V.; Haas, H.; Holub-Krappe, E.; Ivanovic, N.; Mahnke, H.-E.*

**Lattice Relaxation around Arsenic and Selenium in CdTe**

12th Intern. Conf. on X-Ray Absorption Fine Structure XAFS-12, Malmoe, 22.-27.6.2003

Malmoe 22. Jun - 27. Jun 2003

Poster

*Koteski, V.; Haas, H.; Holub-Krappe, E.; Ivanovic, N.; Mahnke, H.-E.*

**Lattice Relaxation around Arsenic and Selenium in CdTe**

DPG-Frühjahrstagung, Dresden, 24.-28.03.2003

Dresden 24. Mar - 28. Mar 2003

Poster

*Koteski, V.; Haas, H.; Ivanovic, N.; Holub-Krappe, E.; Mahnke, H.-E.*

**Lattice relaxation around impurity atoms in II-VI compounds**

HASYLAB Users Meeting, DESY, Hamburg, 31.01.2003

Hamburg 31. Jan - 31. Jan 2003

Oral

*Weber, J.; Bollmann, J.; Knack, S.; Koteski, V.; Mahnke, H.-E.; Sielemann, R.; Welter, E.*

**Capacitance-transient detection of X-ray Absorption Fine Structure: A possible tool to analyze the structure of Deep-Level Centers?**

10th Intern. Conf. on Gettering and Defect Engineering in Semiconductor Technology GADEST, Zeuthen, 21.-26.9.2003

Zeuthen 21. Sep - 26. Sep 2003

## **SE2.Semico**

---

Poster

*Strub, E.; Bär, M.; Bohne, W.; Fischer, Ch.-H.; Leupolt, B.; Lindner, S.; Röhrich, J.; Schöneich, B.*

**Characterization of the Stoichiometry of Thin ILGAR-ZnO Layers by Heavy-Ion ERDA**

DPG-Frühjahrstagung

Dresden, Germany 12. Mar - 12. Mar 2003

Oral

*Strub, E.; Bär, M.; Bohne, W.; Fischer, Ch.-H.; Leupolt, B.; Lindner, S.; Röhrich, J.; Schöneich, B.*

**Intensity Calibration of an FT-IR spectrometer by Heavy-Ion ERDA**

16th Conference on Ion Beam Analysis

Albuquerque, USA 07. Jul - 07. Jul 2003

<b>SF5 - Theory</b>
---------------------

**SF5.Biosystems**

Oral

*Falcke, M.***Stochastische Effekte bei Wellen von intrazellulärem Calcium**

Seminar-Reihe "Nichtlinearität und Unordnung in komplexen Systemen" der Fakultät für Naturwissenschaften der Otto-von-Guericke-Universität Magdeburg

Magdeburg 15. Dec - 15. Dec 2003

Oral

*Falcke, M.***Intracellular Ca<sup>2+</sup> dynamics -A model system for structure formation**

Kolloquium der Fakultät

Bielefeld 08. Dec - 08. Dec 2003

Oral

*Falcke, M.***Intracellular calcium dynamics - a stochastic medium**

4. Dresdener Herbstseminar des Arbeitskreises Nichtlineare Physik,

Dresden 9.-12.11.2003 12. Nov - 12. Nov 2003

Oral

*Falcke, M.***Fluctuations and spatial discreteness in intracellular Ca<sup>2+</sup> dynamics**

Pattern Formation in Physics and Biology

Santa Barbara, USA 17. Aug - 17. Aug 2003

Oral

*Falcke, M.***Stochastic aspects of intracellular Ca<sup>2+</sup> dynamics**

Workshop

Dresden Sept.15-19, 2003 15. Sep - 15. Sep 2003

Oral

*Frey, E.***Collective Phenomena in Intracellular Transport**

Treffen des DFG Schwerpunktes

Schneeverdingen 29. Sep - 02. Oct 2003

Invited Talk

*Frey, E.***The Cytoskeleton: A Model System for Stiff Polymer**

Jülich Soft Matter Days

Kerkrade 18. Nov - 21. Nov 2003

Invited Talk

*Frey, E.***Statistical Mechanics of Stiff Polymer Fibers and Networks**

313. WE Heraeus Seminar

Weingarten 26. Oct - 31. Oct 2003

Invited Talk

*Frey, E.***Physics in Cell Biology**

Indian Annual Theoretical Physics Conference

Kalkutta (Indien) 18. Jan - 25. Jan 2003

Invited Talk

*Frey, E.***Collective Phenomena in Intracellular Transport**

Bioinformatics &amp; System Biology

Dresden 16. Aug - 19. Aug 2003

Invited Talk

*Frey, E.***Collective Phenomena in Intracellular Transport**

Tenth Hopping and Related Phenomena Conference

Trieste (Italien) 01. Sep - 04. Sep 2003

Invited Talk

*Frey, E.***Collective Phenomena in Intracellular Transport**

Classical and quantum barrier transport in complex systems

Dresden 19. May - 24. May 2003

Invited Talk

*Frey, E.***Viscoelasticity of biopolymer networks and statistical mechanics of semiflexible polymers**

International Workshop on Proteomics

Trieste (Italien) 05. May - 16. May 2003



Invited Talk

*Frey, E.*

**The Cytoskeleton: A Model System for Semiflexible Polymers**

Challenges in Optical Nanoscopia

Bessy (Berlin) 27. Apr - 29. Apr 2003

Invited Talk

*Frey, E.*

**Collective Phenomena in Intracellular Systems**

Winterschule E22

Antholz 10. Mar - 14. Mar 2003

Invited Talk

*Frey, E.*

**Fundamental Physics in Cellular Systems**

Indian Institute of Science

Bangalore (India) 27. Jan - 31. Jan 2003

Invited Talk

*Frey, E.*

**Collective Phenomena in Intracellular Transport**

Statistical Mechanics Meeting

San Francisco 09. Jan - 13. Jan 2003

Poster

*Heussinger, C.*

**Elasticity of Stiff Polymer Networks**

313. WE-Heraeus Stiftung: Fibre Systems in Materials Science and Biology/Medicine

Weingarten 26. Oct - 30. Oct 2003

Poster

*Heussinger, C.*

**Elasticity of Stiff Polymer Networks**

Jülich Soft Matter Days

Rolduc, NL 18. Nov - 21. Nov 2003

Oral

*Lattanzi, G.*

**Coarse grained models for the conformational analysis of protein motors**

DFG Priority Program 'Molecular Motors' and Workshop 'Molecular Motors and New Microscopy Techniques'

Schneverdingen 29. Sep - 01. Oct 2003

Invited Talk

*Lattanzi, G.*

**Protein Motors: kinetics and structural properties of kinesin**

Workshop

ICTP Trieste, Italy 08. May - 08. May 2003

Invited Talk

*Lattanzi, G.*

**Protein Motors: kinetics and structure in coarse grained models**

Workshop

ICTP Trieste, Italy 14. Jul - 19. Jul 2003

Invited Talk

*Lattanzi, G.*

**Motor Proteins and the Roads upon which they move**

Statistical Physics Across Disciplines

SISSA Trieste, Italy 18. Dec - 19. Dec 2003

Poster

*Lattanzi, G.; Munk, T.; Frey, E.*

**Transverse fluctuations of grafted polymers**

313. WE-Heraeus Seminar

Weingarten, Germany 26. Oct - 30. Oct 2003

Poster

*Lattanzi, G.; Munk, T.; Frey, E.*

**Transverse fluctuations of grafted polymers**

Jülich Soft Matter Days 2003

Rolduc-Kerkrade, the Netherlands 19. Nov - 21. Nov 2003

Oral

*Parmeggiani, A; Franosch, T.; Frey, E.*

**Phase Coexistence in one dimensional collective transport**

'Classical and Quantum Barrier Transport in Complex Systems'

Max Planck Institute, Dresden 20. May - 24. May 2003

Oral

*Thul, R. ; Falcke, M.*

**Spatial Structure and Stability**

Pattern Formation in Physics and Biology

Santa Barbara, CA, USA 17. Aug - 21. Aug 2003

Poster

*Thul, R., M.Falcke*

**Spatial discreteness and stability of reaction-diffusion systems**

4. Dresdner Herbstseminar

Dresden 09. Nov - 12. Nov 2003

Poster

*Thul, R.; Falcke, M.***Calcium profiles of single channel clusters at the membrane of the endoplasmic reticulum**4th European Biophysics Congress  
Alicante, Spain 04. Jul - 10. Jul 2003

Oral

*Thul, R.; Falcke, M.***Spatial Structure and Stability**Achstes Herbstseminar  
Salzwedel 28. Sep - 30. Sep 2003**SF5.Hard Matter**

---

Poster

*Artemyev, A.N., Beier, T., Eichler, J., Klasnikov, A.E., Kozhuharov, C., Shabaev, V.M., Stoehlker, T., Yerokhin, V.A.***Negative-continuum dielectronic recombination for heavy atoms**23rd International Conference on Photonic, Electronic and Atomic Collisions  
Stockholm 23. Jul - 23. Jul 2003

Poster

*Eichler, J., Ichihara, A.***Polarization of photons emitted in radiative electron capture by bare high-Z ions**

Stockholm 23. Jul - 29. Jul 2003

Oral

*Eichler, J., Ichihara, A.***Polarization of photons emitted in radiative electron capture by bare high-Z ions**23rd International Conference on Photonic, Electronic and Atomic Collisions  
Stockholm 23. Jul - 23. Jul 2003

Invited Talk

*Fröbrich, P.***Present status of the theory of fission of hot nuclei**Int. Conf. 'From Tunneling Nuclear Microscope to Nuclear Processes in Matter' (Fusion03)  
Matsushima, Miyagi, Japan 12. Nov - 12. Nov 2003

Invited Talk

*Fröbrich, P.***Some remarks on deep-inelastic heavy-ion scattering**Sendai Symposium on Nuclear Physics (in celebrating Prof. N. Takigawa's 60th birthday)  
Sendai, Japan 16. Nov - 16. Nov 2003

Poster

*Klasnikov, A.E., Artemyev, A.N., Beier, T., Eichler, J., Shabaev, V.M., Yerokhin, V.A.***Spin-flip processes for radiative recombination of an electron with H- and Li-like uranium**23rd International Conference on Photonic, Electronic and Atomic Collisions  
Stockholm 23. Jul - 23. Jul 2003

Poster

*Shabaev, V.M., Yerokhin, V.A., Artemyev, A.N., Beier, T., Eichler, J.***QED corrections to the REC in heavy ion-atom collisions**23rd International Conference on Photonic, Electronic and Atomic Collisions  
Stockholm 23. Jul - 29. Jul 2003**SF5.Others**

---

Invited Talk

*Gross, D.H.E.***A new Thermodynamics, from Nuclei to Stars.**XLI International Winter Meeting on Nuclear Physics  
Bormio, Italy 26. Jan - 02. Feb 2003

Invited Talk

*Gross, D.H.E.***Geometrical foundation of statistical mechanics, phase-transitions and second law in "small" systems.**Annual APS March Meeting 2003  
Austin, Texas 03. Mar - 07. Mar 2003

Invited Talk

*Gross, D.H.E.***Heat can flow from cold to hot in microcanonical thermo-statistics**Workshop on Phase Transitions in Nuclear Collisions (PT03)  
Niels Bohr Institute 09. Oct - 10. Oct 2003

Invited Talk

*Gross, D.H.E.*

**Classical Equilibrium Thermostatistics, "Sancta Sanctorum of Statistical Mechanics", from Nuclei to Stars.**

NEXT2003 Second Sardinian International Conference on News and Expectations in Thermostatistics

Cagliari, Italy 21. Sep - 28. Sep 2003

Invited Talk

*Gross, D.H.E.*

**A New Thermodynamics from Nuclei to Stars**

3rd International Workshop on Global Phase Diagrams

Odessa, Ukraine 14. Sep - 19. Sep 2003

Invited Talk

*Gross, D.H.E.*

**From Nuclei to Stars, New Classical Equilibrium Thermodynamics**

Research Workshop Nucleation Theory and Applications

Dubna, Russia 12. Apr - 20. Apr 2003

Invited Talk

*Krappe, H.-J.*

**Analytic results on level densities**

10th Nuclear Physics Workshop Marie and Pierre Curie

Kazimierz Dolny, Polen 24. Sep - 28. Sep 2003

**SF5. Soft Matter**

Oral

*Benetatos, P.*

**Response of a semiflexible polymer to a uniform field**

90th Statistical Mechanics Meeting

Rutgers University, New Jersey, USA 14. Dec - 16. Dec 2003

Poster

*Franosch, T.; Schultz, M.G.*

**Light Scattering of Molecular Supercooled Liquids: Molecules of arbitrary Shape**

DYPROSO

Trieste 22. Sep - 25. Sep 2003

Poster

*Kroy, K.*

**Strain hardening of biological tissue**

Jülich Soft Matter Days

Kerkrade 18. Nov - 21. Nov 2003

Invited Talk

*Kroy, K.*

**A cluster mode-coupling approach to weak gelation in attractive colloids**

Workshop on Attractive Interaction in Colloidal Systems

Bad Gastein 18. Jan - 20. Jan 2003

Poster

*Sarlah, A.; Frey, E.*

**Phase behavior of a 2D colloidal system under the influence of 2D periodic external potentials**

European Science Foundation (ESF) PESC Exploratory Workshop: Liquid Crystal Colloid Dispersions

Bled, Slowenien 28. Aug - 30. Aug 2003

**SF6 - Trace Elements**

**SF6. Analysis**

Oral

*Alber, D.*

**Neutronenaktivierungsanalyse- eine gute alte oder eine veraltete Methode?**

13. Jahreskolloquium-IGAS, Vergangenheit, Gegenwart und Zukunft der

Berlin 19. Nov - 19. Nov 2003

Oral

*Alber, D.; Görner, W; Berger, A.; Haase, O.; Segebade, Chr.*

**Strahlengeometrie-Aktivierungsanalyse- eine Chance zur Bestimmung von Haupt- und Nebenkomponten in großen Proben**

GDCh-Jahrestagung Chemie 2003

München 07. Oct - 07. Oct 2003

Oral

*Behne, D.; Alber, A.; Kyriakopoulos, A.*

**Determination of small amounts of selenium-containing proteins by nuclear analytical methods**

ANS/ENS International Winter Meeting

New Orleans, USA 16. Nov - 16. Nov 2003

Oral

*Berger, A.; Alber, D.*

**Bestimmung von Cobalt in Nickel bei Gehalten im sub- $\mu\text{g/g}$  Bereich**

GDCh-Jahrestagung Chemie 2003

München 06. Nov - 06. Nov 2003

Poster

*D. Alber, G. Bukalis, A. Kyriakopoulos, D. Behne*

**NAA-Laboratory and Irradiation Service at BER II for Trace Element Analysis**

Gemeinsame Herbsttagung (HMI+GMS)  
Metalloproteine und Metalloidproteine  
Berlin, HMI 06. Nov - 06. Nov 2003

Oral

*Falkenberg, G.; Kühbacher, M.; Weseloh, G.; Kyriakopoulos, A.; Behne, D.*

**Microanalysis of Morbus Alzheimer affected tissue by means of polycapillary-based SRXRF at HASYLAB beamline L**

ICXOM: 17th International Congress on X-ray Optics and Microanalysis;  
Chamonix Mont-Blanc, France 22. Sep - 22. Sep 2003

Poster

*Kühbacher, M.; Weseloh, G.; Falkenberg, G.; Schade, U.; Kyriakopoulos, A.; Behne, D.*

**Neurodegenerative disorders investigated with Micro-SRXRF, Micro-XANES and SRFTIR-Spectromicroscopy**

Gemeinsame Herbsttagung (HMI+GMS)  
Metalloproteine und Metalloidproteine  
Berlin, HMI 06. Nov - 06. Nov 2003

Poster

*Kühbacher, M.; Weseloh, G.; Falkenberg, G.; Schade, U.; Kyriakopoulos, A.; Behne, D.*

**Application of Micro-SRXRF and SRFTIR-Spectromicroscopy in the investigation of neurodegenerative disorders**

HASYLAB User Meeting 2003  
Hamburg 31. Jan - 31. Jan 2003

Oral

*Kühbacher, M.; Weseloh, G.; Kyriakopoulos, A.; Behne, D.*

**Komplementäre Nutzung von Synchrotron-Röntgenfluoreszenzanalyse am BESSY**

Strategiediskussion HMI  
Berlin 06. Jan - 06. Jan 2003

Oral

*Lin, X.; Alber, D.; Henkelmann, R.*

**Did Napoleon die from arsenic poisoning? INAA results of his hairs cut on different time and places suggest a negative answer**

GDCh-Jahrestagung Chemie 2003  
München 06. Oct - 06. Oct 2003

Poster

*Plotnikov, A.; Kyriakopoulos, A.; Behne, D.*

**Möglichkeiten der Laserablation-ICP-Massenspektrometrie zur Identifizierung von Metallo- und Metalloidproteinen durch Scannen von gelelektrophoretisch getrennten Proteinen**

Gemeinsame Herbsttagung (HMI+GMS),  
Metalloproteine und Metalloidproteine  
Berlin, HMI 06. Nov - 06. Nov 2003

Poster

*Weseloh, G.; Kühbacher, M.; Falkenberg, G.; Kyriakopoulos, A.; Behne, D.*

**Changes of Copper Distribution in Syrian Hamster Brain with Aging, as investigated with the SRXFA- Microprobe**

Gemeinsame Herbsttagung (HMI+G;MS),  
Metalloproteine und Metalloidproteine  
Berlin, HMI 06. Nov - 06. Nov 2003

Oral

*Weseloh, G.; Kühbacher, M.; Kyriakopoulos, A.; Behne, D.*

**Investigations of metalloproteins in the CNS and in the reproductive system by Microprobe- Synchrotron Radiation X-Ray Fluorescence Analysis and FTIR-Spectromicroscopy.**

BioXAS on metalloproteins and organism tissue, EMBL Outstation  
Hamburg 22. Jun - 22. Jun 2003

---

**SF6.Clinical app.**

---

Poster

*Bertelsmann, H.; Rösick, U.; Alber, D.; Kyriakopoulos, A.; Hammadeh, M.; Behne, D.*

**Determination of selenium and zinc in very small amounts of human sperm nuclei**

Gemeinsame Herbsttagung (HMI+GMS),  
Metalloproteine und Metalloidproteine,  
Berlin 06. Nov - 06. Nov 2003

Poster

*Bukalis, K.; Kyriakopoulos, A.; Özaslan, M.; Behne, D.*

**Determination of trace elements and trace-element- containing proteins in the lung of the rat**

Gemeinsame Herbsttagung (HMI+GMS),  
Metalloproteine und Metalloidproteine  
Berlin 06. Nov - 06. Nov 2003

## Poster

*Dalla Puppa, L.; Savaskan, N.E.; Eypoglu, I.Y.; Breuer, A.U.; Kyriakopoulos, A.; Behne, D.; Nitsch, R.*

**Regulation of microglial activation and proliferation by the essential trace element selenium**

Gemeinsame Herbsttagung (HMI+GMS), Metalloproteine und Metalloidproteine, Berlin 06. Nov - 06. Nov 2003

## Poster

*Dalla Puppa, L.; Savaskan, N.E.; Eypoglu, I.Y.; Bräuer, A.U.; Kyriakopoulos, A.; Behne, D.; Nitsch, R.*

**Inhibition of microglia activation and proliferation by the essential trace element selenium**

VI. European Meeting on Glial Cell Function in Health and Disease  
Berlin 06. Sep - 06. Sep 2003

## Poster

*Hoppe, B.; Kyriakopoulos, A.; Behne, D.*

**Selenium- containing proteins in the cells involved in the blood-brain barrier**

Gemeinsame Herbsttagung (HMI+GMS), Metalloproteine und Metalloidproteine, Berlin 06. Nov - 06. Nov 2003

## Oral

*Kühbacher, M.; Weseloh, G.; Falkenberg, G.; Schade, U.; Kyriakopoulos, A.; Behne, D.*

**Ortsauflösende spektroskopische Untersuchungen von Metalloproteinen in Gewebeproben TSE infizierter Tiere an Synchrotronstrahlungsquellen**

Gemeinsame Herbsttagung (HMI+GMS) Metalloproteine und Metalloidproteine  
Berlin 06. Nov - 06. Nov 2003

## **SF6.Proteins**

---

## Oral

*Behne, D.; Alber, D.; Kyriakopoulos A.*

**Selenium and selenoproteins in the mammalian organism**

Gemeinsame Herbsttagung (HMI+GMS), Metalloproteine und Metalloidproteine  
Berlin, HMI 06. Nov - 06. Nov 2003

## Oral

*Behne, D.; Kyriakopoulos, A.*

**Selenoproteins and metalloproteins in redox processes and cell protection**

HGF-Meeting, Environmental Health  
München 08. Apr - 08. Apr 2003

## Oral

*Behne, D.; Kyriakopoulos, A.*

**Identification of novel selenoproteins in the mammalian organism and elucidation of their metabolism and functions**

3rd Meeting of the Reviewing Panel of the DFG Priority Programme on Selenoproteins  $\zeta$   
Biochemical basis and clinical aspects  
Berlin 24. Nov - 24. Nov 2003

## Oral

*Behne, D.; Kyriakopoulos, A.*

**Effects of chemical form and dosage of dietary selenium on tissue selenium levels and the formation of effective selenium compounds**

Meeting, Selenium in Cancer Prevention  
Vejle, Dänemark 02. Apr - 02. Apr 2003

## Oral

*Behne, D.; Kyriakopoulos, A.*

**Selenium in the mammalian organism: Distribution, functions and requirement**

Selenium meeting of the Danish Chemical Society  
Kopenhagen, Dänemark 20. Aug - 20. Aug 2003

## Oral

*Behne, D.; Hoppe, B.; Bertelsmann, H.; Kyriakopoulos, A.*

**Localization, identification and characterization of mammalian selenium-containing proteins**

2nd Colloquium of the DFG-Priority Programme on Selenoproteins  
Berlin 07. Jul - 07. Jul 2003

## Oral

*Kyriakopoulos, A. Behne, D.*

**Studies of membrane-bound selenoproteins involved in redox processes and antioxidant system**

4th International symposium of Trace Elements in Humans: New Perspectives  
Athen, Griechenland 09. Oct - 09. Oct 2003

Oral

*Kyriakopoulos, A.; Bukalis, K.; Graebert, A.; Hoppe, B.; Kühbacher, M.; Weseloh, G.; Behne, D.*

**Localization and characterization of membrane-bound selenoproteins in the liver of the rat**

International conference, Membrane, Lipids and Microdomains

Dresden 20. Sep - 20. Sep 2003

Poster

*Kyriakopoulos, A.; Graebert, A.; Bukalis, K.; Kiesel, C.; Alber, D.; Behne, D.*

**Localization of selenoproteins in the cell compartments of the kidney and liver of the rat**

Gemeinsame Herbsttagung (HMI + GMS), Metalloproteine und Metalloprotein

HMI, Berlin 06. Nov - 06. Nov 2003

Oral

*Kyriakopoulos, A.; Graebert, A.; Hoppe, B.; Behne, D.*

**Membrane-bound selenoproteins**

International meeting on proteome analysis, Proteomic Forum,

München 14. Oct - 14. Oct 2003

Oral

*Kyriakopoulos, A.; Hoppe, B.; Dalla-Puppa, L.; Bukalis, K.; Kiesel, C.; Behne, D.*

**Proteomics: Identification of selenoproteins in the plasma membrane of rat liver by microcharacterization techniques**

1th International Conference in Functional Genomics,

Prag 14. May - 14. May 2003

Oral

*Kyriakopoulos, A.; Hoppe, B.; Kühbacher, M.; Weseloh, G.; Behne, D.*

**Involvement of selenoenzymes in the redox regulation of metabolic process**

7th Joint Meeting, Signal Transduction

Weimar 09. Nov - 09. Nov 2003

**SF7 - Measurement instrumentation**

**SF7.Detector**

Oral

*Gebauer, B.*

**Development of Very High Resolution & Fast Hybrid 2D Micro-strip Detectors (MSGC & Si-MSD)**

7th TECHNI Meeting

University of Coimbra, Coimbra, Portugal 05.

May - 06. May 2003

Oral

*Gebauer, B.*

**High-resolution & Fast Hybrid 2D Micro-strip Detectors and Outlook to DETNI**

8th TECHNI Meeting

TASC-INFN & ELETTRA, Trieste, Italien 09. Oct

- 10. Oct 2003

Oral

*Gebauer, B.*

**Overview on DETNI Detector Requirements Incl. Specifics for Hybrid MSGC Detectors**

ASIC Workshop

Heidelberg 07. Nov - 07. Nov 2003

Oral

*Schulz, Ch.*

**Entwicklung eines Neutronen-Detektors mit hoher Orts- und Flugzeitauflösung für Experimente an ESS und Reaktoren**

34. Arbeitstreffen Kernphysik in Schleching/Obb

Schleching/Obb 20. Feb - 27. Feb 2003

**SF7.ERDA**

Oral

*Bohlen, H.G.; Kalpakchieva, R.; von Oertzen, W.; Massey, T.N.; Gebauer, B.; Grimes, S.M.; Kokalova, T.; Lenz, A.; Lenske, H.; Milin, M.; Schulz, Ch.; Thummerer, S.; Torilov, S.; Tumino, A.*

**Molecular and particle-hole structures of neutron-rich Be- and C-isotopes**

VIII International Conference on Nucleus-Nucleus Collisions

Moscow, Russia 17. Jun - 17. Jun 2003

Oral

*Bohlen, H.G.; von Oertzen, W.; Kalpakchieva, R.; Massey, T.N.; Gebauer, B.; Grimes, S.M.; Kokalova, T.; Lenske, H.; Milin, M.; Schulz, Ch.; Thummerer, S.*

**Structure of neutron-rich Beryllium and Carbon isotopes**

The 8<sup>th</sup> International Conference on Clustering Aspects of Nuclear Structure and Dynamics  
Nara, Japan 24. Nov - 24. Nov 2003

Invited Talk

*Bohlen, H.G.; von Oertzen, W.; Kalpakchieva, R.; Massey, T.N.; Gebauer, B.; Grimes, S.M.; Kokalova, T.; Lenz, A.; Milin, M.; Schulz, Ch.; Thummerer, S.; Torilov, S.; Tumino, A.*

**Structure studies of light neutron-rich isotopes using heavy-ion induced transfer reactions**

International Symposium on Exotic Nuclei  
HALO'03  
St.-Petersburg, Russia 25. Jun - 25. Jun 2003

## SE - Solar Energy Research

### SE1 - Silicon photovoltaics

#### SE1.Cells

Oral

*Boehme, C.; Lips, K.*

#### Investigation of Electronic Transitions in Semiconductors with Pulsed Electrically Detected Magnetic Resonance

Specialized Colloque 'AMPERE 2003'

Portoroz, Slovenia 08. Sep - 12. Sep 2003

Invited Talk

*Boehme, C.; Lips, K.*

#### The Nature of Dangling Bond Recombination in $\mu\text{c-Si:H}$

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Oral

*Brendel, K.; Nickel, N. H.*

#### Elektron-Spin-Resonanz Untersuchungen an laserkristallisiertem polykristallinem Silizium

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

Poster

*Brendel, K.; Nickel, N. H.; Lips, K.; Fuhs, W.*

#### An Electron Paramagnetic Resonance Study on Laser Crystallized Polycrystalline Silicon

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Oral

*Brendel, K.; Nickel, N. H.; Lips, L.; Fuhs, W.*

#### Electron Spin Resonance Investigation of Laser Crystallized Polycrystalline Silicon

MRS Spring Meeting

San Francisco, USA 21. Apr - 25. Apr 2003

Oral

*Brüggemann, R.; Brehme, S.; Kleider, J. P.; Gueunier, M. E.; Bronner, W.*

#### Effects of Proton Irradiation on the Photoelectronic Properties of Microcrystalline Silicon

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Invited Talk

*Böhme, C.; Lips, K.; Fuhs, W.*

#### The Nature of Dangling Bond Recombination in $\mu\text{c-Si:H}$

"Amorphous and thin film semiconductors" Meeting Spring 2003

Cambridge, UK 03. Apr - 04. Apr 2003

Oral

*Chukichev, M. V.; Forsh, P. A.; Fuhs, W.; Kazanskii, A. G.*

#### Creation of Metastable Defects in Microcrystalline Silicon Films by keV - Electron Irradiation

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Poster

*Conrad, E.; Elstner, L.; Fuhs, W.*

#### $\mu\text{c-Si:H}$ Thin Film Solar Cells with an Absorber Layer Deposited by ECRCVD at a High Deposition Rate of 80-100 nm/min

2nd aSiNet Workshop on Thin Silicon & 9th Euroregional Workshop on Thin Silicon Devices

Lisbon, Portugal 19. Feb - 21. Feb 2003

Poster

*Fenske, F.; Reinig, P.; Selle, B.; Fuhs, W.*

#### Pulsed Sputter Deposition: A Novel Approach for Ordered Silicon Film Growth

2nd aSiNet Workshop on Thin Silicon & 9th Euroregional Workshop on Thin Silicon Devices

Lisbon, Portugal 19. Feb - 21. Feb 2003

Oral

*Friedrich, F.; Böhme, C.; Lips, K.*

#### Spinabhängige Rekombination an Defekten der c-Si/SiO<sub>2</sub>-Grenzfläche

Deutsche Physikerinnentagung

Augsburg 06. Nov - 09. Nov 2003

Oral

*Friedrich, F.; Böhme, C.; Lips, K.; Fuhs, W.*

#### Untersuchungen zur Rekombinationskinetik von Pb-Zentren an c-Si/SiO<sub>2</sub>-Grenzflächen

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003



Invited Talk

*Fuhs, W.*

**Dünnschichtsolarzellen aus Silizium**

FVS-Jahrestagung

Berlin 25. Sep - 25. Sep 2003

Oral

*Gall, S.; Schneider, J.; Muske, M.; Sieber, I.;*

*Nast, O.; Fuhs, W.*

**Poly-Si Films on Glass by the Aluminium-Induced Crystallisation of Amorphous Silicon**

2nd aSiNet Workshop on Thin Silicon & 9th Euroregional Workshop on Thin Silicon Devices

Lisbon, Portugal 19. Feb - 21. Feb 2003

Oral

*Klein, J.; Schneider, J.; Muske, M.; Gall, S.;*

*Fuhs, W.*

**Aluminum-Induced Crystallization of Amorphous Silicon: Influence of the Aluminium Layer on the Process**

E-MRS Conf.

Strasbourg, France 10. Jun - 13. Jun 2003

Oral

*Knipper, U.; Rau, B.; Schwarzkopf, J.; Brehme, S.;*

*Fuhs, W.*

**Electrical Properties of Low-Temperature Epitaxial Thin Silicon Films**

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

Poster

*Lips, K.; Böhme, C.; Fuhs, W.*

**Recombination in  $\mu\text{c-Si:H}$  Pin Solar Cells**

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Oral

*Nickel, N. H.*

**Hydrogen Bonding in Zinc Oxide**

MRS Fall Meeting

Boston, USA 01. Dec - 05. Dec 2003

Oral

*Nickel, N. H.; Brendel, K.:*

**Influence of Laser Crystallization on the Hydrogen Density of States Distribution**

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Oral

*Nickel, N. H.; Brendel, K.:*

**Influence of Laser Annealing on Hydrogen Bonding in Disordered Silicon Thin Films**

MRS Spring Meeting

San Francisco, USA 21. Apr - 25. Apr 2003

Poster

*Peters, S.; Leihkauf, R.; Wagemann, H. G.*

**Integrated Series-Interconnected Thin Film Si Solar Cells with 6 V and 12 V Output Voltage**

3rd World Conf. on Photovoltaic Energy Conversion 'WCPEC-3'

Osaka, Japan 11. May - 18. May 2003

Oral

*Petter, K.; Böhme, C.; Rau, B.; Gall, S.; Lips, K.;*

*Fuhs, W.*

**Photolumineszenz-Untersuchungen an Niedertemperatur homoepitaktisch gewachsenen dünnen Siliziumschichten**

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

Poster

*Rau, B.; Selle, B.; Knipper, U., Brehme, S.;*

*Sieber, I.; Stöger, M.; Schattschneider, P.;*

*Gall, S. Fuhs, W.*

**Low Temperature Epitaxial Si Absorber Layers Grown by Electron-Cyclotron Resonance Chemical Vapor Deposition**

3rd World Conf. on Photovoltaic Energy Conversion 'WCPEC-3'

Osaka, Japan 11. May - 18. May 2003

Oral

*Rau, B.; Selle, B.; Sieber, I.; Gall, S.; Fuhs, W.*

**Low-Temperature Si Epitaxy by Electron-Cyclotron Resonance Chemical Vapor Deposition**

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

Oral

*Rau, B.; Sieber, I.; Selle, B.; Brehme, S.;*

*Knipper, U.; Gall, S., Fuhs, W.*

**Homo-Epitaxial Si Absorber Layers Grown by Low-Temperature ECRCVD**

E-MRS Conf.

Strasbourg, France 10. Jun - 13. Jun 2003

Oral

*Saleh, R.; Nickel, N. H.:***Silicon Hydrogen Bonds in Excimer Laser Crystallized Phosphorus Doped Polysilicon**

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Oral

*Schneider, J.; Gall, S.; Muske, M.; Fuhs, W.***Thin Polycrystalline Silicon Layers Formed by Aluminium-Induced Crystalization**

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

Oral

*Schneider, J.; Klein, J.; Muske, M.; Gall, S.; Fuhs, W.***Aluminium-Induced Crystallization of Amorphous Silicon: Preparation Impact on Growth Kinetics**

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Poster

*Schneider, J.; Klein, J.; Muske, M.; Schöpke, A.; Gall, S.; Fuhs, W.***Aluminum-Induced Crystallization of Amorphous Silicon: Influence of Oxidation Conditions**

3rd World Conf. on Photovoltaic Energy Conversion 'WCPEC-3'

Osaka, Japan 11. May - 18. May 2003

Poster

*Sieber, I.; Rau, B.; Schubert-Bischoff, P.; Urban, I.; Fuhs, W.***The Orientation-Dependent Growth of Epitaxial Silicon Layers at Low Temperature**

31st Microscopy Conf.

Dresden 07. Sep - 12. Sep 2003

Oral

*Stöger, M.; Hébert, C.; Schattschneider, P.; Zandbergen, H. W.; Rau, B.; Gall, S.***SUB-eV Core Level Shifts in Si Grain Boundaries and Nanotwins**

6th Multinat. Congress on Microscopy (MCM-6)

Pula, Croatia 01. Jun - 05. Jun 2003

Poster

*Stöger, M.; Hébert, C.; Karl-Rückert, E. C.; Schattschneider, P.; Rau, B.; Gall, S.; Zandbergen, H. W.***Investigations of Core Level States in Epitaxial Grown Si Layers by Electron Energy Loss Spectrometry**

13th Microscopy of Semiconductor Materials (MSM-13)

Cambridge, UK 31. Mar - 03. Apr 2003

Oral

*Stöger, M.; Schattschneider, P.; Schneider, J.; Gall, S.***The ELNES Separation applied to Oxidation States of Interfaces**

6th Multinat. Congress on Microscopy (MCM-6)

Pula, Croatia 01. Jun - 05. Jun 2003

Oral

*Stöger, M.; Schattschneider, P.; Schneider, J.; Gall, S.; Zandbergen, H. W.***Investigations of Bonding at an Aluminium (III) Oxide Membrane in Si Using ELNES Separation**

13th Microscopy of Semiconductor Materials (MSM-13)

Cambridge, UK 31. Mar - 03. Apr 2003

**SE1.Hetero**

Invited Talk

*Angermann, H.; Henrion, W.; Rebien, M.; Röseler, A.***Wet-Chemical Preparation and Spectroscopic Characterization of Silicon Interfaces**

III. Intern. Workshop on Semiconductor Surface Passivation - SSP2003, Ustron, Polen, 14.-16.9.2003

Ustron, Poland 14. Sep - 16. Sep 2003

Oral

*Bresler, M. S.; Gusev, O. B.; Terukov, E. I.; Fuhs, W.; Froitzheim, A.; Goudovskikh, A. S.; Kleider, J. P.; Weiser, G.***Electroluminescence from Amorphous-Crystalline Silicon Heterostructures**

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors

Sao Paulo, Brazil 25. Aug - 29. Aug 2003

## Poster

*Froitzheim, A.; Elstner, L.; Kriegel, M.; Stangl, R.; Fuhs, W.*

**SIM-Hit: A PC-Programm for the Simulation of Heterojunction Solar Cells to Be Distributed for Public Use**

3rd World Conf. on Photovoltaic Energy Conversion 'WCPEC-3'

Osaka, Japan, 11. May - 18. May 2003

## Oral

*Froitzheim, A.; Scherff, M. L. D.; Ulyashin, A.; Schmidt, M.; Fuhs, W.; Fahrner, W. R.*

**Investigation of a-Si:H(n)/c-Si(p) Heterojunction Solar Cell with an Efficiency of 16 %**

2nd aSiNet Workshop on Thin Silicon & 9th Euroregional Workshop on Thin Silicon Devices

Lisbon, Portugal 19. Feb - 21. Feb 2003

## Oral

*Froitzheim, A.; Scherff, M.; Ulyashin, A.; Milch, O.; Schmidt, M.; Fahrner, W. R.; Fuhs, W.*

**Amorphous/Crystalline Silicon Heterojunction Solar Cells with Intrinsic Buffer Layer**

3rd World Conf. on Photovoltaic Energy Conversion 'WCPEC-3'

Osaka, Japan 11. May - 18. May 2003

## Oral

*Froitzheim, A.; Scherff, M.; Ulyashin, A.; Schmidt, M.; Fahrner, W. R.; Fuhs, W.*

**a-Si:H/c-Si Heterojunctions for Solar Cell Application**

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

## Poster

*Froitzheim, A.; Stangl, R.; Elstner, L.; Kriegel, M.; Fuhs, W.*

**AFORS-Het: A Computer-Program for the Simulation of Heterojunction Solar Cells to Be Distributed for Public Use**

3rd World Conf. on Photovoltaic Energy Conversion 'WCPEC-3'

Osaka, Japan 11. May - 18. May 2003

## Oral

*Gudovskikh, A. S.; Kleider, J. P.; Froitzheim, A.; Fuhs, W.; Terukov, E. I.*

**Investigation of a-Si:H/c-Si Heterojunction Solar Cells Interface Properties**

E-MRS Conf.

Strasbourg, France 10. Jun - 13. Jun 2003

## Oral

*Hartig, P.; Rappich, J.; Dittrich, Th.*

**Organic buffer-layers on Silicon**

203rd Meeting - Gerischer Symposium on Nanostructured Semiconductor Materials and Interfaces Symposium

Paris, France 27. Apr - 02. May 2003

## Oral

*Hartig, P.; Rappich, J.; Dittrich, Th.*

**Electrochemical Engineering of Si Surfaces by Organic Layers**

203rd Meeting - Gerischer Symposium on Nanostructured Semiconductor Materials and Interfaces Symposium

Paris, France 27. Apr - 02. May 2003

## Poster

*Korte, L.; Kliefoth, K.; Schöpke, A.; Laades, A.; Schmidt, M.*

**The Gap State Density Distribution in Thin a-Si:H Layers on c-Si and Their Correlation to the Interface Properties**

9th Intern. Conf. on the Formation of Semiconductor Interfaces 'ICFSI-9'

Madrid, Spain 15. Sep - 19. Sep 2003

## Poster

*Laades, A.; Conrad, E.; Froitzheim, A.; Kliefoth, K.; Schmidt, M.; Fuhs, W.*

**Growth and Electronic Properties of Thin a-Si:H(n) Emitter Layers**

E-MRS Conf.

Strasbourg, France 10. Jun - 13. Jun 2003

## Oral

*Rappich, J.; Yahyaoui, F.; Dittrich, Th.; Lust, S.; Aggour, M.; Lévy-Clément, C.*

**Nonradiative recombination and band bending at Si surfaces during Electrochemical etching in acidic fluoride solutions**

203rd Meeting - Gerischer Symposium on Nanostructured Semiconductor Materials and Interfaces Symposium

Paris, France 27. Apr - 02. May 2003

## Poster

*Schmidt, M.; Milch, O.; Schöpke, A.; Fuhs, W.*

**Electronic Structure of Silicon Based Heterojunctions Used for Solar Cells**

2nd aSiNet Workshop on Thin Silicon & 9th Euroregional Workshop on Thin Silicon Devices

Lisbon, Portugal 19. Feb - 21. Feb 2003

Oral

*Schmidt, M.; Schöpke, A.; Korte, L.; Milch, O.; Fuhs, W.*

**The Gap State Density Distribution in Extremely Thin a-Si:H Layers on Crystalline Silicon Wafers**

20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors  
Sao Paulo, Brazil 25. Aug - 29. Aug 2003

Poster

*Schmidt, M.; Schöpke, A.; Milch, O.; Lußky, T.; Fuhs, W.*

**Photoelectron Spectroscopic Investigations of Very Thin a-Si:H Layers**

MRS Spring Meeting  
San Francisco, USA 21. Apr - 25. Apr 2003

Poster

*Schöpke, A.; Korte, L.; Schmidt, M.*

**Photoelectron Yield Spectroscopy with Low Energy Photon Excitation**

ECASIA'03  
Berlin 06. Oct - 10. Oct 2003

Poster

*Schöpke, A.; Milch, O.; Schmidt, M.*

**Determination of the Gap State Density Distribution in Silicon Based Heterostructures by UV-Photoelectron Spectroscopy**

12th Euro-MBE Workshop  
Bad Hofgastein, Austria 16. Feb - 19. Feb 2003

Oral

*Schöpke, A.; Schmidt, M.; Milch, O.; Fuhs, W.*

**Electronic Structure of Silicon Based Heterojunctions Used for Solar Cells**

DPG-Frühjahrstagung  
Dresden 24. Mar - 28. Mar 2003

Poster

*Stangl, R.; Froitzheim, A.; Fuhs, W.*

**Design Criteria for Amorphous/Crystalline Silicon Heterojunction Solar Cells, - A Simulation Study**

3rd World Conf. on Photovoltaic Energy Conversion 'WCPEC-3'  
Osaka, Japan 11. May - 18. May 2003

---

**SE1.Others**

Oral

*Angermann, H.; Henrion, W.; Rebien, M.; Röseler, A.*

**Wet-Chemical Passivation and Non-Destructive Characterisation of Silicon Surfaces**

Tag der Chemie, Humboldt Universität Berlin  
Berlin 24. Jun - 24. Jun 2003

Invited Talk

*Fuhs, W.*

**PV Technologies - Challenges of Photovoltaic-Research**

PVPS Workshop "PV in Germany" of the Intern. Energy Agency (IEA)  
Berlin 20. Oct - 20. Oct 2003

Invited Talk

*Fuhs, W.*

**Potentials of Photovoltaics**

IV. Deutsch-Italienisch Kolloquium für die Wissenschaft  
Trient, Italien 20. Oct - 20. Oct 2003

Poster

*Fuhs, W.; Gall, S.; Nickel, N.; Schmidt, M.*

**Crystalline Silicon Thin-Film Solar Cells**

Workshop von FVS und PV-Uni-Netz  
Berlin 11. Dec - 12. Dec 2003

Oral

*Hartig, P.; Sieber, I.; Dittrich, Th.; Rappich, J.*

**Passivierung und Funktionalisierung von Si-Grenzflächen mittels organischer Schichten**

Tag der Chemie, Humboldt Universität Berlin  
Berlin 24. Jun - 24. Jun 2003

Poster

*Kötschau, I. M.; Bär, M.; Fischer, Ch.-H.; Grimm, A.; Lauermann, I.; Reichardt, J.; Sieber, I.; Sokoll, S.; Lux-Seiner, M. Ch.; Weinhardt, L.; Fuchs, O.; Heske, C.; Jung, Ch.; Gudat, W.; Niesen, T. P.; Karg, F.*

**X-Ray Emission Study of the ZnO/CIGS<sub>Se</sub> Interface Before and After Damp Heat Treatment**

3rd World Conf. on Photovoltaic Energy Conversion WCPEC-3,

Osaka, Japan, 11. May - 18. May 2003

Oral

*Müller, A.-D.; Müller, F.; Angermann, H.; Hietschold, M.*

**Simulations of Electrical Force Spectra on Semiconductive Surfaces**

6th German Vietnamese Seminar on Physics and Engineering

Chemnitz 25. May - 31. May 2003

Oral

*Müller, F.; Müller, A.-D.; Angermann, H.; Hietschold, M.*

**Mikroskopie und Spektroskopie elektrischer Wechselwirkungskräfte auf Halbleiteroberflächen**

4. Workshop Rasterkraftmikroskopie in der Werkstoffwissenschaft

Münster 20. Feb - 21. Feb 2003

Invited Talk

*Rein, S.; Lips, K.; Schmidt, J.*

**Materialforschung mit neuen analytischen Methoden**

FVS Jahrestagung

Berlin 25. Sep - 25. Sep 2003

Oral

*Silaghi, S. D.; Salvan, G.; Kampen, T. U.; Friedrich, M.; Scholz, R.; Angermann, H.; Zahn, D. R. T.*

**SERS and DFT Studies of Biomolecular Layers on Silicon Surfaces**

DPG-Frühjahrstagung

Dresden 24. Mar - 28. Mar 2003

**SE2 - Heterogeneous material systems**

**SE2.Analytics**

Oral

*Fischer, Ch.-H.; Sokoll, S.; Bär, M.; Grimm, A.; Kötschau, I.; Lauermann, I.; Rahne, K.; Reichardt, J.; Sieber, I.; Lux-Steiner, M.Ch.; Weinhardt, L.; Fuchs, O.; Heske, C.; Jung, C.; Gudat, W.; Visbeck, S.; Niesen, T. P.; Karg, F.*

**Locally resolved characterization of thin film solar cell structures by soft X-ray emission and photoelectron spectroscopy**

European Conf. on Surface and Interface Analysis ECASIA 2003

Berlin, Germany 06. Oct - 10. Oct 2003

Oral

*Lauermann, I.; Bär, M.; Ennaoui, A.; Fiedeler, U.; Fischer, Ch.-H.; Grimm, A.; Kötschau, I. M.; Lux-Steiner, M. Ch.; Reichardt, J.; Sankapal, B. R.; Siebentritt, S.; Sokoll, S.; Weinhardt, L.; Fuchs, O.; Heske, C.; Jung, C.; Gudat, W.; Karg, F.; Niesen, T. P.*

**Analysis of zinc compound buffer layers in Cu(In,Ga)(S,Se)<sub>2</sub> thin film solar cells by synchrotron-based soft X-ray spectroscopy**

MRS Spring Meeting

San Francisco, USA 21. Apr - 25. Apr 2003

**SE2.Concepts**

Poster

*Dloczik, L.; Tomm, Y.; Dittrich, Th.; Könenkamp, R.; Lux-Steiner, M.-C.*

**p-conducting CuAlO<sub>2</sub> prepared as powder and porous film below 400°C**

E-MRS 20th Spring Meeting

Strasbourg 10. Jun - 13. Jun 2003

**SE2.Semico**

Poster

*Beckers, I. E.; Siebentritt, S.; Lux-Steiner M. Ch. (HMI); Wagner, Mt. (U Linköping); Hoffmann, A.; Heiz, R. (TU Berlin)*

**Photoluminescence Excitation Spectroscopy of CuGaSe<sub>2</sub>**

MRS Spring Meeting

San Francisco, USA 22. Apr - 25. Apr 2003

## Oral

*Bär, M.; Rusu, M.; Reiß, J.; Glatzel, T.; Sadewasser, S.; Bohne, W.; Strub, E.; Muffler, H.-J.; Lindner, S.; Röhrich, J.; Niesen, T.P.; Karg, F.; Lux-Steiner, M.Ch.; Fischer, Ch.-H.*

**Insights into the Degradation Mechanisms of CIGSSe Devices based on different Heterojunctions**

3rd World Conf. Photovoltaic Energy Conversion

Osaka, Japan 12. May - 18. May 2003

## Invited Talk

*Klenk, R.*

**Characterisation and modelling of chalcopyrite solar cells**

The 21 COE Symposium on Solar Cells  
Kyoto University, Japan 19. May - 19. May 2003

## Invited Talk

*Klenk, R.; Bakehe, S.; Kaigawa, R.; Neisser, A.; Reiss, J.; Lux-Steiner, M.Ch.*

**Potential of wide-gap Cu(In,Ga)S<sub>2</sub>**

3rd World Conf. Photovoltaic Energy Conversion

Osaka, Japan 12. May - 18. May 2003

## Invited Talk

*Klenk, R.; Klaer, J.; Luck, I.; Lux-Steiner, M.Ch.; Meyer, N.; Scheer, R.*

**An Overview of Chalcopyrite Based Thin-Film Solar Cells**

1st SWH Int. Conference 2003

Segovia, Spain 07. Jul - 10. Jul 2003

## Oral

*Meeder, A.; Fuertes Marrón, D.; Würz, R.; Lux-Steiner M. Ch.; Kunst, M.*

**Optoelectronic properties of CuGaSe<sub>2</sub> thin films**

MRS Spring Meeting

San Francisco 21. Apr - 25. Apr 2003

## Oral

*Neisser, A.; Klenk, R.; Lux-Steiner, M.Ch.*

**Diffusion of Ga and In in sequentially prepared Cu(In,Ga)S<sub>2</sub> thin films for photovoltaic applications**

Materials Research Society Symposium - Proc. Vol. 763

San Francisco, USA 22. Apr - 27. Apr 2003

## Poster

*Nishiwaki, S.; Dziedzina, M.; Schuler, S.; Siebentritt, S.; Bär, M.; Rumberg, A.; Rusu, M.; Klenk, R.; Lux-Steiner, M.Ch.*

**Preparation of CuGaSe<sub>2</sub> Solar Cells and their Optimization**

3rd World Conf. Photovoltaic Energy Conversion

Osaka, Japan 12. May - 18. May 2003

## Poster

*Nishiwaki, S.; Siebentritt, S.; Lux-Steiner, M.Ch.*

**Preparation and Characterization of Cu-Ga-Se Films of Ordered Vacancy Compound**

MRS Spring Meeting

San Francisco, USA 22. Apr - 25. Apr 2003

## Poster

*Rega, N.; Siebentritt, S.; Albert, J.; Lux-Steiner, M.Ch.*

**Photoluminescence of Cu(In<sub>1-x</sub>Ga<sub>x</sub>)Se<sub>2</sub> epitaxial films grown by MOVPE**

MRS Spring Meeting

San Francisco, USA 22. Apr - 25. Apr 2003

## Oral

*Rusu, M.; Wiesner, S.; Fuertes Marrón, D.; Meeder, A.; Doka, S.; Bohne, W.; Lindner, S.; Schedel-Niedrig, Th.; Giesen, C.; Heuken, M.; Lux-Steiner M. Ch.*

**CuGaSe<sub>2</sub> thin films prepared by a novel CCSVT technique for photovoltaic application**

E-MRS 20th Spring Meeting 2003

Strasbourg, France 10. Jun - 13. Jun 2003

## Oral

*Schedel-Niedrig, Th.; Fuertes Marrón, D.; Meeder, A.; Glatzel, Th.; Bloeck, U.; Schubert-Bischoff, P.; Würz, R.; Babu, S. M.; Lux-Steiner M. Ch.*

**Microstructure and other properties of CVD-grown CuGaSe<sub>2</sub> thin films and thin film solar cells**

E-MRS 20th Spring Meeting 2003

Strasbourg, France 10. Jun - 13. Jun 2003

Oral

*Schedel-Niedrig, Th.; Rusu, M.; Wiesner, S.; Fuertes Marrón, D; Meeder, A.; Würz, R.; Bloeck, U.; Schubert-Bischoff, P; Bohne, W.; Lindner, S.; Strub, E.; Röhrich, J.; Jäger-Waldau, A.; Lux-Steiner M. Ch.*

**Chalcopyrite thin films prepared by novel chemical vapor transport techniques for photovoltaic applications**

1th SWH Internat. Conference 2003  
Segovia, Spain 07. Jul - 10. Jul 2003

Poster

*Strub, E.; Bär, M.; Bohne, W.; Fischer, Ch.-H.; Leupolt, B.; Lindner, S.; Röhrich, J.; Schöneich, B.*

**Characterization of the Stoichiometry of Thin ILGAR-ZnO Layers by Heavy-Ion ERDA**

DPG-Frühjahrstagung  
Dresden, Germany 12. Mar - 12. Mar 2003

Oral

*Strub, E.; Bär, M.; Bohne, W.; Fischer, Ch.-H.; Leupolt, B.; Lindner, S.; Röhrich, J.; Schöneich, B.*

**Intensity Calibration of an FT-IR spectrometer by Heavy-Ion ERDA**

16th Conference on Ion Beam Analysis  
Albuquerque, USA 07. Jul - 07. Jul 2003

**SE1.Hetero**

Oral

*Hartig, P.; Rappich, J.; Dittrich, Th.*

**Organic buffer-layers on Silicon**

203rd Meeting - Gerischer Symposium on Nanostructured Semiconductor Materials and Interfaces Symposium  
Paris, France 27. Apr - 02. May 2003

Oral

*Hartig, P.; Rappich, J.; Dittrich, Th.*

**Electrochemical Engineering of Si Surfaces by Organic Layers**

203rd Meeting - Gerischer Symposium on Nanostructured Semiconductor Materials and Interfaces Symposium  
Paris, France 27. Apr - 02. May 2003

**SE1.Others**

Poster

*Kötschau, I. M.; Bär, M.; Fischer, Ch.-H.; Grimm, A.; Lauermann, I.; Reichardt, J.; Sieber, I.; Sokoll, S.; Lux-Seiner, M. Ch.; Weinhardt, L.; Fuchs, O.; Heske, C.; Jung, Ch.; Gudat, W.; Niesen, T. P.; Karg, F.*

**X-Ray Emission Study of the ZnO/CIGS<sub>Se</sub> Interface Before and After Damp Heat Treatment**

3rd World Conf. on Photovoltaic Energy Conversion WCPEC-3,  
Osaka, Japan, 11. May - 18. May 2003

**SE5.Energetics**

Oral

*Meeder A., Fuertes-Marron D., Wunsch F. and Kunst M. Kunst, M.*

**Optoelectronic properties of CuGaSe<sub>2</sub> films**

EMRS 2003  
Strasbourg (Fr.) 10. Jun - 13. Jun 2003

**SE3 - Technology**

**SE3.Control**

Poster

*A. Neisser, C. A. Kaufmann, M. A. Kroon, R. Klenk, R. Scheer*

**Flexible Cu(In,Ga)Se<sub>2</sub> Solar Cell for Space Applications**

3rd World Conference on Photovoltaic Energy Conversion  
Osaka, Japan 11. May - 16. May 2003

Poster

*Djordjevic, J.; Rudigier, E.; Scheer, R.*

**In-Situ XRD Studies of Sequential CuIn(Se,S)<sub>2</sub> Formation**

2003 MRS Spring Meeting  
San Francisco 21. Apr - 21. Apr 2003

Poster

Scheer, R., Keiichiro Sakurai, Christian A. Kaufmann, Akimasa Yamada, Paul Fons, Yasuyuki Kimura, Tomoyuki Baba, Koji Matsubara, Hisayuki Nakanishi, Shigeru Niki

**Process Variants For  
Cu(In<sub>1-x</sub>Ga<sub>x</sub>)Se<sub>2</sub> Deposition  
Investigated By in situ Spectroscopic  
Light Scattering**

WCPEC-3

Osaka - JAPAN 11. May - 16. May 2003

#### SE4 - Dynamics of interfacial reactions

#### SE4.Others

Poster

Alam, M.S.; Rao, B.S.M.; Janata, E.\*

**Reactions of OH and H with aliphatic alcohols. A pulse radiolysis study**

23rd Miller Conference on Radiation Chemistry and Pulse 2003 session

Bialowieza, Polen 06. Sep - 12. Sep 2003

Oral

Janata, E.

**Cerenkov emission in a "foil" of optical fibers as a means for monitoring the excitation in pulse radiolysis experiments**

23rd Miller Conference on Radiation Chemistry and Puls 2003 Session

Bialowieza, Polen 06. Sep - 12. Sep 2003

Poster

Janata, E.\*; Ershov, B.G.; Alam, M.S.

**Reaction of H and OH with H<sub>2</sub>O<sub>2</sub> in aqueous solution**

23rd Miller Conference on Radiation Chemistry and Pulse 2003 Session

Bialowiza, Polen 06. Sep - 12. Sep 2003

#### SE5 - Solar energy

#### SE5.Energetics

Poster

Aggour, M.; Murrell, C. P.; Jungblut, H.; Kanis, M.; Goncalves, E.; Gaul, M.; Winkelkemper, M.; Lewerenz, H. J.

**(Photo)electrochemically Induced Surface Transformations at Polycrystalline CuInS<sub>2</sub> Solar Cell Absorbers**

ECS Meeting Paris, France, 27.04.-02.05.2003  
Paris, France 01. May - 01. May 2003

Oral

Bogdanoff, P.

**Carbon Supported Iron and Cobalt Based Catalysts for the Electro-Reduction of Oxygen in PEM-FCs.**

International Society of Electrochemistry-54th Annual Meeting-Sao Pedro, Brazil-31.Aug.-5.Sept. 2003

Sao Pedro, Brazil 30. Sep - 05. Oct 2003

Oral

Calvet, W.; Lewerenz, H. J.; Pettenkofer, C.

**Molekularstrahlepitaxie von CuInS<sub>2</sub> auf GaAs**

DPG-Frühjahrstagung, Dresden, Germany, 24.-28.03.2003

Dresden, Germany 26. Mar - 26. Mar 2003

Oral

Citarella G., Abdallah O., Wunsch F. and Kunst, M.

**The study of the electric properties of the insulator/crystalline silicon interface by contactless methods**

INFOS 2003

Barcelons (Sp.) 18. Jun - 20. Jun 2003

Oral

Ellmer, K.

**Kurze Geschichte des Magnetrionsputterns**

X. Erfahrungsaustausch

Mühlleithen 18. Mar - 20. Mar 2003

Oral

Goncalves, E.; Jakubowicz, J.; Jungblut, H.; Lewerenz, H. J.

**Photoelectrochemical Surface Conditioning of Si in NH<sub>4</sub>F: Initial Nanopores**

DFG-Workshop "Semiconductor Electrochemistry", Seeheim, Germany, 24.-25.02.2003

Seeheim, Germany 24. Feb - 24. Feb 2003



Oral

*Gonçalves, E.; Jungblut, H.; Jakubowicz, J.; Lewerenz, H. J.*

**Initielle Strukturbildungsprozesse an photoelektrochemisch modifiziertem Si(111): Eine kombinierte AFM und PES Studie**

DPG-Frühjahrstagung, Dresden, Germany, 24.-28.03.2003

Dresden, Germany 25. Mar - 25. Mar 2003

Oral

*Jungblut, H.; Jakubowicz, J.; Goncalves E.; Lewerenz, H. J.*

**Self-organised and patterned nanostructures on silicon**

Fischer Symposium, Munich, Germany, 21.-25.07.2003

Munich, Germany 24. Jul - 24. Jul 2003

Poster

*Jungblut, H.; Jakubowicz, J.; Goncalves E.; Lewerenz, H. J.*

**Self-organised and AFM induced nanostructures on silicon**

Fischer Symposium, Munich, Germany, 21.-25.07.2003

Munich, Germany 24. Jul - 24. Jul 2003

Oral

*Kunst, M., Neitzert H.-C., Sanders A. and Wünsch F.*

**Characterization of InP and GaAs films by contactless photoconductivity measurements**

EMRS 2003

Strasbourg (Fr.) 10. Jun - 13. Jun 2003

Oral

*Kunst, M., Grunow P., Jokisch D. and Wünsch F.*  
**The characterization of multicrystalline silicon for solar cells**

GADEST 2003

Zeuthen 21. Sep - 26. Sep 2003

Oral

*Kurzweil, A.; Fiechter, S.*

**Dynamische Wärmestrom-Differenz-Kalorimetrie (DDK/DSC) an Birkenrinde**

Jahrestagung des Arbeitskreises Archäometrie in der Fachgruppe Analytische Chemie der GDCh und des Arbeitskreises Denkmalpflege der DMG

Berlin 12. Mar - 15. Mar 2003

Invited Talk

*Lewerenz, H. J.*

**Surface Conditioning for Adsorption of Mesoscopic Entities on Semiconductors**

Nanoparticles and Nanodevices for Biological Chemistry, Portsmouth, UK, 15.04 2003

Portsmouth, UK 15. Apr - 15. Apr 2003

Poster

*Lewerenz, H. J., Jakubowicz, J.; Aggour, M.; Murrell, C.; Cox, P. A.; H. Jungblut, H.*

**Initial and Metastable Stages in Porous Si Formation: Mechanistic Aspects of Nanoisland Formation**

BESSY User Meeting, Berlin, Germany, 04.-05.12.2003

Berlin, Germany 04. Dec - 04. Dec 2003

Oral

*Lewerenz, H. J.; Aggour, M.; Jakubowicz, J.; Murrell, C.; Kanis, M.; Jungblut, H.*

**Nanostructure Formation on Silicon: a combined SRPES and AFM Investigation**

204th ECS Meeting, Orlando, USA, 12.-16.10.2003

Orlando, USA 13. Oct - 13. Oct 2003

Oral

*Lewerenz, H. J.; Jungblut, H.; Aggour, M.; Murrell, C.; Kanis, M.; Goncalves, E.; Rütther, E.; Jakubowicz, J.; Cox, P.A.*

**The Early Stages of Si Roughening in Fluoridic Media: a Surface Analytical Study Using Synchrotron Radiation Photoelectron Spectroscopy and Scanning Probe Microscopy**

ECS Meeting Paris, France, 27.04.-02.05.2003

Paris, France 29. Apr - 29. Apr 2003

Oral

*Meeder A., Fuertes-Marron D., Wünsch F. and Kunst M. Kunst, M.*

**Optoelectronic properties of CuGaSe<sub>2</sub> films**

EMRS 2003

Strasbourg (Fr.) 10. Jun - 13. Jun 2003

Oral

*Niehus M., Sanguino P., Schwarz R., Fedorov A., Martinho J.M.G. Soares M.J., Monteiro T., Wünsch F. and Kunst, M.*

**Non-radiative and radiative properties of PLD-deposited poly-crystalline GaN studied by UV ps to ns laser pulses**

ICAMS 20

Brasil 25. Aug - 29. Aug 2003

## Oral

*Plagemann, A.; Wiesemann, K.; Ellmer, K.*  
**In situ-Messung von mechanischen Spannungen in Zinkoxidschichten, abgeschlossen durch reaktives Magnetronspütern**  
 11. Bundesdeutsche Fachtagung Plasmatechnologie  
 Ilmenau 12. Mar - 12. Mar 2003

## Poster

*Skorupska, K.; Lewerenz, H. J.; Jakubowicz, J.; Jungblut, H.*  
**Self Organised and AFM Induced Formation of Nanostructure Pits by Electrochemical Processing: a Combined Photoelectron Spectroscopy and Scanning Probe Microscopy Investigation**  
 EMRS Spring Meeting 2003, Strasbourg, France, 10.-13.06.2003  
 Strasbourg, France 11. Jun - 11. Jun 2003

## Poster

*Vollweiler, G.; Groetschel, R.; Ellmer, K.*  
**Epitaxial Growth of Zinc Oxide Films on Sapphire Substrates: Influence of Substrate Orientation and Pretreatment**  
 16th International Symposium on Plasma Chemistry  
 Taormina (Italy) 22. Jun - 27. Jun 2003

## Poster

*Weiß, V.; Mientus, R.; Sieber, I.; Ellmer, K.*  
**In situ-EDXRD Study of Nucleation and Growth of Tungsten and Molybdenum Disulfide Films**  
 16th International Symposium on Plasma Chemistry  
 Taormina (Italy) 22. Jun - 27. Jun 2003

## Poster

*Wünsch F., Jokisch D., Citarella G. and Kunst, M.*  
**Inhomogeneous distributions of defects studied by transient photoconductivity measurements**  
 BIAMS 2003  
 Villeneuve d'Asq (Fr.) 25. May - 25. May 2003

**SE5.Interfaces**

## Invited Talk

*Jungblut, H.; Lewerenz, H. J.*  
**Porous Si Formation on Highly Doped n-type Samples: Novel Considerations on the Origin of the Current-Voltage Characteristics**  
 ECS Meeting Paris  
 Paris 27. Apr - 02. May 2003

**SE6 - Electronic structure of semiconductor interfaces**

**SE6.BESSY**

## Poster

*Calvet, W.; Lewerenz, H.-J.; Pettenkofer, C.*  
**Heteroepitaxial  $\text{CuInS}_2$  films on GaAs(100)**  
 EMRS spring meeting  
 Strasbourg 10. Jul - 13. Jul 2003

## Poster

*Calvet, W.; Pettenkofer, C.; Lehmann, C.; Sakurai, K.; Niki, S.; Jaegermann, W.; Hunger, R.*  
**Electronic band structure of  $\text{CuInSe}_2$  by ARPES**  
 BESSY user meeting  
 Berlin 06. Dec - 07. Dec 2003

## Oral

*Calvet, W.; Pettenkofer, C.; Lewerenz, H.-J.*  
**Molekularstrahlepitaxie von  $\text{CuInS}_2$  auf GaAs**  
 DPG-Frühjahrstagung (AKF)  
 Dresden 24. Mar - 28. Mar 2003

## Oral

*Pettenkofer, C.; Meier, U.*  
**Morphology of the Si/ZnO interface**  
 DPG Frühjahrstagung (AKF)  
 Dresden 24. Mar - 28. Mar 2003

Poster

*Plake, T.; Bremsteller, W.; Wolf, H.; Pettenkofer, C.*

**Silver island formation on Si(111) observed in situ by X-PEEM**

BESSY user meeting

Berlin 06. Dec - 07. Dec 2003

### **SE6.Interfaces**

---

Oral

*Calvet, W.; Lewerenz, H.-J.; Pettenkofer, C.*

**Molecular beam epitaxy of thin  $\text{CuInS}_2$  films on Si**

MRS spring meeting

San Francisco, CA 21. Apr - 25. Apr 2003



# Invited Lectures

## SF - Structural Research

### SF - BENSC

#### BENSC.User

*Schröder-Smeibidl, B.*

#### **Neutron autoradiography of large scale paintings, Titian, Rembrandt, La Tour, Poussin**

Universität Zürich, Institut für Anorganische Chemie, Zürich, Switzerland, 28.11.2003

*Schröder-Smeibidl, B.*

#### **Alte Meister - Gesehen mit den Augen der Neutronen**

Jahr der Chemie, Veranstaltungsreihe in Berlin "Chemie und Kunst", BAM und Rathgenforschungslabor der Stiftung Preussischer Kulturbesitz, Berlin, Germany, 19.09.2003

#### SF1.BENSC

*Strobl, M.*

#### **New alternative contrast methods in neutron computer tomography**

Seminar über neue Arbeiten; ATI Wien, ATI Wien, Wien, Austria, 28.10.2003

#### SF3.BENSC

*Kardjilov, N.*

#### **Phase-Contrast Radiography with X-rays and Neutrons: Overview and Some Results with Phase-Contrast Neutron Radiography**

Neutronen und deren Anwendungen in Wissenschaft und Industrie, TU München, Fakultät für Physik, München, Germany, 10.03.2003

### SF1 - Methods and Instruments

#### SF1.Dynamics

*Pappas, C.*

#### **Power-law relaxation in spin glasses: Neutron spin echo and dynamic scaling**

INSA, Toulouse, France, 30.01.2003

*Pappas, C.*

#### **Relaxation and disorder: The quest for the Griffiths phase**

University of Montpellier, Montpellier, France, 03.04.2003

*Steitz, R.*

#### **Neutron reflectivity from ultrathin polymeric films**

Forschungsseminar, Humboldt Universität zu Berlin, Institut für Physik, Berlin, Germany, 14.02.2003

*Mezei, F.*

#### **What atoms do in non-crystalline matter**

University of California San Diego, La Jolla, United States, 27.02.2003

*Lieutenant, K.*

#### **Protein Dynamics investigated by TOF neutron scattering and other methods**

SF1 Seminar, HMI, Berlin, Germany, 09.03.2003

*Mezei, F.*

#### **What atoms do in matter?**

BNC Neutron School, Budapest Neutron Center (BNC), Budapest, Hungary, 07.04.2003

#### SF1.Methods

*Krist, T.*

#### **Planungen für die Polarisatoren am Spin-Echo-Gerät an der SNS**

Das Spin-Echo-Gerät an der SNS, Forschungszentrum Jülich, Jülich, Germany, 18.04.2003

*Krist, T.*

**Solid state elements for neutron optics**

Kyoto Research Reactor Institute, Kyoto, Japan, 14.04.2003

*Krist, T.*

**Solid state elements for neutron optics**

RIKEN Institute, Tokyo, Japan, 15.04.2003

*Krist, T.*

**Solid state elements for neutron optics**

Japan Atomic Energy Institute, Tokai, Japan, 16.04.2003

*Krist, T.*

**Solid state elements for neutron optics**

Korean Atomic Energy Research Institute, Daejeon, Korea, 24.04.2003

*Mezei, F.*

**Conference Summary**

International Workshop on Scientific Opportunities of Cold Neutron Time-of-Flight Spectroscopy, Los Alamos National Laboratory, Penn State University, Bethesda, United States, 15.07.2003

*Mezei, F.*

**New Scientific Opportunities by new instrumental capabilities in neutron spectroscopy**

International Workshop on the Scientific Opportunities of Cold Neutron Time-of-Flight Spectroscopy, Los Alamos National Laboratory, Penn State University, Bethesda, United States, 14.07.2003

*Mezei, F., Russina, M.*

**Test of coupled cold moderator performance at Lujan Center**

Los Alamos National Laboratory, Los Alamos, United States, 27.02.2003

*Krist, T.*

**Aspects of neutron optics**

Kyoto University, Kyoto, Japan, 07.05.2003

*Krist, T.*

**Solid state elements for neutron optics**

Korean Physical Society, Seoul, Korea, 26.04.2003

*Krist, T.*

**Solid state elements for neutron optics**

China Institute for Atomic Energy, Peking, P.R. of China, 21.04.2003

**SF1.Spallation**

---

*Hilscher, D.*

**Transmutation - eine Option für die Zukunft?**

Technische Universität Dresden, Dresden, Germany, 24.06.2003

*Hilscher, D.*

**Transmutation - eine Option für die Zukunft?**

Universität Stuttgart, Stuttgart, Germany, 15.07.2003

*Mezei, F.*

**The ESS revolution in neutron research opportunities**

Edgar Lüscher Seminar, Universität Duisburg, Duisburg, Germany, 02.02.2003

*Mezei, F., Eccleston, R.C.*

**Instrumentation and scientific utilisation**

ESS Council, Leipzig, Germany, 01.07.2003

*Lieutenant, K.*

**New Features in VITESS 2.4**

SCANS Meeting, University of Nyköping, Nyköping, Sweden, 26.09.2003

## SF2 - Magnetism

### SF2.Bulk magnetism

*Graf, H.*

#### Neutronenstreuung - Zur Untersuchung der kondensierten Materie

Strukturbestimmung, Methodenkombination, Datenbanken, Universität Leipzig, Leipzig, Germany, 10.09.2003

### SF2.Thin films

*Holub-Krappe, E.*

#### Spin Reorientation Transition in Magnetic Thin Films

Polish Academy of Sciences, Warsaw, Poland, 10.02.2003

*Maletta, H.*

#### Interfacial effects in magnetic nanostructures as studied by synchrotron experiments

KFKI RMKI Institute, Budapest, Hungary, 10.09.2003

*Krappe, H.*

#### Bayesian Approach to EXAFS Data Analysis

Institute of Physics, Polish Academy of Sciences, Warschau, Poland, 10.02.2003

*Holub-Krappe, E.*

#### Spin Reorientation Transition in Au Capped Thin Co Films

MAX-lab National Laboratory, Lund, Sweden, 30.04.2003

## SF3 - Materials

### SF3.Light weight mat.

*Banhart, J.*

#### Metal foam: manufacturing methods and physics of foaming

Institut INEGI, Porto, Portugal, 23.05.2003

*Banhart, J.*

#### Metallschäume - Von der Mikrostruktur zur Anwendung

DGM, Berlin, Germany, 18.09.2003

*Banhart, J.*

#### Foaming metals on earth and in space

Hungarian Academy of Sciences, Miskolc, Hungary, 18.10.2003

*Banhart, J.*

#### Aluminiumwerkstoffe: Chancen und Herausforderungen durch neue Mikro- und Makrostrukturen

Werkstoffkolloquium, Universität Karlsruhe, Karlsruhe, Germany, 24.10.2003

## SF3.Microstructure

*Macht, M.*

#### Zwischen Schmelze und Festkörperforschung an metallischen Gläsern am HMI Berlin

Kolloquium des Fachbereichs Physik der Martin-Luther Universität Halle-Wittenberg, Fachbereich Physik der Martin-Luther Universität Halle-Wittenberg, Halle, Germany, 10.04.2003

*Abromeit, C.*

#### MD simulation of diffusionless phase transformation in Ni-Al

Kyush University, Fukuaoa 812-8581, Japan, 20.11.2003

## SF5 - Theory

### SF5.Biosystems

*Parmeggiani, A.*

#### Embouteillages sur des autoroutes moléculaires

Université Montpellier, Montpellier, France, 24.03.2003



*Frey, E.*

**Physics in Cell Biology**

Universität Heidelberg, Heidelberg, Germany,  
03.02.2003

*Lattanzi, G.*

**Models of Biological Macromolecules**

University of Lecce, Lecce, Italy, 07.11.2003

*Lattanzi, G.*

**Cytoskeletal filaments: a biological motivation for physical studies**

TIRES Centre, University of Bari, Bari, Italy,  
28.04.2003

**SF5.Hard Matter**

*Fritsch, W.*

**Theory pure and dirty: a physics excursion from the field of atomic collisions to chemical vapor deposition**

Kyoto Institute of Technology, Kyoto, Japan,  
04.11.2003

*Fritsch, W.*

**Solar Cells from a Chemical Vapor Deposition Reactor: Computational Fluid Dynamics Studies**

Venture Business Laboratory, Yamaguchi University, Ube, Japan, 15.10.2003

*Fritsch, W.*

**Atomic Collision Physics for Fusion Plasmas: is Theoretical Physics useful for a Complex Technical Design Problem?**

Yamaguchi University, Ube, Japan, 15.11.2003

*Fritsch, W.*

**Solar Cells: Observations and Issues**

Yamaguchi University, Ube, Japan, 06.12.2003

*Fritsch, W.*

**Simulations for the Production of Solar Cells: is Theoretical Physics useful for an Engineering Problem**

Yamaguchi University, Ube, Japan, 07.11.2003

**SF5.Soft Matter**

*Benetatos, P.*

**Depinning of semiflexible polymers in (1+1) dimensions**

Annual APS March Meeting 2003, American Physical Society, Austin, Texas, United States,  
04.03.2003

*Kroy, K.*

**Sand Dunes**

Universität Göttingen, Institut f. Theoretische Physik, Göttingen, Germany, 04.07.2003

*Kroy, K.*

**Strain hardening of biological tissue**

Universität Konstanz, Konstanz, Germany,  
09.09.2003

*Kroy, K.*

**Strain hardening of biological tissue**

Universität Leipzig, Leipzig, Germany,  
14.07.2003

*Basu, A.*

**Novel universality classes of a coupled driven diffusive system**

TU Darmstadt, Physics Department, Darmstadt, Germany, 07.10.2003

**SF6 - Trace Elements**

**SF6.Analysis**

*Kühbacher, M., Weseloh, G.; Kyriakopoulos, A.; Behne, D.*

**Lokalisation von Metallen und Metalloiden in Geweben des Zentralen Nervensystems und des männlichen Reproduktionssystems mit Hilfe der Synchrotronröntgenfluoreszenzanalyse**

Robert-Koch-Institut, Berlin, Germany,  
01.01.2003

**SF6.Clinical app.**

---

*Kühbacher, M., Weseloh, G.; Kyriakopoulos, A.; Behne, D.*

**Proteinfehlfaltung als molekulares Schlüsselereignis bei neurodegenerativen Demenzen wie Alzheimer-, Parkinson- und Creutzfeldt-Jakob-Krankheit**

Lehrveranstaltung, FU Berlin, Berlin, Germany, 17.02.2003

*Kyriakopoulos, A., Behne, D.*

**Charakterisierung der Plasma Glutathionperoxidase**

Fa. Biogenes, Berlin, Germany, 15.05.2003

**SF6.Proteins**

---

*Behne, D., Kyriakopoulos, A.*

**Selenium in the mammalian organism: Distribution, functions and requirement**

Selenium meeting of the Danish Chemical Society, Danish Chemical Society, Copenhagen, Denmark, 20.08.2003

*Kyriakopoulos, A., Behne, D.*

**Selenocysteinhaltige Proteinen im Endoplasmatischen -Retikulum**

FU Berlin, Berlin, Germany, 25.04.2003

*Kyriakopoulos, A., Behne, D.*

**Expression of selenoproteins in tissues of the rat**

University of Athens, Athen, Greece, 07.10.2003

*Kyriakopoulos, A., Behne, D.*

**RNAs von Selenoproteinen**

RINA Netzwerk, Berlin, Germany, 21.11.2003

**SF7 - Measurement instrumentation****SF7.ERDA**

---

*von Oertzen, W.*

**Nuclear Clusters and Covalently bound nuclear molecules**

IreS, Strassbourg, France, 03.04.2003

*von Oertzen, W.*

**Nuclear Structure beyond the Shell-model, Three-body clusters and Valence neutrons in covalent orbitals**

FLNR (JINR), Dubna, Russia, 24.07.2003

*von Oertzen, W.*

**Search for Cluster Structures in excited states of <sup>13</sup>C and <sup>14</sup>C**

University of Tokyo, Hongo Campus, Tokyo, Japan, 20.11.2003

## SE - Solar Energy Research

### SE1 - Silicon photovoltaics

#### SE1.Cells

*Böhme, C., Lips, K.*

**Grundlagen und Anwendungen gepulster elektrisch detektierter magnetischer Resonanz**

Walther-Schottky-Institut, München, Germany, 09.05.2003

*Böhme, C., Lips, K.*

**Foundations and Applications of Pulsed Electrically Detected Magnetic Resonance**

Carl-von-Ossietzky-Universität, Oldenburg, Germany, 25.06.2003

*Fuhs, W.*

**Solarzellen aus amorphem und multikristallinem Dünnschicht-Silizium**

Technische Universität Berlin, Berlin, Germany, 04.07.2003

*Lips, K.*

**ESR Research at the Hahn-Meitner-Institute**

Carl-von-Ossietzky Universität, Oldenburg, Germany, 25.06.2003

*Nickel, D.N.*

**Properties of Hydrogen in Silicon**

Université de Rennes I, Rennes, France, 27.06.2003

*Nickel, D.N.*

**Hydrogen Migration in Disordered Silicon**

Universités Paris VI et XI Ecole Supérieure d'Electricité, Gif-sur-Yvette, France, 11.12.2003

*Nickel, D.N.*

**Hydrogen in Poly-Si and ZnO**

Laboratoire de Physique des Solides et de Cristallogénèse, Meudon, France, 29.09.2003

*Lips, K.*

**Recombination in pin  $\mu\text{c-Si:H}$  solar cells**

IPV, Forschungszentrum Jülich, Jülich, Germany, 17.07.2003

*Klein, J.*

**Entwicklung von Niedertemperaturprozessen für Dünnschichtsolarzellen auf Siliziumbasis**

TU Ilmenau, Ilmenau, Germany, 08.07.2003

#### SE1.Hetero

*Froitzheim, A.*

**Solarzellen aus amorphem und kristallinem Silizium**

ISFH, Hameln, Germany, 27.06.2003

*Schmidt, M.*

**TCO/a-Si:H/c-Si Silizium Heterojunction Solarzelle: Material- and Interface-characterisierung, Prozessierung und Simulation**

Universität Erlangen-ZAE Bayern, Erlangen, Germany, 12.04.2003

#### SE1.Others

*Selle, B.*

**MeV-Ionenrückstreuung im Dienste der Photovoltaik**

Friedrich-Schiller-Universität, Jena, Germany, 06.03.2003

### SE2 - Heterogeneous material systems

#### SE2.Analytics

*Fischer, C.*

**Synchrotrondiagnostik zur Unterstützung der Material- und Technologieentwicklung für kostengünstige  $\text{Cu(In,Ga)(S,Se)}_2$ -Photovoltaikmodule**

BMBF-Statusseminar, BMBF, Stuttgart, Germany, 18.03.2003

*Fischer, C.*

**Synchrotrondiagnostik zur Unterstützung der Material- und Technologieentwicklung für kostengünstige Cu(In,Ga)(S,Se)<sub>2</sub> - Photovoltaikmodule**

Projekttreffen Hochspannungsnetz, ?, Frankfurt/M., Germany, 30.04.2003

*Glatzel, T.*

**Kelvin Probe Force Microscopy for characterization of Cu(In,Ga)(S,Se)<sub>2</sub> solar cells**

Universität Würzburg, Arbeitsgruppe Umbach, Würzburg, Germany, 08.05.2003

*Fischer, C.*

**Röntgenemissions- und Photoelektronen-Spektroskopie mit Synchrotronanregung eine einzigartige Kombination zur Untersuchung anorganischer Dünnschichtsysteme**

FUB, FB Chemie, Berlin, Germany, 02.06.2003

*Laueremann, I.*

**Synchrotron based surface and interface analysis of chalcopyrite thin film solar cells**

FUB, FB Physik, Berlin, Germany, 27.08.2003

*Sadewasser, S.*

**Austrittsarbeitsmessungen auf der Nanometer-Skala zur Charakterisierung von Dünnschichtszellzellen**

Universität Darmstadt, Darmstadt, Germany, 14.01.2003

*Laueremann, I.*

**Neue Entwicklungen in der Photovoltaik vom Silizium zur Farbstoffzelle**

Arbeitskreis regenerative Energien der Universität Hannover, Arbeitskreis regenerative Energien der Universität Hannover, Hannover, Germany, 27.11.2003

*Glatzel, T.*

**Kelvin Probe Force Microscopy for characterization of Cu(In,Ga)(S,Se)<sub>2</sub> solar cells**

FUB, Arbeitsgruppe Fumagalli, Berlin, Germany, 14.07.2003

## SE2.Chemistry

*Muffler, H.*

**Chalkopyrit-Dünnschicht-Solartechnologie**

Institut f. Verfahrenstechnik der Techn. Universität Berlin, Berlin, Germany, 31.01.2003

*Fischer, C.*

**ILGAR ein vielseitiges Low-cost Beschichtungsverfahren**

1. Membransymposium des Forschungsschwerpunktes Fluidsystemtechnik an der Techn. Universität Berlin, TUB, Berlin, Germany, 24.05.2003

## SE2.Concepts

*Meyer, C.*

**Quantencomputer Rechnen mit Atomen**

Tag der Forschung 2003, Fachhochschule Harz, Wernigerode, Germany, 26.11.2003

*Fostiropoulos, K., Scharber, M.; Hirsch, A.*

**Organische und Polymersolarzellen**

Photovoltaik neue Horizonte, Jahrestagung des FVS, FVS, Berlin, Germany, 25.09.2003

*Harneit, W.*

**Der Quantencomputer**

Ilmenauer Physiksommer 2003, ?, Ilmenau, Germany, 08.09.2003

*Lux-Steiner, M.C.*

**Optische Hochkonversion und Nanotechnologie**

FVS PV Jahrestagung, FVS, Berlin, Germany, 25.09.2003

*Harneit, W.*

**N@C60 Fullerene - Spinmoleküle und ihre Anwendungen**

DFG-Forschergruppenseminar "Ferromagnet-Halbleiter-Nanostrukturen", Universität Regensburg, Regensburg, Germany, 28.11.2003

*Weidinger, A.*

**Ionenspuren Ein neuer Weg zur Nanotechnologie**

Physikalisches Kolloquium an der Ruhr-Universität Bochum, Ruhr-Universität Bochum, Bochum, Germany, 14.07.2003

**SE2.Semico**

*Lux-Steiner, M.C.*

**Solarzellen: Stand und Perspektiven**

Heraeus-Seminar, ?, Bad Honnef, Germany, 27.05.2003

*Lux-Steiner, M.C.*

**Solar Cell Devices - a Scientific and Technological Challenge**

7th International Summer School, ?, Samedan, Switzerland, 01.08.2003

*Lux-Steiner, M.C.*

**Frauen und Photovoltaik**

HGF-Workshop Potentiale nutzen Frauen in der Helmholtz-Gemeinschaft, GBF-Gesellschaft für Biotechnologische Forschung mbH, Braunschweig, Germany, 17.09.2003

*Lux-Steiner, M.C.*

**Die Photovoltaik auf dem Weg von der Forschung in die industrielle Umsetzung**

ÖPG-Jahrestagung, ?, Salzburg, Austria, 01.10.2003

*Lux-Steiner, M.C.*

**Technologie avancée des couches minces pour une photovoltaïque abordable ATHLET PV**

HGF, Berlin, Germany, 28.10.2003

*Lux-Steiner, M.C.*

**Solarzellen aus dünnen Schichten**

Physikerinnen-Tagung, ?, Heidelberg, Germany, 08.11.2003

*Schedel-Niedrig, T.*

**Dünnschichten für die Anwendung in der Photovoltaik: Strukturelle und elektronische Eigenschaften von CVD-Chalkopyrit**

Fritz-Haber-Institut der MPG, Berlin, Germany, 24.09.2003

*Siebentritt, S.*

**Halbleiterdefekte und Solarzellen Grundlagen und Anwendungen ternärer Halbleiter**

Universität Heidelberg, Heidelberg, Germany, 29.01.2003

*Siebentritt, S.*

**Defekte und Transport in Chalkopyriten**

Universität Jena, Jena, Germany, 22.05.2003

*Siebentritt, S.*

**Defects and Transport in Cu(In,Ga)Se<sub>2</sub>**

Workshop on Widegap Chalcopyrite Solar Cells, ?, Reichenow, Germany, 01.10.2003

**SE3 - Technology**

**SE3.Baseline**

*Scheer, R.*

**Chalkopyrit-Dünnschicht-Solarzelle mit hoher Bandlücke**

Forschungsverband Solarenergie, Berlin, Germany, 25.09.2003

**SE3.Control**

*Scheer, R.*

**Defect ordering in  $CuB^{III}C_2^{VI}$  ternary chalcogenides**

Universität Stuttgart, Stuttgart, Germany, 27.10.2003

*Scheer, R.*  
**Prozess- und Qualitätskontrolle für Dünnschichtsolarzellen**  
 Technische Universität Berlin, Berlin, Germany,  
 14.11.2003

*Willig, F.*  
**Femtosecond electron transfer from the C1 surface state into bulk states of In-rich (2x4) - reconstructed InP(100)**  
 University of Pittsburg, Telluride, United States,  
 25.06.2003

<b>SE4 - Dynamics of interfacial reactions</b>
--

#### SE4.Cells

*Willig, F.*  
**New experimental results and models concerning the initial and the final charge separation steps in the dye-sensitized solar cell**  
 Imperial College, London, United Kingdom,  
 10.06.2003

#### SE4.Dynamics

*Willig, F.*  
**Femtosecond electron dynamics at the surface of semiconductors**  
 National Renewable Energy Laboratory, NREL,  
 Golden, CO, United States, 20.06.2003

*Willig, F.*  
**Atomic reconstruction and hot electron dynamics on the surface of MOCVD grown InP(100)**  
 University of California at Los Angeles, Los Angeles, United States, 04.07.2003

*Willig, F.*  
**Hot electron dynamics in surface and bulk states of In-rich reconstructed InP (100)**  
 DFG Schwerpunkt 1093, Würzburg, Germany,  
 08.10.2003

*Willig, F.*  
**Femtosecond electron injection from optically populated donor states into the conduction band of semiconductors**  
 SPIE, San Diego, United States, 07.08.2003

#### SE4.Others

*Janata, E.*  
**Pulse radiolysis techniques and applications**  
 Istituto per la Sintesi Organica e la Fotoattività (ISOF), Bologna, Italy, 01.04.2003

*Janata, E.*  
**Cerenkov emission in optical fibers for detecting and measuring radiation**  
 Radiation Laboratory, University of Notre Dame, Notre Dame, United States, 16.10.2003

*Janata, E.*  
**Pulse generators for electron accelerators**  
 Radiation Laboratory, University of Notre Dame, Notre Dame, United States, 16.09.2003

*Janata, E.*  
**Pulse radiolysis experiments at the ELBENA facility: growth of small silver particles and the direct observation of aliphatic alcohol radicals**  
 Radiation Laboratory, University of Notre Dame, Notre Dame, United States, 20.10.2003

*Janata, E.*  
**Growth of small silver particles and the direct observation of aliphatic alcohol radicals**  
 Brookhaven National Laboratory, Brookhaven, United States, 23.10.2003

*Janata, E.*  
**Cerenkov emission in optical fibres as a means of detecting and measuring radiation**  
 Brookhaven National Laboratory, Brookhaven, United States, 23.10.2003

## SE5 - Solar energy

### SE5.Energetics

*Tributsch, H.*

#### **Bionik solarer Energiesysteme**

TU Berlin, Inst. für Regelungstechnik und Bionik, Berlin, Germany, 05.12.2003

*Tributsch, H.*

#### **Wissenschaftliche Herausforderungen für eine nachhaltige Energiewirtschaft**

Solarzeitalter - Voraussetzungen-Aussichten-Probleme, Leibnitz-Sozietät, Augustusburg, Germany, 12.09.2003

*Tributsch, H.*

#### **Microbially Induced Corrosion of Iron Sulfides**

Workshop on Biogeochemical Processes Involving Iron Minerals in Natural Waters, ETH Zürich, Monte Verità, Ticino, Switzerland, 21.11.2003

*Ellmer, K.*

#### **Magnetronspütern von sulfidischen Halbleiterschichten für Dünnschichtsolarzellen**

Fraunhofer-Institut für Schicht- und Oberflächentechnik (IST), Braunschweig, Germany, 12.05.2003

*Bogdanoff, P.*

#### **Carbon Supported Iron and Cobalt based Catalysts for the Electroreduction of Oxygen**

FEE - Kolloquium "Biogene Gase-Brennstoffzellen", Ernst Moritz Arndt Universität Greifswald, Greifswald, Germany, 25.08.2003

*Tributsch, H.*

#### **Comparative Analysis of Photodegradation in Ru-N3 sensitized Wet and Solid TiO2 Based Nanostructured Solar Cells**

15th Workshop on Quantum Solar Energy Conversion (QUANTSOL), ESQSEC, Bad Gastein, Austria, 21.03.2003

*Ellmer, K.*

#### **Magnetronspütern von Halbleiterschichten für Dünnschichtsolarzellen**

Leibniz-Institut für Niedertemperaturplasmaphysik (INP), Greifswald, Germany, 19.05.2003

*Ellmer, K.*

#### **Reaktives Magnetronspütern von Indium-Zinn-Oxid: Plasmamparameter und Schichteigenschaften**

TU Chemnitz, Institut für Physik, Lehrstuhl: Physik fester Körper, Chemnitz, Germany, 13.06.2003

### SE5.Interfaces

*Lewerenz, H.J.*

#### **Semiconductor Surface Nanostructures for Adsorption of Biological Molecules**

North Carolina State University, North Carolina, United States, 08.11.2003

*Lewerenz, H.J.*

#### **Electrochemical Conditioning of CuInS<sub>2</sub>**

CRG-Meeting, Universität, Darmstadt, Germany, 27.02.2003

*Lewerenz, H.J.*

#### **Synchrotron Radiation Photoelectron Spectroscopy on Photoelectrochemically Conditioned n-Si(111)**

CRG-Meeting, Universität, Darmstadt, Germany, 27.02.2003

*Goncalves, E.*

#### **Elektrochemisch erzeugte selbstorganisierte Nanostrukturen auf Si-Oberflächen**

Angewandte Spektroskopie, BTU, Cottbus, Germany, 26.05.2003

*Jungblut, H.*

#### **Roughness Development on Photoelectrochemically Treated n-Si(111): From Nanopits to Mesa-Type Structures**

CRG-Meeting, Universität, Darmstadt, Germany, 27.02.2003

*Lewerenz, H.J.*

**Initial Stages of por-Si Formation: a Surface Analytical Study Using Synchrotron Radiation Photoelectron Spectroscopy and Atomic Force Microscopy**

CRG Evaluation, BESSY, Berlin, Germany,  
26.06.2003

**SE6 - Elektronic structure of semiconductor interfaces**

**SE6.Interfaces**

*Pettenkofer, C.*

**Morphology and electronic properties of energy converting interfaces**

portland state university, Portland, United States, 28.05.2003



## Patents and Patent Applications

### Patents

Dep.	HGF-Programme	Inventor	Title	Application date	Assignment date
SF1	Structure of matter	Krist, T.	Neutronenpolarisator - FR 0009633	24.07.00	03.01.03
SF1	Structure of matter	Hoffmann, J.; Krist, T.	Neutronenoptisches Bauelement - CH 19991720/99	17.09.99	15.08.03
SF2, SE2	Structure of matter	Klose, F.; Maletta, H.; Nagengast, D.; Rehm, C.; Weidinger, A.	Magnetischer Meßfühler - DE, EP (18 Staaten) DE: 59809207.2-08, EP: 98910585.3-2216	06.02.98	06.08.03
SF2, SF1	Structure of matter	Fritzsche, H.; Maletta, H.; Nawrath, T.; Nowikow, J.	Magnetfeldsensor - DE, EP (18 Staaten) DE: 59906363.7-08, EP: 99936411.0-2216	28.05.99	23.07.03
SF2, SF1	Structure of matter	Fritzsche, H.; Maletta, H.; Nawrath, T.; Nowikow, J.	Magnetischer Speicher - DE, EP (18 Staaten) DE: 59906791.8-08, EP: 99936412.8-2210	28.05.99	27.08.03
SE1	Energy	Dittrich, T.; Hartig, P.; Rappich, J.	Verfahren zur Funktionalisierung und Passivierung der Oberfläche von Silizium-Wafern durch elektrochemisches Abscheiden dünner organischer Schichten - DE 10130801.9-09	22.06.01	30.10.03
SE2	Energy	Fischer, C.; Könenkamp, R.; Lux-Steiner, M.C.; Möller, J.; Siebentritt, S.	Verfahren und Anordnung zur Herstellung dünner Metallchalkogenid-Schichten - DE 19831214.8-09	03.07.98	03.07.03
SE2	Energy	Bär, M.; Fischer, C.; Lux-Steiner, M.C.; Muffler, H.; Müller, F.	Verfahren zur Herstellung dünner, schwer löslicher Beschichtungen - DE 10160504.8-09	30.11.01	13.11.03
SE2	Energy	Fritsch, W.; Jäger-Waldau, A.A.; Lux-Steiner, M.C.; Meyer, N.; Rumberg, A.; Wiesner, S.	Verfahren und Anordnung zum Abscheiden von Material aus einem Vorrat - DE 20220591.6	27.02.02	11.12.03

Dep.	HGF-Programme	Inventor	Title	Application date	Assignment date
SE2	Energy	Fischer, C.; Lux-Steiner, M.C.; Muffler, H.	Verfahren zur Herstellung dünner, schwer löslicher Beschichtungen - AU, HU AU: 50600/00, HU: P0200790	06.04.00	AU: 12.06.03, HU: 01.08.03
SE3	Energy	Pietzker, C.; Scheer, R.	Verfahren zur Herstellung einer Chalkogenid- Halbleiterschicht des Typs ABC2 mit optischer Prozesskontrolle - DE 10119463.3-09	12.04.01	06.03.03
SE3	Energy	Gartsman, K.; Scheer, R.	Verfahren zur Erzeugung von p-n-Übergängen in einem Halbleiter - DE 10153053.6-09	21.10.01	09.10.03
SE3	Energy	Klaer, J.; Luck, I.; Siemer, K.; Werner, A.	Dünnschicht- Halbleiterbauelement mit einer Chalkopyritschicht und Verfahren zu seiner Herstellung sowie Verwendung des Verfahrens zur Herstellung einer Dünnschicht-Solarzelle - DE 10004733.5-09	28.01.00	11.12.03
SE4	Energy	Giersig, M.; Hilgendorff, M.	Verfahren zur reproduzierbaren Herstellung einer regelmäßigen Anordnung aus nanokristallinen Magnetpartikeln - DE 10108853.1-09	18.02.01	16.01.03
SE4	Energy	Janata, E.	Messvorrichtung zur Dosismessung hochenergetischer Teilchenstrahlung - DE 20121715.5	15.07.01	27.03.03
SE5	Energy	Aggour, M.; Lewerenz, H.; Störkel, U.	Verfahren zum selektiven Entfernen von Fremdphasen an Oberflächen von sulfidhaltigen Chalkopyritthalbleitern - DE 10022625.3-09	28.04.00	24.04.03
SE5	Energy	Bogdanoff, P.; Friebe, P.; Tributsch, H.	Reversibles Elektrosorptionsverfahren, Anordnung zur Durchführung und Anwendung des Verfahrens - DE 19914100.2-09	22.03.99	28.05.03
SE5, SE1	Energy	Aggour, M.; Jungblut, H.; Lewerenz, H.; Rappich, J.	Verfahren zum Behandeln von Oberflächen flacher Siliziumkörper - DE 19510852.3-09	17.03.95	08.05.03

## Patent applications

Dep.	HGF-Programme	Inventor	Title	Application date
SF	Structure of matter	Mezei, F.; Russina, M.	Neutronenoptische Bauelementanordnung zur gezielten spektralen Gestaltung von Neutronenstrahlen oder -pulsen - WO PCT/DE03/00192	22.01.2003 Additional application
SF1	Structure of matter	Clemens, D.; Mezei, F.; Mokrani, L.	Neutronenoptisches Bauelement für die Neutronenkleinwinkelstreu-Messtechnik - WO PCT/DE03/02869	25.08.2003 Additional application
SF4	Structure of matter	Fahrner, W.; Fink, D.; Hoppe, K.; Petrov, A.; Sandkühler, U.; Stanski, B.	Parametrierte Halbleiterverbundstruktur mit integrierten Dotierungskanälen, Verfahren zur Herstellung und Anwendung davon - DE 10325150.2-33	31.05.2003
SF4	Structure of matter	Fink, D.; Petrov, A.; Prashant, A.	Elektronische Nanobauelemente auf der Basis einer einzelnen Ionenspur und Anwendungen davon - DE 10339825.2-54	24.08.2003
SF4	Structure of matter	Amaral, L.; Behar, M.; Fink, D.	Quantenelektronisches Nanobauelement und Verfahren zu seiner Herstellung - DE 10361934.8-33	28.12.2003
SE1	Energy	Hartig, P.; Portwich, M.	Biosensor mit einer Anordnung von mehreren Schichten und Verfahren zum Messen von Eigenschaften einer Testkomponente - DE 10334097.1	25.07.2003
SE1	Energy	Kytin, V.; Kytina, I.; Lips, K.	Verfahren zur Herstellung und zum Betreiben eines Feststoff-Polymer-Lasermediums und Anordnung zu dessen Implementierung in einem Aufbau zur Lichtverstärkung - WO PCT/EP03/10057	10.09.2003 Additional application
SE2	Energy	Hofsäss, H.; Krauser, J.; Mertesacker, B.; Weidinger, A.; Zollondz, J.	Quantenpunkt aus elektrisch leitendem Kunststoff, Verfahren zur Herstellung und Anwendung - DE 10306076.6-33	08.02.2003
SE2	Energy	Fostiropoulos, K.; Johnev, B.; Vogel, M.	Verfahren zur Passivierung der anorganischen Elektrode einer organischen Solarzelle und organische Solarzelle - DE 10307772.3-33	14.02.2003
SE2	Energy	Glatzel, T.; Lux-Steiner, M.C.; Sadewasser, S.	Elektrochemisches Verfahren zur direkten nanostrukturierbaren Materialabscheidung auf einem Substrat - DE 10318440.6-54	15.04.2003

Dep.	HGF-Programme	Inventor	Title	Application date
SE2	Energy	Harneit, W.; Jäger-Waldau, A.A.; Lux-Steiner, M.C.	Verfahren zur Herstellung eines Solarmoduls mit integriert serienverschalteten Dünnschicht-Solarzellen und mit dem Verfahren - HK 03104726.0	02.07.2003 Additional application
SE2	Energy	Chen, J.; Köenenkamp, R.	Vertikaler Nano-Transistor, Verfahren zu seiner Herstellung und Speicheranordnung - DE 10339529.6-33	21.08.2003
SE2	Energy	Chen, J.; Lux-Steiner, M.C.	Vertikaler Nano-Transistor, Verfahren zu seiner Herstellung und Speicheranordnung - DE 10339531.8-33	21.08.2003
SE2	Energy	Fuertes-Marrôn, D.; Lux-Steiner, M.C.; Meeder, A.; Schedel-Niedrig, T.; Würz, R.	Schichtanordnung aus heteroverbundenen Halbleiterschichten mit zumindest einer zwischengelagerten Trennschicht und Verfahren zu ihrer Herstellung - WO PCT/DE03/03371	09.10.2003 Additional application
SE2	Energy	Köenenkamp, R.	Feldeffekttransistor sowie Verfahren zu seiner Herstellung - WO PCT/DE03/03673	29.10.2003 Additional application
SE2, SE4	Energy	Bär, M.; Fischer, C.; Hilgendorff, M.; Lauermann, I.; Lux-Steiner, M.C.; Muffler, H.	Beschichtungsverfahren zur Deposition und Fixierung von Partikeln auf einer Substratoberfläche und Solarzellen mit funktionellem Schichtenaufbau - DE 10339824.4-33	25.08.2003
SE2, SE5	Energy	Dittrich, T.; Dloczik, L.; Lux-Steiner, M.C.; Tomm, Y.	Verfahren zur Herstellung vontransparentem p-leitendem $\text{CuAlO}_2$ - DE 10323625.2-41	21.05.2003
SE3	Energy	Luck, I.; Rudigier, E.; Scheer, R.	Zerstörungsfreies Analyseverfahren zur Güteermittlung einer Solarzelle und Anwendung davon - WO PCT/DE03/03372	09.10.2003 Additional application
SE3	Energy	Neisser, A.; Scheer, R.	Verfahren zur Herstellung einer Chalkogenid-Halbleiterschicht mit optischer in-situ-Prozesskontrolle und Vorrichtung zur Verfahrensdurchführung - WO PCT/DE03/03891	24.11.2003 Additional application
SE4	Energy	Ernstorfer, R.	Fenster für eine Ultrahochvakuum-Kammer - DE 10339823.6-52	25.08.2003

Dep.	HGF-Programme	Inventor	Title	Application date
SE5	Energy	Küppers, U.; Rojas-Chapana, J.; Tributsch, H.	Transparentes Versiegelungsmaterial für lichtbestrahlte, photoelektronisch aktive Oberflächen, Verfahren zur Herstellung und Anwendung - DE 10325149.9-43	31.05.2003
SE5	Energy	Tributsch, H.	Photovoltaiksystem für die direkte Wasserstoffherzeugung und -sammlung - DE 10332570.0-45	13.07.2003
SE5	Energy	Berenguier, B.; Lewerenz, H.	Elektrochemisches Ätzverfahren zum selektiven Entfernen von Fremdphasen an der Oberfläche eines sulfidhaltigen Chalkopyritthalbleiters - DE 10344315.0-33	21.09.2003
SE5	Energy	Lewerenz, H.	Photovoltaische Solarzelle mit metallischen Nanoemittern und Verfahren zur Herstellung - DE 10347401.3-33	09.10.2003
SE5	Energy	Fiechter, S.; Maruthamuthu, P.; Tributsch, H.	Photoelektrochemische Solarzelle mit einem Detergens auf Lipidbasis - DE 10356684.8-33	30.11.2003
SE5, SF4	Energy	Fink, D.; Küppers, U.; Rojas-Chapana, J.; Tributsch, H.	Flexible, atmungsaktive Polymerfolie und Verfahren zu deren Herstellung - DE 10301984.7-43	15.01.2003
RE	Structure of matter	Welzel, S.	Mikrokanalplatte zur Elektronenvervielfachung und Verfahren zu ihrer Herstellung - DE 10353131.9-54	31.10.2003



## Academic Education

### Lectures, Courses, ...

Dep.	Lecturer	Topic	Course	University	SWS
<b>Summer Term 2003</b>					
SF1	Mezei, F.	Doktorandenseminar	seminar	TU-Berlin	2
SF1	Peters, J.	Bildgebende Verfahren in der Medizinphysik	lecture	TFH-Berlin	4
SF1	Steitz, R.; von Klitzing, P.; Lang, P.	Stromethoden: Grundlage und Anwendung auf Polymer und Kolloidlösungen	lecture	TU-Berlin	2
SF4	Czerski, K.	Kernreaktionen bei niedrigen Energien und schnelle Elektronendynamik	seminar	TU-Berlin	2
SF4	Mahnke, H.	Festkörperphysik mit schweren Ionen	seminar	FU-Berlin	2
SF4	Schiwietz, G.	Kurzzeiddynamik des Festkörpers	seminar	TU-Berlin	2
SF4	Schiwietz, G.	Einführung Physikalisches Grundpraktikum 2	lecture	TU-Berlin	2
SF4	Schumacher, G.	Physik der Superlegierungen	lecture	TU-Berlin	2
SF5	Frey, E.; Franosch, T.; Kroy, K.	Hydrodynamik und Elastizität mit Anwendungen in der Biologie	lecture	FU-Berlin	2
SF6	Behne, D.	Anwendung von Radionukliden in den Biowissenschaften	lecture	FU-Berlin	1
SF6	Kyriakopoulos, A.; Behne, D.	Biochemie von Spurenelementen	seminar	FU-Berlin	5
SF6	Kyriakopoulos, A.; Behne, D.	Doktorandenseminar: Ausgewählte Gebiete der Spurenelementforschung	seminar	FU-Berlin	2
SF6	Kyriakopoulos, A.	Biochemie von Spurenelementen	lecture	FU-Berlin	2
SF7	von Oertzen, w.	Schwerionen Reaktionen	seminar	FU-Berlin	2
SE1	Gall, S.; Wagemann, H.	Grundlagen der Bauelemente für die photovoltaische Energiewandlung	lecture	TU-Berlin	2
SE1	Nickel, N.H.; Richter, W.; Esser, N.	Festkörperphysik I	lecture	TU-Berlin	4
SE2	Ennaoui, A.	Quanten Mechanik II, Photo-Elektrochemie II	lecture	University Mohamed V, Morocco	4
SE2	Fischer, C.	Instrumental analytical chemistry/Analysis of inorganic thin-films	seminar	FU-Berlin	2
SE2	Harneit, W.	Compton Effect	seminar	FU-Berlin	2
SE3	Scheer, R.	Physik erneuerbarer Energien	lecture	Universität Potsdam	2
SE5	Bogdanoff, P.	Untersuchung der katalytischen Aktivität von Übergangsmetallchalkogeniden mit elektrochemischen Methoden	lab course	FU-Berlin	4

Dep.	Lecturer	Topic	Course	University	SWS
SE5	Fiechter, S.	Untersuchung von Übergangsmetallchalkogeniden	lab course	FU-Berlin	4
SE5	Lewerenz, H.J.	Oberflächenphysikalische Untersuchungen an energieumwandelnden Halbleiterstrukturen	seminar	TU-Berlin	2
SE5	Lewerenz, H.J.	Physikalische Elektrochemie	lecture	TU-Berlin	2
SE5	Tomm, Y.	Herstellung von Übergangsmetallchalkogeniden	lab course	FU-Berlin	4
SE5	Tributsch, H.	Physikalische Chemie II für Biochemiker für Biochemiker	lecture	FU-Berlin	2
I	Nielsen, U.	Rechnergeführte elektronische Prozessleittechnik	lecture	TU-Berlin	2

**Winter Term 2003/2004**

<b>Winter Term 2003/2004</b>					
SF1	Mezei, F.	Doktorandenseminar	seminar	TU-Berlin	2
SF1	Mezei, F.	24th Tutorial on Neutron Scattering	tutorial	TU-Berlin	1
SF1	Mezei, F.	24th Tutorial on Neutron Scattering	lecture	TU-Berlin	2
SF1	Peters, J.	Ausgewählte Kapitel der Physik	lecture	TFH-Berlin	4
SF1	Steitz, R.	Einführung in die physikalische Chemie der Polymere	lecture	TU-Berlin	3
SF3	Banhart, J.; Schiffmann, R.	Technologie der Aluminiumwerkstoffe	lecture	TU-Berlin	4
SF4	Czerski, K.	Kernphysikalische Prozesse der Elemententstehung im Universum	seminar	TU-Berlin	2
SF4	Mahnke, H.	Festkörperphysik mit schweren Ionen	seminar	FU-Berlin	2
SF5	Frey, E.; Kroy, K.	Theoretische Physik IV (Quantentheorie I)	lecture	FU-Berlin	4
SF5	Frey, E.; Falcke, M.	Nichtlineare Physik und Strukturbildung in Physik, Chemie und Biologie	tutorial	FU-Berlin	2
SF5	Frey, E.; Falcke, M.	Nichtlineare Physik und Strukturbildung in Physik, Chemie und Biologie	lecture	FU-Berlin	2
SF5	Frey, E.; Kroy, K.	Theoretische Physik IV (Quantentheorie I)	tutorial	FU-Berlin	2
SF6	Behne, D.	Spurenelementanalyse: Einführung und spezielle Probleme (Umweltanalytik, Medizin, Biologie)	lecture	FU-Berlin	1
SF6	Kyriakopoulos, A.; Behne, D.	Biochemie von Spurenelementen	seminar	FU-Berlin	5
SF6	Kyriakopoulos, A.	Biochemie von Spurenelementen	lecture	FU-Berlin	2
SF6	Kyriakopoulos, A.; Behne, D.	Doktorandenseminar: Ausgewählte Gebiete der Spurenelementforschung	seminar	FU-Berlin	2
SF7	von Oertzen, W.	Schwerionen Reaktionen	seminar	FU-Berlin	2



Dep.	Lecturer	Topic	Course	University	SWS
SF7	von Oertzen, W.; Kokalova, T.; Hotzel, A.	Kern- und Elementarteilchenphysik	lecture	FU-Berlin	4
SF7	von Oertzen, W.; Kokalova, T.; Hotzel, .	Einführung in die Kern und Teilchen Physik	tutorial	FU-Berlin	2
SF7	von Oertzen, W.; Heese, J.	Einführung in die Kern- und Teilchen Physik	lecture	FU-Berlin	4
SE1	Gall, S.; Wagemann, H.	Grundlagen der Bauelemente für die photovoltaische Energiewandlung	lecture	TU-Berlin	2
SE1	Nickel, N.H.; Richter, W.; Esser, N.	Festkörperphysik II	lecture	TU-Berlin	4
SE2	Fischer, C.; Lauer mann, I.	Instrumental Analytical chemistry/Analysis of inorganic thin-films	seminar	FU-Berlin	2
SE2	Fischer, C.; Simon, J.	Instrumental analytical chemistry	lecture	FU-Berlin	2
SE2	Harneit, W.	Compton Effect	seminar	FU-Berlin	2
SE2	Schedel-Niedrig, T.	Instrumentelle Analytik II	lecture	TU-Berlin	3
SE2	Siebentritt, S.	Übungen zur Physik für Naturwissenschaftler	tutorial	FU-Berlin	2
SE3	Scheer, R.	Physik photovoltaischer Solarzellen	lecture	Universität Potsdam	2
SE5	Bogdanoff, P.	Untersuchung der katalytischen Aktivität von Übergangsmetallchalkogeniden mit elektrochemischen Methoden	lab course	FU-Berlin	4
SE5	Fiechter, S.	Grundlagen der Materialpräparation und Charakterisierung sulfidischer Halbleiter	lecture	TU-Berlin	2
SE5	Fiechter, S.	Untersuchung von Übergangsmetallchalkogeniden	lab course	FU-Berlin	4
SE5	Lewerenz, H.J.	Photovoltaische Solarzelle	lecture	TU-Berlin	2
SE5	Lewerenz, H.J.	Oberflächenphysikalische Untersuchungen an energieumwandelnden Halbleiterstrukturen	seminar	TU-Berlin	2
SE5	Tomm, Y.	Herstellung von Übergangsmetallchalkogeniden	lab course	FU-Berlin	4
SE5	Tributsch, H.	Bionik-Strategien zur regenerativen Energienutzung	lecture	FU-Berlin	2
I	Nielsen, U.	Rechnergeführte elektronische Prozessleittechnik	lecture	TU-Berlin	2

## Exams

Dep.	Author	Title	University	Date
<b>PhD</b>				
SF1	Strobl, M.	New alternative contrast methods in neutron computer tomography	TU Wien	10/03
SF3	Kardjilov, N.	Further developments and applications of radiography and tomography with thermal and cold neutrons	TU München, Fakultät für Physik, E21	06/03
SF4	Koteski, V.	Local structures around impurity atoms in the II-VI compounds	Universität Belgrad	11/03
SF6	Plotnikov, A.	Beiträge zur räumlichen Analyse mittels Scanning Laserablation-ICP-MS unter besonderer Berücksichtigung von Schichtsystemen und Supraleitern	TU Dresden	12/03
SF7	Kokalova, T.	Gamma-ray spectroscopy at deformed states in light nuclei and cluster emission	FU-Berlin	07/03
SF7	Torilov, S.	Spektroskopie of Ca-isotopes	St. Petersburg Universität	12/03
SE1	Blauärmel, A.	Ballistische Elektronen-Emissions-Mikroskopie an Au/Si-Kontakten	TU-Berlin	10/03
SE1	Brendel, K.	Laserkristallisiertes polykristallines Silizium Wasserstoffbindungen und elektronische Eigenschaften	Philipps-Universität Marburg	12/03
SE1	Böhme, C.	Dynamics of spin-dependent charge carrier recombination	Philipps-Universität Marburg	01/03
SE1	Froitzheim, A.	Hetero-Solarzellen aus amorphem und kristallinem Silizium	Philipps-Universität Marburg	07/03
SE1	Rau, B.	Spontane und stimulierte Emission von (Al,In,Ga)N-Heterostrukturen - Untersuchung von konventionellen Heterostrukturen und einer neuartigen "feldfreien" Struktur	HU-Berlin	02/03
SE1	Rebien, M.	Optische Materialuntersuchungen für Si-Dünnschichtsolarzellen: ZnO, Ga <sub>2</sub> O <sub>3</sub> und Lichteinfang	HU-Berlin	05/03
SE2	Bär, M.	Neuartige Cd-freie Fensterstruktur für Chalkopyrit-Dünnschichtsolarzellen	TU-Berlin	12/03
SE2	Fuertes-Marrón, D.	Structural and electronic characterization of thin-film solar cells based on CVD-grown CuGaSe <sub>2</sub>	FU-Berlin	07/03
SE2	Glatzel, T.	Kelvinsondenkraftmikroskopie am Heteroübergang (Zn,Mg)O / Cu (In,Ga)(S,Se) <sub>2</sub> Chalkopyrit	FU-Berlin	12/03
SE2	Lindner, S.	ERDA-Untersuchungen atomarer Diffusionsprozesse in Chalkopyrit-Dünnschichtsolarzellen	FU-Berlin	05/03

SE2	Meeder, A.	Defektspektroskopie an CuGaSe <sub>2</sub> aus der halogen-unterstützten Gasphasenabscheidung	FU-Berlin	11/03
SE2	Meyer, C.	Endohedral Fullerenes for Quantum Computing	FU-Berlin	11/03
SE3	Gavilanes Perez, I.	Non destructive electrical and morphological characterisation of chalcopyrite solar cells by infrared thermographical analysis	Universität Salamanca/Spanien	12/03
SE5	Oertel, J.	Materialchemische und elektronische Untersuchungen cobaltdotierter MOCVD-Schichten aus Pyrit für photovoltaische Anwendungen	FU-Berlin	10/03
SE5	Weiß, V.	In situ-Untersuchungen des Wachstums von reaktiv gesputterten MoS <sub>x</sub> - und WS <sub>x</sub> -Schichten mit Hilfe der energiedispersiven Röntgenbeugung (EDXRD)	FU-Berlin	04/03

<b>Diploma</b>				
SF1	Hüttner, D.	Aufbau und Test eines Experimentiermessplatzes mit polarisierten Neutronen	TFH-Berlin	11/03
SF7	Lenz, A.	Spektroskopie des neutronenreichen Beryllium-Isotops <sup>11</sup> Be mit Multi-Nukleonen-Transferreaktion	TU-Berlin	01/03
SE1	Koepsell, S.	Aluminium-induzierte Kristallisation von amorphem Silizium	Fachhochschule für Technik und Wirtschaft Berlin	10/03
SE2	Chapus, C.	Entwicklung und Umsetzung eines Konzepts für stabile Chalkopyrit-Dünnschichtsolarzellen mit vereinfachtem Aufbau	FU-Berlin	10/03
SE2	Ishii, K.	Growth and Analysis of CuGaSe <sub>2</sub> Thin Film and its Application to Solar Cell	Shinshu University	09/03
SE2	Leimeister, R.	Untersuchung von Ionenspuren in diamantartigen Kohlenstoffschichten	FU-Berlin	12/03
SE2	Rahne, K.	Surface modification and Interface characterisation of chalcopyrite solar cells with a ZnSe buffer layer using X-ray emission and photoelectron spectroscopies	FU-Berlin	10/03
SE2	Reichardt, J.	X-Ray emission and photoelectron spectroscopy of chalcopyrite thin film solar cells	HU-Berlin	05/03
SE5	Berenguier, B.	Elektrochemische Entfernung des Kupfersulfides an Kupferindiumsulfid-Dünnschichten	Ecole Nationale Supérieure de Physique de Marseille, France	09/03
SE5	Junghänel, M.	(Physikalisch chemische) Bionik	FU-Berlin	12/03

SE5	Thomalla, M.	Chromatographische Untersuchungen zur photochemischen Umsetzung eines Ruthenium Sensibilisators in Farbstoffsolarzellen	TU-Berlin	03/03
HAD	Günzel, M.	Konzeption und Entwicklung einer Java-Bibliothek zur graphischen Darstellung geologischer Bohrungen	Berufsakademie Berlin	08/03
HAD	Kallies, M.	Animationssequenzen zur Visualisierung dynamischer Kristallgleichgewichte	Berufsakademie Berlin	08/03
HAD	Kühn, J.	Untersuchung bestehender Authentifizierungsmechanismen zur Implementierung auf Security Appliances (Firewalls)	Berufsakademie Berlin	08/03
HAD	Pape, E.	Entwicklung einer Datenbank für Arbeitsgruppen und institutionsübergreifende Kooperationen	Berufsakademie Berlin	08/03
ZF	Griep, J.	Elektromagnetoptimierung für He3-Neutronenstreufilter	BA	07/03

<b>Studienarbeit</b>				
----------------------	--	--	--	--

SE1	Eidner, I.	Strukturierung des Kristallisationsprozesses beim aluminium-induzierten Schichtaustausch	TU-Berlin	06/03
-----	------------	--	-----------	-------

## Summer students etc.

Dep.	Name	Status	Home Institution	Time of Stay
SF	Plückhahn, J.	high school trainee	Werner-von-Siemens-Oberschule	20.01.03 - 31.01.03
SF1	De-Gen, Y.	high school trainee	Max-Liebermann-Oberschule	09.01.03 - 30.01.03
SF1	Hüttner, D.	student trainee	TFH Berlin	01.01.03 - 15.10.03
SF1	Lemmer, M.	summer student	Unviversität Osnabrück	04.08.03 - 26.09.03
SF1	Mummasani, K.K.R.	summer student	Universität Siegen	04.08.03 - 26.09.03
SF1	Qissabi, A.	student trainee	TFH Berlin	01.10.03 - 31.03.04
SF1	Seurig, M.	student trainee	TFH Berlin	21.07.03 - 21.09.03
SF1	Steineweg, R.	summer student	Universität Osnabrück	04.08.03 - 26.09.03
SF1	Weber, G.	high school trainee	Dreilinden-Oberschule	20.10.03 - 31.10.03
SF2	Freire, R.C.e.	student trainee	Fachhochschule Campinas/Brasilien	01.04.03 - 31.05.03
SF2	Prchal, J.	summer student	Universität Prag	04.08.03 - 26.09.03
SF2	Torabi, R.	summer student	Technische Universität Berlin	04.08.03 - 26.09.03
SF3	Reinhard, C.	summer student	Fachhochschule Bonn-Rhein-Sieg	04.08.03 - 26.09.03
SF3	Sète, O.	student trainee	Technische Universität Berlin	01.09.03 - 30.09.03
SF4	Naumann, I.	summer student	Universität Halle-Wittenberg	04.08.03 - 26.09.03
SF4	Walz, B.	summer student	Universität Regensburg	04.08.03 - 26.09.03
SF5	Demougin, D.	high school trainee	Schadow-Oberschule	06.01.03 - 17.01.03
SF5	Obermayer, B.	summer student	FU Berlin	01.06.03 - 30.06.03
SF6	Berann, T.	student trainee	FU Berlin	08.12.03 - 19.12.03
SF6	Jahnke, N.	student trainee	FU Berlin	08.12.03 - 19.12.03
SF6	Kujawa, M.	summer student	Universität Posen	15.07.03 - 01.08.03
SF6	Meier, J.	student trainee	FU Berlin	30.06.03 - 11.07.03
SF6	Müller, N.	student trainee	TFH-Berlin	01.03.03 - 15.07.03
SF6	Nippe, M.	student trainee	TU Berlin	23.06.03 - 01.08.03
SF6	Piecka, A.	student trainee	FU Berlin	30.06.03 - 11.07.03
SF6	Yegen, E.	summer student	Universität Istanbul	17.07.03 - 31.08.03
SE1	De Vincentis, M.D.	summer student	University of Salerno	04.08.03 - 30.09.03
SE1	Hoehne, H.	high school trainee	FHTW Berlin	01.04.03 - 05.08.03
SE1	Lange, F.	student trainee	FHTW Berlin	01.10.03 - 03.02.04
SE2	Arcoulis, M.	summer student	Universität Honduras	04.08.03 - 26.09.03
SE2	Fiebig, A.	high school trainee	Evang. Gym. Zum Grauen Kloster	31.03.03 - 11.04.03
SE2	Garcia, R.F.	summer student	Universität Oviedo	04.08.03 - 26.09.03
SE2	Knist, S.	summer student	Universität Kiel	04.08.03 - 26.09.03
SE2	Krüger, T.	high school trainee	Dreilinden-Oberschule	20.10.03 - 31.10.03
SE2	Petkovic, A.	summer student	Universität Belgrad	04.08.03 - 26.09.03
SE2	Schröder, M.	student trainee	TFH Berlin	29.09.03 - 27.02.04
SE2	Tsiakiris, M.	summer student	Universität Thessaloniki	04.08.03 - 26.09.03

SE3	Garcia Grande, M.	summer student	University of Oviedo	04.08.03 - 26.09.03
SE3	Gavilanes Perez, I.	student trainee	Universität Salamanca	24.11.03 - 09.12.03
SE3	González Llano, M.	student trainee	TFH Berlin	01.10.03 - 18.02.04
SE3	Lauche, J.	student trainee	TFH Berlin	01.05.03 - 30.09.03
SE3	Mücke, M.	summer student	Humboldt-Universität	04.08.03 - 26.08.03
SE5	Ahlbrecht, W.	student trainee	FU Berlin	16.12.03 - 09.01.04
SE5	Ahrenberg, P.	high school trainee	Freie Waldorfschule Kleinmachnow	24.03.03 - 18.04.03
SE5	Curioso, I.	summer student	Universität Salerno	04.08.03 - 25.09.03
SE5	Grohmann, S.	high school trainee	Käthe-Kollwitz-Oberschule	15.09.03 - 26.09.03
SE5	Jahnke, E.	student trainee	FU Berlin	22.01.03 - 26.02.03
SE5	Köppke, S.	high school trainee	Pierre-Laplace-Oberschule	13.01.03 - 30.01.03
SE5	Mummy, F.	student trainee	FU Berlin	01.12.03 - 12.02.04
SE5	Müller, S.	high school trainee	Private-Kant-Schule	10.11.03 - 28.11.03
SE5	Piela, F.	high school trainee	Freie Waldorfschule Kleinmachnow	24.03.03 - 18.04.03
SE5	Rewanz, W.	high school trainee	Werner-von-Siemens-Oberschule	20.01.03 - 31.01.03
SE5	Richter, M.	student trainee	FU Berlin	01.12.03 - 12.02.04
SE5	Wiget, Z.	high school trainee	Wilma-Rudolph-Oberschule	13.01.03 - 30.01.03
SE5	Winterboer, C.	student trainee	FU Berlin	01.12.03 - 09.01.04
SE6	Spill, S.	high school trainee	Leonardo-da-Vinci-Gymnasium	15.09.03 - 02.10.03
DN	Bornemann, I.	high school trainee	Gymnasium der Königin-Luise-Stiftung, Berlin-Zehlendorf	25.08.03 - 12.09.03
DN	Regentrop, S.	student trainee	indisoft Ges. f. Weiterbildung u. Systementwicklung mbH	19.03.03 - 10.07.03
DS	Kressin, A.	student trainee	TFH Berlin	01.11.03 - 20.03.04
ZT	Altmann, C.	student trainee	cimdata.de	12.05.03 - 02.07.03
ZT	Klante, A.	student trainee	TFH Berlin	29.09.03 - 07.02.04
ZB	Fechner, F.	high school trainee	Schule für Blind und Sehbehind.	06.01.03 - 24.01.03
RE	Opitz, C.	high school trainee	Gymnasium Zehlendorf	20.10.03 - 31.10.03

## Awards

Dep.	Name	Award
SF2	Holub-Krappe, E.	BESSY-Poster Prize, 05.12.2003
SF3	Haibel, A.	Bessy-poster prize (second winner), 05.12.2003
SF3	Rack, A.	BESSY-poster prize (second winner), 05.12.2003
SF4	Runge, S.	Posterpreis MTA-Kongress 2003, 19.03.2003
SF5	Falcke, M.	Erwin-Schrödinger-Preis d. Stifterverbandes für die Deutsche Wissenschaft, 16.10.2003
SF6	Bukalis, K.	Posterpreis der Gemeinsamen Herbsttagung, 08.11.2003
SF6	Richarz, A.	Schering-Preis, 24.11.2003
SE1	Böhme, C.	Dissertationspreis Adlershof 2003, 03.12.2003
SE1	Koepsell, S.	Preis 2003 des Elektrotechnischen Vereins (ETV Berlin-Brandenburg) sowie Sonderpreis der FHTW Berlin, 01.03.2003
I	Zander, K.	Ehrenmitgliedschaft der TU Berlin, 04.04.2003

## Participation in external scientific bodies and committees

Dep.	Name	Committee / Board / Scientific body
SF1	Hilscher, D.	Promotionsausschuss, Örebro University, Sweden
SF1	Hilscher, D.	Isolde Neutron Time-of-Flight Committee, CERN
SF1	Mezei, F.	Journal of Neutron Research
SF1	Mezei, F.	Experimental Facilities Advisory Oversight Committee of the SNS Project, Oakridge (USA)
SF1	Mezei, F.	Scientific Council Laboratoire Leon Brillouin (LLB), Saclay, France
SF1	Mezei, F.	International Advisory Committee of Conference on Polarized Neutrons in Condensed Matter Investigations (PNCMI 2003)
SF1	Mezei, F.	Program Committee ICANS XVI
SF1	Mezei, F.	Instrumentation Subcommittee at Institut Laue-Langevin (ILL), Grenoble
SF1	Mezei, F.	International Advisory Council of the Budapest Neutron Center (BNC), Budapest, Hungary
SF1	Mezei, F.	International Advisory Committee of IPN 2003 Conference
SF1	Mezei, F.	Technical Management Team of the European Spallation Source (ESS)
SF1	Peters, J.	Mitglied der Frauenförderkommission der TFH
SF1	Peters, J.	Mitglied im Vorstand der Akademischen Versammlung der TFH
SF1	Treimer, W.	Präsidium der Technischen Fachhochschule (TFH) Berlin
SF2	Graf, H.	Komitee für Forschung mit Neutronen
SF2	Graf, H.	Instrumentierungsausschuss FRM-II
SF2	Graf, H.	BMBF Gutachterausschuss Erforschung kondensierter Materie an Großgeräten
SF2	Graf, H.	Scientific Council of the ILL
SF2	Holub-Krappe, E.	Wissenschaftliches Komitee zur Vorbereitung der 4th School on Magnetism and Synchrotron Radiation
SF2	Holub-Krappe, E.	Executive Committee of the International X-Ray Society
SF3	Wanderka, N.	International Steering Field Emission Society
SF3	Wanderka, N.	47th International Field Emission Symposium
SF3	Wiedenmann, A.	Experiment Selection Panel, Laboratoire Leon Brillouin (France)
SF3	Wiedenmann, A.	5. Ferrofluid workshop, Mühlheim/Ruhr
SF3	Wiedenmann, A.	ESS Instrumentation committee
SF3	Wiedenmann, A.	IAEA Research Co-ordination on SANS
SF3	Wiedenmann, A.	Instrumentation advisory board ANSTO/Australia
SF3	Wiedenmann, A.	Scientific committee, Paul-Scherrer-Institut (Switzerland)
SF4	Mahnke, H.	Forschung mit nuklearen Sonden und Ionenstrahlen
SF4	Schiwietz, G.	ICACS
SF4	Schiwietz, G.	Editorial Board "Nuclear Instruments and Methods"
SF4	Schiwietz, G.	Topical Issue "Tracks03"
SF4	Schiwietz, G.	DAAD-PROBRAL
SF4	Schiwietz, G.	HGF-Strategiefonds "Ionenspuren in Festkörpern"
SF4	Schiwietz, G.	SHIM
SF4	Stolterfoht, N.	Organizing Committee of the International Seminar for Ion-Atom Collisions
SF5	Eichler, J.	Editorial Board Physics Report
SF5	Eichler, J.	Wissenschaftlicher Beirat des Magnus-Hauses der Deutschen Physikalischen Gesellschaft
SF5	Frey, E.	Leiter eines Projektes im SFB 443 an der LMU München



<b>Dep.</b>	<b>Name</b>	<b>Committee / Board / Scientific body</b>
SF5	Frey, E.	Leiter eines Projektes im Schwerpunkt "Molekulare Motoren" der DFG
SF5	Frey, E.	Sonderforschungsbereich Uni Bielefeld
SF6	Behne, D.	Lenkungsausschuss des HGF-Forschungsverbundes Gesundheit
SF6	Behne, D.	Scientific Committee of the Conference Series "Nuclear Analytical Methods in the Life Sciences" (NAMLS)
SF6	Behne, D.	Parent Committee of the Conference Series "Trace Elements in Man and Animals" (TEMA)
SF6	Behne, D.	Lenkungsausschuss des HGF-Programms "Environmental Health"
SF6	Behne, D.	International Scientific Committee of the "8th International Symposium on Metal Ions in Biology and Medicine"
SF6	Behne, D.	Ausschuss des Klinisch-Biochemischen Forschungsverbundes (KBF)
SF6	Kyriakopoulos, A.	international scientific committee of the 8th International Symposium on Metal Ions in Biologie and Medicine
SF6	Kyriakopoulos, A.	GMS
SF6	Kyriakopoulos, A.	Deutsche Gesellschaft für Protein Forschung
SF6	Richarz, A.	Journal of Trace Elements in Medicine and Biology
SF7	von Oertzen, W.	Lise Meitner Prize committee of EPS
SF7	von Oertzen, W.	Programm advisory committee of Institut de Recherches Subanatomie (IreS) Strasbourg (F)
SF7	von Oertzen, W.	Conseil Scientifique du Departement (CSD), Physique nucléaire et corpusculaire, CNRS (F), Mitglied
SE1	Fuhs, W.	Wiss. Beirat ISFH Emmerthal
SE1	Fuhs, W.	Wissenschaftl. Beirat Forschungsallianz Kristalline Silizium Solarzellen Technologie (FACT)
SE1	Fuhs, W.	Internat. Advisory Committee - Internat. Conf. on Amorphous and Microcrystalline Semiconductors (ICAMS)
SE2	Ennaoui, A.	Editorial Board in Solar Energy Materials and Solar Cells
SE2	Ennaoui, A.	pôle de compétence Matière condensée Université Mohamed V, Morocco
SE2	Ennaoui, A.	Editorial Board in Moroccan Journal of Condensed Matter
SE2	Klenk, R.	Scientific Review Committee for the 19th European Photovoltaic Solar Energy Conference and Exhibition
SE2	Lux-Steiner, M.C.	Wissenschaftlicher Beirat der Sulfurcell Solartechnik GmbH
SE2	Lux-Steiner, M.C.	Eidgenössische Energieforschungskommission CORE in der Schweiz
SE2	Lux-Steiner, M.C.	Jury des Innovationspreises Berlin/Brandenburg
SE2	Lux-Steiner, M.C.	Direktorium des nationalen Forschungsverbundes Sonnenenergie FVS (Verbund von außeruniversitären Forschungseinrichtungen auf dem Gebiet der regenerativen Energien)
SE2	Lux-Steiner, M.C.	EUREC Agency
SE2	Lux-Steiner, M.C.	Arbeitskreis "Frauen in Forschungszentren" der HGF
SE2	Lux-Steiner, M.C.	Hochschulrat der Universität Oldenburg
SE2	Lux-Steiner, M.C.	WTA-Aufsichtsrat im Forschungszentrum Jülich (FZJ)(HGF) und Mitglied des Wissenschaftlichen Beirats für Energieforschungsarbeiten im Programm Energie (FZJ)
SE2	Lux-Steiner, M.C.	Wissenschaftlicher Beirat des Berliner Instituts für Kristallzüchtung (IKZ) in der Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz

<b>Dep.</b>	<b>Name</b>	<b>Committee / Board / Scientific body</b>
SE2	Siebentritt, S.	Scientific Committee EMRS Spring Meeting 2003 SYMPOSIUM D Thin film and nano-structured materials for photovoltaics
SE3	Scheer, R.	Steering Committee IP6 Project ATHLET-PV
SE5	Ellmer, K.	AIF-Projekt Reaktives Magnetronspütern von CuInS <sub>2</sub> -Solarzellen
SE5	Ellmer, K.	Verbundprojekt transparente Verbindungshalbleiter
SE5	Tributsch, H.	Associated Member of IUPAC
I	Nielsen, U.	Innovationsförderprogramm der Investitionsbank Berlin
I	Nielsen, U.	Ständige Kommission des Verwaltungsrates des Konrad-Zuse-Zentrums für Informationstechnik Berlin
I	Nielsen, U.	Collaboration Board TESLA des DESY Hamburg
I	Nielsen, U.	Prüfungsausschuss der Fachrichtung Technik der Berufsakademie Berlin
I	Nielsen, U.	Beirat des Fachbereichs Informatik der TFH Berlin
I	Nielsen, U.	Fachkommission Technik der Dualen Kommission des Fachbereichs Berufsakademie an der FH für Wirtschaft Berlin
I	Nielsen, U.	Mitgliederversammlung des DFN Vereins
DN	Grzanna, J.	Applied Optics
DN	Heinzel, I.	NT-PC-Arbeitskreis der HGF
DN	Prigge, G.	HGF-Ausschuss Kommunikations- und Informationsverarbeitung in der Verwaltung (KIV)
DN	Schwarz, B.	NT-PC-Arbeitskreis
DN	Tomiak, A.	Ausschuss für Datenschutz der Arbeitsgemeinschaft der Betriebsräte (AGBR) der Großforschungseinrich
DN	Tomiak, A.	Ausschuss für Grundsatzfragen der Arbeitsgemeinschaft der Betriebsräte (AGBR) der Großforschungseinr
DN	Ziem, P.	Deutsche Oracle-Anwendergruppe e.V. (DOAG)
DN	Ziem, P.	Koordinierungsausschuss Datenverarbeitung (KODA) der HGF
DS	Sauer, O.	Prüfungsausschuss der Fachrichtung Informatik der Berufsakademie Berlin
DS	Wulf, F.	Koordinierungsausschuss für Elektronik und Prozessdatenverarbeitung der HGF
DS	Wulf, F.	Studiengruppe für Elektronische Instrumentierung (SEI)
DS	Wulf, F.	Committee for European Studies on Norms for Electronics (ESONE), XT/TCC

## Organization of Scientific Conferences and Meetings

Dep.	Title	Type	Date
SF1	Neutrons, Coherence and Confinement	Workshop	12.10.03 - 14.10.03
SF2	2nd Berlin Workshop on Orbital Physics and Novel Phenomena	Workshop	24.09.03 - 25.09.03
SF3	23th Tutorial Session on Neutron Scattering	Workshop	17.02.03 - 21.02.03
SF3	MetFoam 2003	Conference	23.06.03 - 25.06.03
SF4	FSI 2003 - Forschung mit Nuklearen Sonden und Ionenstrahlen	Workshop	30.09.03 - 01.10.03
SF4	ISIAC XVIII	Conference	30.07.03 - 01.08.03
SF4	Tracks 03 - Sommerschule	International Summerschool	08.09.03 - 15.09.03
SF5	Symposium on $Ca^{2+}$ dynamics	Conference	31.08.03 - 03.09.03
SF6	Gemeinsame Herbsttagung, Metalloproteine und Metalloprotein	Conference	06.11.03 - 08.11.03
SF7	DETNI ASIC Workshop Gebauer, B.	Workshop	07.11.03
SE2	FVS Jahrestagung	Annual Meeting	25.09.03 - 26.09.03
SE2	Hochspannungs-Workshop "Wide gap chalcopyrite solar cells"	Workshop	01.10.03 - 02.10.03
SE2	Photovoltaik: Materialforschung in Deutschland (PV-Uni-Net und FVS)	Workshop	11.12.03 - 12.12.03
DS	Studiengruppe für Elektronische Instrumentierung, Herbsttagung 2003 Dr. Friedrich Wulf	Conference	22.09.03 - 24.09.03

## Contributions to Exhibitions / Fairs / Events

Dep.	Title	Type	Date
SF3	Industrietag	PR-Event, HMI	05.06.03
SF4	MTA-Kongress 2003	Guided Tour for Guests	19.03.03 - 21.03.03
SE1	Tage der Forschung	Guided Tour for Guests	12.09.03
SE1	Preisverleihung des BundesUmwelt Wettbewerbs 2002/03 Festvortrag Dr. K. Lips	Presentation: Photovoltaik - Energie der Zukunft	02.10.03
SE1	Tag der Wirtschaft & Wissenschaft WISTA - Adlershof	Presentation K. Lips: Photovoltaik-Energie der Zukunft	01.10.03
SE1	Besuch einer indonesischen Wissenschaftler-Delegation	Guided Tour for Guests	23.09.03
SE1	Auftaktveranstaltung der 39. Runde "Jugend forscht 2004"	Presentation K. Lips: Photovoltaik-Strom aus Sonnenlicht	30.09.03
SE1	Besuch des Physik LKs des John-Lennon-Gymnasium Treptow	Guided Tour for Guests	14.05.03
SE2	Treffen der Vereinigung Schweizer Wissenschaftler in Berlin	Reception	15.07.03
SE3	Solar Energy Berlin	Fair	08.05.03 - 10.05.03
DN	NT-PC-Arbeitskreis der HGF	HGF Workshop	09.10.03 - 10.10.03
all	Girl's Day 2003	PR-Event, HMI	08.05.03
all	Lange Nacht der Wissenschaften	PR-Event, HMI	14.06.03

## Guests

Dep./Project	Name	Home Institution	Time of Stay
BENSC.User	Karpikhin, I.	Russian Federation State Scientific Center	25.11.03 - 22.12.03
BENSC.User	Pavlov, V.S.	Russian Federation State Scientific Center	25.11.03 - 22.12.03
BENSC.User	Raitmans, E.	Latvian Academy of Sciences	15.12.03 - 22.12.03
BENSC.User	Wagner, V.	Physikalisch Technische Bundesanstalt	15.12.03 - 22.12.03
SF1.Dynamics	Kouzmine, A.	FUBerlin	05.01.03 - 31.12.04
SF1	Arzoumanov, S.	Kurchatov Institute	30.06.03 - 30.07.03
SF1	Balireddi, S.	Devi Ahilya University	01.12.02 - 28.02.03
SF1	Glavatsky, I.	Institute for Metal Physics	24.02.02 - 30.09.03
SF1	Hicks, T.J.	School of Phy. & Eng., Monaste Univ.	02.10.03 - 30.11.03
BENSC.User	Chatterji, T.	Institut Laue-Langevin	04.06.03 - 13.06.03
BENSC.User	Triolo, A.	Consiglio Nazionale delle Ricerche	15.12.03 - 22.12.03
SF2.Bulk magnetism	Meschke, M.	Institut Laue Langevin	24.12.03 - 30.06.04
SF2	Mikeska, H.	Uni Hannover, Inst. für Theor. Physik	08.09.03 - 19.09.03
SF2	Mitchell, J.	Argonne National Laboratory	26.05.03 - 06.06.03
SF3	Sahoo, K.L.	National Metallurgical Laboratory	01.06.03 - 31.05.04
SF4.Dynamics	Meurer Papaléo, R.	PUCRS	27.01.03 - 05.02.03
SF4.Dynamics	Novakovic, N.	"Inst. Nuclear Science ""VINCA""	03.09.03 - 26.09.03
SF4.Dynamics	Novakovic, N.	"Inst. Nuclear Science ""VINCA""	26.10.03 - 05.11.03
SF4.Dynamics	Schattat, B.	Uni Stuttgart	08.12.03 - 31.12.04
SF4.Dynamics	Sobocinski, P.		24.11.03 - 01.05.05
SF4.Dynamics	Walz, B.		10.11.03 - 30.05.05
SF4.Dynamics	Zrineh, A.	University of Rabat	15.07.03 - 15.09.03
SF4.Structures	Imielski, P.	FU Berlin	15.09.03 - 30.09.06
SF4.Structures	Prandolini, M.	FU Berlin	01.01.03 - 31.12.03
ISL.User	Sarkar, M.	Saha Institute of Nuclear Physics	27.10.03 - 24.12.03
SF5.Soft Matter	Chattopadhyay, A.	MPI für Physik komplexer Systeme	01.11.03 - 31.10.04
SF5.Soft Matter	Holm, C.	MPI Mainz	06.02.03 - 08.02.03
SF5.Soft Matter	Ramaswamy, S.	Indian Institute of Science	21.05.03 - 03.06.03
SF5.Soft Matter	Sarlah, A.	University of Ljubljana	03.02.03 - 30.04.03
SF5.Soft Matter	Sarlah, A.	University of Ljubljana	01.05.03 - 30.06.03
SF5.Biosystems	Bausch, A.	TU München	16.02.03 - 18.02.03
SF5.Biosystems	Curtis, J.	Uni Heidelberg	01.06.03 - 02.02.03
SF5.Biosystems	Gholami, A.	Raman Research Institute (RRI)	26.01.03 - 31.03.03
SF5.Biosystems	Guck, J.	Uni Leipzig	22.05.03 - 23.05.03
SF5.Biosystems	Liverpool, T.	Uni Leeds	01.05.03 - 31.07.03
SF5.Biosystems	Metzler, R.	Nordita	28.06.03 - 01.07.03
SF5.Biosystems	Rao, M.	Raman Research Institute (RRI)	11.06.03 - 11.08.03

Dep./Project	Name	Home Institution	Time of Stay
SF5.Biosystems	Santen, L.	Universität des Saarlandes	26.08.03 - 28.08.03
SF5.Biosystems	Wilhelm, J.	TU München	17.02.03 - 24.02.03
SF6.Analysis	Wolf, C.	IFRN	02.01.03 - 07.01.03
SF6.Proteins	Felix, K.	National Cancer Institute	21.03.03 - 27.03.03
SF6.Proteins	Friesen, N.	Heinrich-Heine-Universität	01.07.03 - 09.07.03
SF6.Clinical app.	Plotnikov, A.	TU Dresden	20.06.03 - 28.06.03
SF7.Detector	Alimov, S.	Kharov State University, Depart.of Physics/Technol	20.06.03 - 19.12.03
SF7.Detector	Levchanoskaya, M.	International University Dubna	20.07.03 - 12.09.03
SF7.Detector	Levtchanovskii, F.	Joint Institute for Nuclear Research	12.05.03 - 31.12.03
SF7.ERDA	Efimov, G.	JINR, Flerov Laboratory of Nuclear Reactions	12.10.03 - 04.04.04
SF7.ERDA	Grützmann, M.		05.08.03 - 05.10.03
SF7.ERDA	Kalpakchieva, R.	Flerov Laboratory of Nuclear Reactions, JINR	04.09.03 - 20.09.03
SF7.ERDA	Massey, T.N.	J.E. Edward Laboratories, Ohio University	01.09.03 - 20.09.03
SF7.ERDA	Mc Ewan, P.	University of Birmingham, School of Physics ...	06.10.03 - 31.07.04
SF7.ERDA	Milin, M.	Rudjer Boskovich Institute	25.08.03 - 07.11.03
SF7.ERDA	Ohkubo, S.	Dept. of Applied Science Kochi Womens University	01.08.03 - 14.08.03
SF7.ERDA	Torabi, R.	Diplomand	03.10.03 - 31.12.03
SF7.ERDA	Wheldon, C.	Gesellschaft für Schwerionenforschung	25.11.03 - 31.12.03
SF7.Others	De Angelis, G.	Laboratori Nazionale di Legnaro (Padua)	01.07.03 - 30.04.04
SF7.ERDA	Khoa, D.T.	Institute for Science & Technique	01.07.03 - 30.09.03
SF7	Alimov, S.	Kharkov National University	20.06.03 - 29.02.04
SF7	Kamanin, D.	Flerov Laboratory for Nuclear Reactions	29.03.03 - 19.04.03
SF7	Kamanin, D.	Flerov Laboratory for Nuclear Reactions	12.10.03 - 31.10.03
SF7	Kokalova, T.	University of Sofia	01.04.03 - 30.04.04
SF7	Litvinenko, E.	JINR	16.06.03 - 30.06.03
SF7	Litvinenko, E.	JINR Dubna	24.11.03 - 05.12.03
SF7	Nikiforov, A.	JINR	16.06.03 - 30.06.03
SF7	Zherebchevsky, V.	St. Petersburg University	01.12.03 - 20.12.03
SE1.Cells	Ehara, T.	Ishinomaki Senshu University	01.09.03 - 31.08.04
SE1.Cells	Rückert, E.	TU Wien	01.04.03 - 10.10.03
SE1.Cells	Saleh, R.	FMIPA Universitas Indonesia	02.09.03 - 15.10.03
SE1.Cells	Terukov, J.	A.F.Ioffe Physico-Technical Institute	03.06.03 - 27.08.03
SE1.Hetero	Güell, G.A.	Universitat de Barcelona	01.09.03 - 30.12.03
SE1.Hetero	Merson, A.	Tel-Aviv University	01.07.03 - 30.09.03
SE2.Semico	Arushanov, E.	Institute of Applied Physics	03.02.03 - 30.04.03
SE2.Semico	Doka, S.	Kamerun	01.10.03 - 30.09.04
SE2.Semico	Grigorieva, N.	FU-Stipendiatin, Universität St. Petersburg	06.10.03 - 29.02.04
SE2.Contacts	Zajogin, A.	Belarussian State University	01.07.03 - 08.07.04
SE2.Chemistry	Allsop, N.	University of Oxford	02.09.03 - 30.11.03
SE2.Chemistry	Allsop, N.	University of Oxford	01.12.03 - 31.12.03

Dep./Project	Name	Home Institution	Time of Stay
SE2.Chemistry	Knittelmayer, C.	Christian-Albrecht-Universität Kiel	22.09.03 - 02.10.03
SE2.Chemistry	Sartale, S.	Shivaji University, Dept. of Physics	01.07.03 - 30.06.04
SE2.Concepts	Berzilov, A.	Kyiv National Taras Shevchenko University	18.11.03 - 26.11.03
SE2.Concepts	Bisquert, J.	Universidad Jaume I	12.02.03 - 16.02.03
SE2.Concepts	Carl, P.	University of Pennsylvania, USA	15.04.03 - 30.09.03
SE2.Concepts	Galas, O.	Ukrainische Akademie der Wissenschaften, Institute of Physics	25.03.03 - 17.04.03
SE2.Concepts	Gavrilov, S.	Moscow Institute of Electronic Technology	16.10.03 - 26.10.03
SE2.Concepts	Guminskaya, T.	./.	03.06.03 - 30.08.06
SE2.Concepts	Kytin, V.	Moscow Lomonosov State University	15.01.03 - 31.03.03
SE2.Concepts	Mahrov, B.	Uppsala University, Dept. Phys. Chemistry	28.08.03 - 29.08.03
SE2.Concepts	Milovanov, Y.	Kyiv National Taras Shevchenko University	01.04.03 - 31.05.03
SE2.Concepts	Musembi, R.J.	Nairobi University	28.10.03 - 31.07.04
SE2.Concepts	Nosova, L.	Academy of Science of Uzbekistan	15.01.03 - 30.04.04
SE2.Concepts	Ogacho, A.	Nairobi University	28.10.03 - 31.07.04
SE2.Concepts	Skoyshesky, V.	Kyiv National Taras Shevchenko University	18.11.03 - 26.11.03
SE2.Concepts	Volodymyr, G.	Ukrainische Akademie der Wissenschaften, Institute of Physics	25.03.03 - 17.04.03
SE2.Analytics	Douheret, O.	Royal Institute of Technology/KTH Schweden	15.06.03 - 14.09.03
SE2.Analytics	Gavrilov, S.	Moscow Institute of Electronic Technology	30.06.03 - 04.07.03
SE2.Analytics	Schwarzmann, A.	Tel Aviv University, Faculty of Electrical Engineering	13.11.03 - 30.11.03
SE2.Others	Böttger-Voll, J.	Freie Universität Berlin	01.11.03 - 31.07.05
SE2.Others	Döring, R.	Freie Universität Berlin	- 21.07.05
SE2.Others	Hauschild, J.	Freie Universität Berlin	22.09.03 - 31.07.05
SE2.Others	Scheloske, M.	Freie Universität Berlin	15.09.03 - 31.07.05
SE3.Baseline	Barcones, B.	Universität Barcelona	01.08.03 - 31.10.03
SE3.Baseline	Eisele, W.	Sulfurcell	27.07.03 - 27.07.04
SE3.Baseline	Gartsman, K.	Weizmann Institute	02.06.03 - 16.06.03
SE3.Baseline	Hinze, J.	Sulfurcell	01.02.03 - 01.02.06
SE3.Baseline	Luck, I.	Sulfurcell	01.04.03 - 31.12.05
SE3.Baseline	Meyer, N.	Sulfurcell	26.02.03 - 28.02.04
SE3.Baseline	Pietzker, C.	Sulfurcell	27.02.03 - 28.02.04
SE3.Baseline	Rühle, U.	Sulfurcell	01.08.03 - 31.01.04
SE3	Djordjevic, J.	University of Belgrade	03.03.02 - 02.03.03
SE4	Alam, M.S.	University of Pune	01.07.03 - 30.09.03
SE4	Kandulski, W.	Poznan University of Technology	01.12.02 - 31.03.03
SE4	Karolczak, S.	Institute of Applied Radiation Chemistry	01.02.03 - 09.03.03

<b>Dep./Project</b>	<b>Name</b>	<b>Home Institution</b>	<b>Time of Stay</b>
SE4	Karolczak, S.	T.U. Lodz, Inst. Of Applied Radiation Chemistry	18.09.03 - 31.10.03
SE5.Energetics	Abd El-Halim, M.	Ain Shams University	04.07.03 - 26.09.03
SE5.Energetics	Ambrozejczyk, K.	TU Kielce (Polen)	10.03.03 - 30.09.03
SE5.Energetics	Barkschat, A.	FU Berlin	01.01.03 - 31.12.03
SE5.Energetics	Cestaroli, D.T.	University of Sao Paulo	30.04.03 - 27.07.03
SE5.Energetics	Leem, H.	TU Berlin	23.04.03 - 31.10.03
SE5.Energetics	Linguist, S.	University of Uppsala, Dept. of Phys. Chemistry	20.05.03 - 22.05.03
SE5.Energetics	Maruthamuthu, P.	Dept. of Energy, Guindy Campus, Univ. of Chennai	01.05.03 - 30.06.03
SE5.Energetics	Oertel, J.	FU Berlin	01.01.03 - 31.12.03
SE5.Energetics	Ossamah, A.		08.01.03 - 17.08.03
SE5.Energetics	Schmidt, G.		01.01.03 - 31.12.03
SE5.Energetics	Sirimanne, P.		01.01.03 - 31.07.03
SE5.Energetics	Sirimanne, P.	Nagoya Institute of Technology	10.06.02 - 31.07.03
SE5.Interfaces	Aggour, M.	Université Ibn Tofail	11.08.03 - 11.11.03
SE5.Interfaces	Berenguier, B.	Ecole Nationale Supérieure de Physique, Marseille	18.08.03 - 05.09.03
SE5.Interfaces	Cox, P.	University of Portsmouth	23.01.03 - 28.01.03
SE5.Interfaces	Song, W.	Hokkaido University	02.07.03 - 05.07.03



## Co-operations

**U?:** Classification of partners

- U** University
- R** Research Institution outside university
- K** KMU
- I** Industry

**C?:** Contract

- +** contract
- no contract

Dep.Project	U?	C?	Partner	Topic
SF1.BENSC	R U	+	MPI für Festkörperphysik Stuttgart, Germany TU Darmstadt, Germany	Höchstauflösende NRSE- Spektroskopie
SF1.BENSC	U	+	TU Darmstadt, Institut für Festkörperphysik, Germany	Inelastische Neutronenstreuung
SF1.BENSC	R	-	Paul-Scherrer-Institut (PSI), Switzerland	Neutronentomographie
SF1.BENSC	R	-	Atominstitut Wien (ATI), Austria	Perfekt Kristall Neutronen- Optik und Tomographie
SF1.BENSC	U	+	Technische Fachhochschule Berlin (TFH), Germany	Tomographie
SF1.BENSC	U	-	Universität Szeged, Lehrstuhl für Bildverarbeitung und Computergraphik, Hungary	Tomographische Rekonstruktion - Discrete Tomograph
SF1.BENSC	I	-	Biotronic, Germany	Tomographische Untersuchungen an Herzschrittmachern
SF1.Dynamics	U R	-	University of Leeds, Department of Physics and Astronomy, United Kingdom Rutherford Appleton Laboratory (RAL), The ISIS Facility, United Kingdom	Dynamics of complex magnetic systems
SF1.Dynamics		-		Dynamics of glassy systems - glass transition
SF1.Methods	R	-	ISIS Facility, Rutherford Appleton Laboratory (RAL), United Kingdom	Benchmarking of Fermi choppers
SF1.Methods	R	+	Institut Laue-Langevin (ILL), France	Development of a zero- field spin-echo option ZETA for the tripple-axis- spectrometer IN3 at ILL
SF1.Methods	I	-	SKF Industrial Division, Germany	Konstruktion von Magnetlagern für Chopper
SF1.Methods	R	+	KFKI Atomic Energy Research Institute AEKI, Hungary	Neutron and Gamma Radiography
SF1.Methods		+		Neutron scattering research
SF1.Methods	I	+	Neutron Optics Berlin GmbH (NOB), Germany	Neutronenoptische Bauelemente
SF1.Methods	R	+	Institut Laue-Langevin, France	Operation and development of the Neutron Spin Echo Spectrometer IN15

Dep.Project	U?	C?	Partner	Topic
SF1.Methods	R	+	Russian Research Centre - Kurchatov Institute (RRCKI), Russia	Wechselwirkung von ultrakalten Neutronen mit Oberflächen
SF1.Spallation	R R R	-	Forschungszentrum Jülich (FZJ), Institut für Festkörperphysik (IFF), Germany Forschungszentrum Jülich, Germany Spallation Neutron Source (SNS), United States	NSE spectrometer for the next generation spallation source SNS
SF1.Spallation	R	+	Atomic Energy Research Institute AEKI, Hungary	TOF Monochromator for Neutrons
SF2.BENSC	R R U R	+	Institut Laue-Langevin, France FZ Jülich, Institut für Festkörperforschung, Germany Universität Mainz, Germany Rutherford Appleton Laboratory, ISIS, United Kingdom	European Neutron Polarisation Initiative (ENPI)
SF2.BENSC	U	+	Universität Mainz, Germany	Wissenschaftliche und technische Zusammenarbeit zur Weiterentwicklung und Anwendung von <sup>3</sup> He-Polarisationseinrichtungen
SF2.Bulk magnetism	R	-	Universite Louis Pasteur Strasbourg, Groupe des Matériaux Inorganiques, France	Bestimmung der Kristall- und magnetischen Struktur von Co-hydroxid-terephthalat
SF2.Bulk magnetism	U	-	Department of electronic structures, Charles University, Czech Republic	Complex f-electron systems under extreme conditions
SF2.Bulk magnetism	U	+	Slovakian Academy of Science, Institute of Exp. Physics, Slovakia	DAAD projektbezogener Austausch von Wissenschaftlern:
SF2.Bulk magnetism	U U R R U R	+	Royal Holloway and Bedford New College, Univ. of London, United Kingdom Univ. of Liverpool, Dept. of Physics, United Kingdom Centre de Recherches sur les Très Basses Températures CRTBT-UPR 5001, France Centre d'Etudes des Saclay, France Univ. of Florida, Dept. of Physics, United States Walther-Meißner-Institut für Tieftemperaturforschung, Germany	EU-RTN Netzwerk: <sup>3</sup> He Neutron Study
SF2.Bulk magnetism	U	-	Okayama University, Department of Physics, Japan	Hochfeldmagnetisierung von Mangan-tricyanomethanid

Dep.Project	U?	C?	Partner	Topic
SF2.Bulk magnetism	U	-	Eastern Washington University, Department of Chemistry and Biochemistry, United States	Neutronenstreuung an molekularen magnetischen Materialien
SF2.Bulk magnetism	U	-	Van der Waals-Zeeman Inst., University of Amsterdam, Netherlands	New phenomena in compounds with transition metals
SF2.Bulk magnetism	U	-	Technische Universität Braunschweig, Inst. für Metallphysik u. Nukleare Festkör, Germany	Untersuchungen zum Wechselspiel von kristallographischer Unordnung und Magnetismus mit Neutronenstreuung
SF2.Thin films	U U	-	Universität Uppsala, Department of Physics, Sweden Lund University, MAX-lab, Sweden	Magnetic Thin Films
SF2.Thin films	R	-	Max-Planck-Institut für Metallforschung Stuttgart, Germany	Magnetische Reflektometrie mit Synchrotronstrahlung
SF2.Thin films	U U	-	Universität Rostock, Fachbereich Physik, Germany Universität Düsseldorf, Institut für angewandte Physik, Germany	Nanoparticles
SF3.BENSC	R R	+	Paul-Scherer-Institut, Switzerland Nuclear Energy Corporation of South Africa, South Afrika	IAEA's Co-ordinated Research Project in "Development of improved sources and imaging systems for neutron radiography"
SF3.BENSC	U	-	Technische Fachhochschule Berlin, Germany	Neutronentomographie
SF3.Light weight mat.	I	-	Hydro Aluminium Deutschland GmbH, Germany	Charakterisierung eines aushärtbaren Al-Blechwerkstoffes
SF3.Light weight mat.	U	+	Zentrum für Angewandte Raumfahrttechnik und Mikrogravitation (ZARM), Germany	Development of Advanced Foams in Microgravity
SF3.Light weight mat.	R	+	Fraunhofer-Institut für Angewandte Materialforschung (IFAM), Germany	Untersuchung der Schaumbildung von Metallen
SF3.Microstructure	U	-	Kyushu University -Dep. of Applied Quantum Physics and Nuclear Engineering, Japan	Anti-phase Boundary Evolution in Intermetallic Phases - Antiphasengrenzen in Legierungen
SF3.Microstructure	R	-	CEA-Grenoble, France	Diffusion in and Viscosity of the melts of metallic glass alloys

Dep.Project	U?	C?	Partner	Topic
SF3.Microstructure	U	+	TU Berlin -Institut für Metallische Werkstoffe-, Germany	Diffusion in mehrkomponentigen Metallschmelzen
SF3.Microstructure	U	-	Physik Department der TU München, Germany	Diffusion in mehrkomponentigen Metallschmelzen
SF3.Microstructure	I	+	EDF R&D, France	European ITEM Network
SF3.Microstructure	R	-	Kharkov Institute of Physics and Technology, Ukraine	Heterogeneous Structures in Alloys - Heterogene Strukturen in Legierungen
SF3.Microstructure	U	+	TU Braunschweig, Germany	Optimierung des Hochtemperaturwerkstoffes INCONEL 706
SF3.Microstructure	R	-	National Metallurgical Laboratory, India	Production and Characterization of Al-Based Metallic Glasses
SF3.Microstructure	U	-	Institut de Physique de la Matière Complexe, Faculté des Science de Base, EPFL, Switzerland	Stability of Ordered Intermetallic Phases - Stabilität von Ferngeordneten Phasen
SF3.Microstructure	R	-	Institut für Festkörper- und Werkstofforschung, Germany	Struktur langzeitrelaxierter metallischer Massivgläser
SF3.Microstructure	U	+	Humboldt Universität Berlin -Institut für Physik-, Germany	Strukturelle und chemische Gradienten in kriechverformten Superlegierungen
SF3.Nanostructures	R	+	IAEA Wien, Austria	Development and practical utilization of SANS
SF3.Nanostructures	R	+	NECSA, South Afrika	Development and test of position sensitiv detectors for SANS
SF3.Nanostructures	R	-	Paul-Scherer-Institut, Switzerland	Entwicklung von Datenreduktions- und SANS-Auswertesoftware
SF3.Nanostructures	I	-	Berlin Heart GmbH, Germany	Herstellung und Charakterisierung von Ferrofluiden
SF3.Nanostructures	U	-	TU des Saarlandes/Forschungszentrum Karlsruhe, Germany	Magnetische Austauschkopplung in ferromagnetischen Nanomaterialien
SF3.Nanostructures	U	-	Technisches Institut für Hochtechnologie, Universität Jena, Germany	Magnetische Strukturbildung in Ferrofluiden
SF3.Nanostructures	R	-	FZK Karlsruhe, Germany	Magnetisierungsfluktuationen in Hartmagneten
SF3.Nanostructures	R	+	Korean Atomic Energy Research Institute (KAERI), Korea	Materials research using SANS
SF3.Nanostructures	R	+	Techn. Institut für Festkörper und Werkstofforschung Dresden, Germany	Modellierung von Entmischungsvorgängen aus Streudaten, Mikrostrukturentwicklung in amorphnanokristallinen Systemen

Dep.Project	U?	C?	Partner	Topic
SF3.Nanostructures	U	-	Technical Academy of Science of the Czech Republic, Czech Republic	Modellierung von Kleinwinkel-Streudaten aus Einkristall-Superlegierungen
SF3.Nanostructures	U	+	Techn. RWTH Aachen -Lehr- und Forschungsgebiet Mechanische Verfahrenstechnik-, Germany	NKWS Untersuchungen an teilerstarten Legierungen im Scherfeld
SF3.Nanostructures	U	+	Technische Universität Darmstadt -FB Materialwissenschaften-, Germany	Neutronen-Kleinwinkelstreuung an nanoskaligen Keramiken
SF3.Nanostructures	R	+	DFG - Spp 1104, Germany	Neutronenkleinwinkelstreuung zur Untersuchung von Kern und Hülle in Ferrofluiden
SF3.Nanostructures	R	-	FZJ Jülich, Germany	SANS Instrumentierung für ESS
SF3.Nanostructures	U U	-	Technische Universität Braunschweig, Germany Technische Universität Darmstadt, Germany	SANS investigation of precipitate microstructure in Ni-base superalloys at elevated temperatures
SF3.Nanostructures	R	-	PTB Berlin (Behörde), Germany	SANS und Magnetorelaxation in Ferrofluiden
SF3.Nanostructures	U	-	ZARM Universität Bremen, Germany	SANS und magneto-rheologische Untersuchungen in Ferrofluiden
SF3.Nanostructures	R R	-	MPI Bremen, Germany MDC Berlin, Germany	Strukturuntersuchungen in Magnetosomen
SF3.Nanostructures	R	-	MPI Golm, Germany	Strukturuntersuchungen in polymerverkapselten Magnetflüssigkeiten
SF3.Others	K	+	Applied Light-Weight Metals, Germany	Entwicklung der AFS-Technologie
ISL.Accelerator	U	+	Technische Universität Wien, Austria	ECR-Quelle SOPHIE (TUW)
ISL.PPT	I	-	ACCEL Instruments, Germany	ACCEL Instruments
ISL.PPT	R	-	Charité - Campus Benjamin Franklin, Inst. Medizinische Informatik, Germany	Charité - Medizinische Informatik
ISL.PPT	R	-	Charité - Campus Benjamin Franklin, Medizinische Klinik III, Germany	Charité - Medizinische Klinik III
ISL.PPT	R	-	Charité - Campus Mitte, Strahlentherapie, Germany	Charité - Strahlentherapie
ISL.PPT	R	-	Deutsches Krebsforschungszentrum, Germany	DKFZ/HMI
ISL.PPT	U	-	Fachhochschule Giessen-Friedberg, Germany	Fachhochschule Giessen-Friedberg
ISL.User	R	+	Charité - Campus Benjamin Franklin, Augenklinik, Germany	Charité Augenklinik

Dep.Project	U?	C?	Partner	Topic
ISL.User	R	+	Universitätsklinikum Essen, Germany	UKE-HMI
SF4.BESSY	U	-	HU Berlin, Germany	DFG HU
SF4.Dynamics	I	+	Commission of the European Communities, Belgium	European Infrastructure Cooperation Network LEIF
SF4.Dynamics	U	+	Institut für Strahlenphysik der Universität Stuttgart, Germany	HMI/Uni Stuttgart
SF4.Dynamics	R	+	ATOMKI, Hungary	Hungarian-German Collaboration
SF4.Dynamics	U	+	Instituto de Física - UFRGS, Brazil	PROBRAL / DAAD
SF4.Structures	R	-	CERN, Switzerland	CERN/HMI
SF5.Biosystems	U	-	TU München, Physik-Department T 34, Germany	Actin cytoskeleton and molecular motors
SF5.Biosystems	U	-	TU München, E22, Germany	Actin cytoskeleton and molecular motors
SF5.Biosystems	R R	-	FZ Jülich, Germany FZ Jülich, Germany	Biopolymers
SF5.Biosystems	U	-	Universität Stuttgart, II. Institut für Theoretische Physik, Germany	Collective phenomena in internally driven systems
SF5.Biosystems	R	-	Raman Research Institute, Theoretical Physics, India	DNA Hyperstructure
SF5.Biosystems	U	-	Department of Physiology, University of Texas Health Science Center at San Anton, United States	Effect of SERCA overexpression on calcium wave propagation
SF5.Biosystems	R	-	International School for Advanced Studies, S.I.S.S.A., Italy	Elastic properties of proteins
SF5.Biosystems	U	-	Vrije Universiteit Amsterdam, Faculty of Sciences, Division of Physics and Astro, Netherlands	Experimental and theoretical description of motor proteins
SF5.Biosystems	R R	-	MPI Unit Structural Molecular Biology, Germany MPI Unit Structural Molecular Biology, Germany	Kinesin and microtubules
SF5.Biosystems	U	-	TU München, Physik-Department T 34, Germany	Molecular Motors
SF5.Biosystems	R	-	Jozef Stefan Institute, Slovenia	Molecular motors
SF5.Biosystems	U	-	Université de Montpellier II-Laboratoire de Physique Mathématique, France	Molekulare Motoren
SF5.Biosystems	U	-	UMR 168 CNRS, Institut Curie, Physico-Chimie, France	Molekulare Motoren
SF5.Biosystems	R	-	Institut Curie, Section de Recherche, France	Molekulare Motoren
SF5.Biosystems	R	-	ESPCI, France	Molekulare Motoren
SF5.Biosystems	R	-	Max Planck Institut für Physik komplexer Systeme, Germany	Molekulare Motoren

Dep.Project	U?	C?	Partner	Topic
SF5.Biosystems	U	-	TU München, E22, Germany	Motor-cytoskeletal filaments interaction
SF5.Biosystems	R	-	Physico-Chimie Curie, UMR 168 CNRS, Insitut Curie, France	Theoretical description of motor proteins
SF5.Hard Matter	U	-	Freie Universität Berlin, Germany	Comparison of Quantum Note Carlo, Green's function and Schwinger Boson approaches
SF5.Hard Matter	U	-	KTH, SCFAB, Cond. Matter Theory, Sweden	Comparison of Quantum Note Carlo, Green's function and Schwinger Boson approaches
SF5.Hard Matter	U	-	Lab. de Physique Quantique, Université Paul Sabatier, France	Comparison of Quantum Note Carlo, Green's function and Schwinger Boson approaches
SF5.Hard Matter	R	-	GSI Darmstadt, Germany	Electron capture in relativistic ion-atom-collision
SF5.Hard Matter	U	-	Department of Physics, St. Petersburg State University, Russia	Electron capture in relativistic ion-atom-collision
SF5.Hard Matter	R	-	Japan Atomic Energy Research Institute, Dept. of Reactor Engineering, Japan	Polarization of photons emitted in radiative electron capture by bare high-Z ion
SF5.Hard Matter	R	-	Fritz-Haber Institut der Max-Planck-Gesellschaft, Germany	Quantum dots
SF5.Hard Matter	R	-	Institute of Modern Physics, Chinese Academ of Science, P.R. of China	Radiative electron capture and the photoelectric effect in hydrogen-like high-Z systems
SF5.Hard Matter	R	-	GSI Darmstadt, Germany	Radiative electron capture and the photoelectric effect in hydrogen-like high-Z systems
SF5.Hard Matter	U	-	TU Berlin, Institut für Festkörperphysik, Germany	Stresses in overgrowth
SF5.Hard Matter	U	-	Otto-von-Guericke-Universität, Institut für experimentelle Physik, Germany	Stresses in overgrowth of GaN
SF5.Hard Matter	R	-	HMI, SF4, Germany	Superalloy
SF5.Hard Matter	R	-	HMI, SF4, Germany	Texture evolution in thinfilm growth
SF5.Hard Matter	U	-	Université de Meknes, Marocco	Thin ferromagnetic films
SF5.Soft Matter	U	-	Harvard University, Division of Engineering and Applied Sciences, Physics, United States	Actin cytoskeleton
SF5.Soft Matter	R	-	Indian Institute of Science, Department of Physiscs, India	Active systems
SF5.Soft Matter	U	-	Dept. Physics, Bethlehem University, Israel	Cluster fragmentation

Dep.Project	U?	C?	Partner	Topic
SF5.Soft Matter	U	-	University of Edinburgh, Department of Physics&Astronomy, United Kingdom	Colloidal gelation
SF5.Soft Matter	U	-	Universität Stuttgart, II. Institut für Theoretische Physik, Germany	Colloidal suspensions
SF5.Soft Matter	U	-	Universität Konstanz, Fachbereich Physik, Germany	Dynamic light scattering
SF5.Soft Matter	R	-	Institut Curie, Physicochimie UMR 168, France	Fluctuations of semiflexible polymers
SF5.Soft Matter	U	-	Physique des Milieux Condensés, UPMC Paris VI, France	Light scattering
SF5.Soft Matter	U	-	INFN, Università degli Studi di Firenze, Italy	Light scattering
SF5.Soft Matter	U	-	Vrije Universiteit Amsterdam, Faculty of Sciences, Division of Physics and Astro, Netherlands	Molekulare Motoren
SF5.Soft Matter	U	-	TU München, E22, Germany	Molekulare Motoren
SF5.Soft Matter	R	-	Max Planck Institut für Physik komplexer Systeme, France	Molekulare Motoren
SF5.Soft Matter	U	-	Virginia Polytechnic Institute and State University, Physics Department, United States	Non-equilibrium physics
SF5.Soft Matter	U U	-	Universität Marburg, Fachbereich Physik, Germany Universität Marburg, Fachbereich Physik, Germany	Semiflexible polymers
SF5.Soft Matter	U	-	Rockefeller University, United States	Statistical mechanics
SF5.Soft Matter	U	-	Prof. L. Schimansky-Geyer, HU Berlin, Germany	Stochastische Modellierung in aktiven Medien
SF5.Soft Matter	U	-	Syracuse University, Physics Department, United States	Vortex matter
SF6.Analysis	U	-	TU Berlin, Institut für Atomare Physik und Fachdidaktik, Germany	3D Micro-XRF
SF6.Analysis	R	+	BAM, Germany	Trace Element Analysis by X-Ray Fluorescence (BESSY) and Neutron Activation Analysis (BER II)
SF6.Clinical app.	U	-	Universitätsklinikum Charité, Germany	Metalloprotein mapping with micro-SRXRF in combination with SRFTIR spectromicroscopy
SF6.Clinical app.	U	-	Institut für Tierernährung der Freien Universität Berlin, Germany	Relationships between selenium and fatty acid metabolism
SF6.Clinical app.	R	-	National Cancer Institute, United States	Selenium and plasma cell tumors in mice
SF6.Clinical app.	U	-	Heinrich-Heine-Universität Düsseldorf, Germany	Selenoproteins in diabetes



Dep.Project	U?	C?	Partner	Topic
SF6.Clinical app.	U	-	Charité Berlin, Germany	Selenoproteins in the brain and in neurological diseases
SF6.Proteins	U	-	Universität Jena, Germany	Alternative splicing of selenoproteins
SF6.Proteins	R	-	Institute of Food Research Norwich Research Park, United Kingdom	Analysis of iron containing proteins in human plasma
SF6.Proteins	R	-	Max-Delbrück-Centrum, Germany	Crystallization of selenoproteins
SF6.Proteins	U	-	FU Berlin, Germany	Generation of selenoproteins and metalloproteins by means of Bioreactor
SF6.Proteins	U	-	BOKU-University of Natural Resources and Applied Life Sciences, Vienna, Austria	Interactions between selenium and zinc
SF6.Proteins	U	-	Justus-Liebig-Universität Gießen, Germany	Investigation of interrelationships between selenoproteins and noble elements
SF6.Proteins	I	-	GKSS Geesthacht, Germany	Investigation of metalloproteins in colon and colon carcinoma
SF6.Proteins	R	-	GSF München, Germany	Investigations of selenoproteins in selenoprotein knock-out mice
SF6.Proteins	K	+	Fa. BioGenes, Germany	Production of antibodies
SF6.Proteins	R	-	MPI-Berlin, Germany	Proteomics: Protein-Peptide Analysis
SF6.Proteins	U	-	Universitätskliniken des Saarlandes, Germany	Selenoproteins in male infertility
SF6.Proteins	U	-	Charité Berlin, Germany	Studies on selenium metabolism in selenoprotein P knockout mice
SF6.Proteins	R	-	Robert-Koch-Institut Berlin, Germany	The role of trace metals in the pathogenesis of transmissible spongiforme encephalopathies.
SF6.Proteins	U	-	Charité Berlin, Campus Benjamin Franklin, Germany	Tracer studies on selenoprotein and metalloprotein
SF7.ERDA	R R	+	IreS, Strassburg, France IreS, Strassburg, France	EUROBALL
SF7.ERDA	R U U	+	Gesellschaft für Schwerionenforschung mbH (GSI), Germany , TU-Darmstadt, Fachbereich Physik, Germany , TU-Darmstadt, Fachbereich Physik, Germany	GSI
SF7.ERDA	R	+	Moscow State Engineering Physics Institute (Technical University), (IPPE), (IGNP), Russia	MEPHI

Dep.Project	U?	C?	Partner	Topic
SE1.Cells	U	-	Humboldt-Universität zu Berlin, Institut für Physik, Germany	Defektspektroskopie
SE1.Cells	U	-	Humboldt Universität zu Berlin, Fachbereich Physik, Germany	Defektspektroskopie
SE1.Cells	I	+	Spectra-Physics LAS GmbH, Germany	Elektronenmikroskop
SE1.Cells	U	-	Humboldt-Universität zu Berlin, Institut für Physik, Germany	Elektronenmikroskopie
SE1.Cells	R	-	ACA Institut für Angewandte Chemie Berlin-Adlershof e. V., Germany	Elektronenspektroskopie
SE1.Cells	I	+	Osram Opto Semiconductors GmbH, T5 Analytics, Germany	H-Analytik
SE1.Cells	R	-	Palo Alto Research Center (PARC), United States	H-Passivierung
SE1.Cells	R	+	Institut für Physikalische Hochtechnologie, Bereich Lasertechnik, Germany	Laserkristallisiertes Silizium (BMBF)
SE1.Cells	R	-	A. F. Ioffe Physikalisch-Technisches Institut, Russia	Lightemitting Si diodes (INTAS)
SE1.Cells	R U U	+	Interuniversitair Micro-Elektronica Centrum vzw (IMEC), Belgium Katholieke Universiteit Leuven, Dep. of Metallurgy and Materials Engineering, Belgium TU Wien, Institut für Angewandte und Technische Physik, Austria	METEOR (EU-Projekt)
SE1.Cells	U	+	North Carolina State University, Dep of Physics, United States	Plasmadeposition
SE1.Cells	U	+	Technische Universität Berlin, Fachgebiet Hochfrequenztechnik, Germany	SiN-Passivierung
SE1.Cells	R	+	Bundesamt für Materialforschung und -prüfung (BAM), Germany	Strukturuntersuchungen
SE1.Cells	R	+	Fraunhofer Institut, Schicht- und Oberflächentechnik, Germany	Strukturuntersuchungen
SE1.Hetero	U	-	Tel-Aviv University, Dep. of Physical Electronics, Faculty of Engineering, Israel	Electrochemical deposition
SE1.Hetero	U	+	Technische Universität Hamburg-Harburg, Arbeitsbereich Halbleitertechnologie, Germany	Elektronenstrahl kristallisiertes Si (BMBF/BMU)

Dep.Project	U?	C?	Partner	Topic
SE1.Hetero	R	-	Institut für Spektrochemie und angewandte Spektroskopie (ISAS), Germany	IR-Ellipsometrie
SE1.Hetero	I	+	Q-Cells AG, Germany	Messtechnik
SE1.Hetero	U	-	Universitat de Barcelona, Departament de Quimica Fisica, Spain	Nanopatterning
SE1.Hetero	R	-	Institut für Spektrochemie und angewandte Spektroskopie, Germany	Nass-chemische Grenzflächen
SE1.Hetero	U	-	Lomonosov Moscow State University, Department of Physics, Russia	Oberflächenpräparation
SE1.Hetero	U	-	Technische Universität Chemnitz, Institut für Physik, Germany	Präparation Si-Grenzflächen
SE1.Hetero	U	-	Technische Universität Darmstadt, Germany	UHV-Spektroskopie
SE1.Hetero	R U	+	Forschungszentrum Jülich, Institut für Photovoltaik, Germany Technische Universität Darmstadt, Germany	ZnO-Fensterschichten (BMBF-Vernetzung)
SE1.Hetero	U U R R R U R I	+	Carl-von-Ossietzky-Universität Oldenburg, FB Physik, Germany Fern-Universität Hagen, Germany Forschungszentrum Jülich, IPV, Germany Fraunhofer ISE, Labor & Service Center, Germany RWTH Aachen, Institut für Halbleitertechnik, Germany Universität Stuttgart, IPE, Germany Institut für Solarenergieforschung Hameln/Emmerthal (ISFH), Germany RWE Schott Solar GmbH, Unternehmensbereich Technik/Entwicklung, Germany	a-Si:H/c-Si Heterostruktur (BMBF-Vernetzung)
SE1.Others	I	-	Micro Resist Technology, Germany	Optische Spektroskopie
SE2.Analytics	U I R	+	Universität Würzburg, Experimentelle Physik II, Germany Shell Solar GmbH, Germany BESSY, Germany	CISSY
SE2.Analytics	I	+	OMICRON NanoTechnology GmbH, Germany	Entwicklung einer Steuerelektronik für die Kelvinsondenkraftmikroskopie

Dep.Project	U?	C?	Partner	Topic
SE2.Analytics	R	+	IMEC, Belgium	High resolution electrical characterization of ULSI and advanced semiconductor devices
SE2.Analytics	U U	-	Universität Stuttgart, Institut für Physikalische Elektronik, Germany Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany	Nanoanalysis of chalcopyrite surfaces
SE2.Analytics	U	-	Universität Würzburg, Experimentelle Physik II, Germany	Photoelectronspectroscopy on chalcopyrite solar cells
SE2.Analytics	R	-	Institute of Crystal Growth, Germany	Work function measurements on Si/SiGe nanostructures
SE2.Analytics	U	-	Johannes Kepler University Linz, Physical Chemistry, Austria	Work function measurements on organic semiconductors
SE2.Analytics	R	+	Institut für Photovoltaik, FZ Jülich, Germany	Zinkoxidschichten für Dünnschichtsolarzellen: Material- u. Grenzflächenforschung - ZnO-Vernetzungsprojekt
SE2.Concepts	R	-	Moscow Institute of Electronic Engineering, Russia	Füllen von Nanoporen mit halbleitenden Materialien
SE2.Concepts	U	-	Kyiv Taras Shevchenko University, Radiophysics Department, Ukraine	IR-Charakterisierung von Pufferschichten auf TiO <sub>2</sub> , Sensoreigenschaften von TiO <sub>2</sub>
SE2.Concepts	U	-	Tel-Aviv University, Dept. of Electrical Engineering, Israel	Konditionierung elektronischer Eigenschaften von Halbleiteroberflächen (insbes. TiO <sub>2</sub> ) mit Monolagen organischer Moleküle
SE2.Concepts	U	-	Universidad Politécnica de Madrid, Instituto de Energía Solar - ETSIT, Spain	Neue Solarzellenkonzepte mit mibcell
SE2.Concepts	R	-	Institute of Physics, Ukraine	Nichtlineare optische Phänomene in porösem TiO <sub>2</sub>
SE2.Concepts	U	-	Universidad Jaume I, Dept. de Ciències Experimentals, Spain	Transportphänomene in halbleitenden Nanokompositen und deren Einfluss auf die Limitierung des Wirkungsgrades in eta-Solarzellen
SE2.Concepts	U	-	M. V. Lomonosov Moscow State University, Faculty of Physics, Russia	Transportphänomene in nanostrukturierten Halbleitern

Dep.Project	U?	C?	Partner	Topic
SE2.Concepts	R U U U U R	+	ECN - Energy Research Centre of the Netherlands, Netherlands TTU - Tallinn Technical University, Materjalitehnika Institut, Estonia University of Uppsala, Department of Physiscal Chemistry, Sweden Delft University of Technology, Laboratory of Inorganic Chemistry, Netherlands University of Gent, Dept. of Electronics and Information Systems, Belgium Weizmann Institute of Science, Dept. of Materials and Interfaces, Israel	eta-Solarzellen
SE2.Contacts	U U U U I R R R I	+	Uppsala University, Sweden Ecole Centrale Paris, France Universität Nantes, Laboratoire de Physique des Solides pour l'Electronique, France ETHZ-Swiss Federal Institute of Technology, Zürich, Switzerland Sulfurcell GmbH, Germany CIEMAT-Centro de Investigaciones Energéticas Medioambientales y Tecnológicas, Spain CRSA-Centrale Recherche S.A., France ZSW-Zentrum für Sonnenenergie- und Wasserstoffforschung, Bad Württemberg, Germany Würth Solar GmbH & Co. KG, Germany	Buffers for chalcopyrite solar cells (NEBULES)
SE2.Semico	U	+	Warsaw Technical University, Poland	Electrical characterization of Chalcopyrite Solar Cells
SE2.Semico	I	+	AIXTRON AG, Germany	Entwicklung einer neuen Dünnschichttechnologie für die Photovoltaik: Technische Umsetzung des CCSVT-Verfahren am Beispiel des Cu(In,Ga)Se <sub>2</sub> -Solarzellen

Dep.Project	U?	C?	Partner	Topic
SE2.Semico	U U U U R	+	University of Stuttgart, Germany University of Oldenburg, Germany University of Darmstadt, Germany University of Erlangen, Germany ISFH Hameln, Germany	Hochspannungsnetz
SE2.Semico	U U U	-	University of Port Elizabeth, United States University of Illinois, Urbana-Champaign, United States Lawrence Berkeley Lab, United States	Optical and electrical properties of chalcopyrites
SE2.Semico	U U I U U R I I I R	+	University of Hull, United Kingdom University of Ljubljana, Slovenia TEKsolar, United Kingdom Utrecht University, Netherlands Warsaw Technical University, Poland ECN - Energy Research Centre of the Netherlands, Netherlands Würth Solar GmbH & Co. KG, Germany Shell Solar, Germany ZSW-Zentrum für Sonnenenergie- u. Wasserstoffforschung, Germany CEA, France	PV roadmap for Europe

Dep.Project	U?	C?	Partner	Topic
SE3.Baseline	R U R U R I I U	+	CIEMAT - Centro De Investigaciones Energéticas Medioambientales y Tecnológicas, Spain Universität Nantes, Laboratoire de Physique des Solides pour l' Electronique, France CRSA - Centrale Recherche S.A., France ETHZ - Swiss Federal Institute of Technology, Zürich - Thin Film Physics Group, Switzerland ZSW - Zentrum f. Sonnenenergie - u. Wasserstoff-Forschung, Baden Württemberg, Germany Sulfurcell GmbH, Germany Würth Solar GmbH & Co. KG, Germany Uppsala University - Dept. of Materials Science, Sweden	Buffers for chalcopyrite solar cells
SE3.Baseline	I	+	Sulfurcell Solartechnik GmbH, Germany	CuInS2 Entwicklung
SE3.Baseline	R R	+	NATO Scientific Affairs Division, Belgium Weizmann Institute of Science, Israel	Electric field induced pn-junctions
SE3.Baseline	R	-	Institut für Solarenergieforschung GmbH Hameln/Emmerthal, Abt. Dünnschichttechnik, Germany	Hochspannungsnetz
SE3.Baseline	I	+	Q-Cells AG, Germany	Messtechnik
SE3.Baseline	U	+	BTU Panta Rhei gGmbH, Germany	Oberflächenanalyse
SE3.Baseline	I R	+	Dutch Space, Netherlands ZSW, Germany	Thin film solar cells for space
SE3.Control	I	+	Shell Solar GmbH, Germany	Entwicklung einer zerstörungsfreien Prüfmethode mittels Ramanspektroskopie
SE3.Control	U	-	University Barcelona, Spain	Raman spectroscopy for chalcopyrite materials
SE4.Cells	U	-	University of California, Los Angeles USA, United States	FTIR
SE4.Cells	R	-	Fraunhofer-Institut für Solare Energiesysteme, Germany	III-V Solarzellen
SE4.Cells	I	-	National Renewable Energy Laboratory, Golden CO. USA, United States	III-V Wachstum auf Si (100)
SE4.Cells	U	-	Uni Braunschweig, Germany	InP auf Silizium (100)
SE4.Cells	I	-	Innovative Processing AG, Germany	InP-basierte multi-junction Solarzellen

Dep.Project	U?	C?	Partner	Topic
SE4.Cells	I	-	AIXTRON AG - Aachen, Germany	MOCVD von III-V Halbleitern
SE4.Cells	I	-	MOCHEM GmbH, Germany	Precursor-Moleküle
SE4.Cells	I	-	LayTec GmbH, Berlin, Germany	RAS-Entwicklung
SE4.Cells	U	-	Institut für Halbleitertechnologie Uni Duisburg, Germany	Ternäre and quaternäre III-V-Halbleiter
SE4.Cells	R	-	Fraunhofer-Institut für Solare Energiesysteme, Germany	Verbindungshalbleiter mit kleinem Bandabstand
SE4.Cells	R	-	Fraunhofer-Institut für Solare Energiesysteme, Germany	Zeitaufgelöste Lebensdaueremessungen
SE4.Dynamics	U	-	University of Toronto, Canada, Canada	Femtosecond fast-scan detection
SE4.Dynamics	U	-	LMU München, Germany	Femtosekunden Laser Entwicklung, NOPA
SE4.Dynamics	U	-	Rutgers University, Newark, N.J. USA, United States	Molekülsynthese, "molecular spacers and anchor groups"
SE4.Dynamics	U	-	HU Berlin, Germany	Theorie zur Analyse und Steuerung ultraschneller photoinduzierter Reaktionen
SE4.Dynamics	U	-	TU Berlin, Germany	Theorie zur Dynamik von Elektronentransferprozessen an Grenzflächen, DFG Schwerpunkt 1093
SE4.Dynamics	R	-	Indian Institute of Science, Bangalore, India, India	Time-resolved absorption and Raman spectroscopy
SE4.Dynamics	U U	-	FU Berlin, Germany FU Berlin, Germany	Zwei-Photonen-Photoemission
SE4.Others	U	-	University of Pune, National Centre for Free Radical Research, India	Grundlagen der Pulsradiolyse
SE4.Others	R	-	Technical University of Lodz, Institute of Applied Radiation Chemistry, Poland	Grundlagen der Pulsradiolyse
SE4.Others	R	-	Bhabha Atomic Research Centre Radiation Chemistry & Chemical Dynamics Division, India	Grundlagen der Pulsradiolyse
SE4.Others	U	-	University of Toronto, Canada, Canada	Preparation of VO <sub>2</sub> Nano wires
SE4.Others	U	-	EPFL Lausanne, Switzerland, Switzerland	Processing of CdSe Nanrods
SE4.Others	U	-	Humboldt Universität zu Berlin (HUB), Germany	Pulsradiolyse von Gläsern, Bestrahlungen zur präparativen Chemie
SE4.Others	R	-	Forschungszentrum Karlsruhe Institut für Nukleare Entsorgung, Germany	Pulsradiolytische Untersuchungen von konzentrierten Chloridlösungen



Dep.Project	U?	C?	Partner	Topic
SE4.Others	R R R	+	Bundesanstalt für Materialprüfung und- Forschung Berlin, Germany Bundesanstalt für Materialprüfung und- Forschung Berlin, Germany Bundesanstalt für Materialprüfung und- Forschung Berlin, Germany	Sterilisation durch Gamma-Bestrahlung Bestandteil der globalen kooperationsvereinbarung BAM-HMI
SE4.Others	I	-	Astrium GmbH, Engineering Solargeneratoren, Germany	Untersuchungen zur Strahlenresistenz von elektrischen Bauteilen
SE5.Energetics		-		Development of noble metal free catalysts
SE5.Energetics	R	+	HIAT (Hydrogen Institute of Applied Technologies gGmbH), Germany	Erprobung und Optimierung von RuSe-Katalysatoren in DMFCs
SE5.Energetics	R	-	Optotransmitter- Umweltschutz-Technologie e.V. Berlin, Germany	Herstellung und Charakterisierung von reaktiv gesputterten Oxidschichten
SE5.Energetics	I	-	Millennium Inorganic Chemicals SA, France	Investigations of TiO <sub>2</sub> powders
SE5.Energetics	K	-	BIONIK-Systeme, Germany	Lifepacking - Bionische Verpackungen für eine nachhaltige Ma
SE5.Energetics	U	-	Ruhr-Universität Bochum, Germany	Plasma Characterization
SE5.Energetics		+		Reaktives Magnetronspattern von CuInS <sub>2</sub> -Solarzellen
SE5.Energetics	U	-	TU Darmstadt, Germany	Silicon-organic pigment material hybrids for photovoltaic application
SE5.Energetics	U	-	Mendel University of Agriculture and Forestry, Inst. of Forest Ecology, Czech Republic	Solar Energy Conversion via Tensile Water in Trees
SE5.Energetics	U	+	University of Paris XIII e.a., France	Supported semiconductor nanosized catalysts for photo-chemical organic pollutant degradation
SE5.Energetics		+		Verbundprojekt Erneuerbare Energien: Zinkoxidschichten für Dünnschichtsolarzellen
SE5.Interfaces	U U	+	TU Berlin, Germany Northcarolina State University, United States	Austauschprogramm HMI- TU-North Carolina State University
SE5.Interfaces	U U	+	BTU Cottbus, Germany TU Darmstadt, Germany	CRG (Cooperating Research Group)
SE5.Interfaces	U	-	University of Portsmouth, Div. of Pharmaceutics and Microbiology, United Kingdom	DFT-Berechnungen für PES-Messungen bei BESSY II
SE5.Interfaces	U	-	Université Ibn Tofail, Faculté des Sciences, Marocco	Elektrochemie an CuInS <sub>2</sub> und Si

<b>Dep.Project</b>	<b>U?</b>	<b>C?</b>	<b>Partner</b>	<b>Topic</b>
SE5.Interfaces	R	-	FHI-Berlin, Dept. PC, Germany	HREELS-Untersuchungen an photoelektrochemisch präparierten n-Si-Proben
SE5.Interfaces	U	-	University of Portsmouth, School of Pharmacy and Biomedical Sciences, United Kingdom	Rastersondenmikroskopie an texturierten Halbleitoberflächen
HAD	R	+	DESY Hamburg, Germany	X-FEL Projekt
DH	I	+	Berliner Wasser Betriebe, Germany	Technologietransfer- Magnetfeldsensor

## External Funding

Dep.Project	Topic	Funding Agency	Duration
BENSC.User	Access to BENSC TMR	EU	1996-2003
BENSC.User	Access to BENSC Add.	EU	1999-2004
BENSC.User	BENSC 2000 (EU)	EU	2000-2003
BENSC.User	Ausbau E1 und PU	BMBF	2001-2002
BENSC.User	Enhanced Access to BENSC - Add-On	EU	2001-2004
BENSC.User	Erlöse ZET E3	div.	
BENSC.User	Autoradiographie	NHK	
BENSC.User	Round Table	EU	2000-2003
SF1.Methods	Industrieerlöse, TT-Projekt	NOB	2000-2004
SF1.Methods	WW Ultrakalte Neutronen mit Oberflächen	BMBF	2003-2004
SF1.Methods	Dreifachkorrelation in ternärer Spaltung (T-odd correlation)	BMBF	2003-2005
SF1.Spallation	Cryst. Neutron optics	EU	1997-2001
SF1.Spallation	SCANS (EU)	EU	2000-2004
SF2.Bulk magnetism	Magn. Properties 3He	EU	2000-2004
SF2.Bulk magnetism	PPP Slowakei DAAD (Dipol-Wechselwirkung in Magneten)	DAAD	2003-2004
SF2.BENSC	RTD Projekt	EU	1998-2001
SF2.BENSC	ENPI	EU	2000-2003
SF2.BESSY	Magnetische Röntgenstreuung	BMBF	2000-2003
SF2.BESSY	Analyse v. Eigenspannungen Walter AG	Walter AG	2003-2004
SF2.BESSY	ZET BESSY Industrieerlöse	Ford	
SF3.Microstructure	Inhomogeneities (NATO)	NATO	2000-2002
SF3.Microstructure	Diffusion in Metallschmelzen	DFG	2001-2004
SF3.Microstructure	ITEM	EU	2001-2005
SF3.Microstructure	Inconel 706	DFG	2002-2005
SF3.Microstructure	chem. Gradienten	DFG	2002-2003
SF3.Light weight mat.	Met Foam 2003	DFG/div.	2003-2004
SF3.Light weight mat.	Schaumbildung bei Metallen	DFG/TU	
SF3.Light weight mat.	Porenbildung beim Schäumen	DFG/TU	
SF3.Light weight mat.	Schaumbildung bei Metallen	DFG/FhG	
SF3.Nanostructures	Neutronen - Kleinwinkelstreuung (Ferrofluide)	DFG	2000-2004
SF3.Nanostructures	Nd-Basislegierungen	DFG	2001-2004
SF3.BENSC	Superalloys	EU	1996-1999
SF3.BENSC	RESTAND	EU	1997-2001
SF4.Structures	Ionisationsmechanis.	DAAD	1998-2002
SF4.Structures	Low-Energy Ion Beam Facilities	EU	2000-2004
SF4.Structures	PPP Portugal PROBRAL	DAAD	2000-2003

Dep.Project	Topic	Funding Agency	Duration
SF4.Structures	Gitterfehlpassung in der einkristallinen Superlegierung SC 16	DFG	2003-2004
ISL.User	ATT-Erlöse	CCBF, UKE	
ISL.User	Bestrahlung f. Jena Optronik	Jena	
ISL.User	OXYPHEN Kooperation	Oxyphen	
SF5.Soft Matter	Theoretische Aspekte von Schwerionenstößen	DFG	1998-2003
SF5.Soft Matter	Mikrokanonische Statistik	DFG	2001-2003
SF5.Biosystems	Molekulare Motoren	DFG	2001-2003
SF5.Biosystems	Protein Motors	EU	2002-2004
SF5.Biosystems	Collective Phenomena	EU	2002-2004
SF6.Proteins	Neue Selenproteine (DFG)	DFG	2000-2004
SF6.Proteins	Immunoessay	BMWI	2002-2004
SF6.NAA	diverse Erlöse aus Bestrahlungen	div.	
SF7.ERDA	PANS EU	EU	2000-2003
SF7.ERDA	Fr. Kokalova / Stipendium	DAAD	2003-2003
SF7.ERDA	de Angelis / W. Bestel Preis	AvH	2003-2003
SF7.ERDA	Hr. Khoa / Humboldt Fellowship	AvH	2003-2003
SF7.ERDA	McEwan / Stipendium	DAAD	2003-2004
SF7.ERDA	Zherebchevsky / Stipendium	DAAD-Euler	2003-2003
SF7.Detector	TECHNI EU	EU	2000-2004
SE1.Cells	Strukturierung von Bauelementen	TUB	2000-2003
SE1.Cells	METEOR	EU	2002-2004
SE1.Cells	Industrieerlöse SE1	Spectra Physics LAS GmbH	
SE1.Hetero	Elektronenstrahl-rekristallisiertes Silizium	TU HH	1999-2003
SE1.Hetero	Grundlagen und Technologien von Solarzellen auf Basis von a-Si/c-Si Heterostrukturen	BMBF	2000-2003
SE1.Hetero	Zinkoxidschichten für Dünnschichtsolarellen: Material- und Grenzflächenforschung	BMBF	2000-2003
SE1.Others	Industrieerlöse SE1	Q Cells AG	
SE2.Semico	Entwicklung einer Dünnschichttechnologie CCSVT-Verfahren	BMWI	2000-2003
SE2.Semico	Lizenz Erlöse	Sulfurcell	2002-2005
SE2.Semico	Hr. Yamigno Doka / Stipendium	DAAD	2002-2004
SE2.Contacts	Hochspannungsnetz	BMBF	2000-2004
SE2.Contacts	NEBULES	EU	2003-2005
SE2.Integration	Gründerlabor HMI Adlershof	BMBF	2001-2001
SE2.Integration	PVNET	EU	2001-2003
SE2.Chemistry	CISLINE	EU	2002-2004
SE2.Chemistry	Hr. Sartale / Stipendium	AvH	2003-2004
SE2.Chemistry	Industrieerlöse ILGAR-Verfahren, TT-Projekt	Daimler Chrysler	

Dep.Project	Topic	Funding Agency	Duration
SE2.Concepts	Quantum Computer EU	EU	2000-2002
SE2.Concepts	ETA-Cells	EU	2000-2004
SE2.Concepts	Organische Solarzellen	BMBF	2000-2003
SE2.Concepts	Fullerene als Atomfallen	DFG	2001-2004
SE2.Concepts	Leitende Ionenspuren	BMBF	2001-2004
SE2.Concepts	MIBCELL	EU	2001-2004
SE2.Concepts	Polymere Solarzellen	BMBF FhG	2001-2003
SE2.Concepts	Random Light Traps	BMBF FZJ	2001-2003
SE2.Concepts	QIPDDF-Roses	EU	2003-2004
SE2.Concepts	Organische Solarzellen mit OVPD	BMU	2003-2006
SE2.Concepts	Fr. Nosova / Stipendium	DAAD	2003-2004
SE2.Concepts	Hr. Musembi / Stipendium	DAAD	2003-2004
SE2.Concepts	Hr. Ogacho / Stipendium	DAAD	2003-2004
SE2.Analytics	HERCULAS	EU	2000-2004
SE2.Analytics	Photovoltaik-Module	BMBF	2000-2004
SE2.Analytics	Lizenz Erlöse	Omicron	2003-2012
SE2.Others	Industrieerlöse SE2	Schering	2002-2003
SE2.Others	Molekulare Elektronik (über FU)	FU	2003-2008
SE3.Baseline	Entwicklung einer zerstörungsfreien Prüfmethode mittels Raman Spektroskopie	Shell	
SE3.Control	Electric Field Induced p-n Junctions	NATO	2001-2003
SE3.Control	Space Solar Arrays	Contraves	2001-2002
SE3.Control	Thin Film Solar Cells For Space	Dutch Space	2002-2005
SE4.Cells	Industrielle Fertigungstechnologie für Verbindungshalbleiter mit kleinem Bandabstand (Indufert)	BMBF	2001-2003
SE4.Dynamics	Elektronentransfer Reaktionen	VW-St.	1998-2003
SE4.Dynamics	Ultraschnelle Photo-Reaktion	DFG	1998-2004
SE4.Dynamics	Dynamik heißer Elektronen	DFG	2000-2003
SE4.Others	Nanostrukturen aus kolloid. Halbleitern	DFG	2000-2003
SE4.Others	Magnetic Nanoscale P	EU	2000-2004
SE4.Others	diverse Erlöse aus Bestrahlungen	div.	
SE5.Energetics	silicon-organic hybrids	VW-St.	2002-2005
SE5.Energetics	Magnetronspattern	BMW A	2003-2005
SE5.Energetics	Industrieerlöse im Projekt Energetics	HIAT	
SE5.Interfaces	Si-Nanostruktur	DFG	2001-2004