



Supplement
to the
Annual Report 2001

Berlin 2002

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Publications

Department SF1

Instruments and Methods**Reviewed Publications**BENSC-Activities*Ehlers, G.; Farago, B.; Pappas, C; Mezei, F.***A new IN11 with an almost 35 times higher counting rate than that of IN11C**

Proceedings of the ILL Millenium Workshop, 2001 p. 316

*Fitzsimmons, M. R.; Leighton, C.; Hoffmann, A.; Yashar, P. C.; Nogués, J.; Liu, K.; Majkrzak, C. F.; Dura, J. A.; Fritzsche, H.; Schuller, I. K.***Influence of interfacial disorder and temperature on magnetization reversal in exchange-coupled bilayers.**

Phys. Rev. B 64 (2001) 104415

*Ioffe, A.; Mezei, F.***4 p-symmetry of the neutron wave function under space rotation**

Physica B 297 (2001) 303-306

*Jauch, W., Reehuis, M., Bleif, H.J., Kubanek, F., Pattison, P.***Crystallographic symmetry and magnetic structure of CoO**

Phys. Rev. B 64 (2001) 052102 1-3

*Kaisermayr, M.; Pappas, C; Sepiol, B.; Vog, G.I***Neutron spin echo probes self diffusion on lattices**

Phys. Rev. Letters, 87 (2001) 175901

*Krist, Th., Mezei, F.***Solid state neutron polarisers and collimators in "Neutron Optics" J L Wood, I Anderson, Editors, Proceedings of SPIE Vol. 4509, (2001) (accepted)***Krist, Th.; Fritzsche, H., Mezei, F.***Large angle neutron polarisation analyser**

Appl. Phys. A, (2001) (accepted)

*Lohstroh, W.; Leuenberger, F.; Felsch, W.; Fritzsche, H.; Maletta, H.***Hydrogen-controlled interlayer exchange coupling in Fe/LaH_x multilayers**

J. Magn. Magn. Mater. 237 (2001) 77

*Mezei, F.; Drabkin, G.; Ioffe, A.***Polarimetric neutron spin echo**

Physica B 297 (2001) 9-13

*Mezei, F.; Russina, M.***New opportunities in quasi elastic neutron scattering spectroscopy**

Physica B 301 (2001) 94-98

*Pappas, C.; Kischnik, R.; Mezei, F.***Wide angle NSE : the spectrometer SPAN at BENSC**

Physica B 297 (2001) 14-17

*Pappas, C.; Mezei, F.***How to achieve high intensity in NSE spectroscopy?**

Proceedings of the ILL Millenium Workshop, 2001, p.318

*Peters, J.; Treimer, W.***Bloch walls in a nickel single crystal**

Phys. Rev. B 64 (2001) 214415 – 214422

*Scheffer, M.; Rouijaa, M.; Suck, J.-B.; Sterzel, R.; Lechner, R. E.:***Magnetic neutron scattering from quasicrystalline Zn-Mg-Ho and Zn-Mg-Y at low temperatures**

Materials Science and Engineering 294-296 (2000) 488-491

*M. Strobl, W. Treimer, A. Hilger***Advancement on the development of USANS instruments for non-destructive material investigations**3rd ICNRP, Almaty, KZ, Abstract book ISBN 9965-9051-6-9, p 197 (2001)*Temst, K. ; Van Bael, M. J.; Fritzsche, H.***Application of off-specular polarized neutron reflectometry to measurements on an array of mesoscopic ferromagnetic disks.**

Appl. Phys. Lett. 79 (2001) 991

*Temst, K.; Van Bael, M. J.; Fritzsche, H.***Neutron reflectivity study of a magnetic dot array.**

J. Magn. Magn. Mater. 226-230 (2001) 1840

*Treimer, W., Strobl, M., Hilger, A.***Experiments with tuneable many bounce channel cut crystals for thermal neutron scattering**Proceedings of euspen, 2nd Int. Conf. Vol 1, p 526-529 (2001)*Treimer, W., Feye-Treimer, U., Strobl, M.***Doppelkristalldiffraktometrie und Tomographie**

PSI – Proceedings 01-01, p 26 – 29 , Mai (2001)

*Treimer, W. , Strobl, M., Hilger, A.***Development of a tunable channel cut crystal**

Phys. Lett. A 289, 151 – 154 (2001)

*Treimer, W., Strobl, M., Hilger, A.***Thermal neutron optical experiments with a high resolution double crystal diffractometer**

J. Appl. Physics A (accepted)

*Treimer, W. , Strobl, M., Hilger, A.***Evidence of Edge Diffraction and Refraction in Ultra Small Angle Neutron Scattering**

submitted Phys. Rev. Lett.

*Wagh, A., Rakecha, V. C., Treimer, W.***Bonse-Hart angular profiles realized for multiply Bragg reflected neutrons**

Phys. Rev. Lett. 87, 12, 125504-1 – 4 (2001)

Spallation

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 (2002) submitted

Arrighi, V.; Ferguson, R.; Lechner, R. E.; Telling, M.; Triolo, A.:

Local dynamics of atactic polypropylene across the glass transition
Physica B 301 (2001) 35-43

Ehlers, G.; Casalta, H.; Lechner, R. E.; Maletta, H.:
Dynamics of frustrated magnetic moments in antiferromagnetically ordered TbNiAl probed by neutron time-of-flight and spin-echo spectroscopy
Phys. Rev. B 63 (2001) 224407-1 –224407-6

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Quasielastic neutron scattering from trehalose aqueous solutions
J. Chem. Phys. 115 (2001) 3281-3286

Fitter, J.; Herrmann, R.; Hauß, T.; Lechner, R. E.; Dencher, N. A.:

Dynamical properties of α -amylase in the folded and unfolded state: the role of thermal equilibrium fluctuations for conformational entropy and protein stabilisation
Physica B 301 (2001) 1-7

Gutberlet, T.; Heinemann, U.; Steiner M.

Protein crystallography with neutrons - status and perspectives
Acta Cryst. D57 (2001) 349-354

Hilscher, D.; Herbach, C.-M.; Jahnke, U.; Tishchenko, V.; Enke, M.; Filges, D.; Goldenbaum, F.; Neef, R.-D.; Nünighoff, K.; Paul, N.; Schaal, H.; Sterzenbach, G.; Letourneau, A.; Böhm, A.; Galin, J.; Lott, B.; Péghaire, A.; Pienkowski, L.:

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J. of Nucl. Materials 296 (2001) 83-89

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Neutron energy spectra from the laser induced $D(d,n)^3He$ reaction
Phys. Rev. E 64 (2001) 016414-1-9

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Spallation neutron production and the current intra-nuclear cascade and transport codes

Eur. Phys. J. A 11 (2001) 467-490

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Correction for thermal diffuse scattering in single-crystal time-of-flight neutron diffraction: first applications

Journal of Applied Crystallography 34 (2001), 493-495

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Thermal excitation and decay of nuclei from antiproton-nucleus interactions at 1.22 GeV
Phys. Rev. C 63 (2001) 034616-1-23

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Quasielastic high-resolution time-of-flight spectrometers employing multi-disk chopper cascades for spallation sources

Proceedings ICANS-XV, 15th Meeting of the International Collaboration on Adv. Neutron Sources, Tsukuba, Japan, 6. 11. – 9. 11. 2000; available at JAERI, Tokai-mura, Naka-gun, Ibaraki-ken, 319-1195, Japan; ref.: JAERI-Conf (2001-002) 357-376

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Physica B 301 (2001) 83-93

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Intracrystalline equilibrium reaction in a protonic conductor

J. Phys. Soc. Jpn 70 (2001) Suppl. (Proc. Int. Symposium on Adv. in Neutron Scattering Research) 274-276

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Solid State Ionics 145 (2001) 167-177

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Quasielastic high-resolution direct geometry TOF spectrometers at steady-state reactors and at spallation sources

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J. Am. Chem. Soc. 123 (2001) 8147-8148

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Pieper, J.; Irrgang, K.-D.; Renger, G.; Lechner, R.E.:

Density of Phonon States in the Light-Harvesting Complex II of Green Plants
Appl. Phys. A (2002) accepted

Radulescu, A.; Lechner, R. E.; Padureanu, I.; Postolache, C.:

Additional low-frequency modes in zirconium hydrides
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Russina O.; Russina M.; Mezei F.; Lechner R.E.; Pieper J.; Desmedt A.:

Dynamic Correlations around the Glass Transition in Systems with different Degrees of Fragility
Appl. Phys. A (2002) accepted

Schuck, G.; Lechner, R. E.; Langer, K.:

Proton conduction based on intracrystalline chemical reaction
Appl. Phys. A (2002) accepted

Triolo, A.; Arrighi, V.; Triolo, R.; Passerini, S.; Mastragostino, M.; Lechner, R. E.; Ferguson, R.; Borodin, O.; Smith, G. D.:

Dynamic heterogeneity in polyelectrolytes. Comparison between QENS data and MD simulations
Physica B 301 (2001) 163-167

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QENS Investigation of filled rubbers
Appl. Phys. A (2002) accepted

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Segmental dynamics in polymer electrolytes
Appl. Phys. A (2002) accepted

Triolo A.; Lechner R.E.; Desmedt A.; Telling, M.; Arrighi, V.:

Complex dynamics in polyisobutylene melts
Macromolecules (2002) submitted

Wilmer, D.; Feldmann, H.; Combet, J.; Lechner, R. E.:

Ion conducting rotor phases - new insights from quasielastic neutron scattering
Physica B 301 (2001) 99-104

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Monte Carlo simulation of crystal monochromators/analysers - Applications for the crystal-analyser neutron spectrometer IRIS

Nucl. Instr. and Meth. in Phys. Res. A, 457/1-2 (2001) 299-308.

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Arrighi, V.; Pappas, C.; Triolo, A.; Pouget, S.

Temperature dependence of local chain dynamics in atactic polypropylene: A neutron spin-echo study

Physica B 301 (2001) 157-62

Brome, C.R.; Butterworth, J.S.; Dzhosyuk, S.N.; Mattoni, C.E.H.; McKinsey, D.N.; Doyle, J.M.; Huffman, P.R.; Dewey, M.S.; Wietfeldt, F.E.; Golub, R. Habicht, K.; Greene, G.L.; Lamoreaux, S.K.; Coakley, K.J.

Magnetic trapping of ultracold neutrons

Physical Review C 63 (2001), 1-15

Calandrini, V.; Deriu, A.; Onori, G.; Lechner, R.E.; Pieper, J.

Water Dynamics in Dilute Aqueous Solutions of Small Apolar Solutes by Quasi-Elastic Neutron Scattering

Appl. Phys. A (2002)

Chatterji, T.; Regnault, L.P.; Thalmeier, P.; van de Kamp, R.; Schmidt, W.; Hiess, A.; Vorderwisch, P.; Suryanarayanan, R.; Dhalenne, G. and Revcholevschi, A.

Spin dynamics of quasi-2D ferromagnet

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J. Alloys Comp. 326 (2001) 15

Desmedt A.; Kitchin S.J.; Guillaume F.; Couzi M.; Harris K.D.M.; Bocanegra E.

Phase transitions and molecular dynamics in the cyclohexane / thiourea inclusion compound
Phys. Rev. B 64(5) (2001) 054106(1-21)

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Physica B 301 (2001) 59-64

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A combined MD-IQNS investigation of the guest molecules rotational disorder in thiourea inclusion compounds

Appl. Phys. A (2002)

Enderle, M.; Roennow, H.M.; McMorrow, D.F.; Regnault, L.-P.; Vorderwisch, P.; Meissner, M.; Smeibidl, P.; Dhalenne, G. and Revcholevschi, A.

Statics and dynamics of the magnetic soliton lattice in the high-field phase of CuGeO_3

J. Magn. Magn. Mat. 226-230 (2001) 465

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Phys. Rev. Lett. 87 (2001) 177203

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The spatial distribution of vapor filled voids on condensation and drainage of nitrogen at ~78K in a mesoporous silica glass

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J. Phys. Chem. Solids 62 (2001) 2103-2108

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Field-induced antiferromagnetism in a high-temperature superconductor

Nature (accepted)

Padureanu I.; Lechner R.E.; Aranghel D.; Radulescu A.; Desmedt A.; Pieper J.; M. Ion

Temperature dependence of the dynamic scattering function in glycerol studied by quasi-elastic slow neutron scattering

Appl. Phys. A (2002)

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Electron-Phonon Coupling in Trimeric Light-Harvesting Complex II of Green Plants: Line-Narrowed and Temperature Dependent Fluorescence Spectra

Journal of Physical Chemistry B (2001), 105, 7115-7124

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Absolute spin magnetic moment of FeF₂ from high energy photon diffraction

Phys. Rev. Lett. 86 (2001) 3152-3155

Rogalski, O.; Vorderwisch, P.; Hüller, A. and Hau-tecler, S.

A heuristic quantum dissipation algorithm applied to new neutron scattering data of the free ammonia rotations in the Ni-Ni-biphenyl Hofmann clathrate

J. Chem. Phys. (accepted)

Rüegg, Ch.; Cavadini, N.; Furrer, A.; Kräemer, K.; Güdel, H.U.; Vorderwisch, P. and Mutka, H.

Spin dynamics in the high field phase of quantum critical S=1/2 TICuCl₃

Appl. Phys. A (accepted)

Sellmann, R.; Fritzsche, H.; Maletta, H.; Leiner, V.; Siebrecht, R.

Spin reorientation transition and magnetic phase diagrams of thin epitaxial Au(111)/Co films with W and Au overlayers

Phys. Rev. B 64 (2001) 054418

Sellmann, R.; Fritzsche, H.; Maletta, H.

Growth of thin Co films on W(110) and Au(111) layers prepared on Al₂O₃(1120)

Surf. Sci. 495 (2001) 185

Smarsly, B.; Göltner, C.; Antonietti, M.; Ruland, W.; Hoinkis, E.

SANS investigation of nitrogen sorption in porous silica

J. Phys. Chem. B 105 (2001) 831

Triolo, A.; Lo Celso, F.; Arrighi, V.; Qian, H.; Lechner, R.E.; Desmedt, A.; Pieper, J.; Frick, B.; Triolo, R.

QENS Investigation of filled rubbers

Appl. Phys. A (2002)

Non-reviewed Publications

BENSC-Activities

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

Realization of Wide Angle NSE

Neutron News, 12, No.3 (July 2001)

Pappas, C.

Introduction to NSE spectroscopy

Report KFKI-2001-01/E, KFKI, Budapest, Hungary

Spallation

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Validation of MC-models of spallation reactions in thin and thick targets in the GeV range
 Proceedings of the International Conference on Advanced Monte Carlo for Radiation Physics, Particle Transport Simulation and Applications, Lisbon, Portugal, 23-26 October (2000), Eds. A. Kling, F. Barao, A. Nakagawa, L. Tavora, (ISBN 3-540-4195-8, Springer Verlag Berlin 2001) pp. 1003-1008

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Neutron and charged-particle data studied for spallation reactions

Proceedings of the Fifth Workshop On Simulating Accelerator Radiation Environments (SARE-5), Models and Codes for Spallation Neutron Sources, OECD/NEA, Paris, France, July 17-21, 2000, edit. D. Filges, F. Goldenbaum, and Y. Yariv, ISSN 1433-559X, ESS-report 112-01-T (April 2001), pp. 7-26

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The standard HETC and MC4 approach

Proceedings of the Fifth Workshop On Simulating Accelerator Radiation Environments (SARE-5), Models and Codes for Spallation Neutron Sources, OECD/NEA, Paris, France, July 17-21, 2000, edit. D. Filges, F. Goldenbaum, and Y. Yariv, ISSN 1433-559X, (April 2001), pp. 93-107

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Instrumentation issues, established techniques, need for innovation, technical risks,

ESS-SAC/ENSA Workshop on "Scientific Trends in Condensed Matter Research and Instrumentation Opportunities at ESS", Progress Report, ed. D. Richter, Jülich, 2001, p. 13

Mezei, F.

Performance of a Suite of Generic Instruments on ESS

ESS Instrumentation Group Reports, ed. by F. Mezei, R. Eccleston, Jülich, 2001

Zsigmond, G., Streffer, F., Wechsler, D., and Mezei, F.

Monte Carlo simulation of crystal monochromators/analysers - Applications for backscattering spectroscopy with high resolution

Proceedings of ICANS-XV (2000) (Eds. J. Suzuki and S. Itoh, JAERI, Tsukuba, 2001) Vol. I, p. 354

Zsigmond, G., Wechsler, D., and Mezei, F.

Monte Carlo simulation of NSE at reactor and spallation sources

Proceedings of ICANS-XV (2000) (Eds. J. Suzuki and S. Itoh, JAERI, Tsukuba, 2001) Vol. I, p. 400

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VITESS simulation of backscattering and reflectometry at spallation sources

Proceedings of International Workshop on New Opportunities in Single Crystal Spectroscopy with Neutrons, Balaton, Hungary, April, 19-22, 2001, p. 87

Department SF2

Magnetism**Reviewed Publications**Bulk Magnetism

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Electronic structure and magnetism in UptAl
 Phys. Rev. B 64 (2001) 144408

Chang, S.; Jung, M.H.; Nakotte, H.; Brück, E.; Klaasse, J.C.P.; Mihalik, M.; Lacerda, A.H.; Prokeš, K.; Torikachvili, M.S.; Schultz, A.J.:

Electronic properties of UIrGe in high magnetic fields
 J. Appl. Phys. 89 (2001) 7186-7188

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Phonon dispersion and elastic constants in Fe-Cr-Mn-Ni austenitic steel
 J. of Materials Science, 36 (2001) 811-814

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 J. Phys.: Condens. Matter 13 (2001), 2639-2650

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Low-temperature magnetic phase transition of geometrically frustrated isosceles triangular Ising antiferromagnet CoNb₂O₆
 Phys. Rev. B 63 (2001) 024415

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Structure and magnetic order in Fe_{2+x}V_xAl
 J. Phys.: Condens. Matter 13 (2001), 5487-5501

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Field dependence of the incommensurate magnetic order in UNiGe
 J. Mag. Mag. Matter 226-230, (2001) 70-71

Park, J.; Jo, Y.; Park, J. -G.; Prokeš, K.; Welzel, S.; Lee, C.H.; Kudrevatykh, N.; Valiev, E.; Pirogov, A.; Sheptyakov, D.:

Magnetization anisotropy of the Tm- and Fe-subsystems in Tm₂Fe₁₇

J. Mag. Mag. Matter, 237 (2001) 158-168

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Metamagnetic transition in U₂Pd₂In

Physica B: Condensed Matter 294-295 (2001) 288-291

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Magnetic structure of a UNiAl single crystal under pressure

J. Mag. Mag. Matter, 226-230, (2001) 1186-1187

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Magnetic anisotropy in UNiGa determined by polarized neutrons

Physica B: Condensed Matter 301 (2001) 255-260

Prokeš, K.; Tegus, O.; Brück, E.; Klaasse, J.C.P.; de Boer, F.R.; Buschow, K.H.J.:

Magnetic properties and magnetic structure of DyTiGe

Physica B: Condensed Matter 307 (2001) 169-174

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J. Mag. Mag. Matter, 236 (2001) 28-36

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Department SF7

Nuclear Measurements

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Department SE1

Silicon Photovoltaics

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Crystalline Silicon Thin-film Solar Cells

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Department SE2

Heterogeneous Material Systems

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Fullerenes

Waiblinger, M.; Lips, K.; Harneit, W.; Weidinger A.; Dietel, E.; Hirsch, A.

Thermal stability of the endohedral fullerenes NaC_{60} , NaC_{70} , and PaC_{60}

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Corrected Article: Thermal stability of the endohedral fullerenes N@C_{60} , N@C_{70} , and P@C_{60} [Phys. Rev. B 63, 045421 (2001)]

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Goedde, B.; Jakes, P.; Waiblinger, M.; Dinse, K.-P.; Weidinger A.

Chromatographic separation of $\text{N@C}_{60}/\text{C}_{60}$ and $\text{N@C}_{70}/\text{C}_{70}$ mixtures

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High Pressure Liquid Chromatographic Purification on C_{60} -Incar-Nitrogen, iNC_{60}

Fullerenes for the New Millennium, Vol. 11, edited by K. M. Kadish, P. V. Kamat, D. Guldi, (The Electrochemical Society, Pennington, 2001) 301-303

Goedde, B.; Waiblinger, M.; Dinse, K.-P.; Weidinger A.:

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Fullerenes for the New Millennium, Vol. 11, edited by K. M. Kadish, P. V. Kamat, D. Guldi, (The Electrochemical Society, Pennington, 2001) 304-312

Harneit, W.; Waiblinger, M.; Meyer, C.; Lips, K.; Weidinger, A.:

Concept for Quantum Computing with N@C_{60}

Fullerenes for the New Millennium, Vol. 11, edited by K. M. Kadish, P. V. Kamat, D. Guldi, (The Electrochemical Society, Pennington, 2001) 358-361

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Chem. Phys. Lett. 334 (2001) 12-17

Meyer, C.; Harneit, W.; Waiblinger, M.; Lips, K.; Weidinger, A.

Electron Spin Quantum Computing with N@C_{60}

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Knorr, S.; Grupp, A.; Mehring, M.; Waiblinger, M.; Weidinger A.

Frequency-Dependent Spin-Lattice Relaxation in $^{15}\text{N@C}_{60}$

AIP Conference Proceedings 591 (2001) 105-108

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in *Experimental Implementation of Quantum Computation (IQC'01)*, edited by Robert Clark, (Rinton Press, Princeton, 2001) 38-4

Department SE3

Technology

Reviewed Publications

Monolithically Integrated Test Modules

Álvarez-García, J.; Pérez-Rodríguez, A.; Romano-Rodríguez, A.; Calvo-Barrio, L.; Barcones, B.; Morante, J.R.; Siemer, K.; Luck, I.; Klenk, R.

Microstructural characterisation of CuInS_2 polycrystalline films sulphurised by rapid thermal processing (RTP)

Thin Solid Films 387, 219-221 (2001).

Hunger, R.; Pettenkofer, C.; Scheer, R.

Surface properties of (111), (001), and (110)-oriented epitaxial CuInS_2/Si films

Surf. Sci. 477, 76-93 (2001).

Klaer, J.; Siemer, K.; Luck, I.; Bräunig, D.

9.2% efficient CuInS_2 mini-module

Thin Solid Films 387, 169-171 (2001).

Luck, I.; Störkel, U.; Bohne, W.; Ennaoui, A.;

Schmidt, M.; Schock, H.W.; Bräunig, D.

Influence of buffer layer and TCO deposition on the bulk properties of chalcopyrites

Thin Solid Films 387, 100-103 (2001).

Siemer, K.; Klaer, J.; Luck, I.; Bruns, J.; Klenk, R.; Bräunig, D.

Efficient CuInS_2 solar cells from a rapid thermal process (RTP)

Sol. Energ. Mat. Sol. Cells 67, 159-166 (2001).

Siemer, K.; Klaer, J.; Luck, I.; Bräunig, D.

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Thin Solid Films 387, 222-224 (2001).

In-situ Process Control and Doping

Alvarez-Garcia, J.; Perez-Rodriguez, A.; Romano-

Rodriguez, A.; Morante, J.R.; Calvo-Barrio, L.;

Scheer, R.; Klenk, R.

Microstructure and secondary phases in coevaporated CuInS_2 films: Dependence on growth temperature and chemical composition

J. Vac. Sci. Technol. A 19, 232-239 (2001).

Álvarez-García, J.; Pérez-Rodríguez, A.; A. Romano-Rodríguez; Jawhari, T.; Morante, J.R.; Scheer, R.; Calvet, W.

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Gartsmann, K., Cahen, O., Scheer, R.

Electric field-induced junctions in epitaxial layers of CuInSe₂

Appl. Phys. Lett. 79, 2919 (2001).

Luck, I.; Kneisel, J.; Siemer, K.; Bruns, J.; Scheer, R.; Klenk, R.; Janke, N.; Bräunig, D.

Influence of Na on the properties of Cu-rich prepared CuInS₂ thin films and the performance of corresponding CuInS₂/CdS/ZnO solar cells

Sol. Energ. Mat. Sol. Cells 67, 151-158 (2001).

Scheer, R.; Luck, I.; Kanis, M.; Matsui, M.; Watanaabe, T.; Yamamoto, T.

Incorporation of the doping elements Sn, N, and P in CuInS₂ thin films prepared by co-evaporation

Thin Solid Films 392, 1-10 (2001)

Non-reviewed Publications

Monolithically Integrated Test Modules

Reiß, J.; Malmström, J.; Werner, A.; Hengel, I.; Klenk, R.; Lux-Steiner, M. Ch.:

Current Transport in CuInS₂ Solar Cells Depending on Absorber Preparation

Mat. Res. Soc. Symp. Proc. Vol. 668, H9.4.1

Reliability of thin film solar cells under particle radiation

Jasenek, A.; Boden, A.; Weinert, K.; Balboul, M.R.; Schock, H.W.; Rau, U.:

High-Energy Electron and Proton Irradiation of Cu(In,Ga)Se₂ Heterojunction Solar Cells

Mat. Res. Soc. Symp. Proc. Vol. 668, H3.2.1

In-situ Process Control and Doping

Chaparro, A.M.; Gutiérrez, M.T.; Herrero, J.; Klaer, J.:

Influence of chemical bath deposition parameters on the formation of CuInS₂ / Zn (Se,O) junctions for thin film solar cells

Mat. Res. Soc. Symp. Proc. Vol. 668, H2.9.1

Neisser, A.; Álvarez-García, J.; Calvo-Barrio, L.; Klenk, R.; Matthes, Th.W.; Luck, I.; Lux-Steiner, M. Ch.; Pérez-Rodríguez, A.; Morante; J.R.:

Cu(In,Ga)S₂ Phase Formation from Metallic Cu-In-Ga Precursor Stacks in Rapid Thermal Processes

Mat. Res. Soc. Symp. Proc. Vol. 668, H1.3.1

Neve, S.; Bohne, W.; Röhrig, J.; Scheer, R.:

ERDA analysis of ZnS_x(OH)_y thin films obtained by chemical bath deposition

Mat. Res. Soc. Symp. Proc. Vol. 668, H5.3.1

Pietzker, Ch.; Rudigier, E.; Klaer, J.; Luck, I.; Scheer, R.

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Laser Light Scattering *in-Situ* Studies on the Growth of Chalcopyrite Thin Films

Mat. Res. Soc. Symp. Proc. Vol. 668, H7.3.1

Department SE4

Dynamics of Interface Reactions

Reviewed Publications

Caruso, R.; Antonietti, M.; Giersig, M.; Hentze, H.-P.; Jia, J.:

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CHEM. MATER.,13 (2001) 1114

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In-situ control of InP(100) and GaP(100) interfaces and characterization with RDS at 20 K

J. Electronic Materials, 30 (2001) 1425

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Some structural studies on successive ionic layer adsorption and reaction (SILAR)- deposited CdS thin films

Applied Surface Science, 7188 (2001) 1

Mamedov, A. A.; Belov, A.; Giersig, M.; Mamedova, N. N.; Kotov, N. A.:

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J. Am. Chem. Soc., 123 (2001) 7738

Ramakrishna, S.; Willig, F.; May, V.:

Theory of ultrafast photo-induced heterogeneous electron transfer: Decay of vibrational coherence into a finite electronic-vibrational quasicontinuum

J. Chem. Phys., 115 (2001) 2743

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Visbeck, S.; Hannappel, T.; Zorn, M.; Zettler, J.-T.; Willig, F.:
Temperature Dependence and Origin of InP(100) Reflectance Anisotropy down to 20 K
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Experimental fingerprints of vibrational wavepacket motion during ultrafast heterogeneous electron transfer
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Präparation und Charakterisierung einer SnO₂-F/InP-Solarzelle
 Shaker Verlag, Aachen, 2001

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 Phys. Chem. Chem. Phys., 3 (2001) 2622

Caruso, F.; Spasova, M.; Susha, A.; Giersig, M.; Caruso, R.:
Magnetic Nanocomposite Particles and Hollow Spheres Constructed by a Sequential Layering Approach
 CHEMISTRY OF MATERIALS, 13 (2001) 109

Ershov B. G.; Gordeev A. V.; Janata E.; Kelm M.:
Radiation-chemical oxidation of bromide ions and formation of tribromide ions in weakly acidic aqueous solutions
 Mendeleev Commun., (2001) 149

Janata E.:
Early stages of clusters
 Res. Chem. Intermed. 27 (2001) 733

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In₂S₃ Nanocolloids with Excitonic Emission: In₂S₃ vs CdS Comparative Study of Optical and Structural Characteristics,
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A kinetic study of the mechanism of radiation induced agglomeration of ovalbumin in aqueous solution
 Radiat. Phys. Chem., 62 (2001) 325

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Ferromagnetic Resonance of Monodisperse Co Particles
 J. Vac. Sci. Technol. A, 19 (2001) 1773

Department SE5

Solar Energetics

Reviewed Publications

Solar Energetics

Aichberger, S. v.; Wünsch, F.; Kunst, M.:
Contactless characterization of a-Si:H films on crystalline silicon substrates
 Thin Solid Films, 403-404 (2002) 449-452

Aichberger, S. v.; Wünsch, F.; Kunst, M.:
Charge Carrier Transport In a-Si:H/c-Si Heterojunctions
 MRS Symp.Proc. 664 (2001) A24.1

Bauknecht, A.; Siebentritt, S.; Albert, J.; Tomm, Y.; Lux-Steiner, M. Ch.:
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 Proceedings of the International Conference on Ternary and Multinary Compounds Jpn. J. Appl. Phys. Vol. 39 (2001) Suppl. 39-1, 322-325

Ellmer, K.:
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 J. Phys. D: Appl. Phys., 34 (2001) 3097

Ellmer, K.; Mientus, R.; Weiß, V.; Rossner, H.:
Set Up for in situ X-Ray Diffraction Studies of Thin Film Growth by Magnetron
 Nucl. Instr. Meth. Phys. Res. A, 467-468 (2001) 1041-1044

Ellmer, K.; Mientus, R.; Rossner, H.:
In situ-Investigation by Energy Dispersive X-Ray Diffraction (EDXRD) of the Growth of Magnetron Sputtered ITO Films
 Surf. Coat. Technol., 142-144 (2001) 1094-1099

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Contacts to a Solar Cell with Extremely Thin CdTe Absorber
 Thin Solid Films, 387 (2001) 26-28

Fiechter, S.; Tomm, Y.; Diesner, K.; Weiss, T.:
Homogeneity Ranges, Defect Phases and Defect Formation Energies in A^IB^{III}C^{VI}₂ Chalcopyrites (A= Cu; B= Ga,In; C=S,Se)

Proceedings of the International Conference on Ternary and Multinary Compounds Jpn. J. Appl. Phys. Vol. 39 (2001) Suppl. 39-1, 123-126

García Villora, E.; Fiechter, S.; Klenk, R.; Lux-Steiner, M. Ch.:

Phase formation and growth mechanism of ternary and quaternary Cu(In,Ga)S₂ chalcopyrite layers

Proceedings of the International Conference on Ternary and Multinary Compounds, Jpn. J. Appl. Phys. Vol. 39 (2001) Suppl. 39-1, 171-172

Kunst, M.; Aichberger, S. v.; Thom, W.; Wünsch, F.:

The Determination of Optoelectronic Properties of Microcrystalline And Amorphous Silicon Films.

MRS Symp.Proc. 664 (2001) A23.2

Mientus, R.; Ellmer, K.:

Reactive Magnetron Sputtering of Tin Doped Indium Oxide (ITO): Influence of Argon Pressure and Plasma Excitation Mode

Surf. Coat. Techn., 142-144 (2001) 748-754

Tomm, Y.; Ko, J.M.; Yoshikawa, A.; Sugawara, T.; Fukuda, T.:

Crystal Growth and Characterization in the System (Ga_{1-x}In_x)₂O₃

Proceedings of the International Conference on Ternary and Multinary Compounds Jpn. J. Appl. Phys. Vol. 39 (2001) Suppl. 39-1, 48-49

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Influence of selenium on the catalytic properties of ruthenium-based cluster catalysts for oxygen reduction

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Electrolytic water splitting: Indications for the existence of protonic quantum interferences

Phys. Chem. Chem. Phys 3 (3) (2001) 301-305

Tributsch, H.; Hünemörder, M.:

Patterns of periodic infrared light emission from the human body: A new diagnostic tool

Medical Physics 28/11 (2001) 2352-2357

Tributsch, H.:

Regenerative Energienutzung: Solarenergie

Zeitschrift: Unterricht, Arbeit und Technik, "Bionik - Von der Natur lernen", Friedrich in Velber/Hannover und Klett, Heft 10 (2001) 62-64

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Function and Analytical Formula for Nanocrystalline Dye Sensitization Solar Cell

Appl. Phys. A 73 (2001) 305-316

Turrión, M.; Macht, B.; Tributsch, H.; Salvador, P.:

Potential Distribution and Photovoltage Origin in Nanostructured TiO₂ Sensitization Solar Cells:

An Interference Reflection Study

J. Phys. Chem. B. 105, (2001) 9732-9738

Surface Engineering

Jungblut, H.; Wille, D.; Lewerenz, H.J.:

Nano-oxidation of H-terminated p-Si(100): Influence of the humidity and surface properties of oxide islands

Appl. Phys. Lett. 78 (2001) 168

Störkel, U.; Aggour, M.; Murrell, C.P.; Lewerenz, H.J.:

Electrochemical treatment of CuInS₂

Thin Solid Films 387 (2001) 182

Non-reviewed Publications

Solar Energetics

Mientus, R.; Weiß, V.; Ellmer, K.:

In situ-Strain Analysis by EDXRD during Growth of Indium-Tin Oxide Films by Magnetron Sputtering

HASYLAB-Jahresbericht 2001, Hamburg

Tributsch, H.:

Direct versus indirect Bioleaching

Biohydrometallurgy and the Environment toward the Mining of the 21st Century
Proceedings of International Biohydrometallurgy Symposium IBS-99, Madrid, June 1999; Editors: R. Amils and A. Ballester; Elsevier, Hydrometallurgy 59 (2001) 177-185

Rojas-Chapana, J.; Tributsch, H.:
Biochemistry of Sulfur Extraction in Bio-corrosion of Pyrite by Thiobacillus ferro-oxidans

Biohydrometallurgy and the Environment toward the Mining of the 21st Century, Proceedings of International Biohydrometallurgy Symposium IBS-99, Madrid, June 1999; Editors: R. Amils and A. Ballester; Elsevier, Hydrometallurgy 59 (2001) 177-185

Department SE6

Electronic Structure of Semiconductor Interfaces

Reviewed Publications

A. Klein, S. Tiefenbacher, V. Eyert, C. Pettenkofer, and W. Jaegermann

Electronic band structure of single crystal and single layer WS₂: Influence of interlayer van der Waals interactions

Physical Review B 64, 205416, 1-14 (2001)

S. Tiefenbacher, C. Pettenkofer, and W. Jaegermann,

Ultrahigh vacuum preparation and characterization of TiO₂/CdTe interfaces: Electrical properties and implications for solar cells

J. Appl. Phys. 91, 1984 (2002).

R. Hunger, C. Pettenkofer, R. Scheer

Dipole formation and band alignment at the Si(111)/CuInS₂ heterojunction

J. Appl. Phys. 91, 1, 2002

H.J. Crawack, Y. Tomm, C. Pettenkofer

Localization and charge density wave transformation in Cs intercalated 1T-TaSe₂

Surf. Sci. 465, 301, 2000

H.J. Crawack, C. Pettenkofer

Calculation and XPS measurement of the Ta 4f CDW splitting in Cu, Cs and Li intercalation phases of 1T-TaX₂ (X=S, Se)

Solid State Comm. 118, 325, 2001

R. Hunger, C. Pettenkofer, R. Scheer

Surface properties of (111), (001), and (110)-oriented epitaxial CuInS₂/Si films

Surface Science 477 76, 2001

Saltas, V.; Papageorgopoulos, C.A.; Papageorgopoulos, D.C.; Tonti, D.; Pettenkofer, C.; Jaegermann, W.:

Synchrotron radiation studies of transition metal selenide thin-films formation on Ti, Mo and Cu substrates: in and out diffusion of Li

Thin Solid Films, 389 (2001) 307-314

Subdivision HAD

Information Technology

Reviewed Publications

Central Data-Processing & Networks

Behrends, E., Mädler, F.:

Transformations into Optimal Parallelism in Euclidean Spaces (or: How to Explain the Shape of the Electron-Density Distribution Inside a Crystal).

J. Linear Algebra and its Applications 337 (Nov. 2001), S. 139-156

Non-reviewed Publications

Measurement Systems & Hardware

Becker, H., Vulinovic, S.:

CAE/CAD Tools for Electronic Design.

Proc. 12th IEEE Int. Congress on Realtime for Nuclear and Plasma Sciences, Valencia, Spanien, 04.-08.06.2001, S. IX

Becker, H.:

Finite State Machines (FSM) und ihre Beschreibung in VHDL.

Proc. Herbsttagung der Studiengruppe für Elektronische Instrumentierung, HMI-B 583 (Nov. 2001), S. 35-52

Vulinovic, S.:

Unterstützung des Hardwareentwicklers durch RENOIR.

Proc. Herbsttagung der Studiengruppe für Elektronische Instrumentierung, HMI-B 583 (Nov. 2001), S. 53-65

Experimental Systems

Henschel, H., Körfer, M., Wulf, F.:

Fibre Optical Radiation Sensing System for TESLA.

Proc. 5th European Workshop on Diagnostics and Beam Instrumentation (DIPAC 2001), Grenoble, Frankreich, 13.-15.5.2001, S. 73-75

Henschel, H., Körfer, M., Wulf, F.:

Fiber Optic Radiation Sensing Systems for TESLA.

TESLA Report Nr. 2000-26, S. 1-20

Rossa, L.:

Einsatz von CORBA für die Experimentsteuerung.

Proc. Frühjahrstagung der Studiengruppe für Elektronische Instrumentierung, HMI-B 580 (Mai 2001), S. 55-61

Wulf, F.:

Herausgeber der Tagungsberichte der Studiengruppe für Elektronische Instrumentierung.

HMI-B 580 (Mai 2001), S. 1-140, und HMI-B 583 (Nov. 2001), S. 1-144, ISSN 1438-496

Conference Contributions / Invited Lectures

Department SF1

Instruments and Methods**Invited Conference Contributions**BENSC-Activities*Pappas, C.***Introduction to NSE spectroscopy**

International Workshop on New Opportunities in Single Crystal Spectroscopy with Neutrons, Révfülöp, Hungary, 19-22.4.2001

*Pappas, C.***Polarised Neutrons in Spectroscopy and Diffraction**

Workshop on dynamics, excitations and magnetism, ANSTO, Menai, Australia, 27-28.8.2001

*Pappas, C.; Mezei, F.; Ehlers, G.; Campbell, I.A.***Relaxation dans les verres de spin**

Journées de la Diffusion Neutronique JDN10, Trégastel, France, 16-18.5.2001

*Strobl, M.; Hilger, A.; Treimer, W.***Slit effects at dynamical diffraction**

PECNO Meeting Grenoble 1. -4. April 2001 (V)

*Strobl, M., Treimer, W., Hilger, A., Wagh, A.***Messungen von Neutronenvielfachreflexionen**

Seminar für Neutronen- und Festkörperphysik, Atominstitut Wien, 29. 6.2001

*Treimer, W., Strobl, M.***Doppelkristalldiffraktometrie und Tomographie**

Anwender - Workshop zur Nutzung der Neutronenradiographie, Paul Scherrer Institut, Villigen (CH) 14. 5. 2001 (V)

*Treimer, W., Strobl, M., Hilger, A., Seifert, C.***Refraction tomography**

Cost – Session Munich , Sept. 2001

*Treimer, W., Strobl, M., Hilger, A., Seifert, C.***Tomography with cold neutrons**

PECNO meeting Vienna, Dez. 6-8 2001

*Wagh, A. G. Rakhecha, V., C. Treimer, W.***First realization of Bonse-Hart angular profiles for multiple Bragg reflections**

Int. Conf. on Neutron Scattering, 9. -13. Sept. München 2001 (V)

Spallation*Fritzsche, H.; Lieutenant, K.***Moderator requirements for reflectometry at a pulsed neutron source.**

Workshop on Moderator concepts and optimization for spallation neutron sources, HMI Berlin, March 13, 2001

*Fritzsche, H.; Lieutenant, K.***MC simulations of reflectometers at reactor and spallation sources.**

7th ESS General Meeting, Seggau, Austria, September 26-29, 2001

*Gutberlet, T.***Simulations of SANS instruments for ESS**

Workshop on VITESS 2.0 and other Packages for Simulations of Neutron Scattering, HMI, Berlin, June 25-27 2001

*Lechner R.E.:***QENS TOF-spectrometers at continuous and pulsed sources**ESS General Meeting, 27th-29th Sept. 2001, Seggau, Austria*Lieutenant, K.***VITESS – Status March 2001**

Software for Computer Aided Neutron Scattering, EU RTD network 2000-2002, general meeting. May 20-21, 2001, PSI, Switzerland

*Lieutenant, K.***Introduction to VITESS**

Workshop on VITESS 2.0 and other Packages for Simulations of Neutron Scattering, 25-27 June 2001, Berlin, Germany

*Lieutenant, K., Zsigmond, G., and Fromme, M.***New Features in VITESS 2.1**

Software for Computer Aided Neutron Scattering, EU RTD network 2000-2002, general meeting. October 11-12, 2001, Dobogókő, Hungary

*Mezei, F.***Multiplexing Techniques for Pulsed Neutron Sources**

ICNS, September 9 –13 2001, München, D

*Mezei, F.***ESS Instrumentation studies**

7th ESS General Meeting, Seggau, Austria, September 26-29, 2001

*Mezei, F.***Instrumentation Development**

LANSCE User Meeting, Los Alamos, USA, August 2001

*Mezei, F.***ESS Activities at HMI**

ESS Wissenschaftsrat-Audit, FZ Jülich 10-11 December 2001

*Mezei, F.***Overview of the results of the instrument groups: Performance of key instruments at the different target stations of ESS**

Workshop on Scientific Trends in Condensed Matter Research and Instrumentation Opportunities at ESS Engelberg, Switzerland, 3-5 May 2001

*Mezei, F.***Instrumentation issues, established techniques, need for innovation, technical risks,**

ESS-SAC/ENSA Workshop on "Scientific Trends in Condensed Matter Research and Instrumentation Opportunities at ESS", Jülich, D, 2001

Mezei, F.

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Collective Dynamics and Diffusion

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Jauch, W.

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Lechner R.E.:

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Lechner R.E.:

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Mezei, F.

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Mezei, F. Russina, M.

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Oral Conference Contributions

BENSC-Activities

Krist, Th.

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Die Produktion leichter Teilchen in Spallationsreaktionen an COSY

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 XIII Colloque Ganil, Belgodere, Corse, September 17-22, 2001

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Poster Contributions

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Large angle neutron polarisation analyzer

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Krist, Th. Rupp, A.; Russina, R. and Mezei, F.

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W. Treimer, M. Strobl, A. Hilger

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Water Dynamics in Dilute Aqueous Solutions of Small Dipolar Solutes by Quasi-Elastic Neutron Scattering
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Off-specular polarized neutron reflectometry from a periodic array of Co-disks.

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Determination of the temperature dependence of the coercivity in Fe/Cr(110) multilayers.

International Conference on Neutron Scattering, München, September 9-13, 2001

Howse, J.; Uredat, S.; Steitz, R.; Findenegg, G.H.*

Surfactant adsorption to thin polymer-coatings as studied by neutron reflectometry

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Large angle neutron polarisation analyser

International Conference on Neutron Scattering, München, September 9-13, 2001

Lechner, R.E.; Hauß, T.:

Hydration water and biological membranes

ESS-WR-Audit, FZ Jülich, 10th December 2001

Lechner, R.E.; C., Pappas:

Material transport phenomena

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Temperature dependence of the dynamic scattering function in glycerol studied by quasi-elastic slow neutron scattering

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Temperature dependence of the dynamic scattering function in glycerol studied by quasi-elastic slow neutron scattering

International Conference on Neutron Scattering (ICNS) 2001, München, September 9-13, 2001

Pappas, C.; Mezei, F.; Ehlers, G.; Campbell, I.A.

Dynamic scaling in spin glasses : neutron spin echo results and theory

Fourth International Discussion Meeting on Relaxations in Complex Systems, Heraklion, Greece, 18-26.6.2001

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Russina, O.; Russina, M.; Mezei, F.; Lechner, R.E.;

Pieper, J.; Desmedt, A. :

Dynamic Correlations around the Glass Transition in Systems with Different Degrees of Fragility

International Conference on Neutron Scattering (ICNS) 2001, München, September 9-13, 2001

Invited Lectures

BENSC-Activities

Fritzsche, H.; Temst, K.; Van Bael, M. J.; Mangin, S.

Polarized neutron reflectometry from magnetic layers, multilayers and periodically structured samples.

Seminar of the Laboratoire de physique des matériaux, Université Henri Poincaré, Nancy, France, June 27, 2001

Krist, Th.

Development of Neutron Optical Elements

Seminarvortrag Argonne National Laboratories, Argonne, USA, 24.07.2001

Krist, Th.

Neutron Optical Elements made at HMI

Seminarvortrag Los Alamos National Laboratories, Los Alamos, USA, 26. 7. 2001

Krist, Th.

Solid State Neutron Polarisers and Collimators

International Symposium on Optical Science and Technology (SPIE), Neutron and Hard X-Ray Optics and Applications, San Diego, USA, 2. 8. 2001

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Solid State Neutron Optical Elements

7th ESS General Meeting, Seggau, A, 26.-29. 9. 01

Collective Dynamics and Diffusion*Jauch, W.***High quality structure factors: benefits from the use of gamma radiation**

Centre for Crystallographic Studies, University of Copenhagen, Denmark, June 18, 2001

*Lechner R.E.:***Mechanismus der Protonenleitung: Elementare Sprungprozesse und intrakristalline Reaktionsgleichgewichte in festen Protonenleitern**

Kolloquium, Universität Kiel, 17. 5. 2001, (invited lecture)

*Pappas, C.***Dynamic scaling in spin glasses**

Monash University, Melbourne, Australia, 24.8.2001

Department SF2

Magnetism**Invited Conference Contributions**Bulk Magnetism*Prokeš, K.;***Neutron Scattering on Magnetic Materials under Extreme Conditions**11th Czech and Slovak Conference on Magnetism CSMAG'01, Košice, 22.08.2001*Prokeš, K.:***Magnetic Neutron Scattering Under Extreme Conditions**

Deutsche Neutronenstreutagung 2001, Jülich, 28.02.2001

Magnetism in Thin Films*Ehlers, G.; Casalta, H.; Lechner, R.; Maletta, H.*
Dynamics of frustrated magnetic moments in TbNiAl

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*Holub-Krappe, E.***Polarisation Dependent XAS Measurements on Thin Films**

Workshop on Extended X-Ray Absorption Fine Structure Analysis, Warsaw, Poland, Oct. 22 – 24, 2001

BENSC-Activities*Davies, S.M.A.; Hauß, T.:***Regulation of intracellular proteins by membrane binding: don't forget the lipids!**

Membrane Biology Group, Department of Biomedical Sciences, University of Edinburgh, Edinburgh, U.K. August 29, 2001

*Willumeit R.; Förster, F.; Funari, S.; Hauß, T.; Hubo, S., Kruse, M.; Andrä, J.:***The Interaction of the synthetic Peptide NK2 with Modell Membranes**

International Conference on Neutron Scattering, Munich, Germany, September 9 - 13 2001

Oral Conference ContributionsBulk Magnetism*Feyerherm, R.; Meißner, M.; Ishida, T.:***Magnetic-Field Induced Gap and Staggered Susceptibility in the S = 1/2 Chain****[PMCu(NO₃)₂(H₂O)₂]_n (PM = pyrimidine)**

Frühjahrstagung des Arbeitskreises Festkörperphysik der DPG, Hamburg, 26.-30. März 2001

*Feyerherm, R.; Loose, A.; Mathonière, C.; Kahn, O.; Ishida, T.:***Magnetische Ordnung molekularer Übergangsmetallkomplexe**

Frühjahrstagung des Arbeitskreises Festkörperphysik der DPG, Hamburg, 26.-30. März 2001

*Javorský, P.; Prokeš, K.; Andreev, A. V.; Sechovsky, V.; Diviš, M.; Shiokawa, Y.:***Magnetism in UPtAl**31^{èmes} Journées des Actinides, Saint-Malo, 27.04.2001*Pirogov, A.; Park, J.; Jo, Y.; Park, J. -G.; Prokeš, K.; Welzel, S.; Lee, C.H.; Kudrevatykh, N.; Valiev, E.; Kazantsev, V.; Sheptyakov, D.:***Magnetization and magnetic anisotropy of Tm- and Fe-subsystems in Tm₂Fe₁₇**

Euro-Asian Symposium: Trends in Magnetism, Ekaterinburg, 1.3.2001 talk

*Prokeš, K.; Javorský, Sechovsky, V.; P.; Gukasov, A.; Brück, E.:***Stability of the antiferromagnetic structure of UNiAl in magnetic fields**31^{èmes} Journées des Actinides, Saint-Malo, 27.04.2001*Prokeš, K.; et al.:***Neutron Scattering Experiments in Magnetic Fields at HMI**

International Workshop on The Present Status of High Magnetic Field Technology and the Prospects for Applications to Neutron Scattering Experiments, HMI Berlin, 29.05.2001

*Rogl P.; Gukasov A.; Matas S.; Mihalik M.; Czopnik A.; Troc R.; Tran V.H.; Menovsky A.A***Magnetic order in U₃Al₂Si₃ compounds**

11th Czech and Slovak Conference on Magnetism, 20-23. Aug. 2001 Kosice, Slovakia

*S. Schöttl, K. Siemensmeyer, V. Boiko, I. Bat'ko, E. Dwight-Adams, T.E. Sherline***Neutronenstreuexperiment an festen ³He**

Deutsche Physikalische Gesellschaft, 26.-30. März, 2001 in Hamburg

Schöttl, S

New Development of the Cryostat,

3rd meeting of the ³He Neutron study group,
27.-28.04.2001, Grenoble

Schöttl, S

State of the HMI experiment – the cryogenic part

First Summer School of EU-RTN Project „Neutron
Scattering from Solid ³Helium“, 27. – 31.08.2001,
Frauenchiemsee

Sechovsky, V.; Prokeš, K.; Honda, F.; Khmelevski,
S.; Ouladdiaf, B.; Kulda, J.:

Pressure-induced magnetic structures in UNiGa

International Conference on Neutron Scattering,
Munich 11.09.2001

Sechovsky, V.; Andreev, A. V.; Syshchenko, O.;
Prokeš, K.; Bartachevich, M.I.; Goto, T.:

**On the threshold of long-range magnetic order:
UNi_{2/3}Rh_{1/3}Al and UCoAl study**

11th Czech and Slovak Conference on Magnetism
CSMAG'01, Košice, 22.08.2001

Stüßler, N.; Hoser, A.; Schotte, U.; Meschke, M.;
Meißner, M.:

**Neutron Diffraction of Fluctuation Induced Mag-
netic Phases of CsCuCl₃ in Fields up to 17 Tesla**

20th European Crystallographic Meeting, Krakow,
August 25-31, 2001

BENSC-Activities

Gorzel, A.; Habicht, K.; Hutanu, V.; Klenke, J.;
Rupp, A.; Wiedenmann, A.

**Development and tests of ³He neutron spin fil-
ters and construction of a filling station**

9th International Workshop on Polarized Sources
and Targets, Nashville, IN, USA, 30.09.-04.10.2001

Hauß, T.; Dante, S.; Dencher, N.A.:

**Does Alzheimer's b-amyloid act inside the cell
membrane? A neutron diffraction study**

4th Workshop on Functional Materials, Geestacht,
4 – 5 April 2001

Schneider, R.

**Investigation of Diffuse Scattering Contributions
arising from Magnetic and Structural Disorder
by Meanfield-like Theories**

Europ. Cryst. Meeting ECM20 , Krakau / Polen, 25.-
31. August 2001

Schneider, R.

**Investigation of the Formation of the Bi-2223
Phase in Multifilamentary Bi-2223/Ag Tapes by
in situ High Temperature Neutron Diffraction**

Deutsche Neutronenstreutagung, Jülich, Februar
2001

Poster Contributions

Bulk Magnetism

Batko I.; Flachbart K.; Kohout A.; Matas S.;
Meschke M.; Siemensmeyer K.; Schitsevalova N. ;
Paderno Y.:

**Magnetic order in the fcc-symmetry: Phase
diagram and structure of ReB12**

ICNS -International Conference on Neutron
Scattering, 9-13. Sep. 2001, München,Germany,
poster

Bonn, S.; Fritzsche, H.; Hauschild, J.; Maletta, H.:

**Spindichtewellen dünner Cr(110)-Schichten in
intermetallischen Vielschichtsystemen**

Deutsche Neutronenstreutagung, Jülich,
Feb. 19 – 21, 2001

Bonn, S.; Fritzsche, H.; Hauschild, J.; Klenke, J.;
Maletta, H.:

**Spin density waves of thin epitaxial Cr(110) lay-
ers in a V/Cr multiplayer**

Intern. Conference on Neutron Scattering, ICNS'01,
München, Sept 9 – 13, 2001

V. Boiko, I. Batko, S. Schöttl, K. Siemensmeyer, E.
Dwight-Adams, T.E. Sherline

Neutronenstreuung an festen ³He

Deutsche Neutronentagung, 19-21 Februar 2001,
Jülich and Aachen

Boyko, K. Siemensmeyer, S. Schöttl, I. Batko, S.
Matas, E. Dwight-Adams, T.E. Sherline

Heat exchanger from Pt and Pt/Ag powder

International Symposium on Quantum Fluids and
Solids. July 22-27 2001, Konstanz

Chatterji, T.; Schneider, R.P.; Hoffmann, J.-U.;
Hohlwein, D.; Suryanarayanan, R.; Dhalenne, G.;
Revscolevschi, A.:

Diffuse magnetic scattering in quasi-2D

La_{1.2}Sr_{1.8}Mn₂O₇

International Conference on Neutron Scattering,
München, September 9-13, 2001

Danilkin, S.; Delafosse, D.; Fuess, H.; Gavriljuk, V.;
Ivanov, A.; Magnin, T.; Wipf, H.:

Hydrogen vibrations in austenitic stainless steel

International Conference on Neutron Scattering,
München, September 9-13, 2001

Ehlers, G.; Ritter, C.; Schneider, R.; Knorr, K.; Ma-
letta, H.

**Pressure-induced change of magnetic order in
Tb_{1-x}Y_xNiAl and TbNi_{1-x}Cu_xAl**

Intern. Conference on Neutron Scattering, ICNS'01,
München, Sept 9 – 13, 2001

Feyerherm, R.; Welzel, S.; Sutter, J. P.; Kahn, O.:

**Magnetische Ordnung in der organischen Ver-
bindung 4,5-dimethyl-1,2,4-triazol-nitronyl-
nitroxid**

Frühjahrstagung des Arbeitskreises Festkörper-
physik der DPG, Hamburg, 26.-30. März 2001

Feyerherm, R.; Loose, A.; Ishida, T.; Nogami, T.; Mathonière, C.; Kahn, O.:
Single crystal studies of the 1-D systems $\text{PMCu}(\text{NO}_3)_2(\text{H}_2\text{O})_2$ and $\text{MnNi}(\text{NO}_2)_4(\text{en})$
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Crystal and magnetic structure of the two-dimensional coordination polymers $\text{CoCl}_2(\text{bpy-d8})$ and $\text{NiCl}_2(\text{bpy-d8})$ ($\text{bpy-d8} = 4,4'$ -bipyridine-d8)
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Geissler, J.; Goering, E.; Weigand, F.; Justen, M.; Schütz, G.; Langer, J.; Schmitz, D.; Maletta, H.; Mattheis, R.
X-ray resonant magnetic reflectometry as a powerful tool for element specific magnetization depth profiling
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J. Hauschild, H. Fritsche, S. Bonn, Y. Liu, J. Klenke, K. Prokes
Determination of the Temperature Dependence of the Coercivity in Fe/Cr(110)-Multilayers
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Hoffmann, J.-U.; Hohlwein, D.; Schneider, R.; Modden, A.H.:
Kurzreichweitige magnetische Ordnung $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ ($x=0, 0.1$ und 0.15)
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Magnetic short-range order in $\text{La}_{0.9}\text{Sr}_{0.1}\text{MnO}_3$
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Phonon dispersion in nitrogen doped austenitic steels
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Phonon dispersion in austenitic stainless steel Fe-18Cr-12Ni-2Mo
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Hoser, A.; Stüßler, N.; Schotte, U.; Meschke, M.; Meißner, M.:
Incommensurate-commensurate phase transition in the frustrated antiferromagnet CsCuCl_3
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Loose, A.; Feyerherm, R.; Ishida, T.; Nogami, T.; Lawandy, M. A.; Li, J.
Crystal and magnetic structures of FePM_2Cl_2 , $\text{Co}(\text{ox})(\text{bpy})$ and $\text{MCl}_2(\text{bpy})$, $\text{M} = \text{Co}, \text{Ni}$, determined by neutron powder diffraction
 Mid-Term Conference on the European Science Foundation Programme 'Molecular Magnets', 10. – 15.03.2001, Davos, Switzerland

Maletta, H.; Rehm, Ch.; Klose, F.; Fieber-Erdmann, M.; Holub-Krappe, E.
Anomalous effects of hydrogen absorption in Nb films
 4th Intern. Symposium on Metallic Multilayers, MML'01, Aachen, June 24 – 29, 2001

Matas S.; Adams E.D.; Batko. I.; Boyko V.; Raasch S.; Siemensmeyer K.; Schöttl S.; Sherline T.E.:
Neutron scattering experiment on solid ^3He
 11th Czech and Slovak Conference on Magnetism, 20-23. Aug. 2001 Kosice, Slovakia

Matas S.; Mihalik M.; Reiffers M.; Kacmarcikova E.; Prokes K.:
Elastic neutron study of DyNi_5 single crystal
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Instrument for a neutron scattering experiment on solid ^3He
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Mihalik M.; Matas S.; Zentkova M.; Arnold Z.; Mikulina O.; Rogl P.:
Investigation of the magnetic phase transition in $\text{U}_3\text{Al}_2\text{Si}_3$
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Nakotte, H.; Chang, S.; Klaasse, J.C.P.; Brück, E.; de Boer, F.R.; Prokeš, K.; Mihalik, M.:
High fields magnetization in single-crystalline UlrGe
 Physical Phenomena at high magnetic fields – IV, Santa Fe, 20.10.2001

Pirogov, A.; Park, J.; Park, J. -G.; Lee, C.H.; Prokeš, K.; Valiev, E.; Kudrevatykh, N.; Sheptyakov, D.:
Neutron diffraction investigation of the spin-reorientation transition in $\text{Tm}_2\text{Fe}_{17}$
 International Conference on Neutron Scattering, Munich 10.9.2001

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Field-induced magnetic structures in UNiGe
 31^{èmes} Journées des Actinides, Saint-Malo, 27.04.2001

Prokeš, K.; Smeibidl, P.; Meissner, M.:
Neutron scattering in magnetic fields up to 17 T
 Physical Phenomena at high magnetic fields – IV, Santa Fe, 22.10.2001

Schneider, R.; Hoffmann, J.-U.; Hohlwein D.:
TVueb – Visualisierung und Auswertung zwei-dimensionaler Diffraktionsdaten – Analyse diffuser Streuintensitäten
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Magnetic diffuse scattering in Tb
 International Conference on Neutron Scattering, München, September 9-13, 2001

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Neutron Scattering Experiment on Solid ^3He ,
 International Conference on Neutron Scattering 2001, 09. – 13.09.2001, München

Schöttl, S.; Siemensmeyer, K.; Boyko, V.; Bat'ko, I.; Mataš, S.; Adams, E.D.; Sherline, T.E.
Neutronenstreuexperiment an festem ^3He
 Frühjahrstagung der Deutschen Physikalischen Gesellschaft, 23. – 31.03.2001, Hamburg

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Neutronenstreuexperiment an festem ^3He
 Deutsche Neutronenstreutagung 2001, 19.–21.02.2001, Jülich

Siemensmeyer, K.; Adams, E.D.; Bat'ko, I.; Boyko, V.; Mataš, S.; Schöttl, S.; Sherline, T.E.
Neutron Scattering Experiment on Solid ^3He ,
 International Symposium on Quantum Fluids and Solids 2001, 22. – 27.07.2001, Konstanz

Stüßler, N.; Hofmann, M.:
A neutron diffractometer with an adjustable in-pile fan collimator for focusing in reciprocal and real space
 International Conference on Neutron Scattering, München, September 9-13, 2001

Stüßler, N.; Hofmann, M.:
Impulsraumfokussierung durch Verwendung eines in-pile Fächerkollimators in Verbindung mit einem horizontal gekrümmten Monochromator
 Deutsche Neutronenstreutagung 2001, Jülich und Aachen, Februar 19-21, 2001

Syshchenko, O.; Sechovsky, V.; Prokeš, K.; Hofmann, M.:
Magnetic structures of $\text{Er}_6\text{Ni}_2\text{Sn}$
 International Conference on Neutron Scattering, Munich 11.09.2001

Tomuta, D. G.; Nieuwenhuys, G. J.; Feyerherm, R.; Mydosh, J. A.:
Magnetic alignment of the RE sublattice in ReMnO_3
 Int. Conf. on Neutron Scattering, ICNS 2001, München, 9.-13. Sept. 2001

Magnetism in Thin Films

Gierlings, M; Prandolini, M.J.; Fritzsche, H.; Gruyters, M.; Riegel, D.:

The magnetization reversal process in a $[\text{Co}/\text{CoO}/\text{Au}]_{20}$ exchange bias multilayer above T_N studied with polarized neutron reflectometry (PNR)

International Conference on Neutron Scattering (ICNS), München, 9.-13. Sept. 2001

Gierlings, M; Prandolini, M.J.; Gruyters, M.; Riegel, D.; Brewer W.D.:

On the possibility of detecting asymmetric magnetization reversal processes in exchange bias systems using low temperature nuclear orientation

Symposium on Metallic Multilayers (MML), Aachen, 24.6-29.6.2001

Kirsch, R.; Beutler, O.; Funk, T.; Gierlings, M; Gruyters, M.; Brewer W.; Prandolini, M.J.; Riegel, D.:

Magnetic coupling of dilute Fe probe atoms to V neighbors in AuV alloys studied by TDPAD

XII Int. Conf. On Hyperfine Interactions, Park City, UT/USA, 13. –17.08.2001

BENSC-Activities

Baglioni, P.; Berti, D.; Dante, S., Franti, E.; Hauß, T.:

A structural study of lamellar phases formed by nucleoside functionalized lipids

International Conference on Neutron Scattering, Munich, Germany, September 9 - 13 2001

Charalambopoulou, G.; Steriotis, T.; Hauß, T.; Stefanopoulos, S.; Stubos, A.:

A neutron diffraction study of hydration effects on Stratum Corneum

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Davies, S.M.A.; Harroun, T.H.; Darkes, M.J.M.; Hauss, T.; Cornell, R.B.; Bradshaw, J.P.:

A neutron study of lipid sensing by the membrane binding domain of phosphocholine cytidyltransferase.

673rd Meeting of the British Biochemical Society, Bristol, U.K., April 10 - 12 2001

P.P. Deen, J.P. Goff, A.M. Toader, J. Klenke, F. Yakhou, R.C.C. Ward, M.R. Wells;

Long-range magnetic order in intermediate-valence Ce-Lu alloys

International Conference on Neutron Scattering (ICNS '01), München, 9-13 September 2001

T. Fahr, R. Schneider, H.P. Trinks, C. Fischer
Investigation of the Formation of the Bi-2223 Phase in Multifilamentary Bi-2223/Ag Tapes by in situ High Temperature Neutron Diffraction
 Deutsche Neutronenstreutagung, Jülich, Februar 2001

Gorzel, A.; Klenke, J.; Wiedenmann, A.; Rupp, A.
Development of ^3He neutron spin filter cells at the HMI

International Conference on Neutron Scattering, München, 09.–13.09.2001

Gorzel, A.; Klenke, J.; Rupp, A.
Entwicklung von ^3He -Neutronenspinfilterzellen am HMI

Frühjahrstagung des Arbeitskreises Festkörperphysik bei der DPG, Hamburg, 26.–30.03.2001

Hauß, T.; Dante, S.; Dencher, N.A.:
Interaction of Alzheimer's b-amyloid with anionic and zwitterionic lipid membranes.

International Conference on Neutron Scattering, Munich, Germany, September 9 - 13 2001

Hauß, T.; Dante, S.; Dencher, N.A.:
Localization of Alzheimer's b-amyloid in charged and uncharged lipid membranes. A neutron diffraction study.

4th International Conference on Biological Physics, Kyoto, Japan, July 30 – August 3, 2001

Hauß, T.; Dante, S.; Dencher, N.A.:
Interaction of b-amyloid with lipid membranes studied by neutron diffraction

Deutsche Neutronenstreutagung, Jülich, Germany, February 19 – 21 2001

J.-U. Hoffmann, D. Hohlwein, R. Schneider, A.H. Moudden
Kurzreichweitige magnetische Ordnung in $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$

Deutsche Neutronenstreutagung, Jülich, Februar 2001

M. Kenzelmann, R. Coldea, D. A. Tennant, D. Visser, M. Hoffmann, P. Smeibidl, Z. Tylczynski
Field Dependence of Magnetic Ordering in the frustrated XY Magnet Cs_2CoCl_4

International Conference on Neutron Scattering, Munich, 9 – 13 Sept. 2001

Kiselev, M.A.; Gutberlet, T.; Kisselev, A.M.; Lombardo, D.; Janich, M.; Hauß, T.; Ollivon, M.; Lesieur, P.:

Study of glass transition in DPPC/DMSO/water system at low temperatures

International Conference on Neutron Scattering, Munich, Germany, September 9 - 13 2001

M. Meissner, P. Smeibidl
Sample Environment Equipment at BENSCH for Magnetic Fields up to 17 Tesla and Temperatures from 300 to 0.03 Kelvin

International Conference on Neutron Scattering, Munich, 9 – 13 Sept. 2001

O.A. Petrenko, G. Balakrishnan, D. McK Paul, M. Yethiraj, J. Klenke
Field induced transitions in the highly frustrated magnet Gadolinium Gallium Garnet - long or short range order?

International Conference on Neutron Scattering (ICNS 01), München, 9-13 September 2001

R. Schneider, T. Chatterji, J.-U. Hoffmann, D. Hohlwein

RKKY-like Interactions in the Paramagnetic Phase of Holmium

Deutsche Neutronenstreutagung, Jülich, Februar 2001

R. Schneider, J.-U. Hoffmann, D. Hohlwein
TVtueb - Visualisierung und Auswertung zweidimensionaler Diffraktionsdaten - Analyse diffuser Streuintensitäten

Deutsche Neutronenstreutagung, Jülich, Februar 2001

H. Stanzick, J. Banhart, L. Helfen, T. Baumbach, J. Klenke

Metal foam evolution studied by X-ray and neutron radioscopy

2nd International Conference on Cellular Metals and Metal Foaming Technology (MetFoam2001), Bremen, 18.-20 Juni 2001

H. Stanzick, J. Banhart, J. Klenke, S. Danilkin, D.
Metal foam evolution and decay studied by neutron radioscopy,

International Conference on Neutron Scattering, München, 9-13 September 2001

M. Tovar, D. Többens, C. Welker
Jahn-Teller oxide spinels investigated by neutron powder diffraction

International Conference on Neutron Scattering, München, 09.-13.09.2001

M. Tovar, D. Többens
Low temperature structural properties of CuCr_2O_4 investigated by neutron powder diffraction

Deutsche Gesellschaft für Kristallographie, Jahrestagung in Bayreuth, 12.-15.03.2001

D. Többens, M. Tovar
Asymmetry and peak width at the axially focusing E9 powder diffractometer – theoretical and experimental description

International Conference on Neutron Scattering, München, 09.-13.09.2001

D. Többens, M. Tovar
Erste Experimente mit dem neuen vertikal fokussierenden Monochromator am E9

Deutsche Gesellschaft für Kristallographie, Jahrestagung in Bayreuth, 12.-15.03.2001

BESSY-Activities

Englisch, U.; Rossner, H.; Maletta, H., Bahrndt, J.; Sasaki, S.; Senf, F.; Sawhney, K.J.S.; Gudat, W.
The elliptical undulator UE46 and its monochromator beamline for structural research on magnetic nanomagnets at BESSY-II

7th Int. Conf. Synchrotron Radiation Instrumentation, Berlin, Aug. 2000

Invited Lectures

Bulk Magnetism

Bickulova, N.; Danilkin, S.; Fuess, H.; Semenov, V.; Skomorokhov, A.; Wieder, T.; Yadowski, E.; Yagofarova, Z.:

Lattice dynamics and phase transitions in superionic conductor Cu_{2-x}Se

Second German-Russian User-Meeting "Condensed Matter Physics with Neutrons", Dubna, April 21-24, 2001

Danilkin, S.; Fuess, H.; Hölzel, M.; Wieder, T.; Hoser, A.; Noeva-Baeva, M.; Beskrovni, A.; Jadrovski, E.:

Investigations of the lattice dynamics of transition metals and alloys with spectrometer DIN-2PI

Second German-Russian User-Meeting "Condensed Matter Physics with Neutrons", Dubna, April 21-24, 2001

Feyerherm, R.:

Magnetismus in molekularen Materialien

Seminar an der TU Braunschweig, 18. 05. 2001

Schöttl, S; Meißner, M.; Günther, D.

Specific Heat of Heavy Fermion Systems, exemplified with UPT₃,

Physikalisch-Technische Bundesanstalt, Berlin, November 2001

Magnetism in Thin Films

Gierlings, M:

About spin polarization at Co/Au and CoO/Au interfaces studied with low temperature nuclear orientation

Universität Konstanz, Januar 2001

Gierlings, M:

Asymmetry in der Ummagnetisierung in Exchange Bias Systemen

Seminar der AG Brewer, FU Berlin, 20. 6. 2001

Gierlings, M:

Diffuse n-Streuung an Co/CoO/Au-Exchange-Bias Multilagen

Seminar „Magnetismus in Metallen und Schichten“, Freie Universität Berlin, 07.02.2001

Gruyters, M.:

Exchange Bias über nicht-magnetische Zwischenschichten

Seminar „Magnetismus in Metallen und Schichten“, Freie Universität Berlin, 24.1.2001

Kirsch, R.; Riegel, D.:

Magnetische Wechselwirkungen in Legierungen, Spinkopplungen

Seminar der AG Brewer, FU Berlin, 20. 6. 2001

BENSC-Activities

Graf, H.A.:

Messmöglichkeiten am Berliner Neutronenstreuzentrum BENSC

Seminar „Kristallstrukturuntersuchungen mit Synchrotron- und Neutronenstrahlen in der Praxis“, Max-Planck-Institut für Festkörperphysik, Stuttgart, 17.09.2001

Department SF3

Materials

Invited Conference Contributions

Microstructure and Kinetics of Phase Transitions in Metallic Alloys

Abromeit, C.

Order-disorder transformation induced by irradiation

4th International Ural Seminar on Radiation Damage Physics of Metals and Alloys, Snezhinsk, Russia, 25.02.-03.03.2001

Strain and Stress in Materials and Technical Parts

Genzel, Ch.:

Diffraction Stress-Gradient Analysis from Surface to Volume

SEIFERT-Symposium „X-Ray-Diffraction and New Fields of Industrial Application“, Prague, Czech Republic, 23.10.-24.10.2001

Genzel, Ch.:

Problems related to X-ray stress analysis in thin films in presence of gradients and texture

Size StrainIII, Trento, Italien, 02.12.-05.12.2001

Genzel, Ch.:

Möglichkeiten und Perspektiven der Eigenspannungs- und Mikrostrukturanalytik mit Synchrotronstrahlung

Workshop „Research with Synchrotron Radiation“ der Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen, 19.07.-20.07.2001

Pyzalla, A.:

Fertigung und Betriebsbeanspruchung von Bauteilen: Auswirkungen auf den Werkstoff und seine Mikrostruktur

Kolloquium: Werkstoffeinsatz TU Wien, Wien, 18.12.2001

Pyzalla, A.:

Synchrotronstrahlung: Neue Möglichkeiten zur Analyse der Mikrostruktur, der Textur und der Eigenspannungen

Frühjahrstagung der DPG, Hamburg, 26.03.2001

Reimers, W.:

Capabilities of Neutron and High Energy X-rays for Materials Science

Int. Conf. on Neutron Scattering, München, 09.09.-13.09.2001

Structure Investigations in Nanomaterials using Neutron Small Angle Scattering (SANS)

Wiedenmann, A.:

SANS investigations in nanoscaled materials

ESSA Conference Hurghada, Egypt, 18.03.2001

Wiedenmann, A.:

SANS investigations in ferrofluids

9th International Conference on Magnetic Fluids (ICMF9), Bremen, Germany, 24.07.2001

Wiedenmann, A.:

Small Angle Neutron Scattering Investigations of Nanomaterials

Workshop on Advanced Materials SIREM-AMREC R&D Centre, Kulim, Malaysia, 29.10.2001

Heinemann, A.; Hermann, H.; Wiedenmann, A.; Mattern, N.; Kühn, U.; Bauer, H.-D.; Eckert, J.:

Insight into the formation of ultrafine nanostructures in bulk amorphous Zr Ti-AlCuNi.

TMR, Boston, USA, 01.12.2001

Wiedemann, A.:

Small Angle Neutron Scattering Investigations of Nanomaterials

"Tables Rondes -Systèmes désordonnés". Laboratoire Léon Brillouin, Saclay, France, 03.12.2001

Oral Conference Contributions

Microstructure and Kinetics of Phase Transitions in Metallic Alloys

Abromeit, C.; Alexeechkin, N.V.; Bakai, A.S.; Lazarev, N.P.:

Theory of spontaneous amorphization of metastable crystalline phases

LAM 11, Yokohama, Japan, 09.09.-13.09.2001

Abromeit, C.:

Heterogeneous LRO evolution in intermetallic alloys under cascade irradiation

ITEM Meeting, Fontainebleau, 22.11.-23.11.2001

Alekseechkin, N.V.; Bakai, A.S.; Abromeit, C.; Lazarev, N.P.:

On the kinetics of spontaneous amorphization of metastable crystalline phase

Diftrans'2001, Cherkasy, Ukraine, 24.06.-01.07.2001

Lazarev, N.P.; Abromeit, C.; Bakai, A.S.; Naundorf, V.:

Atomic diffusion in random lattice of multicomponent alloy

Diftrans'2001, Cherkasy, Ukraine, 24.06.-01.07.2001

Lazarev, N.P.; Abromeit, C.; Bakai, A.S.; Naundorf, V.:

Correlation factors of diffusion and isotope effect in disordered structures

Frühjahrstagung DPG, M 11.1, Hamburg, 02.04.-06.04.2001

Macht, M.-P.; Mechler, S.; Müller, M.; Wanderka, N.:

Formation of Quasicrystals and Crystallization Sequence in the $Zr_{46.8}Ti_{8.2}Cu_{7.5}Ni_{10}Be_{27.5}$ Bulk Glass

International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials (ISMANAM 2001), Ann Arbor, Michigan, USA, 24.06.-29.06.2001

Macht, M.-P.; Wanderka, N.; Mechler, S.; Stahl, K.; Jiang, J.Z.:

Bildung von Quasikristallen während der Kristallisation von $Zr_{46.8}Ti_{8.2}Cu_{7.5}Ni_{10}Be_{27.5}$ Massivglas

Frühjahrstagung der Deutschen Physikalischen Gesellschaft, Hamburg, 26.03-30.03.2001

Macht, M.-P.; Zumkley, Th.:

Superplastische Formgebung von Mikrobauteilen aus metallischem Massivglas durch pressen in LIGA-Formen aus Ni

Arbeitstreffen HGF-Strategiefonds Projekts „Material- und Verfahrensentwicklung für mikrotechnische Hochleistungsbauteile“ (MALVE B), HMI Berlin, 24.04.2001

Matsumura, S.; Adipranoto, D.; Abromeit, C.:

Phase transformations under irradiation

Annual meeting, Japan Institute of Metals, Fukuoka, Japan, 22.09.-24.09.2001

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

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

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Denker, A.:

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Seminar "Moderne analytische Methoden der Physik", Technische Universität Berlin, 26.6.2001

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Atomphysikalische Methoden der Archäometrie

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Denker, A.:

Ionen heilen Krebs, verändern Materialien und entlarven Fälscher

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Ionenquellen und Strahlführungssysteme - Steuerung und Visualisierung der Prozesse

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Pelzer, W.:

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Buchali, F.; Baumert, W.; Bülow, H.; Feiste, U.; Ludwig, R.; Weber, H.G.:

Eye Monitoring in a 160 Gbit/s RZ Field Transmission System

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Eisele, W.; Ennaoui, A.; Schubert-Bischoff, P.; Giering, M.; Pettenkofer, C.; Krauser, J.; Lux-Steiner, M.; Zweigart, S.; Karg, F.:

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Tekin, T.; Schlak, M.; Brinker, W.; Berger, J.; Schubert, C.; Maul, B.; Molt, R.:
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Yamamoto, T.; Schubert, C.; Schmidt, C.; Oxenløwe, L.K.; Feiste, U.; Weber, H.G.:
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About spin polarization at Co/Au and CoO/Au interfaces studied with low temperature nuclear orientation
 Seminar der AG Schatz, Universität Konstanz, Januar 2001

Gierlings, M.:
Asymmetry in der Ummagnetisierung in Exchange Bias Systemen
 Seminar der AG Brewer, FU Berlin, 20.6.2001

Gierlings, M.:
Diffuse n-Streuung an Co/CoO/Au-Exchange-Bias Multilagen
 Seminar „Magnetismus in Metallen und Schichten“, Freie Universität Berlin, 7.2.2001

Gruyters, M.:
Exchange Bias über nicht-magnetische Zwischenschichten
 Seminar „Magnetismus in Metallen und Schichten“,
 Freie Universität Berlin, 24.1.2001

Department SF5

Theoretical Physics

Invited Conference Contributions

Magnetic Systems, Thermodynamics and Atomic Collisions

Gross, D.H.E.:
Equilibrium- and Non-Equilibrium Thermodynamics, fundamental derivation from Boltzmann's principle
 Proceedings of 39 International Winter Meeting on Nuclear Physics, Bormio, Italy, 22.-27. 1. 2001

Gross, D.H.E.:
Non-extensive Hamiltonian systems follow Boltzmann's principle not Tsallis statistics - Phase Transitions, Second Law of Thermodynamics
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Equilibrium- and Non-Equilibrium Thermodynamics without the Thermodynamic Limit
 7th European Days on Contemporary Thermodynamics, Mons, Belgium, 27.-31. 8. 2001

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Phase Transitions, Second Law of Thermodynamics, but without Thermodynamic Limit
 76th International Bunsen Discussion Meeting Global Phase Diagrams, Walberberg, 19.-22.8.2001

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Thermostatistics as geometry of phase transitions in SMALL systems, negative specific heat, inhomogeneous equilibrium distribution
 WE-Heraeus-Seminar Cluster 2001, Bundesleistungszentrum Herzogenhorn, 7.-12.10.2001

Soft Matter

Benetatos, P.:
Hydrodynamics of Liquids of Arbitrarily Curved and Looping Flux Lines in Type II Superconductors
 Thursday Condensed Matter Seminars, Brown University, Providence, USA, 26.4.2001

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Hydrodynamics of Liquids of Arbitrarily Curved and Looping Flux Lines in Type II Superconductors
 After-Lunch CMT seminar, Harvard University, Cambridge, USA, 1.5.2001

Franosch, T.:
New developments in mode-coupling theory
 DYPROSO XXVIII, Kerkrade, Holland, 17. 9. 2002

Biological Physics

Falcke, M.:
Stochastic Model for intracellular Calciums dynamics
 Sixth SIAM Conference on Applications of Dynamical Systems, Snowbird, UT, USA, 20.-24.5.2001

Falcke, M.:
Ca²⁺ puffs and waves in strongly buffered systems
 2nd Workshop on Computation of Biochemical Pathways and Genetic Networks, Villa Bosch, Heidelberg, Germany, 21.-22.6.2001

Frey, E.:
What is Life? - Physics in Cell Biology
 Vortragsreise in Irland auf Einladung des Institute of Physics in Ireland: University of Limerick, Limerick; University of Ulster, Jordanstown; University College Dublin, Dublin, 3.-7.12.2001

Frey, E.:
Statistische Mechanik semiflexibler Polymere
 Kolloquium am MPIKG Golm, 23.10.2001

Frey, E.:
What is Life? - Physikalische Fragestellungen in der Zellbiologie
 Kolloquium am IPP Garching, München, 26.10.2001

Frey, E.:
What is Life? - Physikalische Fragestellungen in der Zellbiologie
 Kolloquium an der Universität Saarbrücken, 8.11.2001

Frey, E.:
What is Life? - Physikalische Fragestellungen in der Zellbiologie
 Kolloquium an der Universität Greifswald, 15.11.2001

Frey, E.:
What is Life? - Physikalische Fragestellungen in der Zellbiologie
 Antrittsvorlesung am HMI, 19.11.2001

Frey, E.:
What is Life? - Physikalische Fragestellungen in der Zellbiologie
 Kolloquium an der Gesamthochschule Essen, 28.11.2001

Oral Conference Contributions

Magnetic Systems, Thermodynamics and Atomic Collisions

Eichler, J.:
Axiale and Landau-Eichung für ein Elektron im homogenen Magnetfeld
 Arbeitstagung Energiereiche Atomare Stöße, Riezern, 22.-26.1.2001

Fröbrich, P.:

Dünne ferromagnetische Filme in einem Heisenberg-Modell (plus Anisotropien) im Rahmen von Vielteilchen Greenschen Funktionen

Kolloquium zur Festkörpertheorie, Humboldt Universität Berlin, 13.6.2001

Jensen, P.J.:

Theory for the magnetism in nanostructured films: nonequilibrium magnetic domain structure

7th Joint MMM-Intermag Conference, San Antonio, TX, USA, 11.1.2001

Jensen, P.J.:

Magnetic reversal of a ferromagnetic cluster deposited on an antiferromagnetic substrate

California State University Northridge, Los Angeles, CA, USA, 12.1.2001

Jensen, P.J.:

Superferromagnetism due to dipole coupling

California State University Northridge, Los Angeles, CA, USA, 16.1.2001

Jensen, P.J.:

Magnetic reversal of a ferromagnetic cluster deposited on an antiferromagnetic substrate: magnetic storage device with improved temporal stability

228. WE-Heraeus-Seminar „Spin-Dynamics“, Physikzentrum Bad Honnef, Germany, 4.1.2001

Soft matter

Benetatos, P.:

Hydrodynamics of Liquids of Arbitrarily Curved and Looping Flux Lines in Type II Superconductors

APS March 2001 Meeting, Seattle, USA, 14.3.2001

Biological Physics

Parmeggiani, A.:

Theoretical Description of Molecular Motors Processivity

III DFG-Colloquium on „Molecular Motors“, Workshop on „Molecular Motors and New Microscopy Techniques, Maria in der Aue, Köln, Germany, 1.-3.10.2001

Parmeggiani, A.:

Theoretical Description of Molecular Motors Processivity

Kolloquium des SFB 413: „Dynamik und Regulation zytoskelettabhängiger Bewegungsvorgänge“, München, Germany, 14. 11. 2001

Poster Contributions

Magnetic Systems, Thermodynamics and Atomic Collisions

Brinzanik, R.; Jensen, P.J.; Bennemann, K.H.:

Theory for the magnetism in nanostructured films: nonequilibrium magnetic domain structure

228. WE-Heraeus-Seminar „Spin-Dynamics“, Physikzentrum Bad Honnef, Germany, 5.1.2001

Fröbrich, P.; Kuntz, P.J.; Saber, M.:

Many-body Green's function theory for thin ferromagnetic films

7ème Rencontre de la Physique statistique et de la matière condensée, Meknes, Marocco, 20.-22.9.2001

Jensen, P.J.:

Ferromagnetic grains deposited on antiferromagnetic substrate: improvement of the temporal stability of stored information

7th Joint MMM-Intermag Conference, San Antonio, TX, USA, 8.1.2001

Stancil, P.C.; Turner, A.R.; Cooper, D.L.; Schultz, D.R.; Racovic, M.J.; Fritsch, W.; Zygelman, B.:

Charge transfer in collisions of S⁴⁺ with H

DAMOP meeting of the American Physical Society, London, Ontario, Canada, 16.-19.5.2001

Stöhlker, Th.; Eichler, J.; Dunford, R.W.; Hagmann, S.; Ichihara, A.; Kozhuharov, C.; Krämer, A.; Ma, X.; Mokler, P.H.; Stachura, Z.; Warczak, A.:

Near-threshold photoionization of hydrogenlike uranium studied via the time-reversed process

International Conference on Photonic, Electronic and Atomic Collision, Santa Fe, NM, USA, 18.-24.7.2001

Wang, J.G.; Stancil, P.C.; Turner, A.R.; Cooper, D.L.; Schultz, D.R.; Racovic, M.J.; Fritsch, W.; Zygelman, B.:

Charge transfer in collisions of S⁴⁺ with He

DAMOP meeting of the American Physical Society, London, Ontario, Canada, 16.-19.5.2001

Semiconductor Physics and Photovoltaics

Liu, Q.K.K.; Rudloff, D.; Riemann, T.; Christen, J.; Diesselberg, M.; Einfeldt, S.; Hommel, D.;

Finite-element calculation of stress distributions in thick layer AlGaIn in the presence of trigonal micro-cracks

MRS Fall Meeting, Boston, USA, 26.-30.12. 2001

Rudloff, D.; Riemann, T.; Christen, J.; Liu, Q.K.K.; Diesselberg, M.; Einfeldt, S.; Hommel, D.;

Depth-resolved cathodoluminescence study and micro-Raman spectroscopy of thick AlGaIn layers

Fourth International Conference on Nitride Semiconductors, Denver, USA, 16.-20.7.2001

Weis, T.; Brehme, S.; Kanschä, P.; Fuhs, W.; Lipperheide, R.; Wille, U.:

Barrier-Limited Carrier Transport in Highly n-Doped mc-Si:H Thin Films

19th International Conference on Amorphous and Microcrystalline Semiconductors, Nice, France, 27.-31.8.2001

Weis, T.; Brehme, S.; Lipperheide, R.; Wille, U.:

Beschreibung des Ladungsträgertransports in mikrokristallinem Silizium im Trappingmodell
DPG-Frühjahrstagung Hamburg, 26.-30.3.2001
[Verhandl. DPG (VI)36, 162 (2001)]

Soft Matter

Benetatos, P.:

Plasticity in current-driven vortex lattices in type-II superconductors

Boulder School for Condensed Matter and Materials Physics, Colorado, USA, 1.-31.7.2001

Benetatos, P.:

Plasticity in current-driven vortex lattices in type-II superconductors

„Horizons in Complex Systems“, University of Messina, Italy, 5.-8.12.2001

Santos, J.E.; Schütz, G.M.:

Non-equilibrium tube length fluctuations of entangled polymers

Workshop „Fundamental problems of statistical physics X“, Altenberg, Germany, 20.8.-2.9.2002

Biological Physics

Parmeggiani, A.:

Processivity of Molecular Motors

1st International MTBio-Workshop on Function and Regulation of Cellular Systems: Experiments and Models, MPI-PKS Dresden, 25.-30.06.2001

Invited Lectures

Magnetic Systems, Thermodynamics and Atomic Collisions

Eichler, J.:

Relativistic atomic collisions with highly charged ions

Tata Institute for Fundamental Research, Bombay, India, 6.11.2001

Eichler, J.:

Axial and Landau gauge for a continuum electron in a homogeneous magnetic field

Tata Institute for Fundamental Research, Bombay, India, 7.11.2001

Fritsch, W.:

AO close-coupling studies for the collision system S⁴⁺ - He

Seminar am Department of Physics and Astronomy, University of Georgia, Athens, USA, 25.7.2001

Department SF6

Trace Elements

Invited Conference Contributions

Analysis of Trace Elements and Metalloproteins

Alber, D.; Behne, D.:

Bestrahlungseinrichtungen und Neutronenaktivierungsanalyse am Forschungsreaktor BER II
18. Seminar Aktivierungsanalyse, Berlin, 25.-26.10.2001

Behne, D.; Geßner, H.; Alber, D.; Kyriakopoulos, A.:

Untersuchungen zur Regulation des Selenstoffwechsels mit Hilfe radioanalytischer Methoden

18. Seminar Aktivierungsanalyse, Berlin, 25.-26.10.2001

Behne, D.; Kyriakopoulos, A.; Alber, D.; Wolf, C.; Weseloh, G.; Kühbacher, M.:

Analyse und Untersuchung von Metalloproteinen durch Kombination von elementanalytischen, biochemischen und molekularbiologischen Methoden

11. Jahrescolloquium der Interessengemeinschaft Atomspektroskopie Berlin (IGAS), Berlin, 07.11.2001

Brätter, P.; Richarz, A.-N.; Wolf, C.; Rösick, U.:

Speciation of trace elements in human tissues
Second International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, München-Neuherberg, 07.-10.05.2001

Molecular Trace Element Research: Selenoproteins and Metalloproteins

Behne, D.; Kyriakopoulos, A.:

Identification and characterization of novel mammalian selenoproteins

1. Kolloquium DFG-Schwerpunktprogramm 1087 "Selenoproteine", Würzburg, 16.-17.02. 2001

Behne, D.; Kyriakopoulos, A.:

New studies on the identification and characterization of novel mammalian selenoproteins

2. Kolloquium DFG-Schwerpunktprogramm 1087 "Selenoproteine", Bonn, 07.12.01

Kyriakopoulos, A.; Bertelsmann, H.; Graebert, A.; Kühbacher, M.; Hoppe, B.; Behne, D.:

Identification of two small selenoproteins in tissues of the rat

3rd International Symposium on Trace Elements in Human: New Perspectives, Athens, Greece, 04.-06.10.2001

Oral Conference Contributions

Analysis of Trace Elements and Metalloproteins

Lin, X.; Alber, D.; Henkelmann, R.:

Calibration of the irradiation channel DBVK at BERII reactor and feasibility of applying the k₀-method at this device

3rd International k₀-users Workshop, Bruges, 23.-28.09.2001

Richarz, A.-N.:

Vorteile und Begrenzungen von Speziationsuntersuchungen für essentielle und toxische Spurenelemente in Humanproben mittels ICP-QMS und on-line gekoppelter Chromatographie

IGAS (Interessengemeinschaft Atomspektroskopie Berlin) ICP-MS-Anwendertreffen 2001, Berlin, 28.03.2001

Weseloh, G.; Behne, D.; Kühbacher, M.; Kyriakopoulos, A.:

Pilotstudien zur Identifizierung metallhaltiger Proteine mit Hilfe der SY-RFA

2. BAMline Seminar, Berlin, 08.-09.11.01

Wolf, C.:

Miniaturisierung der Elementbestimmung in Biopsieproben mittels ICP-QMS und gekoppelter Chromatographie

IGAS (Interessengemeinschaft Atomspektroskopie Berlin) ICP-MS-Anwendertreffen 2001, Berlin, 28.03.2001

Molecular Trace Element Research: Selenoproteins and Metalloproteins

Kyriakopoulos, A.; Bertelsmann, H.; Graebert, A.; Hoppe, B.; Kühbacher, M.; Behne, D.:

Distribution of selenoproteins in the kidney of the rat

1st International FESTEM Congress on Trace Elements and Minerals in Medicine and Biology, Venice, 16.-19.05.2001

Kyriakopoulos, A.; Bertelsmann, H.; Graebert, A.; Hoppe, B.; Kühbacher, M.; Behne, D.:

Membrane-bound mitochondrial selenoproteins in the kidney of the rat.

Fall Meeting of the Gesellschaft für Biochemie und Molekularbiologie, Bochum, 09.-12.09.2001

Schäfer, K.; Behne, D.; Kyriakopoulos, A.; Gessner, H.; Grune, T.:

Effect of selenium on antioxidant defence and phospholipid fatty acid metabolism in rats fed diets enriched in fish oil.

1st International FESTEM Congress on Trace Elements and Minerals in Medicine and Biology, Venice, 16.-19.05.2001

Clinical Applications

Richarz, A.-N.:

Speciation of trace elements in Alzheimer's brain with special emphasis on metallothioneins

Second International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, München-Neuherberg, 07.-10.05.2001

Poster Contributions

Analysis of Trace Elements and Metalloproteins

Behne, D.; Kyriakopoulos, A.; Alber, D.; Wolf, C.; Kühbacher, M.:

Analysis and investigation of metalloproteins by combining element analytical and biochemical methods

Second International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, München-Neuherberg, 07.-10.05.2001

Behnert, I.; Alber, D.:

Charakterisierung von Ocker verschiedener Herkunft mittels INAA

18. Seminar Aktivierungsanalyse, BAM Berlin, 25.-26.10.2001

Köhler, M.; Harms, A.V.; Alber, D.; Jurisch, M.:

Bestimmung von Zn-Verunreinigungen in Halbleiter-GaAs mittels Neutronenaktivierungsanalyse

Jahrestagung Chemie 2001, Würzburg, 23.-29.10.2001

Wermann, G.; Alber, D.; Pritzkow, W.; Riebe, G.; Vogl, J.; Görner, W.:

Determination of nuclear data by mass spectrometric investigations of neutron transmuted ⁶⁴Zn and ⁶⁴Ni in highly pure copper

13th International Conference on Radionuclide Metrology and its Applications (ICRM2001), Braunschweig, 14.-18.05.2001

Wolf, C.; Rösick, U.; Brätter, P.:

Quantification of trace elements in chromatographic speciation analyses of biopsy samples

1st International FESTEM Congress on Trace Elements and Minerals in Medicine and Biology, Venice, 16.-19.05.2001

Molecular Trace Element Research: Selenoproteins and Metalloproteins

Kyriakopoulos, A.; Bertelsmann, H.; Graebert, A.; Hoppe, B.; Kühbacher, M.; Behne, D.:

Proteomics: selenium-containing proteins in the kidney of the rat

Applied Proteomics Conference, Potsdam, 26.-27.05.2001

Kyriakopoulos, A.; Bertelsmann, H.; Graebert, A.; Hoppe, B.; Kühbacher, M.; Behne, D.:

Distribution of selenoproteins in the kidney of the rat by 2D-electrophoresis

Proteomic Forum 2001, International Meeting on Proteome Analysis, München, 16.-19.09.2001

Kyriakopoulos, A.; Hoppe, B.; Kühbacher, M.; Behne, D.:

Investigation of selenium-containing proteins in the brain of the rat and the human neuronal cell line HT 22

International Conference „Cell Migration in Development and Disease“, Berlin, 29.11.-01.12.2001

Clinical Applications

Richarz, A.-N.; Brätter, P.:
Speciation of metalloproteins in human cytosols of different organs and different pathological state

1st International FESTEM Congress on Trace Elements and Minerals in Medicine and Biology, Venice, 16.-19.05.2001

Invited LecturesMolecular Trace Element Research: Selenoproteins and Metalloproteins

Behne, D.; Kyriakopoulos, A.:
Untersuchungen zur biologischen Bedeutung von Selen durch Kombination von elementanalytischen und biochemischen Methoden
 Adlershofer Analytische Kolloquien der IGFA/BAM IBZ-Adlershof, 20.09. 2001

Kyriakopoulos, A.; Behne, D.:
Neues aus der Selenoproteinforschung
 Institut für Bioanalytik, Institutsseminar „mRNAs und Proteine“, Göttingen, 12.01.2001

Kyriakopoulos, A.; Behne, D.:
Identifizierung von Metalloid- und Metalloproteinen
 Netzwerk RNA-Technologien, FU Berlin, 09-02.2001

Kyriakopoulos, A.; Behne, D.:
Relevante Selenoproteine zur Bestimmung des Selenstatus
 Firma BIOGENES, Vortrag im Rahmen des gemeinsamen Projektes „Antikörper-Tests für den Nachweis bestimmter Selenoproteine“
 Berlin, 19.10.2001

Richarz, A.-N.:
Speziation von Spurenelementen in biologischen Proben mittels HPLC-ICP-MS-Kopplung
 Bayer AG, Leverkusen, 29.01.2001

Richarz, A.-N.:
Speziationsuntersuchungen von Spurenelementen in Humanproben mittels on-line HPLC-ICP-MS Kopplung
 Schering, Berlin, 20.06.2001

Wolf, C.:
Miniaturisierung der Elementbestimmung in Biopsieproben mittels ICP-QMS und gekoppelter Chromatographie
 Schering, Berlin, 20.06.2001

Clinical Applications

Behne, D.
Selen und andere Spurenelemente in Gesundheit und Krankheit
 Urania Mittelelbe, Wittenberg, 24.11.2001

Department SF7

Nuclear Measurements**Invited Conference Contributions**ERDA and Nuclear Spectroscopy

Bohlen, H. G.:
Nuclear Rainbows in Heavy-Ion Scattering
 EPS Conference: East-West Co-ordination Meeting on Nuclear Science, Sandanski, Bulgaria, 5-9 May, 2001

Bohlen, H. G.; von Oertzen, W.; Blazevic, A.; Gebauer, B.; Milin, M.; Kokalova, Tz.; Schulz, Ch.; Thummerer, S.; Tumino, A.:
Structure of neutron-rich Beryllium isotopes
 Int. Symposium on Exotic Nuclei EXON-2001, Baikal Lake, Russia, 24-28 July, 2001

Bohlen, H. G.:
Molecular structures of neutron-rich Be-isotopes
 Workshop on the Physics of Halo Nuclei, Trento, Italy, 4-12 October, 2001

Thummerer, S.:
Nuclear structure studies using particle-gamma coincidences
 Workshop on the Future of Nuclear Structure and Gamma Spectroscopy with Stable Beams, Institut de Recherches Subatomiques, Strasbourg, France, 7-8 June, 2001

von Oertzen, W.; Blazevic, A.; Bohlen, H. G.; Subotin, V.; Khoa, Dao T.; Nouffer, F.; Roussel-Chomaz, P.; Casandjian, J. M.:
Nuclear Rainbows, Nucleus-Nucleus Potentials and the EOS of Nuclear Matter
 XXXIX Int. Winter Meeting on Nuclear Physics, Bormio, Italy, January 2001

von Oertzen, W.:
Elastic exchange of neutrons in ${}^6\text{He}+{}^4\text{He}$ scattering and nuclear molecules
 ECT*, European Centre of Theoretical Physics, Trento, Italy., 23 February, 2001

von Oertzen, W.:
Covalently bound nuclear clusters
 Symposium on Reactions with Radioactive Beams, University of Paris Sud, Orsay, France, 28 June, 2001

von Oertzen, W.:
Lecture on nuclear rainbow scattering and the equation of state of nuclear matter
 XXVII Mazurian Lakes School, Krzyze, Poland 2-8 June, 2001

von Oertzen, W.:
Nuclear clustering and spectroscopy of extremely deformed light nuclei
 Workshop on the Future of Nuclear Structure and Gamma Spectroscopy with stable beams, IReS Strasbourg, France, 7-8 June, 2001

von Oertzen, W.:

4 lectures on covalent molecular binding between nuclear clusters

School on Topics in Nuclear Physics, Fiera di Primiero, Italy, 5-10 October, 2001

von Oertzen, W.:

Nuclear clusters and covalently bound nuclear molecules

Yukawa Symposium on Unstable Nuclei, Kyoto, Japan, 4-9 November, 2001

Development of Thermal Neutrons Imaging Detectors

Gebauer, B.:

Development of high-resolution and fast hybrid micropattern detectors for the next generation pulsed neutron sources

Int. Workshop on Position-Sensitive Neutron Detectors (PSND), Berlin, June 28-30, 2001, Book of Abstracts, pp. 49-51

Oral Conference Contributions

ERDA and Nuclear Spectroscopy

Blazevic, A.; Bohlen, H.-G.; von Oertzen, W.:

The stopping and charge exchange of neon and oxygen ions at 2 MeV/U in the non-equilibrium region

15th Int. Conference on Ion Beam Analysis, IBA-15, Cairns, Australia, 15-20 July, 2001

Kokalova, Tz.; von Oertzen, W.; Bohlen, H. G.; Gebauer, B.; Thummerer, S.; Kalpakchieva, R.; Massey, T.; Napoli, D. R.; Lenzi, S. M.; de Angelis, G.; Gadea, A.; Marginean, N.; de Poli, M.; Brandolini, F.; Rossi-Alvarez, C.; Lunardi, S.; Menegazzo, R.; Bazzacco, D.; Bizzeti, P. G.; Bizzeti-Sona, A. M.; Petrache, C.:

Gamma-Spektroskopie stark deformierter Banden in neutronenreichen Beryllium-, Bor- und Kohlenstoffisotopen

DPG-Frühjahrstagung 2001, Erlangen

Development of Thermal Neutrons Imaging Detectors

Gebauer, B.; Schulz, Ch.; Levchanovski, F.V.; Nikiforov, A.; Balykov, L.N.; Richter, G.; Namaschk, B.; Klimov, A.Yu.; Rogov, V.V.; Shashkin, V.I.:

A large-area hybrid multi-layer micro-strip gas chamber (MSGC) detector for thermal neutron imaging

II German-Russian User Meeting, Dubna, Russia, April 21-25, 2001

Schulz, Ch.; Gebauer, B.; Levchanovski, F.V.; Nikiforov, A.; Richter, G.; Balykov, L.N.; Shashkin, V.I.; Klimov, A.Yu.; Rogov, V.V.:

A novel large-area, low-pressure detector with high position and time-of-flight resolution for thermal neutron imaging

Int. Conf. on Neutron Scattering (ICNS 2001), München, Sept. 9-13, 2001; Book of Abstracts, p. 30 (T-98)

Poster Contributions

ERDA and Nuclear Spectroscopy

Thummerer, S.; von Oertzen, W.; Gebauer, B.; Lenzi, S. M.; Gadea, A.; Napoli, D. R.; Beck, C.; Rousseau, M.:

The Population of Deformed Bands in 4N Nuclei by Cluster-Emission

3rd International Conference on Exotic Nuclei and Atomic Masses, ENAM 2001, July 2-7, 2001 Hämeenlinna, Finland

von Oertzen, W.; Thummerer, S.; Bohlen, H. G.; Gebauer, B.; Kokalova, Tz.; Milin, M.; Tumino, A.; Massey, T.; Napoli, D. R.; de Angelis, G.; Gadea, A.; Marginean, N.; de Poli, M.; Lenzi, S. M.; Brandolini, F.; Rossi-Alvarez, C.; Lunardi, S.; Menegazzo, R.; Bazzacco, D.; Bizzeti, P. G.; Bizzeti-Sona, A. M.:

Molecular Structure in ²¹Na and ²¹Ne nuclei

3rd International Conference on Exotic Nuclei and Atomic Masses, ENAM 2001, July 2-7, 2001, Hämeenlinna, Finland

Development of Thermal Neutrons Imaging Detectors

Schulz, Ch.; Gebauer, B.; Balykov, L.; Richter, G.; Levchanovsky, F.V.; Nikiforov, A.:

Development of high-resolution, large-area hybrid MSGC detectors for thermal neutron imaging

Int. Workshop on Position-Sensitive Neutron Detectors (PSND), Berlin, June 28-30, 2001

Invited Lectures

ERDA and Nuclear Spectroscopy

von Oertzen, W.:

Nuclear molecules in light neutron-rich nuclei

RIKEN, Tokyo (Japan), 31 October, 2001

von Oertzen, W.:

Introduction to covalent molecular binding

University of Surrey, Guildford UK, 12 December 2001

Development of Thermal Neutrons Imaging Detectors

Gebauer, B.:

Very high resolution and fast large-area hybrid low-pressure MSGC detector for thermal neutron imaging

3rd TECHN Meeting, Univ. Milano-Bicocca, Milan, Italy, May 3-4, 2001

Gebauer, B.:

Development of very high resolution and fast hybrid 2D-micro-strip gas chamber detectors for the next generation pulsed neutron sources

4th TECHN Meeting, Paul Scherrer Institut, Villigen, Switzerland, October 18-19, 2001

Department SE1

Silicon Photovoltaics**Invited Conference Contributions**Crystalline Silicon Thin Film Solar Cells*Fuhs, W.:***Photovoltaik: Erfolge und Chancen**

6. Kasseler Symposium Energie-Systemtechnik,
Institut für Solare Energietechnik, Kassel,
15.11.2001

Oral Conference ContributionsCrystalline Silicon Thin Film Solar Cells

Birkholz, M.; Selle, B.; Fuhs, W.; Williamson, D.:
**Tayloring the Structure of Low-Temperature-
Deposited Silicon Films by Biasing the Sub-
strate**

MRS Spring Meeting, San Francisco, USA, 16.-
20.4.2001

*Böhme, C.; Kanschat, P.; Lips, K.:***Time Domain Measurements of Spin Dependent Recombination: A Novel Defect Spectroscopy Method**

E-MRS Conf., Strasbourg, France, 5.-8.6.2001

*Böhme, C.; Kanschat, P.; Lips, K.:***Time-Domain Measurement of Spin-Dependent Recombination in Microcrystalline Silicon**

19th Intern. Conf. on Amorphous and Microcrystal-
line Semiconductors, Nizza, Frankreich, 27.-
31.8.2001

*Böhme, C.; Lucovsky, G.:***Origins of Silicon Solar Cell Passivation by SiN_x:H Anneal**

19th Intern. Conf. on Amorphous and Microcrystal-
line Semiconductors, Nizza, Frankreich, 27.-
31.8.2001

*Brendel, K.; Lengsfeld, P.; Schöpke, A.; Sieber, I.;
Nickel, N. H.:*

Laserkristallisierung von amorphem Silizium (a-Si:H) auf Metallschichten

DPG-Frühjahrstagung, Hamburg, 26.-30.3.2001

*Gall, S.; Muske, M.; Sieber, I.; Nast, O.; Fuhs, W.:***Aluminium-Induced Crystallisation of Amorphous Silicon**

19th Intern. Conf. on Amorphous and Microcrystal-
line Semiconductors, Nizza, Frankreich, 27.-
31.8.2001

*Heise, H.; Nickel, N. H.:***Hydrogen Bonding in Laser Crystallized Poly-Si**

19th Intern. Conf. on Amorphous and Microcrystal-
line Semiconductors, Nizza, Frankreich, 27.-
31.8.2001

*Heise, H.; Nickel, N. H.:***Einfluß des Wasserstoffs auf die Laserkristallisierung von amorphem Silizium (a-Si:H)**

DPG-Frühjahrstagung, Hamburg, 26.-30.3.2001

Kanschat, P.; Brehme, S.; Lips, K.; Fuhs, W.:
**Metal-Insulator Transition and Band Tail States
in Phosphorus Doped Microcrystalline Silicon**
E-MRS Conf., Strasbourg, France, 5.-8.6.2001

Lips, K.; Kanschat, P.; Brehme, S.; Fuhs, W.:
**Metal-Insulator Transition and Band Tail States
and Free Electrons in Phosphorus Doped Micro-
crystalline Silicon**

E-MRS Conf., Strasbourg, France, 5.-8.6.2001

Lips, K.; Kanschat, P.; Brehme, S.; Fuhs, W.:
**Metal-Insulator Transition, Free Electrons and
Bandtail States in Phosphorus Doped Micro-
crystalline Silicon Studied by ESR**

19th Intern. Conf. on Amorphous and Microcrystal-
line Semiconductors, Nizza, Frankreich, 27.-
31.8.2001

*Nickel, N. H.:***Metastable Changes of the Electrical Conductivity in Microcrystalline Silicon**

MRS Spring Meeting, San Francisco, USA, 16.-
20.4.2001

*Nickel, N. H.; Rakel, M.:***Metastable Defects Kinetics in Microcrystalline Silicon**

19th Intern. Conf. on Amorphous and Microcrystal-
line Semiconductors, Nizza, Frankreich, 27.-
31.8.2001

*Nickel, N. H.:***Ramanspektroskopie an ultrahoch dotierten polykristallinen Siliziumfilmen**

Arbeitskreistreffen Punktdefekte, TU Dresden,
13.2.2001

*Reinig, P.; Fenske, F.; Fuhs, W.; Selle, B.:***Influence of Ion Bombardement on Polycrystalline Silicon Films Grown by Pulsed DC-Magnetron Sputtering**

19th Intern. Conf. on Amorphous and Microcrystal-
line Semiconductors, Nizza, Frankreich, 27.-
31.8.2001

Silicon-Heterostructures

Burke, T.; Dittrich, Th.; Koch, F.; Rappich, J.:
**Passivation of a Thin Anodic Oxide/p-Si Inter-
face Induced by Electron Injection**

DPG-Frühjahrstagung, Hamburg, 26.-30.3.2001

*Dittrich, Th.; Bitzer, T.; Rada, T.; Richardson, N. V.;
Timoshenko, V. Yu.; Rappich, J.; Koch, F.:*
**Defect Transformation under Growth of Sub-
monolayer Oxides on Silicon Surfaces at Low
Temperatures**

Conf. on Insulating Films on Semiconductors
(INFOS '2001), Udine, Italien, 20.-23.6.2001

*Dittrich, Th.; Koch, F.; Bitzer, T.; Rada, T.; Richardson, N.
V.; Rappich, J.; Timoshenko, V. Yu.:*

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Bär, M., Muffler H.-J., Weinhardt L., Fischer, Ch.-H., Heske, C., Umbach, E., Gay, R., Lux-Steiner, M.C.:

Cd-free thin film Cu(In,Ga)(S,Se)₂ solar cells with ILGAR-ZnO WEL

European Research Conference on Photovoltaic Devices, 08.-13.09.2001, Tomar, Portugal

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

ILGAR overcomes CBD with respect to CIGSSe solar cell efficiency

San Francisco, USA, April 2001. MRS Spring Meeting 2001

Ion Beam Applications

Krauser, J.; Hoffman, V.; Harnleit, W.; Waiblinger, M.; Stolterfoht, N.; Weidinger, A.; Trautmann, C.; Hofsäss, H.; Ronning, C.; Schultrich, B.; Sturm, H.
Graphitic Nanowires Embedded in Diamond-Like Carbon Films

XV Int'l Winterschool on Electronic Properties of Novel Materials (IWEPM 2001), Kirchberg / Austria, March 3 - 10, 2001

Fullerenes

Meyer, C.; Harnleit, W.; Waiblinger, M.; Lips, K.; Döring, R.; Mertensacker, B.; Weidinger, A.

Electron Spin Quantum Computing with N@C₆₀

XV Int'l Winterschool on Electronic Properties of Novel Materials (IWEPM 2001), Kirchberg / Austria, March 3 - 10, 2001

Knorrr, S.; Grupp, A.; Mehring, M.; Waiblinger, M.; Weidinger, A.
Frequency-Dependent Spin-Lattice Relaxation in $^{15}\text{N}@C_{60}$

XV Int'l Winterschool on Electronic Properties of Novel Materials (IWEPM 2001), Kirchberg / Austria, March 3 - 10, 2001

Meyer, C.; Harneit, W.; Lips, K.; Döring, R.; Mertesacker, B.; Weidinger, A.
First Steps towards Molecular Electron Spin Quantum Computing

European Commission QIPC workshop, Torino, 28-31 October 2001

Meyer, C.; Harneit, W.; Lips, K.; Waiblinger, M.; Mertesacker, B.; Döring, R.; Fostiropoulos, K.; Weidinger, A.

Phosphorus in C_{60}

DPG-Frühjahrstagung, Fachverband Atom- und Molekülphysik Berlin, 02-06 April 2001

Invited Lectures

Chalcopyrite Solar Cells

Glatzel, Th.:

UHV Kelvin Probe Force Microscopy on Semiconductor Surfaces and Interfaces

Dep. of Electrical Engineering, University of Tel Aviv (Israel), November 27, 2001

Klenk, R.:

Die optimale Chalkopyrit-Solarzelle

Institut für Solarenergieforschung GmbH, Hannover, 20.03.2001

Klenk, R.:

Stand der CuInS_2 Solarzellenentwicklung

Universität Stuttgart, 21.05.2001

Lux-Steiner, M. Ch.

Nano-Scale Characterization of Semiconductor Surfaces and Heterostructures: Kelvin Probe Force Microscopy in Ultra-high Vacuum

Universität Lausanne/CH, 13.11.2001

Lux-Steiner, M. Ch.

Alternative Energien – Möglichkeiten und Grenzen

Auricher Wissenschaftstage, Aurich, 16.11.2001

Lux-Steiner, M. Ch.

Kelvinsonden-Kraftmikroskopie für die Charakterisierung von Solarzellen

Universität Oldenburg, 19.11.2001

Siebert, S.:

Photovoltaik – wieviel Strom kommt von der Sonne?

Marie-Curie-Gymnasium, Ludwigsfelde, 07.11.2001

Eta-Cell

Könenkamp, R.:

Solar cells with extremely thin absorbers

Instituto Superior Tecnico, Lisbon, Portugal, February 2001

Könenkamp, R.:

Quantum dot solar cells

Institute of Solar Energy, Polytechnical University of Madrid, Spain, March 2001

Könenkamp, R.:

High sensitivity measurements of photoconductivity on novel semiconductors

University of Armed Forces, Hamburg, Germany, April 2001

Könenkamp, R.:

Large area nano-structuring for optical, electrical and photovoltaic applications

Physics Department, Tulane University, New Orleans, USA, April 2001

Könenkamp, R.:

Electrical and Optical properties of the $\text{TiO}_2/\text{CdTe}/\text{Au}$ solar cell with extremely thin absorber

EC-project on ETA-Solar Cells, Uppsala, Sweden, May 2001

Könenkamp, R.:

Quantum dot solar cell for 2-photon excitation processes

EC-project on 2-photon solar cells, University of Glasgow, U.K., July 01

Buffer Layers, Alternative Thin Film Technology

Fischer, Ch.-H.:

ILGAR – a novel Deposition Technology for thin Compound Semiconductor Layers

University Oxford, Oxford, 23.1.01

Fischer, Ch.-H.:

Analysis of ancient Roman and Etruscan organic pigments

University of Thessaloniki, Saloniki, 26.10.01

Fischer, Ch.-H.:

Ion Layer Gas Reaction – ein neues chemisches Depositionsverfahren für sulfidische und oxidische Dünnschichten

Christian-Albrecht-Universität Kiel, Techn. Fakultät, 26.11.01

Ion Beam Applications

Weidinger, A.

Conducting Ion Tracks in Diamond-Like Carbon Films

Seminar University Cambridge, 21 February 2001

Zollondz, H.

Conducting Ion Tracks in Diamond-Like Carbon Films

Colloquium, Epicenter, University of Abertay, Dundee (UK), 22 October 2001

Fullerenes

Weidinger, A.

Stickstoff im C_{60} Käfig: Von der Atomrassel bis zum Quantencomputer

Seminar Universität Karlsruhe, 9 June 2001

Department SE3

Technology**Oral Conference Contributions***In-situ Process Control and Doping*

Pietzker, C.; Bräunig, D.; Scheer, R.
Laser light scattering and real time XRD studies on the sequential formation of CuInS₂ films: Towards a simple and stable process control
 17th European Photovoltaic Solar Energy Conference (2001) Munich

Scheer, R.; Pietzker, C.; Bräunig, D.
Laser light scattering in-situ studies on the growth of chalcopyrite thin films
 Spring Meeting Mat. Res. Soc. (2001), San Francisco

Poster Contributions*Monolithically Integrated Test Modules*

Chaparro, A.M.; Gutiérrez, M.T.; Herrero, J.; Klaer, J.:
Influence of chemical bath deposition parameters on the formation of CuInS₂ / Zn (Se,O) junctions for thin film solar cells
 Spring Meeting Mat. Res. Soc. (2001), San Francisco

Fuertes Marron, D.; Meeder, A.; Gavilanes Perez, I.; Lux-Steiner, M.C.; Jäger-Waldau, A.
Characterisation of thin film solar cells based on two-sources CVD-grown CuGaSe₂
 17th European Photovoltaic Solar Energy Conference (2001) Munich

Gavilanes Pérez, I.; Scheer, R.; Bräunig, D.
Spatial Resolution Methods for the Characterisation of CuInS₂ Modules
 European Research Conferences, Photovoltaic Devices-High Efficiency Solar Cells, Tomar, Portugal, 8-13 September 2001

Herrero, J.; Chaparro, A.M.; Guillen, C.; Durand, G.; Rakib, M.; Malinowska, B.; Klaer, J.
Analysis of films and cells prepared from recovered metallic Cadmium from a CdS-CBD recycling pilot scale plant
 17th European Photovoltaic Solar Energy Conference (2001) Munich

Lauermann, I.; Luck, I.; Wojcyskowski, K.
CuInS₂-based thin film solar cell preparation on ceramic substrates: Moving towards the full integration of solar module and roofing tile
 17th European Photovoltaic Solar Energy Conference (2001) Munich

Luck, I.; Álvarez-García, J.; Calvo-Barrio, L.; Werner, A.; Pérez-Rodríguez, A.; Morante, J.R.; Bräunig, D.
Growth monitoring of Cu-poor prepared CuInS₂ thin films

Spring Meeting Mat. Res. Soc. (2001), San Francisco

Neisser, A.; Álvarez-García, J.; Calvo-Barrio, L.; Klenk, R.; Matthes, T.W.; Luck, I.; Lux-Steiner, M.C.; Pérez-Rodríguez, A.; Morante, J.R.
Cu(In,Ga)S₂ phase formation from metallic Cu-In-Ga precursor stacks in rapid thermal processes

Spring Meeting Mat. Res. Soc. (2001), San Francisco

Neve, S.; Bohne, W.; Röhrich, J.; Scheer, R.:
ERDA analysis of ZnSx (OH)y thin films obtained by chemical bath deposition

Spring Meeting Mat. Res. Soc. (2001), San Francisco

Neve, S.; Bohne, W.; Klaer, J.; Klenk, R.; Scheer, R.
ZnS_x(OH)_y buffers for chalcopyrite solar cells
 17th European Photovoltaic Solar Energy Conference (2001) Munich

Reiß, J.; Malmström, J.; Werner, A.; Hengel, I.; Klenk, R.; Lux-Steiner, M. Ch.:
Current Transport in CuInS₂ Solar Cells Depending on Absorber Preparation
 Spring Meeting Mat. Res. Soc. (2001), San Francisco

Reliability of thin Film Solar Cells under Particle Radiation

Jasenek, A.; Boden, A.; Weinert, K.; Balboul, M.R.; Schock, H.W.; Rau, U.:

High-Energy Electron and Proton Irradiation of Cu(In,Ga)Se₂ Heterojunction Solar Cells
 Spring Meeting Mat. Res. Soc. (2001), San Francisco

Invited Lectures

Scheer, R.
CuInS₂ based thin film solar cells
 Siemens Solar Industries, Camarillo, USA, 23.04.2001

Luck, I.
CuInS₂ based thin film solar cells
 BP Solar, Fairfield, USA, 25.04.2001

Scheer, R.
Charge carrier collection and recombination in chalcopyrite solar cells: Evaluation of EBIC images and profiles
 National Renewable Energy Laboratory, Golden, USA, 26.04.2001

Scheer, R.
Dünnschichtsolarzellen auf der Basis von CuInS₂
 Interpane, 10.10.2001

Department SE 4

Dynamics of Interface Reactions**Invited Conference Contributions***Willig, F.:***Solarcells of III-V semiconductors**

6. Deutsch-Türkisches Energiesymposium, "Renewable Energy Resources and Environmental Protection", Izmir, Türkei, 22.6.2001

*Willig, F.:***Time-resolved electron injection from an adsorbed molecule into a semiconductor modulated by vibrational wavepacket motion**

Ultrafast Surface Dynamics Conference, San Sebastian, Spanien, 11.07.2001

*Willig, F.:***Femtosecond Electron Injection and Recombination Involving Dye Molecules on Nanostructured TiO₂ in Ultra-high-vacuum**

International Workshop on Nanostructures in Photovoltaics, Max-Planck-Institut für Physik komplexer Systeme, Dresden, 02.08.2001

*Willig, F., Zimmermann, C.; Ramakrishna, S.; Burfeindt, B.; Pettinger, B.; Eichberger, R.; Storck, W.:***Experimental Fingerprints of Femtosecond Electron Injection from Hot Vibrational States of an Adsorbed Molecule into the Conduction Band of a Semiconductor**

10th International Conference on Unconventional Photoactive Systems (UPS'01), Les Diablerets, Schweiz, 6.9.2001

*Willig, F.:***Influence of vibrational wavepacket dynamics on ultrafast heterogeneous electron transfer**

International Symposium of SFB450, Berlin, 24.11.2001

*Willig, F.:***Dynamik des Einfangs heißer Elektronen in III-V Halbleitern durch adsorbierte organische Moleküle**

Kolloquium im DFG-Schwerpunkt, Bad Honnef, 8.2.2001

*Willig, F.:***Unoccupied electronic states and hot electron dynamics at the InP(100) surface**

DFG Schwerpunktstreffen, Münster, 05.10.2001

Oral Conference Contributions*Giersig, M.:***Magnetic nanoparticle arrays and interactions**

Particles 2001 Conference, Orlando, Florida, USA, 25.2.01

*Giersig, M.:***Magnetische Nanostrukturen**

Heinrich Hertz Institut Berlin, 16.05.2001

*Janata, E.:***Pulse radiolysis and physical chemistry**

Bhabha Atomic Research Centre, Mumbai, Indien, 01.03.2001

*Janata, E.:***Pulse radiolysis techniques and applications**

Consiglio Nazionale Delle Ricerche, Istituto di Fotochimica e Radiazioni d'Alta Energia (CNR-FRAE), Bologna, Italien, 16. 03.2001

*Janata, E.:***Direkte Beobachtung der Reaktionen von OH und H mit einigen aliphatischen Alkoholen**

Strahlenchemikertreffen SCT2001 Naumburg, 19.9.01

*Janata, E.:***Direkte Beobachtung der Reaktionen von OH und H mit einigen aliphatischen Alkoholen**

Strahlenchemikertreffen SCT2001, Naumburg, 19.09.2001

*Janata, E.:***Some examples of pulse radiolysis**

National Symposium on Radiation & Photochemistry, Roorkee, Indien, 22.02.2001

*Kalska, B.; Müller, Ch.; Fumagalli, P.; Hilgendorff, M.; Rybczynski, J.; Giersig, M.:***Magneto-optical Studies of Nanoparticles**3rd Workshop on Correlation of Structure and Magnetism in Novel Nanoscale Magnetic Particles, Uppsala, Schweden, 05. – 06.10.2001*Kalska, B.; Fumagalli, P.; Hilgendorff, M.; Giersig, M.:***Magneto-optical behaviour of Co nanoparticles**

Joint Summer Workshop on Mesomagnetism, Spin Dynamics and Spin Electronics, Santorini, Griechenland 30. Juni - 05. July 2001 (P)

*Rybczynski, J.; Hilgendorff, M.; Sobal, N.; Giersig, M.; Spasova, M.; Farle, M.:***Colloid Nanoparticles in Aqueous Solutions**3rd Workshop on Correlation of Structure and Magnetism in Novel Nanoscale Magnetic Particles, Uppsala, Schweden, 05. – 06.10.2001*Spasova, M.; Wiedwald, U.; Ramchal, R.; Farle, M.; Hilgendorff, M.; Giersig, M.:***Magnetic Properties of Magnetophoretically Deposited Co Nanocrystals**

Joint Summer Workshop on Mesomagnetism, Spin Dynamics and Spin Electronics, Santorini, Griechenland 30. Juni - 05. July 2001 (P)

*Ulmeanu, M.; Illekova, E.; Majkova, E.; Kostic, I.; Smrcek, L.; Giersig, M.; Hilgendorff, M.; Bizdoaca, L.; Farle, M.:***Structural Studies of Co Magnetic Nanoparticles**3rd Workshop on Correlation of Structure and Magnetism in Novel Nanoscale Magnetic Particles, Uppsala, Schweden, 05. – 06.10.2001

Poster Contributions

Bizdoaca, E.L.; Spasova, M.; Ramchal, R.; Farle, M.; Hilgendorff, M.; Caruso, R.:

Magnetically Directed Self-assembly of Submicron Spheres with a Fe₃O₄ Nanoparticle Shell

Joint Summer Workshop on Mesomagnetism, Spin Dynamics and Spin Electronics, Santorini, Griechenland, 30. Juni - 05. July 2001

Felber, S.; Willig, F.:

A new single source precursor for the rapid and low temperature preparation of crystalline InP particles from solution

Fifth International Conference on Materials Chemistry, University of Wales, Bangor, UK
24. - 27. Juli 2001

Hannappel, Th.; Töben, L.; Neges, M.; Möller, K.; Visbeck, S.; Pettenkofer, Ch.; Willig, F.:

Charakterisierung der Rekonstruktion von Phaligen III-V-Halbleitergrenzflächen

DPG Frühjahrstagung Arbeitskreis Festkörperphysik, Hamburg, 29.03.2001

Zimmermann, C., Ramakrishna, S., Eichberger, R., Storck, W., Pettinger, B., and Willig, F.:

Influence of wavepacket motion on light-induced heterogeneous electron transfer

5th International Symposium of the Volkswagen-Stiftung on Intra- and Intermolecular Electron Transfer, Chemnitz, 16.05-19.05.2001

Zimmermann, C., Eichberger, R., Ramakrishna, S., Storck, W., Pettinger, B., and Willig, F.:

Ultrafast Heterogeneous Electron Transfer Modulated by a Vibrational Wavepacket

5th FEMTOCHEMISTRY Conference, UCLM Toledo, Spanien, 02.09-06.09.2001

Invited Lectures

Chemseddine, A.:

Functionalized nanocrystals as building blocks for highly nanostructured materials

Université Paris VI Pierre et Marie Curie, Laboratoire Chimie de la Matière Condensée, Paris, Frankreich, 30.01.2001

Giersig, M.:

Multidimensional nanostructures based on single nanosized magnetic nanoparticles

Symposium on Cluster assembled Materials, Nagoya, Japan 7.-10.06.2001

Giersig, M.:

Nanostructures for solar energy application

Dept. of Chemistry, University of Melbourne, Melbourne Australien, 25.07.2001

Giersig, M.:

Multidimensional nanostructures based on single nanosized magnetic nanoparticles

World Chemistry Congress, Brisbane, Australien, 28.06-06.06.2001

Giersig, M.:

Multidimensional structures created on the basis of colloidal magnetic nanoparticles

A conference on Modern Microscopical Methods, Innsbruck, Austria, 9.-14.09.2001

Henschel, H.; Janata, E.; Wulf, F.; Körfer, M.; Wittenburg, K.:

Fiber Optic Radiation sensing Systems for TESLA

5th European Workshop on Diagnostics and Beam Instrumentation (DIPAC 2001), Grenoble, Frankreich, 15.5.01

Henschel, H.; Janata, E.; Wulf, F.; Körfer, M.; Wittenburg, K.:

Fiber optic radiation sensing systems for TESLA

5th European Workshop on Diagnostics and Beam Instrumentation, DIPAC 2001, ESRF, Grenoble, Frankreich, 15.05.2001

Hilgendorff, M.; Rybczynski, J.; Giersig, M.; Sobal, N.; Möhwald, H.:

Preparation of Novel Nanoscale Magnetic Particles and Magnetophoretic Deposition thereof,

Joint Summer Workshop on Mesomagnetism, Spin Dynamics and Spin Electronics, Santorini, Griechenland 30. Juni - 05. July 2001 (P)

Hilgendorff, M.; Giersig, M.; Sobal, N.; Möhwald, H.:

Nanocrystalline Co, Co/Pt, and Co/Ag particles: Principles of Synthesis and Magnetophoretic Preparation of Ordered Layers

2nd Workshop on Correlation of Structure and Magnetism in Novel Nanoscale Magnetic Particles, Braunschweig, 23. - 24.3.2001

Hilgendorff, M.; Giersig, M.:

Principles of Magnetophoretic Deposition,

DFG-Schwerpunktkolloquium, Kochel am See, 21. - 23. Oktober 2001

Janata, E.:

Some Examples of Pulse Radiolysis

National Symposium on Radiation & Photochemistry Roorkee, Indien, 22.2.01

Janata, E.; Kelm, M.; Ershov, B.G.:

Solubility of Oxygen and Nitrous Oxide in Aqueous Solutions of NaCl. A Pulse Radiolysis Study

Miller Conference on Radiation Chemistry, Windermeere, U.K., 07. - 12. April 2001

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

Radiation-Chemical Effects in the Near-field of a Disposal Site: Role of bromine on the Radiolytic Processes in NaCl-Solutions

Migration-2001, Bregenz, Österreich, 16.-21. September 2001

Janata, E.:

First results of radiation detection by Cerenkov emission in optical fibers at TTF

Linear Collider Project Meeting, DESY, Hamburg, 16.02.2001

Janata, E.:

Techniques and applications of pulse radiolysis
University of Pune, Indien, 27.02.2001

Willig, F.:

Dynamics of Ultrafast Light-induced Heterogeneous Electron Transfer

Seminar of the Chemistry Department, University of Chicago, USA, 15.01.2001

Willig, F.:

Dynamics of Ultrafast Light-induced Heterogeneous Electron Transfer

Seminar Series: Photonics Research Ontario, University of Toronto, 17.01.2001

Willig, F.:

Influence of vibrational wavepacket dynamics on ultrafast heterogeneous electron transfer

Indian Association for the Cultivation of Science, Kalkutta, Indien, 28.12.2001

Department SE5

Solar Energetics

Invited Conference Contributions

Fiechter, S.:

Desorptionsuntersuchungen an Ruthenium-Katalysatorteilchen

Skimmer User's Meeting, Netzsch Gerätebau, Selb, 28.06.-29.06.2001.

Tributsch, H.; Aroutiounian, Y.:

Theoretical Analysis of Composite Polymer Solar Cell Function

QUANTSOL 2001, A-Kirchberg, Tirol, 10.-17.03.01

Tributsch, Helmut:

Die vernachlässigte Solarenergieforschung

"Sonne und Arbeit", 4. Solarkonferenz M-V, Schwerin 06.08.01

Surface Engineering

Calvet, W.:

Electron spectroscopy investigations of the initial stages of the hetero-epitaxy of CuInS₂

CRG Workshop, La Clusaz, France, 18.-23.03.2001

Jungblut, H.:

On the influence of surface roughness on coverage analysis in quantitative XPS measurements

CRG Workshop, La Clusaz, France, 18.-23.03.2001

Lewerenz, H. J.:

Investigation of the dynamic electro-chemical oxidation of Si by synchrotron radiation

CRG Workshop, La Clusaz, France, 18.-23.03.2001

Murrell, C.:

Analysis of electrochemical etch processes on CuInS₂ absorber layers for solar cells

CRG Workshop, La Clusaz, France, 18.-23.03.2001

Oral Conference Contributions

Solar Energetics

Aichberger, S. v.; Wunsch, F.; Kunst, M.:

Contactless characterization of a-Si:H films on crystalline silicon substrates

EMRS 2001 Strasbourg, Strasbourg, France, 5-8.6.2001

Citarella, G.; Aichberger S. v.; Kunst, M.:

Microwave photoconductivity techniques for the characterization of semiconductors

DRIP IX, Rimini, Italy, 24-28.9.2001

Ellmer, K.:

In situ Energy-Dispersive X-Ray Diffraction System for Time-Resolved Thin Film Growth Studies

ESF Exploratory Workshop on Time-Resolved Investigations of Structural Changes in Soft and Solid Matter with Neutrons and X-Rays, Sommerfeld, Germany, 05.-07.09.2001

Fiechter, S.; Bron, M.; Radnik, J.; Fieber-Erdmann, M.; Dorbandt, I.; Hilgendorff, M.; Bogdanoff, P.; Schulenburg, H.; Tributsch, H.:

Preparation Strategies towards Selective Ru-based Oxygen Reduction Catalysts for Direct Methanol Fuel Cells

4. International Symposium on New Materials for Electrochemical Systems, Montréal, Canada, 9. - 13.7.2001

Hilgendorff, M.; Fiechter, S.; Bogdanoff, P.; Schulenburg, H.; Dorbandt, I.; Bron, M.; Tributsch, H.:

Surface modified ruthenium nanoparticles: structural investigation and surface analysis of a selective catalyst for oxygen reduction

4. International Symposium on New Materials for Electrochemical Systems, Montréal, Canada, 09. - 13.07.2001

Kunst, M.; Abdallah, O.; Wunsch, F.:

Passivation of silicon by silicon nitride films

EMRS 2001 Strasbourg
Strasbourg, France, 05-08.06.2001

Kunst, M.; Aichberger S. v.; Citarella, G.; Wunsch, F.:

Amorphous silicon/crystalline silicon heterojunctions for solar cells

ICAMS 19, Nice, France, 27-31.08.2001

Tomm, Y.; Fiechter, S.:

Wachstum hochtexturierter Wolframdisulfid-Schichten aus Nickelsulfid-Schmelzen

2. Kinetikseminar der DGKK, Universität Erlangen-Nürnberg, 22.-23.2.2001

Wünsch, F.; Aichberger, S. v.; Kunst, M.:
Contactless Determination of Carrier Mobility in Thin Film Silicon
 Chelsea Amorphous and Organic Semiconductors Meeting, London, UK, 5-6. 4. 01

Surface Engineering

Aggour, M.; Störkel, U.; Murrell, C.; Campbell, S.A.; Jungblut, H.; Hoffmann, P.; Mikalo, R.; Schmeißer, D.; Lewerenz, H.J.:
Electrochemical Interface Modification of CuInS₂ Thin Films
 EMRS Spring Meeting 2001, Strasbourg, 04.-08.06.2001

Lewerenz, H.J.; Aggour, M.; Murrell, C.; Jakubowicz, J.; Kanis, M.; Campbell, S.A.; Cox, P. A.; Hoffmann, P.; Jungblut, H.; Schmeißer, D.:
Interface Engineering of Photoelectrochemically Prepared Si Surfaces
 EMRS Spring Meeting 2001, Strasbourg, 04.-08.06.2001

Lewerenz, H.J.; Jungblut, H.; Schubert-Bischof, P.; Boeck, T.; Hess, O.; Bachmann, K.; Schmeißer, D.:
Scanning probe microscopy and photoelectrochemically induced pore growth on single crystalline and epitaxially grown Si, Ge and InP for photonic crystals
 DFG proposal colloquium in the priority program „Photonic Crystals“, Bad Godesberg, 07.-09.01.2001

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 Si electrodes investigated by photoelectron spectroscopy using synchrotron radiation and in-situ AFM
 Joint Meeting of the International Society of Electrochemistry and the Electrochemical Society of America, San Francisco, USA, 02.-07.09.2001

Poster Contributions

Solar Energetics

Aichberger, S. v.; Wünsch, F.; Kunst, M.:
Charge Carrier Transport In a-Si:H/c-Si Heterojunctions
 MRS 2001-Spring Meeting, San Francisco, USA, 16.-20.04.2001

Aichberger, S.v., Wünsch, F.; Kunst, M.:
Contactless characterization of a-Si:H films on crystalline silicon substrates
 E-MRS 2001 Strasbourg, France, 5-8.6 2001

Bogdanoff, P.; Bron, M.; Hilgendorff, M.; Schulenburg, H.; Fiechter, S.:
Platinum-free Catalysts for the Oxygen-Reduction in PEM-Fuel Cells
 Seventh Grove Fuel Cell Symposium, London (UK), 11.-13.09.2001

Bogdanoff, P.; Fiechter, S.; Bron, M.; Hilgendorff, M.; Tributsch, H.:
Methanol-insensitive Catalysts for the Electro-reduction of Oxygen in Acidic Electrolyts
 Elektrochemisches Grundlagensymposium Schloss Pommersfelden, 11.-13-Juni 2001

Bron, M.; Fiechter, S.; Bogdanoff, P.; Dorbandt, I.; Hilgendorff, M.; Schulenburg, H.; Tributsch, H.:
Ru-based catalysts for oxygen reduction in PEM fuel cells
 Europacat V, Limerick, Ireland, 2.-7. September 2001

Citarella, G.; Abdallah, O.; Kunst, M.:
The optoelectronic characterization of the silicon/silicon nitride interface
 DRIP IX, Rimini, Italy, 24.-28.9. 2001

Ellmer, K.; Mientus, R.; Weiß, V.; Rossner, H.:
Set Up for *in situ* X-Ray Diffraction Studies of Thin Film Growth by Magnetron Sputtering
 HASYLAB User's Meeting, Hamburg, 26.01.01

Fiechter, S.; Bron, M.; Hilgendorff, M.; Dorbandt, I.; Schulenburg, H.; Bogdanoff, P.; Tributsch, H.; Radnik, J.; Fieber-Erdmann, M.; Holub-Krappe, E.; Schubert-Bischof, P.; Bloeck, U.; Giersig, M.:
Surface modified ruthenium nanoparticles: structural investigation and surface analysis of a new catalyst for oxygen reduction
 75th International Bunsen Discussion Meeting, Analysis and Modelling of Heterogeneous Catalytic Processes, Berlin 12.-14.3.2001

Hinze, J.; Plagemann, A.; Ellmer, K.:
In situ-Messung von mechanischen Spannungen in Zinkoxidschichten, abgeschlossen durch Magnetron-Sputtern
 10. Bundesdeutsche Fachtagung Plasmatechnologie, Greifswald, 28.2.-2.3.2001

Kunst, M.; Aichberger, S. v.; Thom, W.; Wünsch, F.:
The Determination of Optoelectronic Properties of Microcrystalline And Amorphous Silicon Films.
 MRS 2001-Spring Meeting, San Francisco, USA, 16.-20.04.2001

Kunst, M.; Aichberger, S.v.; Citarella, G.; Wünsch, F.:
Optoelectronic characterization of microcrystalline silicon films
 ICAMS 19, Nice, France, 27.-31.8 2001

Mientus, R.; Ellmer, K.:
Reaktives Magnetron-Sputtern von Indium-Zinn-Oxidschichten (ITO): Einfluß von Sputterdruck und Plasmaanregung
 10. Bundesdeutsche Fachtagung Plasmatechnologie, Greifswald, 28.2.-2.3.2001

Schulenburg, H.; Bogdanoff, P.; Fiechter, S.:
Iron based electrocatalysts for the oxygen reduction reaction: Pyrolysis of nitrogen containing polymers with iron acetate adsorbed on high area carbon

4. International Symposium on New Materials for Electrochemical Systems, Montréal, Canada, 9. - 13.7.2001

Tributsch, H.:
Isostructural FeS₂ and RuS₂ in Solar Cells, as Water Oxidation Photocatalysts and as Energy Source for Bacterial Oxidation

2001 Joint International Meeting (200th Meeting of the Electrochemical Society, Inc. and the 52nd Meeting of the International Society of Electrochemistry), San Francisco Hilton & Towers, San Francisco, California, 02.-07.09.01

Wünsch, F.; Citarella, G.; Kunst, M.:
Optoelectronic properties of microcrystalline silicon films

EMRS 2001 Strasbourg, France, 05.-08.06.2001

Surface Engineering

Grzanna, J.; Jungblut, H.; Lewerenz, H.J.:
Theory on the correlation of localized corrosion and macroscopic oscillation behaviour of Si electrodes

Joint Meeting of the International Society of Electrochemistry and the Electrochemical Society of America, San Francisco, USA, 02.-07.09.2001

Jungblut, H.; Aggour, M.; Störkel, U.; Murrell, C.; Hoffmann, P.; Schmeißer, D.; Lewerenz:

Electrochemical surface conditioning of polycrystalline CuInS₂ solar cell absorber layers

Photovoltaic Devices: High Efficiency Solar Cells, Tomar, Portugal, 08.-13.09.2001

Lewerenz, H.J.; Jungblut, H.; Schubert-Bischof, P.; Boeck, T.; Hess, O.; Bachmann, K.; Schmeißer, D.:
Scanning probe microscopy and photo-electrochemically induced pore growth on single crystalline and epitaxially grown Si, Ge and InP for photonic crystals

DFG Antragskolloquium „Photonic Crystals“, Bad Godesberg, 07.-09.01.2001

Lewerenz, H.J.; Jungblut, H.:
Kombinierte rastersondenmikroskopische Nanostrukturierung von Silicium

DFG-Antragskolloquium im Schwerpunkt-programm „Grundlagen der elektrochemischen Nanotechnologie“, Pommersfelden, 28.-30.1.2001

Lewerenz, H.J.; Jungblut, H.; Aggour, M.; Hoffmann, P.; Campbell, S.A.; Cox, P.A.; Schmeißer, D.:

Initial Electrochemical Structuring of Si(111)

BESSY User Meeting 2001, Berlin, 13.-14.12.2001

Invited Lectures

Solar Energetics

Barkschat, A.:
Konzeption und Aufbau einer Apparatur zur ortsaufgelösten Photostrom-Messung

Technische Universität Darmstadt, Institut für Chemische Technologie II, 21.08.01

Bogdanoff, P.:
Differential Electrochemical Mass Spectroscopy

Central Electrochemical Research Institute, Karaikudi, Indien, 5.11.2001.

Bogdanoff, P.:
Platinum free catalysts for the oxygen reduction in acidic solutions

Bharathidasan University, Department of Chemistry, Tiruchirappalli, Indien, 8.11.01

Bogdanoff, P.:
Preparation and Characterisation of selective Ru-based catalysts for the oxygen-reduction

Central Electrochemical Research Institute, Karaikudi, Indien, 12.11.2001.

Bogdanoff, P.:
Ru-based catalysts for the application to cathodes in PEM fuel cells

CECRI-Madras-Unit, CSIR Madras Complex, Chennai, Indien, 16.11.2001

Ellmer, K.:
Reaktives Magnetronspütern als großflächige Abscheidemethode für Dünnschichtsolarellen
 Institut für Oberflächenmodifizierung, Leipzig, 19.04.2001

Tomm, Y.:
Gasphasenzüchtung von Übergangsmetallchalkogeniden

Forschungsseminar zur Oberflächenphysik, Lehrstuhl für elektronische Eigenschaften und Supraleitung, Humboldt-Universität Berlin, 11.6.01

Tributsch, H.:
The Challenge of our Energy Future: What can chemistry contribute?

Vortragsreihe als "Sir C.V. Raman Visiting Professor", University of Madras, Department of Energy, Indien, 14.02.01

Tributsch, H.:
Water Splitting Photocatalysis: Where do we stand and what could we learn from nature?
 Vortragsreihe als "Sir C.V. Raman Visiting Professor", University of Madras, Department of Energy, Indien, 16.02.01

Tributsch, H.:
Visible Light Assisted Photocatalysis
 Vortragsreihe als "Sir C.V. Raman Visiting Professor", Bharathidasan University, Department of Chemistry, Tiruchirappalli, Indien, 19.02.01

Tributsch, H.:

Solar Energy Utilization, Sustainability and the Responsibility of Science

Vortragsreihe als "Sir C.V. Raman Visiting Professor", National Conference on Solar Energy Conversion Processes (01.-02.03.01), University of Madras, Department of Energy, Indien, 01.03.01

Tributsch, H.:

Challenges in Photoelectrochemistry and Photocatalysis

Vortragsreihe als "Sir C.V. Raman Visiting Professor", National Conference on Solar Energy Conversion Processes (01.-02.03.01), University of Madras, Department of Energy, Indien, 01.03.01

Tributsch, H.:

Water Purification and Surface Water via TiO₂ Photocatalysis

Vortragsreihe als "Sir C.V. Raman Visiting Professor", Anna University, Department of Chemistry, Madras, Indien, 05.03.01

Tributsch, H.:

Untersuchungen zum Mechanismus und zur Langzeitstabilität von nanokristallinen Farbstoffsolarellen

Seminar: "Advanced Materials", Linzer Institut für Organische Solarzellen (LIOS), Johannes Kepler Universität Linz, Österreich, 27.6.01

Tributsch, H.:

Energy and Information

Vortragsreihe als "Sir C.V. Raman Visiting Professor", Hindustan College of Engineering, Padpur, Tamil Nadu, Indien, 23.02.01

Tributsch, H.:

Dye sensitization solar cells: From single crystalline to ceramic and nanocrystalline systems

Vortragsreihe als "Sir C.V. Raman Visiting Professor", University of Madras, Dept. of Energy, Indien, 27.02.01

Tributsch, H.:

The Instability Problem of Dye-Sensitization Cells: How can we overcome it?

Vortragsreihe als "Sir C.V. Raman Visiting Professor", National Conference on Solar Energy Conversion Processes (01.-02.03.01), University of Madras, Dept. of Energy, Indien, 02.03.01

Tributsch, H.:

Nanocrystalline Dye Sensitization Solar Cells: Mechanism, Problems, Challenges

University of California, Dept. of Chemistry/Biochemistry, Santa Cruz, California, USA, 17.10.2001

Tributsch, H.:

Nanocrystalline Dye Sensitization Solar Cells: Mechanism, Problems, Challenges

California Institute of Technology, Dept. of Chemistry, Pasadena, USA, 4.12.2001

Surface Engineering

Calvet, W.:

Präparation und in-situ Charakterisierung MBE gewachsener Kupferindiumsulfid-Schichten

Seminar Angewandte Spektroskopie, BTU Cottbus, 05.02.2001

Grzanna, J.; Lewerenz, H.J.; Jungblut, H.:

A model for electrochemical oscillations at the Si/electrolyte contact

Fritz-Haber-Institut der MPG, Berlin, 04.10. 2001

Lewerenz, H. J.:

High resolution electron spectroscopy on electrochemically conditioned Si at the molecular level

North Carolina State University, 13.09.2001

Lewerenz, H.J.:

Principles, examples and advanced concepts of photovoltaic solar cells

Fritz-Haber-Institut der MPG, Berlin, 11.12. 2001

Murrell, C.P.:

Electrochemical dissolution of covellite layer from CuInS₂ solar cell absorbers

Seminar Angewandte Spektroskopie, BTU Cottbus, 05.02.2001

Work Group SE6

Electronic Structure of Semiconductor Interfaces

Invited Conference Contributions

W. Calvet

Electronspectroscopy investigation of the initial growth in hetero epitaxy of CuInS₂

CRG Status Seminar LaClusacz, Mar 2001

C. Pettenkofer

Interfaces of Chalcogenides

Goldschmidt Symposium 2001 Hot Springs VA

C. Pettenkofer

Free Electron Lasers - Perspectives and Applications for Basic Research

CRG Status Seminar LaClusacz, Mar 2001

C. Pettenkofer

Pump-Probe Spectroscopy at Semiconductor Heterojunctions

BESSY FEL Status Seminar Holzau Jan 2001

S. Tiefenbacher

TiO₂/ CdTe Interfaces for injectioncell systems

CRG Status Seminar LaClusacz, Mar 2001

Tonti, D

Photoelectron spectroscopy on an intercalating TiS₂ electrode

Université de Lausanne, Schweiz, 30.08.2001

Tonti, D.

In-situ photoelectron spectroscopy study of the Na intercalation reaction in an operating TiS₂ thin film cathode

Universität Leipzig, 10.10.2001

Tonti, D.

In-situ photoelectron spectroscopy study of the Na intercalation reaction in an operating TiS₂ thin film cathode

CRG Tagung, La Clusaz, Frankreich,

U. Meier

Spectroscopy and none-equilibrium phenomena at ZnO interfaces

CRG Status Seminar LaClusacz, Mar 2001

Invited Lectures

Pettenkofer, C.

Grundlagen der Solarenergie

Übersichtsvorträge zur "Langen Nacht der Wissenschaft"

Subdivision HAD

Information Technology

Invited Conference Contributions

Measurement Systems & Hardware

Becker, H.:

CAE/CAD Tools for Electronic Design.

12th IEEE Int. Congress on Realtime for Nuclear and Plasma Sciences, Valencia, Spanien, 4.-8. 6.2001

Becker, H.:

Practical Experiences Using FPGA Advantage: Designing a VICbus Interface.

Jahrestagung der Mentor Graphics User Group (MUG), Leipzig, 10.-12.10.2001

Becker, H.:

Einsatz von PCB- und Simulationswerkzeugen in der Elektronikentwicklung.

Technologieforum der Firma Mentor Graphics, München, 28.11.2001

Oral Conference Contributions

Experimental Systems

Henschel, H., Körfer, M., Wulf, F.:

Fibre Optical Radiation Sensing System for TESLA.

5th European Workshop on Diagnostics and Beam Instrumentation (DIPAC 2001), Grenoble, Frankreich, 13.-15.5.2001

Rossa, L.:

Einsatz von CORBA für die Experimentsteuerung.

SEI-Frühjahrstagung, FZ Karlsruhe, 02.-04.04.2001

Central Data Processing & Networks

Eschricht, N., Hoinkis, E., Mädler, F.:

A SANS Study of Nitrogen Adsorption in the Mesoporous Silica Glass Gelsil 50 and the Reconstruction of the Porous Structure.

AIChE - First Topical Conf. on Nanoscale Science and Engineering, Reno, USA, 5.-9.11.2001

Fromme, M.:

Software Techniques in VITESS

Workshop on VITESS2 and Other Packages for Simulations of Neutron Scattering, HMI Berlin, 25.-27.6.2001

Grzanna, J., Lewerenz, J.H., Jungblut, H.:

Theory on the Correlation of Localized Corrosion and Macroscopic Oscillatory Behavior at Si Electrodes.

Int. Meeting of the Electrochemical Society and the Int. Society of Electrochemistry, San Francisco, USA, 2.-7.9.2001

Measurement Systems & Hardware

Becker, H.:

Finite State Machines (FSM) und ihre Beschreibung in VHDL.

SEI-Herbsttagung, TU Graz, Österreich, 1.-2.10.2001

Vulinovic, S.:

Unterstützung des Hardwareentwicklers durch RENOIR.

SEI-Herbsttagung, TU Graz, Österreich, 01.-02.10.2001

Poster Contributions

Experimental Systems

Becker, H., Brehmer, W., Herdam, G., Kleisch, T., Rossa, L., Sauer, O.-P., Wulf, F.:

Coincidence Data Acquisition and Control System.

12th IEEE Int. Congress on Real-Time for Nuclear and Plasma Sciences, Valencia, Spanien, 04.-08.06.2001

Invited Lectures

Central Data Processing & Networks

Eschricht, N., Hoinkis, E., Mädler, F.:

Statistische Rekonstruktion poröser Materialien.

AVS-Nutzertreffen, Düsseldorf, 1./2.2.2001

Fromme, M.:

HMI-Webportal.

Arbeitskreis Webmaster der HGF, HMI Berlin, 27./28.9.2001

Schröder, M.:

Das Elektronische Laborbuch.

Arbeitskreis Webmaster der HGF, HMI Berlin, 27./28.9.2001

Grzanna, J., Lewerenz, H.J., Jungblut, H.:
**Theory for Electrochemical Oscillations at the
Si/Electrolyte Contact.**
Seminar, Fritz-Haber-Institut der Max-Planck-
Gesellschaft, Berlin, 24.10.2001

Technology Transfer / Patents

Patent applications

Dep.	Filing date	Inventor	Title
SE1	22.06.01	Hartig, Dittrich, Rappich	Verfahren zur Funktionalisierung und Passivierung der Oberfläche von Silizium-Wafern durch elektrochemisches Abscheiden dünner organischer Schichten -101 30 801.9-33
SE1	20.09.01	Böhme, Lips	Verfahren und Anordnung zur Messung von zeitaufgelösten spinabhängigen Rekombinationsprozessen in organischen und anorganischen Halbleitern -101 47 460.1-33
SE2	02.05.01	Waiblinger, Harneit, Weidinger	Molekulare Anordnung mit einer Strukturausbildung und deren Anwendung für quantenmechanische Informationsverarbeitung -101 23 132.6-41
SE2	27.03.01	Könenkamp, Dloczik, Engelhardt, Ernst, Lux-Steiner	Verfahren zur Mikro- und Nano-Strukturierung der Oberflächen von Metalloxiden und Metallchalkogeniden -101 15 971.4-43
SE2	27.08.01	Könenkamp	Solarzelle mit Zwei-Photonen-Anregung -101 42 875.8-33
SE2	27.08.01	Könenkamp, Chen	Transistoranordnung und Verfahren zu deren Herstellung -101 42 913.4-33
SE2	30.11.01	Muffler, Bär, Müller, Fischer, Lux-Steiner	Verfahren zur Herstellung dünner, schwer löslicher Beschichtungen -101 60 504.8
SE3	12.04.01	Scheer, Pietzker	Verfahren zur Herstellung einer Chalkogenid-Halbleiterschicht des Typs ABC ₂ mit optischer Prozesskontrolle -101 19 463.3-33
SE3	21.10.01	Scheer, Gartsman *	Verfahren zur Erzeugung von p-n-Übergängen in einem Halbleiter -101 53 053.6
SE4	18.02.01	Giersig, Hilgendorff	Verfahren zur reproduzierbaren Herstellung einer regelmäßigen Anordnung aus nanokristallinen Magnetpartikeln -101 08 853.1-52
SE4	15.07.01	Janata	Messvorrichtung zur Dosismessung hochenergetischer Teilchenstrahlung -101 35 092.9-52
SE5	05.01.01	Schubert-Bischoff, Jungblut, Lewerenz	Mechanisch stabile Anordnung mit mindestens einem photonischen Kristall und Verfahren zu deren Herstellung -101 01 119.9-51
SE5	03.07.01	Hilgendorff, Dorbandt, Schulenburg, Bron, Fiechter, Bogdanoff, Tributsch	Platinfreies Chelat-Katlysatormaterial für die selektive Sauerstoffreduktion und Verfahren zu seiner Herstellung -101 32 490.1-41
SF6	15.02.01	Kyriakopoulos, Behne, Pfeifer *	Neue Form des PHGPx-Proteins als diagnostischer Marker bei männlicher Infertilität -101 07 186.8

* External Inventor

Patents

Dep.	Filing date	Inventor	Title	The patent was issued
SE1	03.12.92	Mohr, Elstner Hada-movsky	Photovoltaisches Element – DE P 42 41 185.8-33	13.12.01
SE1	29.11.96	Nickel	Verfahren zur Herstellung eines flächigen Einkristalls auf einem Fremdsupstrat und Vorrichtung zu seiner Durchführung - DE 196 51 003.1-43	25.10.01
SE2	27.06.97	Weidinger Murphy Mertesacker Pietzak u.a.	Verfahren und Vorrichtung zur Herstellung von stabilen endohedralen Fullerenen der Struktur ZaCx mit x = 60 - EP 97 93 27 30.1-2111**	30.05.01

Dep.	Filing date	Inventor	Title	The patent was issued
SE5	28.04.97	Bilal, Tributsch	Elektrolytische Reduktion von Schwefelsäure zu Schwefelwasserstoff und diese beinhaltender Biomasse-Produktionsprozesse – DE 197 18 923.7-09	26.07.01
SE5	07.08.98	Tributsch, Rojas-Chapana	Verwendung von Di-tert-Butylsulfid (TBDS) und/oder tert-Butylmercaptan (TBM) als Korrosionsinhibitoren der mikrobiellen Korrosion von Metallen - DE 198 36 544.6-09	28.06.01
SE5	17.10.96	Alonso-Vante	Inerte Katode für die selektive Sauerstoffreduktion und Verfahren zu deren Herstellung – DE 196 44 628.7-09	23.05.01
SF2	29.07.99	Gruyters, Riegel	Verfahren zur Herstellung von nanoskalierten antiferromagnetischen oder pinnenden Schichten und Anwendung derartig hergestellter Schichten - DE 199 36 896.1-09	29.03.01
SF1	29.07.99	Krist	Neutronenpolarisator - DE 199 36 898.8-09	15.02.01
SF1	29.07.99	Welzel	Neutronenoptisches Bauelement – DE 199 36 899.6-33	31.10.01

EP** European patent for 10 states

Start up's

Dep.	Name	Subject	Start up
SE3	Luck, I., Meyer, N.	Founding of Sulfurcell Solar GmbH	08/01

Academic Education

Courses

Summer Term 2001					
Dep.	Lecturer	Topic	Course	University	SWS*
SE1	Nickel, N. H.; Richter, W.; Esser, N.	Festkörperphysik II	Lecture	TU Berlin	2
SE2	Schedel-Niedrig, Th	Spektroskopie an Übergangsmetalloxiden	Lecture	TU Berlin	2
SE2	Moorthy Babu, S	Engineering Physics and Materials Science	Lecture	Anna University, Madras, India	2
SE2	Siebentritt, S.:	Festkörperphysik II – Festkörperspektroskopie	Exercise	FU Berlin	2
SE2	Ennaoui, A.	Quantum Mechanis II Addition of angular momenta, Clebsh-Gordan coefficients	Lecture	University Mohamed V, Morocco	2
SE2	Fischer, Ch.-H.	Analytik von dünnen, anorganischen Filmen	Practical Course	FU Berlin	1
SE2	Lux-Steiner, M. Ch.; Harneit, W.	Festkörperphysik II – Festkörperspektroskopie	Lecture	FU Berlin	4
SE5	Tributsch, H.	Physikalisch-chemische und biologische Mechanismen solarer Energieumwandlung	Lecture	FU Berlin	2
SE5	Lewerenz, H.J.	Photovoltaische Solarzellen	Lecture	BTU Cottbus	2
SE5	Lewerenz, H.J.	Physikalische Elektrochemie	Lecture	TU Berlin	2
SE5	Lewerenz, H.J.	Oberflächenphysikalische Untersuchungen an energieumwandelnden Halbleiterstrukturen	Colloquium	TU Berlin	2
SE5	Bogdanoff, P.	Untersuchung der katalytischen Aktivität von Übergangsmetallchalkogeniden mittels DEMS	Practical Course	FU Berlin	halbtags n.V.
SE5	Fiechter, S. Tomm, Y.	Herstellung und Untersuchung von Übergangsmetallchalkogeniden	Practical Course	FU Berlin	halbtags n.V.
SE6	Pettenkofer, C. Otto, A.	Einführung in die Festkörperphysik I	Lecture	Heinrich-Heine Universität Düsseldorf	4
SE6	Pettenkofer, C.	Berufs-Praktikum für Berliner Gymnasialisten	Practical Course	Berliner Schulen	2 Wochen n.V.
SF1	Treimer, W.	Labor Bildegebende Verfahren in der Medizin	Lab Course	TFH Berlin	2
SF1	Treimer, W.	Diplomandenseminar	Seminar	TFH Berlin	1
SF1	Treimer, W.	Röntgen-und Neutronenoptik	Lecture	TU Berlin	2
SF1	Mezei, F.	Doktorandenseminar	Seminar	TU Berlin	2
SF3	Reimers, W.	Zerstörungsfreie experimentelle Eigenstressanalyse	Lecture	TU Berlin	2
SF4	Biersack, J., Stolterfoht, N.	Atom- und Festkörperphysik mit schweren Ionen	Lecture	FU Berlin	2
SF4	Czerski, K., Heide P., Bucka, H.	Astrophysikalisch relevante Elementarteilchen- und Kernreaktionen	Seminar	TU Berlin	2
SF4	Mahnke, H.-E.	Festkörperphysik mit schweren Ionen	Seminar	FU Berlin	2
SF4	Schiwietz, G.	Kurzzeitdynamik des Festkörpers	Seminar	TU Berlin	2
SF4	Schiwietz, G.	Einführung in das Physikalische Grundpraktikum I	Lecture	TU Berlin	2
SF4	Schumacher, G.	Physik der Superlegierungen	Lecture	TU Berlin	2
SF5	Eichler, J.	Theoretische Mechanik	Lecture	FU Berlin	4

Dep.	Lecturer	Topic	Course	University	SWS*
SF5	Eichler, J.	Theoretische Mechanik	Exercise	FU Berlin	2
SF5	Eichler, J.; Fröbrich, P.; Gross, D.H.E.	Theoretisch-Physikalisches Seminar	Seminar	FU Berlin	2
SF5	Wille, U.	Spezielle Probleme der Theoretischen Festkörperphysik	Seminar	FU Berlin	2
SF 6	Behne, D.	Anwendung von Radionukliden in den Bio-wissenschaften	Lecture	FU Berlin	1
SF 6	Kyriakopoulos, A. Behne, D.	Doktorandenseminar: Ausgewählte Gebiete der Spurenelementforschung	Seminar	FU Berlin	2
SF 6	Kyriakopoulos, A. Behne, D.	Biochemie von Spurenelementen	Practical Course/Seminar	FU Berlin	5
SF 6	Kyriakopoulos, A.	Biochemie von Spurenelementen	Lecture	FU Berlin	1
SF7	v. Oertzen, W.	Kern- und Elementarteilchenphysik II/Schwerionen-Reaktionen	VL/S	FU Berlin	2

I	Nielsen, U.	Rechnergeführte elektronische Prozess-leittechnik.	Lecture	TU Berlin	2
I	Nielsen, U.	Prozessrechnerntechnik.	Lecture	FU Berlin	2

RE	Krohn, H	Construction and Safety of Research Re-actors	Lecture	KWS Essen	
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Winter Term 2001 / 2002

Dep.	Lecturer	Topic	Course	University	SWS
SE1	Nickel, N. H.; Richter, W.; Esser, N.	Festkörperphysik II	Lecture	TU Berlin	2
SE2	Schedel-Niedrig, Th	Allgemeine und Anorganische Chemie, Hauptseminar	Lecture	TU Berlin	1
SE2	Simon, J.; Fischer, Ch.-H.	Instrumentelle Methoden der Analytischen Chemie	Lecture	FU Berlin	2
SE2	Fischer, Ch.-H.	Analytik von dünnen, anorganischen Filmen	Practical Course	FU Berlin	1
SE5	Tributsch, H.	Einführung in die elektrochemische Energieumwandlung und Bioenergetik	Lecture	FU Berlin	2
SE5	Lewerenz, H.J.	Photovoltaische Solarzellen	Lecture	TU Berlin	2
SE5	Lewerenz, H.J.	Oberflächenphysikalische Untersuchungen an energieumwandelnden Halbleiterstrukturen	Colloquium	TU Berlin	2
SE5	Bogdanoff, P.	Untersuchung der katalytischen Aktivität von Übergangsmetallchalkogeniden mittels DEMS	Practical Course	FU Berlin	halbtags n.V.
SE5	Fiechter, S. Tomm, Y.	Herstellung und Untersuchung von Übergangsmetallchalkogeniden	Practical Course	FU Berlin	halbtags n.V.

SF1	Treimer, W.	Diplomandenseminar	Seminar	TFH Berlin	1
SF1	Treimer, W.	Theorie der Dynamische Beugung	Lecture	TU Berlin	2
SF1	Mezei, F.	Doktorandenseminar	Seminar	TU Berlin	2
SF1	Mezei, F.	Kompaktkurs Neutronenstreuung	Lecture	TU Berlin	3
SF2	Riegel, D.	Physikalisches Praktikum für Naturwissenschaftler	Practical Course	FU Berlin	4
SF3	Genzel, C., Pyzalla, A.	Werkstofftechnik: Beugungsverfahren I	Lecture	Ruhr-Universität Bochum	1
SF3	Genzel, C.	Einsatz von Röntgen- und Neutronenstrahlen in der Werkstoffanalytik	Lecture	TU Berlin	2
SF3	Schumacher, G.	Physik der Superlegierungen	Lecture	TU Berlin	2

Dep.	Lecturer	Topic	Course	University	SWS*
SF4	Biersack, J. Stolterfoht, N.	Atom- und Festkörperphysik mit schweren Ionen	Lecture	FU Berlin	2
SF4	Czerski, K., Heide, P.; Bucka, H.	Experimentelle und theoretische Methoden der Nuklearen Astrophysik	Seminar	TU Berlin	2
SF4	Mahnke, H.-E.	Festkörperphysik mit schweren Ionen	Seminar	FU Berlin	2
SF4	Schiwietz, G.	Kurzzeitdynamik des Festkörpers	Seminar	TU Berlin	2
SF4	Heyn, M.; Heese, J.	Einführung in die Kern- und Elementarteilchenphysik	Lecture	FU Berlin	4
SF 4	Heese, J.; Heyn, M.	Übungen zur Einführung in die Kern- und Elementarteilchenphysik	Exercise	FU Berlin	2
SF4/SF 7	von Oertzen, W.	Einführung in die Kern- und Teilchenphysik I	Lecture	FU Berlin	4
SF5	Eichler, J.:	Theoretische Elektrodynamik	Lecture	FU Berlin	2
SF5	Eichler, J.:	Theoretische Elektrodynamik	Exercise	FU Berlin	2
SF5	Eichler, J.; Fröbrich, P.; Gross, D.H.E.	Theoretisch-Physikalisches Seminar	Seminar	FU Berlin	2
SF5	Santos, J.:	Computer Physik I	Exercise	FU Berlin	2
SF5	Wille, U.	Spezielle Probleme der Theoretischen Festkörperphysik	Seminar	FU Berlin	2
SF 6	Behne, D.	Spurenelementanalyse: Einführung und spezielle Probleme (Umweltanalytik, Medizin, Biologie)	Lecture	FU Berlin	1
SF 6	Kyriakopoulos, A.; Behne, D.	Doktorandenseminar: Ausgewählte Gebiete der Spurenelementforschung	Seminar	FU Berlin	2
SF 6	Kyriakopoulos, A., Behne, D.	Biochemie von Spurenelementen	Practical Course/Seminar	FU Berlin	5
SF 6	Kyriakopoulos, A.	Biochemie von Spurenelementen	Lecture	FU Berlin	1
SF7	v. Oertzen, W.	Einführung in Kern- und Elementarteilchenphysik	Seminar	FU Berlin	2
I	Nielsen, U.	Software-Entwicklungsmethoden und Projektmanagement.	Lecture	FU Berlin	2
I	Nielsen, U.	Rechnergeführte elektronische Prozessleittechnik.	Lecture	TU Berlin	2

* Term weekly hours

Exams

Dep.	Author	Title	University	Date
Habilitation				
SE1	Nickel, N.H.	Hydrogen in Polycrystalline Silicon	TU Berlin	11/01
SF3	Pyzalla, A.	Analyse stark plastisch verformter Werkstoffe mit Beugungsverfahren	Ruhr-Universität Bochum, Juli 2001	07/01

Ph.D.				
SE1	Lengsfeld, P.	Successive Laser Crystallization of Doped and Undoped α -Si:H	TU Berlin	04/01
SE1	Angermann, H.	Chemische Konditionierung der Silizium-Oberfläche: Präparation und Charakterisierung von Wasserstoffterminierten und nasschemisch oxidierten Si(111) und Si(100)-Oberflächen	FU Berlin	04/01
SE1	Würz, R.	CaF ₂ -Pufferschichten in Silizium-Heterostrukturen	Philipps-Universität Marburg	09/01
SE2	Rumberg, A.	Chemische Gasphasendeposition von ZnSe-Puffern für die Anwendung in Chalkopyrit-Dünnschichtsolarzellen	FU Berlin	05/01
SE2	Fiedeler, U.	Rekombination und Diffusion in CuGaSe ₂ -Solarzellen – Photolumineszenz- und Quanteneffizienzuntersuchungen an MOCVD gewachsenen Absorbern	FU Berlin	10/01
SE2	Neisser, A.	Gallium as an Isovalent Substitution in CuInSe ₂ Absorber Layers for Photovoltaic Applications	TU Berlin	11/01
SE2	Muffler, H.-J.	Umsetzung und Funktionsprinzip eines alternativen Material- und Abscheidekonzepts für Pufferschichten von Solarzellen	FU Berlin	05/01
SE2	Zollondz, H.	Electronic Characterisation and Computer Modelling of Thin Film Materials and Devices for Optoelectronic Applications	Ph.D. thesis, University of Abertay, Dundee (UK),	12/01
SE2	Waiblinger, M.	Untersuchungen der endohedralen Fullerene mit eingeschlossenem Stickstoff- und Phosphor-Atomen	Ph.D. thesis, Universität Konstanz	01/01
SE3	Neve, S.	Chemische Badabscheidung von Verbindungen für Cadmium-freie Chalkopyrit-Solarzellen	FU Berlin	12/01
SE4	Herrmann, D.	Präparation und Charakterisierung einer SnO ₂ :F/InP-Solarzelle	TU Berlin	02/01
SE5	Turrión Nieves, M.	Untersuchungen zur Morphologie und Stabilität von nassen und von Festkörper-Solarzellen mittels bildgebender photoelektrochemischer und optischer Techniken	FU Berlin & CSIC Madrid	12/01

SF1	Cho, Sang-Jin	Ellipsometrische Untersuchungen an Vielschichtsystemen	TU Berlin	07/01
SF2	Meschke, M.	Feldinduzierter Phasenübergang im kubischen Antiferromagneten K ₂ IrCl ₆	TU Berlin	03/01
SF2	Schneider, R.	Neutronenuntersuchungen an den anisotropen Antiferromagneten CsNiCl ₃ , Holmium und Kupfertetraaminsulfat	Universität Tübingen	05/01
SF2	Prokeš, K.;	Magnetic Structures and related physical properties of <i>f</i> electron systems (Doctor of Science degree: DrSc.)	Charles University, Prague	11/01
SF3	Chen, S.H.,	Elektronenmikroskopische Untersuchung der Legierung Ti-47Al-2Mn-2Nb (at%) + 0.8 Vol. % TiB ₂ XD TM im unverformten Zustand und nach Kriechverformung	TU Berlin	04/01
SF3	Wegener, Jörg	Mikrostruktur, Textur und Eigenspannungen von stranggepressten und reibrühr-geschweißten aushärtbaren Aluminiumlegierungen	TU Berlin	09/01

Dep.	Author	Title	University	Date
SF4	Weber, A.	Isolierte Adatome als radioaktive Sonden auf Fe-, Co-, Ni- und Pd-Oberflächen	FU Berlin	11/01
SF4	Hattendorf, J.	Bor in Silizium-Germanium-Mischkristallen	Universität Marburg	02/01
SF4	Potzger, K.	Ni- Einkristall-Oberflächen und Ni/Pd-Grenzflächen untersucht mit radioaktiven Sonden	FU Berlin	11/01
SF5	Brunne, T.	Charge Transfer and Pair Production in Relativistic Heavy-Ion Collisions	FU Berlin	07/01
SF5	Fliegans, O.	Phase transitions in „small“ systems	FU Berlin	04/01

Diploma/ Master				
SE1	Heise, H.	Wasserstoff in rekristallisiertem Silizium	TU Berlin	07/01
SE1	Muske, M.	Untersuchung der Aluminium-induzierten Kristallisation für Saatschichten in kristallinen Silizium-Dünnschichtsolarzellen mittels eines heizbaren Lichtmikroskops	FHTW Berlin	10/01
SE2	Barbar, G.	Entwicklung eines ILGAR-Verfahrens (Ion Layer Gas Reaction) zur Präparation von Chalkopyrit als Absorber in Dünnschichtsolarzellen	TFH Berlin	11/01
SE2	Steigert, H.	Entwicklung eines ILGAR-Sprühprozesses zur besseren Eingliederung in eine Inline-Produktion dargestellt an Zinkoxidschichten für Solarzellen	Fachhochschule Wiesbaden	10/01
SE5	Martinez, M.	Preparation, phase relations and optical characterization of the semiconducting ternary sulfides in the system Cu-Sn-S (Master)	FU Berlin	07/01
SE5	ElAzhar, A.	Sulfurisierung von WO ₃ -Schichten zu WS ₂ für die Anwendung in einer Injektionssolarzelle (Master)	FU Berlin	08/01
SE5	Wille, D.	Untersuchungen zur Nanostrukturierung an Silicium mit dem Rastersondenmikroskop	TFH Berlin	01/01

SF3	Rehfeldt, T.	Untersuchung der thermischen Stabilität einer plasmagespritzten NiCoCrAlY-Haftschtichtlegierung	TU Berlin	02/01
SF6	Hoppe B.	Verteilung selenhaltiger Proteine im Gehirn der Ratte	FU Berlin	09/01

I	Bruhns, C.	Entwurf und Implementierung einer Mapserverkomponente anhand der standardisierten Architektur eines wissenschaftlichen Meta-informationssystems.	Berufsakademie Berlin	08/01
I	Grunwald, S.	Entwurf und Implementierung einer Thesauruskomponente anhand der standardisierten Architektur eines wissenschaftlichen Meta-informationssystems.	Berufsakademie Berlin	08/01
I	Richter, V.	Erfassung und Visualisierung der Daten ein- und zweidimensionaler Detektorfelder.	Berufsakademie Berlin	08/01
I	Schulz, M.	Modellierung und Visualisierung prototypischer Kristall-Phasenübergänge.	Berufsakademie Berlin	08/01
I	Wagner, A.	Entwicklung eines Web-Zugangs für eine betriebliche X.509-Zertifizierungsstelle.	Berufsakademie Berlin	08/01
SZ	Kobow, V.	Erweiterung der Einsatzmöglichkeiten des Routine-Gammaspektrometrie-Auswertesystems zur Analyse von Proben wechselnder Geometrie und Nuklidzusammensetzung im Freigabemessverfahren	Berufsakademie Berlin	09/01

Co-operation Partners and Guests

Department SF1

Instruments and Methods**Industry**BENSC Activities

- ANSTO, Sydney
„Neutronenoptische Bauelemente“

Non-university researchBENSC Activities

- MPI für Festkörperphysik, Stuttgart
"Konstruktion und Weiterentwicklung von HF-Spinflippern"
- Atominstitut Wien
"Perfektkristalle (channel cut crystals), Neutronentomographie"
- BAM Berlin
Kleinwinkelstreuung und Brechung
- PTB Braunschweig
Herstellung spezieller Lamellenkristalle und channel cut crystals für hochauflösende Kleinwinkelstreuung
- PSI
Neutronentomographie

Spallation

- FZJ, HGF-Strategiefonds (HMI-Berlin; FZ-Jülich): Forschungs- und Entwicklungsarbeiten zum Bau der gepulsten ESS; Nukleare Untersuchungen für die Targetstation
- Budapest Neutron Center
- ISIS
- Risoe National Laboratory
- Los Alamos National Laboratory
- AEKI, Budapest
Neutronen Flugzeit Pulverdiffraktometer
- MBI-Berlin, Wechselwirkung intensiver Laserfelder mit Materie
- NESSI-Kollaboration an COSY (HMI-Berlin; FZ-Jülich; GANIL, Caen, Frankreich; Universität Warschau, Polen; University Rochester, Rochester, NY, USA): Investigation of GeV Proton-Nucleus Spallation Reactions

Collective Dynamics and Diffusion

- Bundesanstalt für Materialforschung Berlin
- MPI für Kolloid- und Grenzflächenforschung (Golm)
- FZ Jülich und ILL Grenoble
- LMU München
- PSI Villigen
- Los Alamos National Laboratory

UniversitiesBENSC Activities

- Technische Universität Darmstadt, Institut für Festkörperphysik, Prof. Wipf, Darmstadt

"Instrumentelle Entwicklung und Betreuung auswärtiger Gäste am kalten Dreiachsenspektrometer V2 (FLEX)"

- TFH/HMI
Wissenschaftlich-technische Zusammenarbeit auf dem Gebiet Experimente mit Neutronen und instrumentelle Entwicklungen
- University Olmütz
Anwendung der Maximum Likelihood Theorie in der Computertomographie

Collective Dynamics and Diffusion

- Uni Paris (Orsay)
- Technische Universität Darmstadt, Institut für Festkörperphysik, Prof. Wipf, Darmstadt
"Instrumentelle Entwicklung und Betreuung auswärtiger Gäste am kalten Dreiachsenspektrometer V2 (FLEX)"
- TU Berlin (Stranski Laboratorium, vormals Iwan-N.-Stranski-Institut)
- TU München
- Universität Erlangen-Nürnberg, Institut für Theoretische Physik I
- TU Berlin, Inst. f. Angewandte Geowissenschaften I
Dynamik von Protonenleitern
- Universität Münster Institut f. Physikal. Chemie und Sonderforschungsbereich 458
Dynamik schneller Ionenleiter mit Rotatorphasen
- FU Berlin, Institut für Kristallographie
Hydratationsdynamik von Cyclodextrinen in Lösung
- TU Darmstadt und FZ Jülich
Inst. f. Biochemie, IBI-2, Biologische Strukturforchung
Dynamik von biologischen Membranen und Membranproteinen
- TU Berlin (Iwan-N.-Stranski Institut)
- H. Haas, University of Sao Paulo, Brazil
Untersuchung der Dynamik in fehlgeordneten magnetischen Systemen
- Laboratoire des Verres, Montpellier
- Laboratoire de Physique des Solides, Orsay, Frankreich
- Condensed Matter Group, University of Leeds

Department SF2

Magnetism**Non-university research**Bulk Magnetism

- ICMCB Bordeaux, Prof. Kahn, "Magnetic structures of organic nitronyl-nitroxide based compounds", "Magnetic ordering in bimetallic chain compounds"
- Argonne National Laboratory, Materials Science Division, J. L. Manson, "Magnetic ordering in transition metal coordination compounds"

BENSC Activities

- ILL, Grenoble, Frankreich; ISIS, Didcot, Großbritannien
„Development of better polarised neutron instrumentation for fundamental and applied research“
- ISIS, Didcot, Großbritannien, INFN Genua, Italien
„Development of a ^3He polariser suitable for a spallation neutron environment“
- FZ Jülich
„Development of better polarised neutron instrumentation for fundamental and applied research“

UniversitiesBulk Magnetism

- Univ. of Electro-Communication, Tokyo, Prof. Ishida, Prof. Nogami, „Magnetic ordering in pyrimidine transition metal complex compounds“, „Thermodynamic properties of Cu-based $S = 1/2$ Heisenberg chains
- Rutgers University, Camden, New Jersey, Prof. J. Li, „Magnetic ordering in transition metal complex compounds“
- TU Braunschweig, Dr. S. Süllow, „Messungen der magnetischen Suszeptibilität in molekularen Magneten unter Druck“

Magnetism in Thin Films

- FU Berlin, Prof. W.D. Brewer et al.
- Uni Sao Paulo, Prof. S. Frota-Pessoa et al.
- FZ Jülich, Dr R. Zeller

BENSC Activities

- Universität Perugia, Italien
„Development of a ^3He polariser suitable for a spallation neutron environment“
- Technischen Universität Darmstadt und Heinrich-Heine-Universität Düsseldorf
„Wissenschaftliche und technische Zusammenarbeit auf dem Gebiet der Neutronenstreuung“
Betrieb des Membrandiffraktometers V1 und des biophysikalischen Labors bei BENSC.
T. Hauß, S. Dante, G. Büldt, N.A. Dencher
- Universität Mainz
„Development of better polarised neutron instrumentation for fundamental and applied research“

GuestsBulk Magnetism

- Prof. Dr. H.-J. Mikeska
Universität Hannover
Institut für Theoretische Physik
C4-Vertretung in der Abt. SF2
01.04.-30.09.01
- Dr. Karol Flachbart

Slovakische Akademie der Wissenschaften
Institut für Experimentalphysik
Kernmagnetismus in Cu
28.02.-11.04.01

Department SF3

Materials**Industry**Microstructure and Kinetics of Phase Transitions in Metallic Alloys

- HGF-Strategiefondsprojekt „Material und Verfahrensentwicklung für mikrotechnische Hochleistungsbauteile“: mit FZJ, FZK, GKSS und mehreren Industrieunternehmen

Strain and Stress in Materials and Technical Parts

- 11 Partner aus Industrie und Forschung
Kalibrierung von Neutronenbeugungseigenstressanalysen
- HGF-Strategiefondsprojekt „Material und Verfahrensentwicklung für mikrotechnische Hochleistungsbauteile“: mit FZJ, FZK, GKSS und mehreren Industrieunternehmen

Structure Investigations in Nanomaterials using Neutron Small Angle Scattering (SANS)

- Fa. CIBA Vision: Qualitätscharakterisierung in Polymerprodukten mit SANS
- Berlin Heart GmbH Berlin, Herstellung und Charakterisierung von Ferrofluiden

Non-university researchMicrostructure and Kinetics of Phase Transitions in Metallic Alloys

- EPFL, Departement de Physique, Lausanne, Schweiz
Stabilität von geordneten intermetallischen Legierungen.
- Kharkov Institute for Physics and Technology, Ukraine (NATO grant)
Legierungen mit heterogenen Strukturen.
- HGF-Strategiefondsprojekt „Material und Verfahrensentwicklung für mikrotechnische Hochleistungsbauteile“: mit FZJ, FZK, GKSS und mehreren Industrieunternehmen

Structure Investigations in Nanomaterials using Neutron Small Angle Scattering (SANS)

- Korean Atomic Energy Research Institute (KAERI), Taejeon, South Korea. Materials research using SANS-
- NECSA, South Africa: Development and test of position sensitive detectors for SANS
- DEMOCRITOS (Athens), Developments of SANS detector assemblies
- Riso National Laboratory: SANS Instrumentierung für ESS

- ISIS facility: SANS-Instrumentierung für ESS, Dataanalyse
- Laboratoire Leon-Brillouin, Saclay Short range ordering in metallic glasses
- Institut Laue Langevin, Grenoble: SANS investigations in GMR materials
- Paul-Scherrer-Institut, Switzerland Entwicklung von Daten-reduktions-und SANS Auswertesoftware
- IAEA Vienna, Research Agreement: CRP: Development and practical utilization of SANS.
- PTB Berlin: SANS und Magnetorelaxation in Ferrofluiden
- MPI Golm: Strukturuntersuchungen in polymerverkapselten Magnetflüssigkeiten
- MDC Berlin: Strukturuntersuchungen in Magnetosomen
- FZK Karlsruhe: Struktur von Weichmagnetischen Materialien
- FZJ Jülich, SANS Instrumentierung für ESS

Strain and Stress in Materials and Technical Parts

- HGF-Strategiefondsprojekt „Material und Verfahrensentwicklung für mikrotechnische Hochleistungsbauteile“: mit FZJ, FZK, GKSS und mehreren Industrieunternehmen
- MPA Stuttgart
Gradientenwerkstoffe

Universities

Microstructure and Kinetics of Phase Transitions in Metallic Alloys

- University of Oxford, Dept. of Materials Science, UK
Phasengrenzflächen in Legierungen.
- Kyushu University, Fukuoka, Japan
Ginzburg-Landau Gleichungen für Nichtgleichgewichtssysteme.
- Institut für Metallische Werkstoffe, Technische Universität Berlin (DFG-Vorhaben)
Diffusion in mehrkomponentigen Metallschmelzen
- Humboldt Universität Berlin, Institut für Physik, Kristallographie (DFG-Vorhaben):
Strukturelle und chemische Gradienten in kriechverformten Superlegierungen
- Friedrich-Schiller-Universität Jena, Physikalisch-Astronomische Fakultät, Metallische Werkstoffe
Ti-Based superalloy
- Technische Universität Braunschweig
Ni-based Superalloys

Structure Investigations in Nanomaterials using Neutron Small Angle Scattering (SANS)

- Technical University Košice, Slovakische Republik SANS investigation of thermally-exposed Ni-base superalloy
- Université de Grenoble, ESRF Grenoble
- SANS and ASAXS in bulk amorphous alloys
- Academy of Sciences of the Czech Republic, Nuclear Physics Institute Rež near Prague, Czech Republic

- Modellierung von Kleinwinkel-Streudaten aus Einkristall-Superlegierungen.), Profile analysis in high-resolution neutron diffraction experiments.
- Slovak Academy of Sciences, Institute of Experimental Physics Košice, Slovakische Republik
Weichmagnetische Nanomaterialien.
- Institut of Electrophysics, Urals Division of Russian Academy of Sciences, Ekaterinburg, Russia SANS studies of Mechanically Alloyed Soft Magnetic Alloys
- Technische Universität Braunschweig. TU Darmstadt.: SANS investigation of precipitate microstructure in Ni-base superalloys at elevated temperatures
- Institut für Festkörper und Werkstofforschung Dresden
- Modellierung von Entmischungsvorgängen aus Streudaten., Mikrostrukturentwicklung in amorph-nanokristallinen Systemen.
- Institut für Hochtechnologie, Universität
Magnetische Strukturbildung in Ferrofluiden
- RWTH Aachen, Lehr- u. Forschungsgebiet
Mechanische Verfahrenstechnik
- NKWS Untersuchungen an teilerstarre Legierungen im Scherfeld.
- ZARM Universität Bremen: SANS und Magneto-rheologische Untersuchungen in Ferrofluiden
- Technische Universität Darmstadt: Fachbereich Materialwissenschaften Neutronen-Kleinwinkelstreuung an nanoskaligen Keramiken
- Universität des Saarlandes, Forschungszentrum Karlsruhe
- Magnetische Austauschkopplung in ferromagnetischen Nanomaterialien
- Universität Rostock, Universität Jena
- Nanoskalige Magnetische Oxidgläser

Strain and Stress in Materials and Technical Parts

- GU/Uni Essen, Institut für Werkstofftechnik
Kurzzeitmetallurgie
- Sfb 605: 6 Institute von TUB, BAM
Elementarereignisse, Reibprozeß-induzierte Eigenspannungen

Guests

Microstructure and Kinetics of Phase Transitions in Metallic Alloys

- Mikhailovskii, I. Prof.
Kharkov Institute of Physics and Technology, Ukraine
Legierung mit heterogenen Strukturen
12.3. –6.4. 2001.
- Lazarev, N., Dr.
Kharkov Institute of Physics and Technology, Ukraine
Diffusionsmechanismen in Legierungen
18.3. –6.4. 2001
- Sahoo, Pratap Ranjan
Indian Institute of Technology, Kharagpur India
Optimization and thermal characterization of PdCuNiP-bulk glasses
6.7.2001-28.2.2002

Structure Investigations in Nanomaterials using Neutron Small Angle Scattering (SANS)

- Tatchew, Dragomir
Institut für physikalische Chemie der bulgarischen Akademie der Wissenschaften, Sofia Bulgarien
Nanostruktur von NiP Gläsern, Strukturberechnung unter Nutzung der Maximum-Entropie Methode
17.9.2001-21.11.2001
- Jeeteh Keshew , NECSA South Africa Design and Practice of SANS
3.9-28.11.2001
- Chang Hee Lee, (KAERI) South Korea
Design of Neutron Instrumentation
4.-9.9.2001
- Dr. Mergita, Demokritos (Athens) Design and tests of SANS Detector arrays
30.4.-5.5.2001
- Dr. R. Schneider, Fa Mesytec München, Dr. R. Gilles (TU Darmstadt)
Design and tests of SANS Detector arrays
30.4-5.5.2001

Department SF4

Structure and Dynamics**Industry**Ion beam technology

- Oxyphen
Ion tracks in polymers (c)[°]

Non-university researchAtomic Dynamics, local structures

- Saha Institute of Nuclear Physics, Kalkutta, Indien
Ion induced desorption (c)
- ATOMKI, Debrecen, Ungarn
Dynamics of Electron-Electron Interaction in Fast Ion-Atom Collisions (c)
- CIRIL, France
Analogies between the ionization mechanisms of photons and very fast ions (c)
- Nuclear Physics Institute, Rež near Prague, Czech Republic
Implantation and diffusion processes in polymers
- Centre Interdisciplinaire de Recherche avec des Ions et Lasers (CIRIL), Caen, Frankreich
Materials modification with fast ions
- CERN (ISOLDE)
Magnetism at interfaces
- Institut für Kristallzüchtung, Berlin
Growth of Aperiodical SiGe Gradient Crystals for Synchrotron Light Monochromatization at BESSY (c)
- GSI Darmstadt

Ion tracks in solids (c)

- GSF-Forschungszentrum für Umwelt und Gesundheit (c)
- Forschungszentrum Jülich
Theory of materials modifications with fast ions

Ion beam analysis

- COST G8
Nondestructive testing on museum objects (c)
- Inst. Techn.e nucl., Sacavem, Portugal
Stoichiometry of ultra-thin Al-On layers
- Kunsthistorisches Museum Wien
Silver coin collection Hoard of Tulln
- Rathgen Forschungslabor der Stiftung
Sceptre of Charlemagne (c)
- Preußischer Kulturbesitz (c)
- Forschungszentrum Rossendorf
Ion beam analysis (c)
- Skulpturensammlung, Berlin
Silver treasure (c)
- Fachhochschule für Technik, Berlin
Prussian medals (c)
- Forschungszentrum Jülich
Stoichiometry and area density of zinc oxide
- Heinrich-Hertz-Institut, Berlin
Impurities in metal contacts on Si

Treatment of eye tumors

- INP Krakau
Technical realization of tumor therapy
- DKFZ Heidelberg

Ion beam technology

- Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)
- Radiation tests

ISL acclerator development and user service

- EPCS-Mitglieder
(alle Labors mit Beschleuniger-Kontrollsystemen und Industrie) speziell VISTA- und EPICS-Anwender

UniversitiesAtomic Dynamics, local structures

- Universidad Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil
Energy loss, track effects, implantation and diffusion processes (PROBRAL Vertrag) (c)
- North Eastern Hill University, Shillong, Meghalaya, India
Characterization of irradiated polymers
- University of Mangalore, Mangalore, India
Physics and chemistry of ion track modifications
- Western Michigan University, USA
Multielectron processes in fast ion-atom collisions
- Technische Universität Wien
Potential sputtering from insulators by slow highly charged ions

[°] (c): Co-operation with contract

- Université de Caen, France
Analogies between Ion and Photon interaction with Matter
- Manne-Siegbahn-Institut, Stockholm, Sweden
Large-Angle Scattering of Slow Highly Charged Ions at Surfaces
- Université Libre de Bruxelles, Belgium
- Universidad del Pais Vasco, San Sebastian, Spain
- Technische Hochschule Wien
Point defects in silicon and germanium
- Universität Aarhus
Defects and diffusion in semiconductors
Magnetism at interfaces
- Humboldt Universität Berlin, Institut für Kristallographie
Structural and chemical gradients in creep-deformed super alloys (DFG) (c)
- Technische Universität, Berlin
Solid-state effects in nuclear fusion reactions
- Universität Stuttgart
Atomic transport in multilayer ceramics
- LMU München
Ion tracks in solids
- Universität Jena
Rare earths in SiC
- Universität Bergakademie Freiberg
Magnetic semiconductors

Ion beam analysis

- Universität Guelph, Kanada
- Universidad Complutense de Madrid, Spain
Structure of SiOxNy: H layers
- University of Oxford
Stoichiometry of In (S,O,H) layers
- Technische Universität Berlin, FB Keramik
Hydrogen profiles at the surface of rails
- Humboldt-Universität Berlin, Inst. f. Zahnmedizin der Charité
Elemental depth profiles at the surface of human teeth
- TU Hamburg-Harburg
Stoichiometry of Si-SiC hetero-solarcells
- Universität Stuttgart
Cd diffusion in ZnO/CdS/Cu(Jn,Ga)Se2 solar-cells
- Universität Marburg
Disc brooches of Eltville

Treatment of eye tumors

- Universitätsklinikum Benjamin Franklin, FU Berlin
- Charité, HU Berlin

Ion beam technology

- Technical University, Novosibirsk, Russia
Development of sensors based on fullerene in etched ion tracks
- Institut für Elektrotechnik, Fernuniversität Hagen, Germany
Development of electronic devices based on ion tracks in polymers

ISL acclerator development and user service

- Institut für Angewandte Physik, Johann-Wolfgang von Goethe Universität, Frankfurt/M. (RFQ)

BESSY Activities

- Universität Potsdam, Institut für Physik
Untersuchung von Strukturveränderungen mittels Röntgenintensitätsfluktuations-spektroskopie (c)

GuestsAtomic Dynamics, local structures

- Bhattacharyya, S.:
Saha Institute of Nuclear Physics, Kalkutta, India
04.09.2001-14.09.2001
- Grande, P.:
Universität FRGS, Porto Alegre, Brasilien
01.10.2001-30.01.2002
- Emtsev, V.V.
Ioffe Institut, St. Petersburg, Russland
12.03.2001-27.03.2001
- Govindaraj, R.
Indira Ghandi Center for Atomic Research
Kalpakkam, Indien
10.02.2001-31.12.2001
- Sulik, B.:
ATOMKI, Debrecen, Ungarn
01.08.2000 -23.09.2002
- Lieb, K.L.:
Universität Göttingen
05.11.01-31.12.01

Ion beam technology

- Berdinsky, A.S.:
TU Novosibirsk, Russia
Characterization of sensors based on fullerene tubules in etched tracks
09.07.2001-18.08.2001
- Rao, V.:
Mangalore University, India
Production and characterization of metallic tubules in etched tracks
17.09.2001-19.10.2001

Department SF5

Theoretical Physics**Non-university research**Magnetic systems, thermodynamics and atomic collisions

- Dr. A. Ichihara, Japan Atomic Energy Research Institute, Tokai-mura, Japan
Polarization of Photons Emitted in Radiative electron Capture by Bare High-Z Ion

- Dr. A. Botvina, GSI Darmstadt
Microcanonical Statistic in Nuclear Fragmentation

Semiconductor physics and photovoltaics

- Prof. M. Scheffler, Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin
Quantenpunkte

Soft matter and biological physics

- Dr. G. Cappello, Physico-Chimie Curie - UMR 168 CNRS/Institut Curie Paris, France
Transport phenomena of microtubule associate motor proteins
- Prof. F. Jülicher, Prof. J. Prost, Physico-Chimie Curie - UMR 168 CNRS/Institut Curie Paris, France
Theoretical description of a single motor protein
- L. LeGoff, Prof. F. Amblard, Physico-Chimie Curie - UMR 168 CNRS/Institut Curie Paris, France
Dynamical fluctuations in biopolymer semiflexible networks
- L. LeGoff, Prof. F. Amblard, Physico-Chimie Curie - UMR 168 CNRS/Institut Curie Paris, France
Physics of a single semiflexible polymer
- Prof. Dr. Ralph Metzler
Nordic Institute for Theoretical Physics (NORDITA), Denmark.
Collective phenomena of active systems
- Dr. M. Bär, MPIPKS Dresden
Musterbildung in diskreten Medien
- Prof. R. Merkel, FZ Jülich
Dynamik des Zytoskeletts

Universities

Magnetic systems, thermodynamics and atomic collisions

- Dr. P. Henelius, KTH Stockholm, Sweden
Quantum Monte Carlo
- Prof. T.M. Nieuvenhuizen
Department Physics and Astronomy,
University of Amsterdam, NL
Second Law of Thermodynamics and Quantum Mechanics
- Prof. M. Saber, University of Meknes, Morocco
Thin ferromagnetic films
- Prof. V.M. Shabaev, Physics Department, State University of St. Petersburg, Russia
Electron-Positron-Production in Electron Capture in Relativistic Ion-Atom Collisions (c)[°]
- Prof. N. Toshima, Institute of Material Science, The University of Tsukuba, Japan
Axial and Landau Gauge for an Electron in a Combined Magnetic and Coulomb Field
- Prof. W. Greiner, Universität Frankfurt/M
Trilaterale Kollaboration Deutschland, Israel, Palästina (gefördert von der DFG unter Gr 398.6-2) (c)

Semiconductor physics and photovoltaics

- Prof. J. Christen, Otto-von-Guericke-Universität, Magdeburg
Spannungsanalyse in GaN Heterostrukturen
- Prof. C. Thomsen, TU Berlin
Spannungsanalyse in GaN Heterostrukturen

Soft matter and biological physics

- Dr. D. Dreyfus, Physique des Milieux Condensée, Université Pierre et Marie Curie, Paris, France
Light scattering by longitudinal phonons
- Dr. A. Hanke, Department of Physics, Oxford University, UK.
Collective phenomena of active systems
- Prof. P. Jung, Department of Physics and Astronomy, Ohio University, Athens, USA
Stochastic models of intracellular calcium dynamics
- Dr. K. Kroy, Department of Physics and Astronomy - Condensed Matter, University of Edinburgh, UK
Semiflexible polymers theory
- Prof. M. C. Marchetti, Dept. of Physics, Syracuse University, N.Y., USA
Vortex matter in type-II superconductors
- Prof. D. Nelson, Condensed Matter Theory Group, Physics Department - Harvard University, Cambridge, MA, USA
Physics of colloids
- Prof. R. Pick, Université Pierre et Marie Curie, Paris, France
Light scattering by longitudinal phonons
- Prof. C. F. Schmidt, Vrije Universiteit Amsterdam - Faculty of Sciences, NL, Division of Physics and Astronomy - Physics of Complex Systems
Motor Proteins and DNA related enzymes
- Prof. C. F. Schmidt, Vrije Universiteit Amsterdam - Faculty of Sciences, Division of Physics and Astronomy - Physics of Complex Systems, NL
Rheology of semiflexible filaments networks
- Prof. J. Sneyd, Massey University, Auckland, New Zealand
Workshop on calcium dynamics
- Prof. U. Täuber, Virginia Polytechnic Institute and State University, USA
Non-equilibrium growth processes
- M. Valentine, Prof. D. A. Weitz, Experimental Soft Condensed Matter Group, Division of Engineering and Applied Sciences Department of Physics - Harvard University, Cambridge, MA, USA
Transport phenomena driven by motor proteins in vivo systems, Biophysics of the Cell
- Dr. A. Vilfan, Theory of Condensed Matter Group, Cavendish Laboratory. University of Cambridge, UK
Molecular motors
- Prof. C. Wiggins, Department of Applied Physics and Applied Mathematics, Columbia University, New York, NY, USA
Theory of semiflexible biopolymers

[°] (c): Co-operation with contract

- Dr. A. Bausch, E22 - Biophysics - Technische Universität München
Physics of biopolymer networks
- Dr. C. Bechinger, Universität Konstanz Fachbereich Physik, L.S. Prof. Dr. Leiderer
Transport phenomena in driven colloidal particles systems
- Dr. T. Gisler, Universität Konstanz
Proteinkristalle
- M. Keller, E22 - Biophysics - Technische Universität München
Motor protein-filament interaction in semiflexible biopolymer networks
- M.Keller, E22 - Biophysics - Technische Universität München
Physical properties of actin networks
- Dr. A. Latz, TU Chemnitz
Light scattering by longitudinal phonos
- Prof. D. Malchow, Universität Konstanz
Edition eines Bandes von Lecture Notes in Physics über Kalzium Dynamik
- Prof. E. Sackmann, E22 - Biophysics - Technische Universität München
Physics of the cytoskeleton
- T. Voigtmann, Physik Department, TU München
Completely monotone solutions of mode coupling equations
- Prof. G. Warnecke, Universität Magdeburg
Simulationen von Reaktions-Diffusions-Gleichung in drei räumlichen Dimensionen

Guests

Magnetic systems, thermodynamics and atomic collisions

- Dr. H. Hidmi
Bethlehem University
Cluster Fragmentation
15.7.01-31.12.01
- Dr. A. De Martino
SISSA Triest, Italy
Gleichgewichtsstatistik gravitierender Systeme
1.11.01-31.10.02
- A. Klasnikov
State University of St. Petersburg, Russia
Electron Capture in Relativistic Ion-Atom Collision
4.6.-3.7. 01 und 17.10.-15.11. 01
- Prof. M. Saber
University of Meknes, Morocco
Ferromagnetische Filme
1.2.-31.5.01
- Prof. V.M. Shabaev
State University of St. Petersburg, Russia
Electron Capture in Relativistic Ion-Atom Collision
4.6.-3.7.01
- Dr. V.J. Votyakov
Karpov Institute, Moscow, Russia
Mikrokanonische Thermodynamik
26.1.98-31.12.02

Soft matter and biological physics

- Dr. A. Basu
Centre for Condensed Matter, Theory, Dept.

- Physics, Indian Institute of Science, Bangalore, India
Driven nonequilibrium systems
17.6.-17.9.01
- Prof. C. Wiggins
Department of Applied Physics and Applied Mathematics, Columbia University, New York, NY, USA
Theory of semiflexible biopolymers
1.6.-31.8.01

Department SF6

Trace Elements

Industry

Molecular trace element research: selenoproteins and metalloproteins

- BIOGENES Berlin,
Entwicklung von Antikörpern gegen Plasma-Glutathionperoxidase

Non-university research

Analysis of trace elements and metalloproteins

- Bundesanstalt für Materialforschung und -prüfung
- Einsatz der NAA als Referenzmethode bei der Zertifizierung
- Bundesanstalt für Materialforschung und -prüfung (BESSY)
Analyse von Metalloproteinen durch RFA
- Gesellschaft für Umweltanalytik, Boden- und Gewässerschutz mbH, Berlin
- Methodenvergleich von Selenanalysen in Gewebeaufschlüssen
- GKSS Geesthacht, Physikalische und Chemische Analyse
Untersuchung von Metalloproteinen

Molecular trace element research: selenoproteins and metalloproteins

- Rowett Research Institute, Division Biochemical Sciences, Aberdeen, U.K.:
Immunoassays von Selenoproteinen
- Max-Planck-Institut für Molekulargenetik Berlin
Sequenzierung von Selenoproteinen
- Max-Delbrück-Centrum Berlin
Kristallisation von Selenoproteinen
- GSF München
Untersuchungen von Selenoproteinen an Knockout-Mäusen

Clinical applications

- Referenzzentrum für neurodegenerative Krankheiten, Klinikum Großhadern, München
Speziation von Metalloproteinen im menschlichen Gehirn

Universities

Analysis of trace elements and metalloproteins

- Humboldt-Universität Berlin, Zahnklinik
Untersuchung der Abriebfestigkeit von Zahnmaterialien mit radioaktiven Tracermethoden
- Technische Universität München, Radiochemie
Charakterisierung des Neutronenspektrums an den Bestrahlungspositionen des BER II
- Universität Hamburg, Anorganische und Angewandte Chemie (HASLAB)
Identifizierung von Metalloproteinen durch RFA

Molecular trace element research: selenoproteins and metalloproteins

- FU Berlin, Institut für Tierernährung:
Zusammenhänge zwischen Selen und Fettsäurestoffwechsel
- FU Berlin, Institut für Versuchstierkunde:
Zucht und Untersuchung von Ratten mit Selenmangel
- FU Berlin, Universitätsklinikum Benjamin Franklin, Abteilung Nuklearmedizin:
Traceruntersuchungen an Ratten in vivo

Clinical applications

- Zentrum für Dermatologie und Andrologie der Justus-Liebig-Universität, Gießen
Selenoproteine bei männlicher Infertilität
- Frauenklinik und poliklinik, Universitätskliniken des Saarlandes, Homburg/Saar.
Selenoproteine bei männlicher Infertilität HU Berlin, Charité, Medizinische Klinik
Selenoproteine bei Herzkrankheiten
- HU Berlin, Charité, Institut für Anatomie
Selenoproteine bei neurologischen Erkrankungen

Guests

Analysis of trace elements and metalloproteins

- Berger, A.:
BAM Berlin
Neutronenaktivierungsanalyse

External Users of the

Neutron Activation Analysis Laboratory (NAA)

Universities and research institutes

- Behnert, I., Riederer, I.:
Rathgen Research Laboratory, Berlin
Trace element analysis of pigments (ochre)
- Berger, A.:
Federal Institute for Materials Research and Testing, BAM, Dept.I.4, Berlin
Certification of Iron
Trace elements in honey
NAA of condenser foil

- Brewer, W., Gierlings, M.:
Dept. of Physics, FU Berlin, Berlin
Activation of Ag/Co/Au multi layers
- Buckel, W., Hans, M.:
Dept. of Biology, University Marburg
Mo and W in enzymes
- Dohmen, B.M.:
Dept. of Nuclear Medicine, University Tübingen
Production of Sm-153 and Re-186 for medical applications
- Finke, Ch.; Arens, B.:
Dental Clinic North, HU Berlin
Study of abrasion resistance of dental materials (Arabesk, Z 100) with radioactive tracers
- Janz, S.:
National Institute of Health, Bethesda, USA
Determination of Se und Zn in biological materials
- Korschinek, G.:
Dept. of Physics, TU München
Activation of Hf
- Kreyling, G.:
Institute of Inhalation Biology, GSF, Neuherberg
Production of Ir-192
- Laukel, M.:
MPI, terrestrical Mikrobiology, Marburg
Determination of Mo und W in enzymes
- Lin, X., Henkelmann, R.:
TU München, Institute of Radiochemistry
Activation of tungsten
Determination of the neutron spectra in DBVK and DBVR
Trace elements in human hair
Determination of V in Al and Si
- Phasalidis, I.:
Dep. of Chemistry, University of Cyprus
Heavy metals in air filter samples
- Richter, M.:
IIF, Leipzig
Production of Ni-58 as Tracer
- Riebe, G.:
Federal Institute for Materials Research and Testing, BAM, Dept.I.4, Berlin
Activation of Cs
- Rösch, F.:
Institute for Nuclear Chemistry, University Mainz
Activation of Yb₂O₃
Activation of Tb₂O₃
Activation of Yb₂O₃
- Sadowski, H.:
Dept. Physics, University Erlangen
Activation of SiC, Study of lattice damages
- Schimke, I.:
University Hospital Charite, HU Berlin
Determination of Se, Zn in human ventricle tissue
- Sobel, E.:
Institute for Earth Sciences, University Potsdam
Production of fission tracks in Zirkon and Apatite
- Tröger, W.:
University Leipzig
Activation of Zr-Wolframat
Activation of Hf
- Vinceti, M., Malagoli, C.:
University Modena, Italy

- Trace elements in nails (case-control study melanoma)
- Wagner, E.:
Dept. of Physics, Technical University München
Production of Os-193 sources
- Wallner, A.:
Strahlenbiologisches Institut der
Ludwig-Maximilian-Universität München
Production of Ca-41

Industrial applications

- Asseln, B.:
Tru-Tec Process Diagnostics, Viernheim
Production of Ar-41 as tracer
- Gleißner, G.:
Pilkington Deutschland AG, Weiherhammer
determination of Co in glass
- Kruse, R.:
Deutsche Gesellschaft für klinische Chemie,
Bonn
Se in human urine
- Kurtze A.:
Swarovski, Wattens, Österreich
NAA of natural Topaz
- Voitsch, A.:
Schott Glas, Jena
NAA of quartz glass
- Seher, A.:
BASF, Ludwigshafen
Production of Ar-41 as tracer

Department SF7

Nuclear Measurements

Industry

Development of thermal neutrons imaging detectors

- IMT AG, Greifensee, Switzerland, development and fabrication of the microlithography for microstrip gas chamber detectors (c)

Non-university research

ERDA and Nuclear Spectroscopy

- IReS, Strasbourg (France)
Hyperdeformation, Clusteremission
- LNL, Legnaro (Italien)
Spectroscopy of deformed states with particle- γ -coincidences, Clusteremission
- JINR, Flerov Laboratory of Nuclear Reactions, Dubna
Neutron-rich light nuclei
- Laboratori Nazionali de SUD, Catania
Molecular structures in light nuclei
- „Horia Hulubei“ National Institute for Physics and Engineering, Bukarest
coupled reaction channels calculations
- Dipartimento di Fisica dell' Università di Padua
Spectroscopy of deformed states with particle- γ -coincidences, cluster-emission
- Institute for Nuclear Science and Technology, Hanoi, Vietnam

- Refractive scattering
- Rudjer Boskovic Institute, Zagreb, Croatia
Study of deformed light nuclei with particular cluster structure, using particle-gamma coincidences
- GSI Darmstadt, γ -Spectroscopy
- Fraunhofer Institut für Schicht- und Oberflächentechnik, Braunschweig, Germany
Development of a multilayer get up for microstrip gas chamber detectors

Development of thermal neutrons imaging detectors

- Trilateral collaboration project „Development of a Large-Area Hybrid Multilayer Micro-Strip Imaging“ (by contract) with:
 - Frank Laboratory of Neutron Physics, Joint Institute for Nuclear Research, Dubna, Russia
 - Institute for Physics of Microstructures RAS, Nizhny Novgorod, Russia
 - EU-RTD-Project TECHNI (Technology for Neutron Instrumentation), (by contract) with:
 - Rutherford Appleton Laboratory, ISIS United Kingdom
 - ILL, Grenoble, France
 - INFN, Milan, Italy
 - CEA, LLB, Paris, France
 - Paul Scherrer Institut, Villingen, Switzerland
 - Riso National Laboratory, Denmark
 - Forschungszentrum Jülich, Germany
 - Technische Universität Delft, IRI,
 - The Netherlands
 - King's College, London, United Kingdom
 - Università degli Studi di Milano-Bicocca, Italy

Universities

ERDA and Nuclear Spectroscopy

- St. Petersburg University (Russia)
Refractive Scattering
- Ohio University, Athens, USA
Neutron-rich light nuclei
- TU-München
High resolution ERDA
- TU-Darmstadt
Energy-loss and charge exchange process in non-equilibrium
- Universität Tübingen
Project Refractive scattering

Guests

ERDA and Nuclear Spectroscopy

- Dr. Avrigeanu, Marilena
Horia Hulubei National Institut of Physics and Nuclear Engineering, Dept. of Experim. Physics
Coupled reaction channel calculations
29.07.01 – 08.09.01
- Prof. Grimes, Steven M.
Ohio University, Athens
Project Neutron-rich Light Nuclei
04.12.01 – 12.12.01

- Dr. Kalpakchieva, Rumiana
Flerov Laboratory of Nuclear Reactions, JINR,
Dubna, Russia
Project Neutron-rich light nuclei
20.11.01 – 20.12.01
- Dr. Khoa, Dao T.
Institute for Nuclear Science and Technology,
Hanoi, Vietnam
Project Refractive Scattering
28.05.01 – 01.07.01
- Dr. Krouglov, Ivan
Physical Institute of St. Petersburg University,
Russia
Project Nuclear Scattering
01.08.01 – 18.09.01
- Prof. Lieb, Klaus Peter
II. Physikalisches Institut, Göttingen
Nuclear structures studies
01.11.01 – 31.12.01
- Prof. Massey, Thomas, N.
Ohio University, Athens
Project Neutron-rich Nuclei
19.02.01 – 05.03.01
- Milin, Matko
Institut Rudjer Boskovic (Zagreb), Croatia
EUROBALL-Project, Study of deformed light
nuclei with particular cluster structure, using
particle- γ -coincidences
15.02.01 – 06.02.02
- Pirzadeh, Pascal
TU-Darmstadt
Stopping-power in non-equilibrium
22.05.01 – 30.10.01
- Szilner, Suzana
Rudjer Boskovich Institute, Zagreb (Croatia)
CRC – calculations on $^{16}\text{O} + ^{12}\text{C}$ scattering
05.08.01 – 09.09.01
- Torilov, Sergey
St. Petersburg University
Nuclear Physics Dept.
EUROBALL-Project, Study of deformed nuclei
with particular cluster structure, using particle-
gamma coincidences
01.05.01 – 01.05.02
- Tumino, Aurora
INFN, Catania
University of Catania, Italy
Molecular structures in neutron-rich nuclei
24.09.00 – 30.09.01

Development of thermal neutrons imaging detectors

- Balykov, Lev N.
Institute for Physics of Microstructures RAS,
Russia
Development of an imaging detector for thermal
neutrons: converter development
EU-TECHNI
05.09.00 – 04.09.02
- Levtschanovskii, Feodosii V.
FLNP, Joint Institute for Nuclear Research,
Dubna (Russia)
Development of an imaging detector for thermal
neutrons: data acquisition card
24.03.-08.04.01, 01.07. – 12.07.01
- Nikiforov, Alexander
Joint Institute for Nuclear Research, Dubna
Development of an imaging detector for thermal
neutrons: data acquisition card

- (Russia)
24.03.-08.04.01, 01.07. – 15.07.01
- Prikhodko, Valentin I.
FLNP, Joint Institute for Nuclear Research,
Dubna (Russia)
Collaboration Meetings
BMBF-Dubna-funds
01.07. – 05.07.01, 01.11.-09.11.01

Research Reactor

Industry

- BWX-Technologies, Lynchburg, Virginia (USA)
Fabrication of MTR fuel elements; Development
of new U-Mo fuel elements.
- CERCA, Romans, France
Fabrication of MTR fuel elements; Development
of new U-Mo fuel elements.
- L'Air Liquide, Sassenage, France
Cooperation in cryo-technic matters of the Cold
Neutron Source (KNQ)
- Westinghouse Reactor GmbH, Munich
Upgrading of technical components of the BER
II due to the further development of the state of
the art.
- Siemens Building Service Engineering, Berlin
Upgrading of technical safety components for
the BER II security area.
- Konsortium GNS/NCS, Hanau
Development of MTR casks for transport and
storage of spent fuel elements.
- Engineering Company B&S, Berlin
Modifying of existing computer programs for
nuclear power plants for the BER II cores.

Non-university research

- Membership of annual Meetings on
- International Conference on Reduced Enrichment
for Research and Test-Reactors (RERTR)
- International Group of Research Reactors
(IGORR)
- Research Reactor Fuel Management (RRFM)
- AFR research group for operating and safety
matters on research reactors
Exchange of experience
- VGB Kraftwerkstechnik, Essen
Membership; Exchange of Experience

Department SE1

Silicon Photovoltaics

Industry

Cristalline Silicon Thin-film Solar Cells

- XEROX, Palo Alto (USA)
H-Passivierung und Transport
- FAP Dresden
Depositionstechnologie
(TT-Projekt) (FUEGO)

Silicon-Heterostructures

- DaimlerChrysler AG, Forschungszentrum Ulm Bauelemente-Technologie (c)^o
- Centrum für Intelligente Sensorik (CIS) Erfurt a-Si:H/c-Si Heteroemitter-Solarzellen (c)

Non-university researchCristalline Silicon Thin-film Solar Cells

- A. F. Ioffe Institut St. Petersburg (Russland) Nano-, mikro- und polykristallines Silizium (EU-Projektverträge: Copernicus & INTAS)
- IPV-Forschungszentrum Jülich Materialforschung a-Si:H und μ c-Si:H BMBF-Projektvertrag
- IPHT Jena Laserkristallisierte Si-Schichten BMWi-Projektvertrag

UniversitiesCristalline Silicon Thin-film Solar Cells

- North Carolina State University, Raleigh (USA) Plasmadeposition (c)
- Universität Erlangen Struktur kristalliner Si-Filme (c)
- Universität Marburg PECVD-Deposition und Charakterisierung (c)

Silicon-Heterostructures

- Lomonossov-Universität Moskau (Russland) Elektrochemische Oberflächenpräparationen
- TU Berlin, Institut für Festkörperphysik Prozesscharakterisierung an Silizium-Oberflächen
- Technische Universität München Halbleiter/Elektrolyt-Kontakt
- Friedrich-Schiller-Universität Jena RBS-Analytik (c)
- TU Hamburg-Harburg Rekrystallisierte SiC/Si Dünnschichtsolarstrukturen (c)
- Universität Stuttgart, Institut für Physikalische Elektronik a-Si/c-Si-Heterostrukturzelle (c)
- Fern-Universität Hagen a-Si/c-Si-Heterostrukturzelle (c)
- Universität Oldenburg, FB Physik a-Si/c-Si-Heterostrukturzelle (c)
- RWTH Aachen a-Si/c-Si Heterostrukturzelle (c)

GuestsCristalline Silicon Thin-film Solar Cells

- Saleh, Rosari (Dr.) University of Djakarta, Indonesien „Hydrogen Effusion in μ c-Si films“ 3.9.-31.10.01

Silicon-Heterostructures

- Dittrich, Thomas (Dr.) TU München „Passivierung von Si-Grenzflächen“ 19.3.-13.4.01
- Yahyaoui, Fatima Zahra Université Ibn Tofail, Faculté des Sciences Marokko „Etching of Silicon Surface“ 2.4.-31.12.01

Department SE2

Heterogeneous Material Systems**Industry**MOCVD

- F. Karg, Siemens and Shell Solar GmbH, München
- D. Hariskos, ZSW, Stuttgart „Development of Cd-free buffers for efficient CIGS solar cells“ (c)^o

CSV T

- S. Rushworth, Epichem, Bromborough, UK „Development of MO-precursors“(c)

New Materials

- Siemens-Shell München (cells and minimodules)
- Siemens Solar Camarillo CA (cells) “Cd-free buffer layers Cu(Ga,In)(Se,S)₂ based thin films solar Cells et minimodules Efficiency improvement, stability test” (c)

Buffer layers, alternative thin-film-technology

- Siemens&Shell Solar GmbH, München, Dr. F. Karg “Cd-free buffer layers for CIGS_{Se} solar cells“ (c)
- GKSS Teltow, Dr. Kamusewitz “Coating of nano-porous membranes“ (c)

Non-university researchCSV T

- Instituto de Engenharia de Sistemas e Computadores (INESC), Lisbon, Portugal “Optische Charakterisierung von CuGaSe₂-Schichten mittels PDS und CPM” DAAD – projektbezogener Personenaustausch Forschungszentrum Jülich „Vernetzungsprojekt: Zinkoxidschichten für Dünnschichtsolarzellen“ (c)
- Zentrum für Sonnenenergie- und Wasserstoff-Forschung, ZSW, Stuttgart „Vernetzungsprojekt: Zinkoxidschichten für Dünnschichtsolarzellen“ (c)

^o(c): Co-operation with contract

- Universität Stuttgart, Institut für Physikalische Elektronik
„Vernetzungsprojekt: Zinkoxidschichten für Dünnschichtsolarzellen“ (c)
- Technische Universität Darmstadt
„Vernetzungsprojekt: Zinkoxidschichten für Dünnschichtsolarzellen“ (c)

Fullerenes

- Dr. Hinsch, FhG-ISE Freiburg
BMBF-Projekt „Organische Solarzellen“ (c)
- Prof. Parisi, Uni Oldenburg
BMBF-Projekt „Organische Solarzellen“ (c)
- Prof. Leo, TU Dresden
BMBF-Projekt „Organische Solarzellen“ (c)

UniversitiesMOCVD

- A. Klein, TU Darmstadt
„Electronic structure of interfaces in chalcopyrite solar cells“ (c)
- A. Hoffmann, Technical University Berlin
„Defect structure in chalcopyrites“
- A. Rockett, University of Urbana, USA
„Defect structure in chalcopyrites“
- U. Rau, IPE, University Stuttgart
M. Powalla, ZSW, Stuttgart
„Transport in polycrystalline chalcopyrites“
- R. Rentzsch, Free University Berlin
„Hopping conduction in highly compensated semiconductors“ (c)
- Bauer, FU Berlin
„Spatially resolved photoluminescence“ (c)
- H. Strunk, University Erlangen-Nürnberg
„Structural investigation of interface defects“ (c)

Chalcopyrite solar cells

- Universität Oxford
Universität Barcelona
St. Gobain
Vakuumtechnik Dresden
ENEA Portici
- „EU JOULE III Projekt SULFURCELL JOR3-CT98-0297“ (c)
- TU Berlin
„EFRE, Förderung der Arbeitsgemeinschaft solare Materialien“ (c)

New Materials

- University Mohamed V , Morocco
University Ibn Tofail, Morocco
„One step electrodeposition of CuInSe_2 and $\text{CuIn}_x\text{Ga}_{1-x}\text{Se}_2$ “
- Shivaji University, Kolhapur- India
„Preparation of CuInX_2 (X = S, Se, Te) by SILAR method“

Buffer layers, alternative thin-film-technology

- Uni Kiel, Prof. Weppner
„Deposition of thin layers for fuel cells and dry batteries“ (c)

Ion beam applications

- Dr. Lippold, Uni Leipzig
Prof. Ayres de Campos, Uni Coimbra (Portugal)
„Wasserstoff in Dünnschicht-Solarzellen“
- Dr. Schultrich, FhG-IWS Dresden
Prof. Hofsäß, Uni Göttingen
Dr. Trautmann, GSI Darmstadt
Prof. Müller, Uni Wuppertal
BMBF-Projekt „Leitende Ionenspuren“ (c)

Fullerenes

- Prof. Dinse, TU Darmstadt
Prof. Hirsch, Uni Erlangen-Nürnberg
DFG-Projekt „Fullerene als Atomfallen“
- Dr. Twamley, Uni Maynooth (Irland)
Prof. Suter, Uni Dortmund
Dr. Greer, NMRC Cork (Irland)
EU-Projekt „QIPD-DF“ (c)

GuestsCSVT

- Dr. S. Moorthy Babu,
Anna University, Crystal Growth Centre
Madras, Indien
Forschungsstipendium der Alexander von Humboldt-Stiftung
1.11.2001-31.10.2002
Improvement of the understanding of CGS (CuGaSe_2) solar cells
- Prof. E. Arushanov,
Institute of Applied Physics, Academy of Science of Moldova,
Chisinau, Moldova
1.11.-31.12.2001
Photolumineszenz von CuGaSe_2 -Einkristallen

MOCVD

- Marc Kaelin, ETH Zürich
Selenization of Cu-In-Precursors

Chalcopyrite solar cells

- Dr. Ryuji Kaigawa, Ryukoku University, Japan

Department SE3

Solar Cell Technology**Industry**

- Saint Gobain Solar Inc.
Development of structured Mo Back contacts
EC project Sulfurcell
- Contraves Space Inc.
ESA Study on thin film solar cells for space application, ESA project

Non-university research

- Weizmann Institute of Science, Israel, Electric-field induced junction formation in chalcopyrite thin films

Universities

- University Barcelona
In-situ Raman studies on the sulfurization of CuIn precursor layers
- University Potsdam, Prof. Pietsch
Energy dispersive in-situ XRD studies on the sulfurization of CuIn precursor layers

Guests

- Djordjevic, J.
University of Belgrade
- Gartsman, Dr. K.
Weizmann Institute, Israel
- Gledhill, S.
Oxford University
- Kaufmann, Chr.
Oxford University

Department SE4

Interface Reactions

Industry

- AIXTRON
MOCVD
- LayTec
RDS
- MOCHEM
Precursormoleküle

Non-university research

- Indian Institute of Science, Bangalore, India,
Prof. Umapathy
Raman- und IR-Spektroskopie
- HLT Duisburg, Prof. Tegude
Ternäre und quaternäre III-V Halbleiter
- ISE, Dr. Bett
III-V Solarzellen
- UCLA, Prof. Hicks
InGaP
- FHI, Prof. Ertl, Prof. Schlögl
SEM, TEM, Mokekülsynthese

Universities

- TU Berlin, Prof. Knorr
STM, Theorie heisser Ladungsträger
- HU Berlin, Prof. May
Theorie der Elektroneninjektion
- FU Berlin, Prof. Wöste, Prof. Wolf
Laserspektroskopie
- Rutgers University: Prof. Gallopini
Molekülsynthese

Guests

- Alam, Mohammad S., National Centre for Free Radical Research, Department of Chemistry, University of Pune, Indien
- Rao, Prof. B. M. S., National Centre for Free Radical Research, Dean Department of Chemistry, University of Pune, Indien

Department SE5

Solar Energetics

Industry

- Applied Films Corp. Hanau (ehemals Leybold Systems GmbH, Hanau)
„CuInS₂-Schichten“
- BAM-Adlershof, Dr. Reck
„Strukturuntersuchungen an neuen metallorganischen Verbindungen“
- DaimlerChrysler
„Entwicklung edelmetall-freier Katalysatoren für Brennstoffzellen“
- INAP Gelsenkirchen
„Stabilität von Sensibilisierungssolarzellen“
- Optotransmitter-Umweltschutz-Technologie e.V., Berlin-Köpenick
„ZnO-Schichten“

Non-university research

- Laboratoire d'Ingénierie des Matériaux et des Hautes Pressions, CNRS (UPR 1311) Université Paris 13
„Eigenschaften von TiO₂-Pulvern“
- Laboratoire de Physique des Interfaces et des Couches Minces-CNRS (UPR 258), Ecole Polytechnique, Palaiseau
„Charakterisierung von mikrokristallinem Silizium“
- Institute of Macromolecular Chemistry Academy of Science of the Czech Republic, Prague
„Charakterisierung von halbleitenden Polymeren“
- Laboratoire de Physique de la Matière Condensée, CNRS-Ecole Polytechnique, Palaiseau
Elektrochemische Modifikation von Siliziumoberflächen als alternative Substratvorbehandlung
- Fraunhofer Institut für Fertigungstechnik und Materialforschung in Bremen
„Bionik“
- G. Mendel-Universität in Brno, Tschechische Republik
„kapillarer Wassertransports“

Surface Engineering

- Prof. Dr. K. Jacobi, Fritz-Haber-Institut Berlin
HREELS-Untersuchungen an photoelektrochemisch präparierten n-Si-Proben

Universities

Solar Energetics

- Dipartimento di Electronica, Università degli studi di Salerno
„Charakterisierung von InP und Heteroübergängen“
- Ruhr-Universität Bochum, Fakultät Physik und Astronomie, Experimentalphysik/Gaselektronik
„Sputterprozesse“

- CSIC-Madrid/ Universität Palma/ Mallorca
"Verfahren bildhafte Techniken"

Surface Engineering

- Dr. S.A. Campbell, University of Portsmouth, England
Rastersondenmikroskopie an texturierten Oberflächen
- Dr. Mohammed Aggour, Université Ibn Tofail, Kénitra, Marokko
Elektrochemie an CuInS₂
- Austauschprogramm HMI/TU Berlin/North Carolina State University, Raleigh (USA)

Guests

Solar Energetics

- Aroutiounian, Prof. Vladimir
Yerevan State University, Dept. of Physics of Semiconductors, Yerevan, Republic of Armenia
Thema: Photoelektrochemie und Photovoltaik mit nanostrukturierten Materialien
15.11.-15.12.00
- Balabanovich, Dr. Aliksandr
Universität Minsk, Forschungsinstitut für Physikalische, Chemische Probleme, Minsk, Weißrussland
Einwirkung von g-Strahlen auf das Brennverhalten von Kunststoffen
01.11.00- 31.01.01
- Colbeau-Justin, Dr. Christophe
Laboratoire d'Ingenierie des Matériaux et des Hautes Pressions, Université Paris 13, F-981130 Villetaneuse (Pariser Bezirk)
Photokatalytische Eigenschaften von TiO₂ n.a.
Transiente Photoleitfähigkeit
05.-09.06.00
- Fukuda, Prof. T.
Institute for Materials Research, Tohoku University, Sendai, Japan
01.-03.06.00
- Garcia Villora, Dr. E.
Institute for Materials Research, Fukuda Laboratory, Kinken, Tohoku University, Sendai, Japan
Charakterisierung neuer Oxide (Ga₂O₃) für Solarzellen, elektrische und optische Eigenschaften)
02.-20.06.00
- Kuppusami, Dr. P.
Physical Metallurgy Section, Materials Characterization Group, Indira Gandhi Centre for Atomic Research, Kalpakkam, Indien
Betreuer: Dr. Ellmer
10.-17.09.00
Kurzzeitgast am HMI
- Lokhande, Dr. Chandrakant
Thin Film Physics Laboratory, Dept. of Physics, Shivaji University, Kolhapur, Indien
Investigations on the reactivity of the CIS Buffer Layers with Photocurrent Imaging and Electro-reflection Technique)
03.07.-15.11.00

- Koike, Dr. Shinji
Osaka National Research Institute, Osaka, Japan
29.10.99 - 30.09.00

Surface Engineering

- Aggour, Dr. Mohammed
Université Ibn Tofail, Faculté des Sciences, Kénitra, Marokko
Vorbereitung und Durchführung von Oberflächenanalyse-Messungen an elektrochemisch konditionierten Halbleitern (Si, CuInS₂) mit Synchrotronstrahlung bei BESSY II
13.08-14.11.00
- Campbell, Dr. Sheelagh
University of Portsmouth, Chem. Dept., Portsmouth, England
04.-09.07.00
- Goncalves, Éder
Instituto de Fisica, Universidade de Sao Paulo, Brasilien
Rastersonenmikroskopische Untersuchungen zur elektrochemischen Oberflächenmodifizierung von CuInS₂
12.12.00 - 31.03.01

Work Group SE6

Electronic Structure of Semiconductor Interfaces

Universities

- CRG
Heinrich-Heine-Universität-Düsseldorf
HMI, BTU Cottbus, TU Darmstadt
Betrieb von Messplätzen bei BESSYII

Guests

- Dr. Ralf Hunger, TU Darmstadt
BMBF - Projekt SOLIAS

Subdivision D

Information Technology

Industry

Central Data-Processing & Network

- Visual Numerics International GmbH
„Reference Customer of PV-WAVE“

Measurement Systems & Hardware

- Berliner Wasser Betriebe
„Technologietransfer-Magnetfeldsensor“

Non-university research

- DESY, Fraunhofer-Institut für Naturwissenschaftlich-Technische Trendanalysen (TESLA-Co-operation) (c)
„Ortsaufgelöste Dosismessung am TTF zur Strahldiagnose und Überwachung“
„Entwicklung eines Dosisleistungs-Messsystems für Undulatoren“

Central Data-Processing & Network

- EU-Network IHP-INF-99-1
"Software for Computer Aided Neutron Scattering"

External Funding

Department SF1

Methods and InstrumentsBENSC Activities

- EU-Projekt
PECNO (Perfect Crystal Neutron Optics)
Laufzeit 1997 bis 2001
- BMBF
"Nickel II"
Laufzeit 1998-2001
- BMBF "Tomographie"
Laufzeit 2001-2004

Spallation

- EU RTD network
Software for Computer Aided Neutron Scattering
Laufzeit 2000-2002
- TMR (FMRX-CT98-0244) 7/98-12/02
Research and Development for the Target-Moderator-Reflector Assembly of the Future European Spallation Source (ESS).
- HGF-Strategiefonds (01 SF 9837/9)
F&E für den Bau einer gepulsten ESS; Nukleare Untersuchungen für die Targetstation.
- DPG Schwerpunktsprogramm (BE 784/6-1,2)
Wechselwirkung intensiver Laserfelder mit Materie.

Collective Dynamics and Diffusion

- BMBF
Förderung des Verbundprojekts über den Glasübergang
bis 31.3.2001
- Projekt im Rahmen des DFG-Schwerpunktprogramms "Benetzung und Strukturbildung an Grenzflächen"
„Grenzflächeninduzierte Ordnung und Benetzungsverhalten: Grenzschicht von wässrigen Tensidsystemen an polymerbedeckten Substraten“, 2000 –2002

Department SF2

MagnetismBulk Magnetism

- BMBF
"Untersuchung der spontanen Kernordnung in Cu"
1998- 2001
- EU - IHP - RTN
"3He Neutron Study"
2000 - 2003

Magnetism in Thin Films

- BMBF
Räumliche und zeitliche Korrelationen in magnetischen Materialien
(bis 31.03.2001), zzgl. Humboldt-Stipendiaten
(ab 01.09.1999)
- BMBF

Magnetische Eigenschaften dünner Schichten
Laufzeit 1998 bis 2001

- Gemeinsam mit dem Partner Prof. Brewer (FU Berlin) BMBF-Verbundprojekt "Magnetismus in dünnen Schichtsystemen und verdünnten Legierungen" (bis 31.03.2001) und durch den Humboldt-Stipendiaten Dr. M. Prandolini (ab 01.09.1999) gefördert.

BENSC - Activities

- EU-Projekt (Cool Neutron Optimisation)
Optimisation of cold neutron beams for single crystal spectroscopy
Laufzeit 1998 bis 2001
- EU-IHP-RTD (HPRI-CT-1999-50016 (ENPI))
Polarised neutron instrumentation
Laufzeit 2000 bis 2003

BESSY - Activities

- HGF-Strategiefonds
Undulator UE46 bei BESSY
Laufzeit 1999 bis 2002
- BMBF-Vernetzungsfonds:
"Konstruktion und Errichtung eines Meßplatzes für magnetische Röntgenstreuung und Strukturuntersuchungen an der Synchrotronstrahlquelle BESSY"
Laufzeit: 01.06.2000-31.05.2003

Department SF3

MaterialsMicrostructure and Kinetics of Phase Transitions in Metallic Alloys

- DFG MA 1832/3-1
Diffusion in mehrkomponentigen Metallschmelzen
- DFG Wa 1378/1-2
Strukturelle und chemische Gradienten in kriechverformten Superlegierungen (Neumann NE646/5-2)
- NATO -Collaborative Linkage Grant, Physical Engineering Science:
Study of Inhomogeneities and Mechanical Properties in Metallic Glasses
- Strategiefondsprojekt: Mikrosystemtechnik

Strain and Stress in Materials and Technical Parts

- EU (SMT-CT 97 – 2200)
Kalibrierung von Neutronenbeugungs-Eigenstressanalysen
- Bayerisches Kulturlministerium
Materialforschungsdiffraktometer am FRM II – Reaktor
- DFG Re 688/23-3.
Gradientenwerkstoffe
- DFG Re 688/29-2, 3:
Kurzzeitmetallurgie
- DFG Re 688/31-1:
hochstickstoffhaltige Stähle
- DFG Re 688/35-1, 2:
Strukturgradienten

- DFG Sfb 605:
Elementarereignisse TP B3 Reibprozessinduzierte Eigenspannungen
- DFG Py 9/1-2:
Erhöhung des Formänderungsvermögens
- DFG Py 9/2-1-2:
Analyse plastischer Umformung unter Verwendung hochenergetischer Synchrotronstrahlung
- Mehrere Industrieaufträge:
Eigenspannungsanalysen

Structure Investigations in Nanomaterials using Neutron Small Angle Scattering (SANS)

- DFG Wi1151/1-1
Mikrostruktur halberstarter Metalllegierungen im Scherfeld
- DFG WI 1151/2-2
Schwerpunktprogramm Magnetische Flüssigkeiten: Projekt Neutronenkleinwinkelstreuung zur Charakterisierung von Kern und Hülle in Ferrofluiden
- DFG WI 1151/3-1 Strukturbildung in mehrkomponentigen Nd-Basis Legierungen
- Fa. CIBA (Basel, Schweiz): Qualitäts-Charakterisierung von Polymermaterialien mittels SANS

Department SF4

Structure and Dynamics

- Verbundprojekt BMBF (03-MK5HMI-5)
Einbau von leichten Elementen und Übergangsmetallen als Störstellen in Verbindungshalbleitern
- Verbundprojekt BMBF (03-SI5HMI/2)
Aufbau und Betrieb eines Rückstoßimplantators für kurzlebige nukleare Sonden am ISL Berlin
Laufzeit: 1998-2001
- HGF-Strategiefonds
Ionenspuren in Festkörpern
Laufzeit: 2000–2003
- DAAD-PROBRAL-Förderung (Deutsch-Brasilianische Zusammenarbeit)
Wechselwirkung energiereicher Ionen mit Festkörpern
Laufzeit: 1999–2002
- BMBF (03-SF5HMI-3)
Experimentelle Nutzung an den Beschleunigeranlagen des HMI durch Hochschulgruppen
Laufzeit: 1995-2001
- Hungarian-German Collaboration
Dynamics of Electron-Electron Interaction in Fast Ion-Atom Collisions, koordiniert durch Internationales Büro der Deutschen Forschungsanstalt für Luft- und Raumfahrt, Partner: ATOMKI, Debrecen, Ungarn
Laufzeit: 2000-2003, Project No. UNGX 231.21
- Verbundprojekt BMBF (03-MK5HMI-5)
- Einbau von leichten Elementen und Übergangsmetallen als Störstellen in Verbindungshalbleitern
Laufzeit 1998-2001
- Verbundprojekt BMBF (03-SI5HMI-2)

Aufbau und Betrieb eines Rückstoßimplantators (Zweistrahlanlage) für kurzlebige nukleare Sonden am ISL Berlin
Laufzeit 1998-2001

- BMBF –Projekt (Förderkz. SF4HMI)
Experimentelle Nutzung an den Beschleunigeranlagen des HMI durch Hochschulgruppen, koordiniert durch BEO, Forschungszentrum Jülich GmbH
Laufzeit 1995-2001
- European Infrastructure Cooperation Network (HPRI-CT-1999-40012)
Low Energy Ion Facilities (LEIF), 12 Mitglieder aus 7 europäischen Ländern
Laufzeit 2000-2003
- Französisch-Deutsche Kollaboration PROCOPE Analogien in den Ionisationsmechanismen durch Photonen und sehr schnelle Ionen, koordiniert durch DAAD Partner: CIRIL, Université de Caen, France
Laufzeit: 2001-2002

Department SF5

Theoretical Physics

Magnetic systems, thermodynamics and atomic collisions

- DFG Kooperationsprojekt 445 MAR112/1/01
Thin ferromagnetic films
Laufzeit: 3 Monate
- DFG Projekt Bat2a Gr 398/6
Trilaterale Kollaboration Palästina, Israel und Deutschland, "Fragmentation and phase transitions in atomic clusters"
Laufzeit: 1997-2002
- DFG Projekt Bat2a Gr 398/9-1
Mikrokanonische Statistik und Phasenübergänge in nichtextensiven Systemen
Laufzeit: 1999-2002
- DFG Kooperationsprojekt 436 RUS113/616/0-1
Elektron-Positron-Paarerzeugung beim Elektroneneinfang in relativistischen Ion-Atom-Stößen
Laufzeit: 2000-2002

Semiconductor physics and photovoltaics

- DFG Projekt NE 646/5-3 und WA 1378/1-3 unter dem Schwerpunktprogramm „Strukturgradienten in Kristallen“ (SPP 1056)
Strukturelle und chemische Gradienten in kriechverformter Superlegierung am Beispiel SC16
Laufzeit: 1999-2003

Soft matter and biological physics

- DFG Projekt FR 85014 Schwerpunkt Molekulare Motoren
Laufzeit: 1999-2005
- Projekt im SFB 413 angesiedelt an der LMU München
Dynamik und Regulation zytoskelettabhängiger Bewegungsvorgänge
Laufzeit: 1998-2002

Department SF6

Trace ElementsMolecular trace element research: selenoproteins and metalloproteins

- Projekt im Biomed II-Programm der EU: Phospholipid hydroperoxide glutathione peroxidase: promoter, expression, regulation, genetic manipulation and role in the pathogenesis of atherosclerosis
- DFG-Projekt: Wechselwirkungen zwischen Fettsäuren- und Selenstoffwechsel
- Forschungsvorhaben "Neue Selenoproteine" im Rahmen des DFG-Schwerpunktprogramms "Selenoproteine"

Department SF7

Nuclear MeasurementsERDA and Nuclear Spectroscopy

- EUROBALL-Collaboration (D, Dk, F, I, UK, S)
Hyperdeformation, Clusteremission
2000-2003
- A. v. Humboldt Stiftung
Molecular States in Nuclei
24.09.00 – 30.09.01
- DAAD
Gamma-Spectroscopy of Molecular States
29.09.99 – 01.10.2002
- PANS (EU)
Public awareness for Nuclear Science
2000 - 2002

Development of thermal neutrons imaging detectors

- 5th EU Program, RTD-Project TECHNI (Technology for Neutron Instrumentation), Contract No. HPRI-CT-1999-50005, 01/03/2000 – 29/02/2004
- BMBF: German-Russian Collaboration with JINR Dubna (Development of High-resolution Position-sensitive Neutron Detectors for the IBR-2 Spectrometers); 2001-2003

Department SE1

Silicon PhotovoltaicsCrystalline silicon thin-film solar cells

- BMWI-Projekt (0329773)
"Niedertemperaturverfahren für Silizium-Dünnschichtszellensolarzellen"
Laufzeit 1997 bis 2001
- INCO-COPERNICUS (ICL5-CT98-0819)
"Time-modulated CVD-techniques for preparation of advanced thin-film materials"
Laufzeit 1998 bis 2001
- FUEGO (0043001M8)
"Thermisch gestützte PECVD hochreiner halbleitender und isolierender dünner Schichten"

Laufzeit 1999 bis 2001

- BMWI-Projekt (0329613B)
"Dünnschichtszellensolarzellen aus laserkristallisiertem Silicium auf Glas"
Unterauftrag des IPHT Jena
Laufzeit 1999 bis 2002

Silicon Heterostructures

- BMWI-Projekt (0329773)
"Niedertemperaturverfahren für Silizium-Dünnschichtszellensolarzellen"
Laufzeit 1997 bis 2001
- BMWI-Projekt (0329571 A7)
"Elektronenstrahlkristallisierte Silizium-a-SiC-Hetero-Dickschicht-Solarzellen auf Mittel- und Hochtemperatur-Substraten"
Unterauftrag der Technischen Universität Hamburg-Harburg
Laufzeit 1999 bis 2003
- BMBF-Projekt (01SF0012)
„Verbundprojekt - Erneuerbare Energien: Grundlagen und Technologie von Solarzellen auf der Basis von a-Si/c-Si-Heterostrukturen“
Koordination
Laufzeit 2000 bis 2003
- BMBF-Projekt (01SF0031)
„Verbundprojekt - Erneuerbare Energien: Zinkoxidschichten für Dünnschichtszellensolarzellen: Material- und Grenzflächenforschung“
Mitarbeit
Laufzeit 2000 bis 2003

Department SE2

Heterogeneous Material SystemsCSV T

- BMWI-Projekt (0329740B)
"Entwicklung einer neuen Dünnschichttechnologie für die Photovoltaik: Technische Unterstützung des CSV T-Verfahrens am Beispiel des Cu(In,Ga)Se₂-Solarzellenbasis-Materials"
Laufzeit 2000 – 2003

MOCVD

- BMBF-Projekt
„Spannungsoptimierung von II-VI-Dünnschichtszellensolarzellen, Hochspannungsnetz“
Laufzeit 2000-2003

Chalkopyrit Solarcells

- EU JOULE III-Projekt (JOR3-CT98-0297)
„SULFURCELL“
Laufzeit 1998 –2002
- BMBF-Projekt (01 SF 0031)
„Erneuerbare Energien: Zinkoxidschichten für Dünnschichtszellensolarzellen: Material- und Grenzflächenforschung“
Laufzeit 2001- 2003
- BMBF-Projekt (03GL0053)
„Gründerlabor“, 2001

Eta-Cell

- EU-Projekt
„Intermediate Band Solar Cell“, Laufzeit 2001-2004
- EU-Projekt
„Intercalation of a nanostructured semiconductor by an extremely thin copper indium sulphide absorber“
Laufzeit 2000-2004
- BMBF Hot Topics Programm
„Halbleiterdeposition auf nanostrukturierten Substraten“
Laufzeit 2000-2001

Ion beam applications

- BMBF-Projekt
„Wasserstoff in Dünnschicht-Solarzellen“
Laufzeit 1998 – 2001
- BMBF-Verbundprojekt (05KK1CBA/2)
„Leitende Ionenspuren in isolierenden Matrizen für Feldemission“
Laufzeit 2001 – 2004

Fullerenes

- DFG-Projekt
„Fullerene als Atomfallen“
Laufzeit 1999 – 2004
- EU-Projekt
„A Study for the Construction of a Quantum Information Processing Device using Doped Fullerenes“
Laufzeit 2000 – 2002
- BMBF-Projekt (01SF0025)
„Erneuerbare Energien: Organische Solarzellen“
Laufzeit 2000-2003

Synchrotronanalytic

- BMBF (01SF0007)
„Synchrotron-Diagnostik zur Unterstützung der Material- und Technologieentwicklung von kostengünstigen Cu(In,Ga)Se₂-Photovoltaikmodulen“, Laufzeit 2000-2003
- BMWi-Projekt (0329889)
„Synchrotron-Diagnostik zur Unterstützung der Material- und Technologieentwicklung von kostengünstigen Cu(In,Ga)Se₂-Photovoltaikmodulen“
Laufzeit 2000-2003

Department SE3

TechnologyMonolithically Integrated Test Modules

- European Project
SULFURCELL: Efficient thin film solar cells based on CuInS₂
Contract No JOR3CT980297
Laufzeit 1998 bis 2001
- Erneuerbare Energien:
Spannungsmaximierung von II/VI Dünnschichtsolarellen (Hochspannungsnetz)

Teilprojekt ZSW-BW
Förderkennzeichen 01 SF 0020
Laufzeit 2000 bis 2003

- BMBF Projekt
Gründerlabor
Laufzeit 2001

Reliability of thin Film Solar Cells under Particle Radiation

- Contraves Space AG
ESA Study: Space Solar Arrays based on thin film solar cells
Laufzeit 2001-2002

In-situ Process Control and Doping

- Electric field induced p-n junctions“, Nato collaborate linkage grant; PST.CLG.978080 (08/01 – 07/03)

Department SE4

Dynamics of Interfacial Reactions

- SFB450 der DFG
Analyse und Steuerung ultraschneller photoinduzierter Reaktionen
- SPP 1093 der DFG
Dynamik von Elektrotransferprozessen an Grenzflächen
- VW-Stiftung
Schwerpunkt: Intra- and intermolekularer Elektrotransfer
- BMBF-Verbund-Forschungsvorhaben
„INDUFERT“ (Industrielle Fertigungstechnologie für Verbindungshalbleiter mit kleinem Bandabstand)
Entwicklung von Antimonhaltigen Halbleitern

Department SE5

Solar EnergeticsSolar Energetics

- BMBF-Vernetzungsfonds Erneuerbare Energien: ZnO-Vernetzungsprojekt des FV Sonnenenergie
Laufzeit: 01.09.00-31.08.03
- BMBF (0327067B)
Platin-freie Katalysatoren für die Sauerstoffreduktion
Laufzeit: bis 31.12.2002
- Deutsche Bundesstiftung für Umwelt
Lifepacking: Bionische Verpackung für eine nachhaltige Materialwirtschaft
07.2001–07.2002

Surface Engineering

- DFG Schwerpunktprogramm "Grundlagen der elektrochemischen Nanotechnologie"
Kombinierte rastersondenmikroskopische und (photo)elektrochemische Nanostrukturierung von Silicium
Laufzeit: 02.2001–02.2004

Work Group SE6

Electronic Structure of Semiconductor Interfaces

- EFRE
Aufbau eines Meßplatzes für Halbleiterheterostrukturen bei BESSYII (TGM7)
01.10.1999-31.12.2001
- BMBF Verbundforschung Verbund 22
Hetrostrukturen mit Schichtgitterchalkogeniden
08SE05cba
01.04.1998-31.03.2001
- BMBF Vernetzungsfonds ZnO
- BMBF Verbundprojekt SOLIAS
- BMWI Sondermittel zur in situ Diagnostik von Halbleiterstrukturen (PEEM)

Participation in external scientific bodies and committees

SE1	Fuhs, W.	Wiss. Beirat ISI FZ Jülich
		Wiss. Beirat ISFH Emmerthal
		Internat. Advisory Committee – Internat. Conf. on Amorphous and Microcrystalline Semiconductors (ICAMS)
		Advisor Materials Research Society – Symposium „Amorphous and Heterogeneous Silicon Thin Films“
SE2	Ennaoui, A.:	Editorial board: Moroccan Journal of Condensed Matter
		Editorial board: Solar Energy Materials and Solar Cells
	Lux-Steiner, M. C.:	Mitglied des Energiebeirats des Senats von Berlin
		Jury-Mitglied des Innovationspreises Berlin/Brandenburg 2001
		Mitglied im Direktorium des nationalen Forschungsverbundes
		Mitglied der EUREC Agency, eine Vereinigung von außerordentlichen Forschungseinrichtungen in der EU im Bereich der Regenerativen Energien, die eng mit der EPIA, dem Industriellen Gegenpart in Verbindung steht.
		Mitglied der Eidgenössischen Energieforschungskommission CORE in der Schweiz (beratendes Organ des Bundesrats in Sachen Energieforschung der öffentlichen Hand in der Schweiz)
		Mitglied des WTA-Aufsichtsrats im Forschungszentrum Jülich
		Co-Chairman bei der 17 th EPVSEC in München, Oktober 2001
	Weidinger, A.:	Komitee "Forschung mit nuklearen Sonden und Ionenstrahlen"
SE5	Tributsch, H.	Associated Member of IUPAC (International Union of Pure and Applied Chemistry)
SF1	Jahnke, U.	Jury de thèse de Yannick Patois, Uni Caen, August 2001
	Mezei, F.	Vertreter des HMI im Komitee Forschung mit Neutronen,
		Vertreter des HMI bei der European Neutron Scattering Association
		Member of Subcommittee Instrumentation, Institut Laue - Langevin (France)
		Member of Scientific Council, Laboratoire Leon Brillouin (France),
		Chairman of the International Advisory Council, Budapest Neutron Center (Hungary)
		Member of Experimental Facilities Advisory Council, Spallation Neutron Source (USA)
		Member of Technical Management Team and Task Leader for Instrumentation European Spallation Source
SF2	Graf, H.A.	Komitee Forschung mit Neutronen
		Instrumentierungsausschuss FRM-II
		Scientific Council, Institut Laue-Langevin
		Neutron Round Table
SF3	Wanderka, N.	Steering committee International Field Emission Society, IFES
		Chair of the 47 th International Field Emission Symposium, July 29 th - August 3 rd , 2001; Berlin, Germany
	Wiedenmann, A.	European Spallation Source- (ESS) Instrumentation
		Laboratoire Leon Brillouin, Comité de Sélection
		International Atomic Energy Agency (IAEA), Vienna, CRP Reactor Utilization
SF4	Busse, W.	Co-opted Member of the EPCS-Board (EPS Interdivisional Group for Experimental Physics Control Systems)
		Member of the International Scientific Advisory Committee of the Conference Series "International Conference on Accelerator and Large Experimental Physics Control Systems" (ICALEPCS'2001)
	Denker, A.	Second National Representative of Germany in the Intereuropean Project "COST-Aktion G8: Non-destructive testing on museum objects"
	Homeyer, H.	Member of the TESLA Advisory Committee of the "Information Meetings on the TESLA Accelerator Installation"
	Klaumünzer, S.	Mitglied des International Scientific Committee der Konferenz „Swift Heavy Ions in Matter (SHIM)“
		Member of the NuPECC Working Group "Atomic and Condensed Matter Physics"
	Schiwietz, G.	Mitglied des International Committee der „International Conference on Atomic Collisions in Solids (ICACS)“
		Mitglied des "International Scientific Committee" der Konferenz „Swift Heavy Ions in Matter (SHIM)“
		Mitglied des Editorial Bord des Journals Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms (NIM-B)
		Projektleitung des HGF-Strategiefonds "Ionenspuren in Festkörpern" (2000-2003)
		Deutscher Projektsprecher DAAD-PROBRAL-Förderung "Wechselwirkung energie-

		reicher Ionen mit Festkörpern" (1999–2002)
	Sielemann, R.	Editorial Board der Zeitschrift „Hyperfine Interactions“
	Stolterfoht, N.	Member of the International Advisory Board des Advanced Studies Institute, Washington DC, Ma, USA
		Member of the International Advisory Committee der EURESCO on Ion Solid Interactions, 11.-14.09.2001
		Advisory Committee des International Seminar for Ion-Atom Collisions, 26.-27.07.2001, Baja, Mexico
	Sulik, B.	Advisory Committee of the „11 th International Conference on Highly Charged Ions“, Caen, France
		Mitglied der Ständigen Kommission des Verwaltungsrates des Konrad-Zuse-Zentrums für Informationstechnik Berlin
		Member of the Customer Advisory Board (CAB) - Forschung und Lehre - der Compaq Computer GmbH München
		Mitglied der Fachkommission Technik an der Berufsakademie Berlin
		Mitglied des Prüfungsausschusses in der Fachrichtung Informatik der Berufsakademie Berlin
		Mitglied des Beirats des Fachbereichs Informatik der TFH Berlin
		Mitglied des Collaboration Board TESLA des DESY Hamburg
SF5	Eichler, J.	Mitglied des Wissenschaftlichen Beirats des Magnus-Hauses der Deutschen Physikalischen Gesellschaft
		Member of the Editorial Board, Physics Reports (Elsevier, Amsterdam, NL)
	Frey, E.	Member of the Management Committee of the COST PI program on „Soft Condensed Matter“
		Leiter eines Projektes im SFB 413 angesiedelt an der LMU München
SF6	Behne, D	Lenkungsausschuss des HGF-Forschungsverbundes Gesundheit
		Ausschuss des Klinisch-Biochemischen Forschungsverbundes (KBF)
		Mitglied des Scientific Committee of the Conference Series "Nuclear Analytical Methods in the Life Sciences (NAMLS)
	Kyriakopoulos, A.	Mitglied des RiNA-Netzwerks Berlin
SF7	v. Oertzen, W.	Chairman of Program Advisory Committee of IReS (Inst. Recherches Subatomiques)
		Member of advisory board of LEA, Laboratories European Association
		Member of Conseil Scientifique, Commission Physique des Particules et Nucléaire du CNRS
		Chairman of „Sandanski“ East-West Co-ordination Meeting on Nuclear Science
		Advisory committees of various Intern. conferences
		Mitglied der Preiskommission des „Otto-Klung Weber Bank Preises“
HAD	Anders. T.	Mitglied der Internet Corporation for Assigned Names and Numbers (ICANN), Marina del Rey, CA, USA
		Mitglied der Unix-Gemeinschaft Usenix, Berkeley, CA, USA
		Mitglied der System Administration Guild (SAGE, Special Technical Group of the USENIX Association)
		Mitglied des Arbeitskreises Webmaster der HGF
	Becker, H.	Mitglied des Prüfungsausschusses in der Fachrichtung Informatik der Berufsakademie Berlin
	Fromme, M.	Mitglied des Arbeitskreises Webmaster der HGF
	Grzanna, J.	Revisor der Zeitschrift „Applied Optics“
	Luck, J.	Mitglied im Normenausschuss Materialprüfung des DIN e.V. (Deutsche Industrienormen)
	Meisel, U.	Mitglied der Studiengruppe für elektronische Instrumentierung (SEI)
		Mitglied des VDE/VDI Arbeitskreises Mikroelektronik Berlin-Brandenburg
	Nielsen, U	Fachgutachter im Innovationsförderprogramm der Investitionsbank Berlin
		Mitglied der Ständigen Kommission des Verwaltungsrates des Konrad-Zuse-Zentrums für Informationstechnik Berlin
		Mitglied des Customer Advisory Board (CAB) - Forschung und Lehre - der Compaq Computer GmbH München
		Mitglied der Fachkommission Technik an der Berufsakademie Berlin
		Mitglied des Prüfungsausschusses in der Fachrichtung Informatik der Berufsakademie Berlin
		Mitglied des Beirats des Fachbereichs Informatik der TFH Berlin
		Mitglied des Collaboration Board TESLA des DESY Hamburg

	Prigge, G.	Mitglied im HGF-Ausschuss Kommunikations- und Informationsverarbeitung in der Verwaltung (KIV)
	Sauer, O.-P.	Mitglied des Prüfungsausschusses in der Fachrichtung Informatik der Berufsakademie Berlin
	Schröder, M.	Mitglied des Arbeitskreises Webmaster der HGF
	Tomiak, A.	Mitglied der Internet Corporation for Assigned Names and Numbers (ICANN), Marina del Rey, CA, USA
		Mitglied im Ausschuss für Datenschutz und im Ausschuss für Grundsatzfragen der Arbeitsgemeinschaft der Betriebsräte (AGBR) der Großforschungseinrichtungen
	Wulf, F.	Mitglied im Committee for European Studies on Norms for Electronics (ESONE), XT/TCC
		Mitglied im Koordinierungsausschuss für Elektronik und Prozessdatenverarbeitung der HGF
		Sekretär der Studiengruppe für Elektronische Instrumentierung (SE1)
	Ziem, P.	Mitglied im Koordinierungsausschuss Datenverarbeitung (KODA) der HGF
		Mitglied der DOAG (Deutsche Oracle-Anwendergruppe e.V.)

Miscellaneous
Awards / Exhibitions / Fairs /
Organization of Conferences and Meetings / Events

Awards

Dep.	Name	Award
SE2	Rumberg, A.	Conference prize for the best presentation 1st Mongolian Photovoltaic Conference, 3.-7.09.2001, Ulaanbaatar, Mongolia Hahn-Meitner-Kommunikationspreis, HMI Berlin, 4.12.2001
	Bär, M., Fischer, C.-H., Muffler, H.-J., Lux- Steiner, M.C.	Paper Award 12th PVSEC , Cheju, Korea, 2001
SF1	Mezei, F.	Fellow of the American Physical Society for leadership in development of neutron scattering in condensed matter research, 2000 (addition to annual report 2000)
SF6	Richarz, A.-N.	Posterpreis beim 1 st International FESTEM Congress on Trace Elements and Minerals in Medicine and Biology, Venice, 16. – 19.05.2001

Exhibitions / Fairs / Events

Dep.	Type	Title
SE1	Fair	Solar Energy, HMI-Stand, Berlin, 8.-10.6.2001
	Exhibition	Tage der Forschung, Berlin-Adlershof, 13.-14.9.2001
	TV	Sendung Quarks & Co, Präsentation des Energiefahrrads, WDR in Köln, 8.-11.3.2001
	Visitors	Besuchergruppe des VDE, Vortrag: Dünnschichtsolarzellen aus Silizium- Forschung am HMI, Berlin, 6.11.2001
		Besuchergruppe der FHT Zwickau, Vortrag: Energie für die Zukunft - Photovoltaik mit Silizium, Berlin, 6.4.2001
SF2	Exhibition	Neutron experiment with a refillable 3He filter cell, 3. ENPI-Treffen, Jülich, 11./12.01.2001 (Gorzel, A.; Graf, H.A.; Klenke, J.; Rupp, A.)
	Exhibition	News from the 3He filter project at HMI, 4. ENPI-Treffen, Didcot/Abingdon, Großbritannien, 28./29.06.2001 (Gorzel, A.; Hutanu, V.; Klenke, J.; Rupp, A.)
	Fair	Forschung mit Neutronen bei höchsten Magnetfeldern und tiefsten Temperaturen am Berliner Zentrum für Neutronenstreuung (BENSC), Hannovermesse, 23.-28-April 2001 (M. Meissner, P. Smeibidl, H. J. Bleif, S. Kausche, M. Tovar, B. Schröder-Smeibidl)
SF3	Exhibition	Innovationsforum Mikrosystemtechnik, 13.11.2001, Berlin-Adlershof, Mikrobau- teile aus metallischen Massivgläsern durch superplastische Umformung (Macht, M.-P.; Zumkley, Th.)
SF4	Exhibition	Schaufenster der Wissenschaft, Stand zur Augentumorthherapie, Berlin, 12.-17.9.2001
HMI		
	Event	Girl's Day, Berlin 26.4.2001
	Event	Mädchen-Technik-Tag, Berlin 30.6.2001
	Event	Organization of the „Lange Nacht der Wissenschaften“ in Wannsee and Adlers- hof, Berlin, 15.9.2001

Organization of Conferences and Meetings

Dep.	Name	Function	Type	Title	Date/Location
SE2	Lux-Steiner, M.	Member of the Organization Committee	Conference	IC MOVPE XI, 11th International Conference on Metal-Organic Vapour Phase Epitaxy	3.-7.6.2002, Berlin
	Siebert, S.	Member of the Organization Committee	Conference	IC MOVPE XI, 11th International Conference on Metal-Organic Vapour Phase Epitaxy	3.-7.6.2002, Berlin
	Weidinger, A.	Organization	Workshop	„Organische Solarzellen“	3.7.01, HMI
SF1/ SF7	Mezei, F	Member of the International Program Committee	Conference	International Conference on Neutron Scattering 2001	2001, München
	Mezei, F.; Gebauer, B., Gutberlet, T., Wilpert, T	Organizing Committee	Workshop	Int. Workshop on Position-Sensitive Neutron Detectors (PSND)	28.-30.6.2001, Berlin
SF4	Homeyer, H.	Member of the International Organizing Committee	Conference	"International Conference on Cyclotrons and their Applications"	2001
	Mahnke, H.-E.	Co-organization	Summer School	HMI – FZ Rossendorf Summer-School „Ionenstrahlen und Nukleare Sonden“	23.-28.09.2001, Bad Blankenburg
	Schiwietz, G.	Co-organization	Summer School	HMI – FZ Rossendorf Summer-School „Ionenstrahlen und Nukleare Sonden“	23.-28.09.2001, Bad Blankenburg
SF5	Falcke, M	Organization	Workshop	1st International MTBio-Workshop on „Function and Regulation of Cellular Systems: Experiments and Models“	25.-30.6.2001, Dresden
	Frey, E.	Organization	Workshop	„Biophysik“ at the „Dynamic Days“	5.-8.6.2001, Dresden
		Organization	Workshop	„Cellular materials: mechanics and motility“, MTBio-Workshop	25.-30.6.2001, Dresden
SF6	Alber, D.	Co-organization	Seminar	18. Seminar „Aktivierungsanalyse“	2001
	Behne, D.	Co-organization	Seminar	18. Seminar „Aktivierungsanalyse“	2001

Faculty Appointments

Dep.	Name	
SF3	Prof. Walter Reimers	Full-Professor at the Technische Universität Berlin by July 1, 2001