ADDENDUM:
AKADEMISCHE UND WISSENSCHAFTLICHE ZUSAMMENARBEIT; ÖFFENTLICHKEITSARBEIT UND HAUSHALT
ACADEMIC AND SCIENTIFIC COOPERATIONS; PUBLIC RELATIONS AND BUDGET

Fachbeirat
Scientific Advisory Board

Prof. Dr. Hans-Jörg Deiseroth
Universität Siegen
Fachbereich 8 Chemie-Biologie
Anorganische Chemie
57068 Siegen

Prof. Dr. Øystein Fischer
University of Geneva
Department of Condensed Matter Physics
24, Quai Ernest Ansermet
1211 Genève 4
Switzerland
(ab 01.04.2007)

Prof. Zachary Fisk, PhD
University of California at Davis
Physics Department
One Shields Avenue
Davis, CA 95616
USA
(bis 31.12.2006)

Prof. Gabriel Kotliar, PhD
Rutgers, The State University of New Jersey
Department of Physics and Astronomy
PO Box 849
Piscataway, NJ 08854-8019

Prof. Dr. Sven Lidin
Stockholm University
Arrhenius Laboratory
10691 Stockholm
Sweden

Prof. Dr. Bernard Raveau
ENSICAEN
Laboratoire CRISMAT
6, Boulevard du Maréchal Juin
14 050 CAEN CEDEX 4
France

Prof. Dr. Michael Ruck
Technische Universität Dresden
Anorganische Chemie
Helmholtzstr. 10
01069 Dresden
(ab 01.04.2007)

Prof. Dr. Dieter Vollhardt
Universität Augsburg
Lehrstuhl für Theoretische Physik III
Institut für Physik
86135 Augsburg

Auswärtige wissenschaftliche Mitglieder
Scientific Members from outside

Prof. Dr. Helmut Eschrig
Leibniz-Institut für Festkörper- und
Werkstoffforschung, Dresden
Helmholtzstr. 20
01069 Dresden

Kuratorium / *Board of Trustee*

Dirk Birgel
Chefredakteur Dresdner Neueste Nachrichten

Dr. Wolfgang Gawrisch
Corporate Vice President Research + Technology,
Henkel KGaA (ab 2008 a.D.)

Prof. Hermann Kokenge
Rektor der Technischen Universität Dresden

Prof. Dr. Achim Mehlhorn
Präsident der Dresden International University

Thilo von Selchow
Vorstandsvorsitzender Zentrum Mikroelektronik
Dresden AG

Dr. Eva-Maria Stange
Sächsische Staatsministerin für Wissenschaft und Kunst

Volker von Vogel
Rechtsanwalt und Syndikus der Kulturverwaltung
(ab 2008 a. D.)
Dresden

Helma Orocz
Oberbürgermeisterin der Stadt Dresden

Ehrungen / *Awards*

Bernd-T.-Matthias-Prize for Superconducting Materials, *Prof. Dr. Frank Steglich* für die Entdeckung der Schwere-Fermionen-Supraleitung
International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors (M2S), Dresden 9.-14.07.2006

Wolfram-Prandl-Preis 2006, *Dr. Oliver Stockert*

Egon-Wiberg-Vorlesung 2007, *Prof. Dr. R. Kniep*

Ehrendoktorwürde der Jagiellonischen Universität in Krakau (Polen) für *Prof. Dr. Frank Steglich* (Verleihung am 16.12.2008).

Kooperationen / *Cooperations*

Verträge mit Universitäten und Instituten / *Contracts with Universities and Institutes*

Kooperationsvereinbarung zwischen der Max-Planck-Gesellschaft und der Technischen Universität Dresden für das Max-Planck-Institut für Chemische Physik fester Stoffe (10/1999)

Agreement on Scientific Partnership between Max Planck Society for the Advancement of Science represented by the Managing Director of the Max Planck Institute for Chemical Physics of Solids, Dresden, and the W. Trzebiatowski Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wroclaw (12/1999)

Agreement on Academic Exchange and Cooperation between the Institute for Solid State Physics of the University of Tokyo and the Max Planck Institute for Chemical Physics of Solids (07/2000)

Memorandum of Understanding, Cooperation and Exchange in the Various Fields of Scientific Activities between the Koç University, Istanbul and Max Planck Institute for Chemical Physics of Solids, Dresden (02/2001)

Memorandum of Understanding Cooperation and Exchange in the Various Fields of Scientific Activities between Department of Chemistry and Department of Material Sciences, Moscow State University, Moscow, and the Max Planck Institute for Chemical Physics of Solids, Dresden (06/2001)

Agreement of Cooperation between the Laboratoire National des Champs Magnétiques Pulsés, Toulouse, France, the High Field Magnet Laboratory, Research Institute for Materials, Nijmegen, The Netherlands, Research Center Rossendorf (FZR), the Leibniz Institute for Solid State and Materials Research Dresden (IFW), the Max Planck Institute for Chemical Physics of Solids, the Max Planck Institute for the Physics of Complex Systems and the Dresden University of Technology, Germany (2002)

Agreement on Scientific Partnership between the National Institute for Materials Science, Tsukuba, Japan, and the Max Planck Institute for Chemical Physics of Solids, Dresden (04/2005)

Agreement on Scientific Partnership between the Laboratoire de Recherche sur la Réactivité des Solides (LRRS) UMR 5613 CNRS - Universitité de Bourgogne and the Max Planck Institute for Chemical Physics of Solids, Dresden (04/2005)

Agreement on Scientific Partnership between the Shanghai Institute of Ceramics Chinese Academy of Sciences, P. R. China, and the Max Planck Institute for Chemical Physics of Solids, Dresden (07/2005)

Foundation of a MPG/CAS Partner Research Group at the Shanghai Institute of Ceramics (2005)

Memorandum of Understanding – Cooperation and Exchange in Academic and Scientific Activities between the Faculty of Chemistry, National University of Mongolia, Ulaanbaatar, and the Max-Planck-Institute for Chemical Physics of Solids, Dresden (2006)

Foundation of a MPG/PAS Partner Group at the Institute of Low Temperature and Structure Research, Wroclaw (2007)

Memorandum of Understanding, Cooperation and Exchange in the Various Fields of Scientific Activities between CNR Kyoto Research Center and the Department Metal Science of the Max Planck Institute for Chemical Physics of Solids, Dresden (2007)

Beteiligung an Sonderforschungsbereichen, Schwerpunkt- und Forschungsprogrammen / *Participations in Research Programs*

National

Technische Universität Dresden
SFB 463: Seltenerd-Übergangsmetallverbindungen: Struktur, Magnetismus und Transport
Teilprojekt B23: Hochfeld-ESR-Spektroskopie und Hochfeld-Magnetisierung an Seltenerd-Übergangsmetallverbindung (Prof. Dr. J. Wosnitza/FRZ, Dr. M. Dörr/TUD, Dr. V. Katalev/TUD, Dr. J. Sichelschmidt)
Teilprojekt B17: Magnetische Anregungen und Strukturen in stark korrelierten Elektronensystemen in der Nähe magnetischer Instabilitäten (Prof. Dr. M. Loewenhaupt/TUD, Dr. Oliver Stockert)
Teilprojekt B14: Präparation und Untersuchung der thermodynamischen und Transporteigenschaften von Ce-, Yb- und Eu-Verbindungen (Prof. Dr. F. Steglich, Dr. C. Geibel, Dr. M. Nicklas)
Teilprojekt B22: Einfluss von Elektronischer Korrelation auf Wechselspiel und Konkurrenz von Ordnungphänomenen (Dr. H. Rosner)
Teilprojekt B3: Schwere Quasiteilchen und Ordnungsphänomene in Verbindung mit 3d/4f Elektronen (Prof. Dr. P. Fulde/MPI PkS, Dr. P. Thalmeier)

DFG Forschergruppe
Quantum Phase Transitions FOR960, *Teilprojekt 01*: Quantum critical point scenarios in heavy-fermion systems (Prof. Dr. F. Steglich, Dr. C. Geibel zusammen mit Prof. P. Gegenwart, Universität Göttingen)

DFG-Schwerpunktprogramme
SPP 1166: Lanthanoid-spezifische Funktionalitäten in Molekül und Material
Teilprojekt: Entwicklung von Funktionalen der Paardichte zur mathematisch-physikalischen Beschreibung der chemischen Bindung in mehrkernigen Lanthanoid- und Lanthanoid-Übergangsmetallkomplexen (Dr. F. R. Wagner, Dr. M. Kohout)

SPP 1178: Experimentelle Elektronendichte als Schlüssel zum Verständnis chemischer Wechselwirkungen
Teilprojekt: Electron density and chemical bonding in intermetallic borides and structural analogues - Elektronendichte und chemische Bindung in intermetallischen Boriden und deren Strukturanaloga (Prof. Dr. J. Grin)
Teilprojekt: Metal-metal and metal-ligand interactions from a viewpoint of direct space functionals / Metall-Metall und Metall-Ligand Wechselwirkungen aus der Sicht der Direktraum-Funktionale (Dr. M. Kohout, Dr. F. R. Wagner)
Teilprojekt: Electron densities of intermetallic compounds inspected by spectroscopy / Überprüfung von Elektronendichten intermetallischer Verbindungen durch Spektroskopie (Dr. H. Rosner)
Teilprojekt: Charge density response to an external high electric field / Ladungsdichte-Response auf ein externes hohes elektrisches Feld (Prof. U. Pietsch/Uni Siegen, Dr. H. Borrmann)

SPP 1362: Poröse metallorganische Gerüstverbindungen
Teilprojekt: Prediction, synthesis and characterization of novel Imidazolate based metal organic frameworks (Dr. S. Leoni)

SPP 1236: Strukturen und Eigenschaften von Kristallen bei extrem hohe Drücken und Temperaturen
Teilprojekt: Nitride Chemistry of Geominerals: Formation, crystal structure and properties of multinary metal nitrides prepared at high pressure (Dr. U. Schwarz)

DFG-Einzelförderung
KN 150/14-1 (zusammen mit BR 306/34-1): Theoretische und experimentelle Untersuchungen zur biomimetischen Morphogenese von Apatit-Gelatine-Nanokompositen
(Prof. Dr. R. Kniep mit Prof. Dr. J. Brickmann)

DFG -SNF Projekt
(Dr. C. F. Miclea, Prof. Dr. A. C. Mota)

DFG-Projekt
WI 1324/1-1: Quantenfluktuationen in elektrondotierten Manganaten (Dr. S. Wirth)

Nachwuchsgruppe im Emmy-Noether Programm:
Elektronenkorrelation in realistischer Beschreibung der Elektronenstruktur (Dr. Helge Rosner, 2006-2007)

Nachwuchsgruppe im Emmy-Noether Programm:
Wechselspiel von Supraleitung und Magnetismus in niedrigdimensionalen organischen Materialien (Jens Müller, bis Dez. 2008)

DFG-Forschungszentrum für Regenerative Therapien Dresden. Associate Membership (Prof. Dr. R. Kniep)

VW-Stiftung (I/82203)
Electron Spin Resonance of Kondo Ions in Heavy Fermion Compounds: Theory and Experiment
(Dr. J. Sichelschmidt, Prof. Dr. F. Steglich)

MPG Institutsübergreifende Forschungsinitiative
The Nature of Laves Phases—From Atomic to Mesoscopic Phenomena
(Prof. J. Grin/Projektkoordination, Dr. G. Kreiner)
Max-Planck-Institut für Eisenforschung Düsseldorf
(Prof. Dr. D. Raabe)
Max-Planck-Institut für Metallforschung Stuttgart
(Prof. Dr. E. Mittemeijer)
Max-Planck-Institut für Festkörperforschung Stuttgart
(Prof. Dr. M. Jansen)

MPG Institutsübergreifende Forschungsinitiative
Materialforschung an der Neutronenquelle FRM-II in Garching (Prof. Dr. F. Steglich, Dr. O. Stockert)
Max-Planck-Institut für Metallforschung Stuttgart
Max-Planck-Institut für Festkörperforschung Stuttgart
Max-Planck-Institut für Kolloid- und Grenzflächenforschung Golm
Max-Planck-Institut für Polymerforschung Mainz

MPG Institutsübergreifende Forschungsinitiative
Material Science and Condensed Matter Research at the Hochfeld-Labor Dresden
(Prof. Dr. F. Steglich, Dr. M. Nicklas)

ECEMP—European Centre for Emerging Materials and Processes Dresden

International

European Commission—the sixth Framework Programme, Nanoscience—Materials—Processes
Network of Excellence (NoE-CMA): Complex Metallic Alloys—CMA (Prof. J. Grin, Dr. G. Kreiner)

European Center for Development of Alloys and Compounds (C-MAC)
(Prof. J. Grin, Dr. G. Kreiner)

European Commission—the sixth Framework Programme
Specific Targeted Research Project: Controlling Mesoscopic Phase Separation
(Dr. S. Wirth)

Verbundforschungsprogramm COST P16
ECOM—Emergent Behaviour in Correlated Matter
(Prof. Dr. F. Steglich)
gefördert durch COST (European Cooperation in the Field of Scientific and Technical Research)

Verbundforschungsprogramm
Highly Frustrated Magnetism (HFM)
(Dr. Ch. Geibel, Dr. P. Thalmeier)
gefördert durch die ESF (European Science Foundation)

Research Cooperation with Developing Countries
Physical properties of strongly correlated low charge-carrier-density materials
DFG-BMZ-NRF-Program (Dr. Niels Oeschler, Prof. A.M. Strydom/University of Johannesburg)

Projektbezogener Wissenschaftleraustausch mit Argentinien
Untersuchungen des ferromagnetischen quantenkritischen Punktes im $CePd_{1-x}Rh_x$ System
Dr. Ch. Geibel und Prof. Dr. J. Sereni/Centro Atomicó de Bariloche, San Carlos di Bariloche
gefördert durch DAAD ANTORCHAS (PWA 2004) bis Dez. 2006

Search for quantum criticallity in CeTX anisotropic compounds with strong ferrromagnetic in-plane interactions
Dr. Ch. Geibel Prof. Dr. J. Sereni/Centro Atomicó de Bariloche, San Carlos di Bariloche
gefördert durch DAAD PROALAR 2008

Projektbezogender Wissenschaftsaustausch mit Chile
Funktionalisierte anorganische Netze
Prof. Dr. R. Kniep, Dr. R. Cardoso-Gil gemeinsam mit Prof. Dr. E. Spodine und Prof. D. Venegas-Yazigi, Santiago de Chile
gefördert durch DFG, 444CHL-133/35/0-1 im Rahmen der FONDACYT-Projekte

Institute for Complex Adaptive Matter: a New Multicampus Research Program of the University of California (ICAM)
Membership in the group of Max Planck Institutes:
Max Planck Institute for Chemical Physics of Solids (Prof. J. Grin, Prof. Dr. R. Kniep, Prof. Dr. F. Steglich)
Max Planck Institute for the Physics of Complex Systems (F. Jülicher, A. Hübsch)
Max Planck Institute for Solid State Research (Prof. Dr. B. Keimer)
Max Planck Institute for Microstructure Physics (Prof. Dr. U. Gösele)
Max Planck Institute for Colloids and Interfaces (Dr. G. Brezesinski)

Joint Research Project
Orbital and Magnetic Order in Transition-Metal Oxides
Dr. Ch. Geibel, Dr. H. Rosner in cooperation with Tel Aviv University, University Köln and IFW Dresden
German-Israeli Foundation for Scientific Research and Development

Wissenschaftliche Zusammenarbeiten / *Scientific Collaborations*

National

RWTH Aachen
Prof. Dr. W. Bronger, Prof. Dr. R. Dronskowski, Prof. Dr. G. Güntherodt

Universität Augsburg
Prof. Dr. S. Horn, Dr. H.-A. Krug von Nidda, Prof. Dr. A. Loidl, Prof. Dr. J. Mannhart, Dr. E. W. Scheidt, Prof. Dr. H. Scherer, Prof. Dr. D. Vollhardt, Prof. Dr. K. Ziegler

Universität Bayreuth
Prof. Dr. R. Kempe, Prof. Dr. S. van Smaalen

Freie Universität Berlin
Prof. Dr. K. Lüders

Technische Universität Berlin
Prof. Dr. M. Lerch

Hahn-Meitner-Institut Berlin
Dr. J.-U. Hoffmann, Prof. Dr. H. Maletta, Dr. K. Prokes, Dr. R. Schneider, Dr. N. Stüßer, Dr. P. Vorderwisch

Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin
Prof. Dr. R. Schlögl, Prof. Dr. K. Horn, Dr. D. Rosenthal

Technische Universität Braunschweig
Prof. Dr. W. Brenig, Prof. Dr. A. Eichler, Prof. Dr. P. Lemmens, Prof. Dr. F. J. Litterst, Prof. Dr. S. Süllow, Prof. Dr. G. Zwicknagl

Technische Universität Darmstadt
Dr. C. D. Bredl, Prof. Dr. J. Brickmann, Prof. Dr. R. Feile, Prof. Dr. N. Grewe

Universität Dortmund
Prof. Dr. F. Anders, Prof. Dr. G. Uhrig

Max-Planck-Institut für Eisenforschung, Düsseldorf
Prof. G. Frommeyer, Dr. M. Palm, Prof. Dr. D. Raabe, Dr. F. Stein

Fraunhofer-Institut für Fertigungstechnik und Angewandte Materialforschung (IFAM), Außenstelle für Pulvermetallurgie und Verbundwerkstoffe Dresden
Prof. Dr.-Ing. B. Kieback, Dr. J. Schmidt

Fraunhofer-Institut für Keramische Technologien und Sinterwerkstoffe (IKTS) Dresden
Prof. Dr. A. Michaelis, Dr. H.-P. Martin

Leibniz-Institut für Festkörper- und Werkstoffforschung (IFW), Dresden
Dr. G. Behr, Prof. Dr. B. Büchner, Prof. Dr. H. Eschrig, Dr. A. Handstein, DR. V. Kataev, Dr. M. Richter, Prof. Dr. L. Schultz

Max-Planck-Institut für Physik komplexer Systeme, Dresden
Prof. Dr. P. Fulde, Prof. Dr. R. Moessner, Dr. I. Eremin, Dr. B. Dora

Technische Universität Dresden
Prof. Dr. K. Becker, Dr. M. Dörr, Dr. T. Doert, Prof. Dr. St. Kaskel, Dr. A. Kreyssig, Prof. Dr. C. Laubschat, Prof. Dr. H. Lichte (Triebenberg/Special Laboratory), Prof. Dr. M. Loewenhaupt, Dr. D. Meyer, Prof. Dr. P. Paufler, Prof. Dr. W. Plieth, Prof. Dr. W. Pompe, Prof. Dr. W. Reschetilowski, Dr. M. Rotter, Prof. Dr. M. Ruck, Dr. P. Schmidt, Prof. Dr. G. Seifert, Prof. Dr. T. Zahnert (HNO-Klinik)

Universität Duisburg
Prof. Dr. W. Kleemann, Prof. Dr. E. F. Wassermann

Universität Frankfurt
Prof. Dr. W. Aßmus, Dr. S. Brühne, Prof. Dr. M. Huth, Prof. Dr. M. Lang, Prof. Dr. B. Lüthi

Max-Planck-Institut für Kolloid- und Grenzflächenforschung, Golm
Dr. H. Cölfen

Universität Göttingen
Prof. Dr. W. Felsch, Prof. Dr. P. Gegenwart, Prof. Dr. K. Samwer, Prof. Dr. K. Winzer

Universität Hamburg
Prof. Dr. J. Appel, Prof. Dr. K. Scharnberg

Universität Hannover
Prof. Dr. M. Binnewies

Forschungszentrum Jülich
Prof. Dr. K. Urban, Dr. M. Feuerbacher

Technische Universität Karlsruhe
Prof. Dr. H. von Löhneysen (auch Forschungszentrum Karlsruhe), Prof. Dr. P. Wölfle

Universität Kiel
Prof. Dr. W. Bensch

Universität zu Köln
Prof. Dr. M. Abd-Elmeguid, Prof. Dr. A. Freimuth, Dr. Z. Hu, Prof. Dr. H. Micklitz, Prof. Dr. E. Müller-Hartmann, Prof. Dr. U. Ruschewitz, Prof. Dr. L. H. Tjeng

Universität Marburg
Prof. Dr. Bernd Harbrecht

Universität Mainz
Prof. Dr. H. Adrian, Prof. Dr. Ph. Gütlich, Dr. M. Jourdan, Prof. Dr. W. E. G. Müller

Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr
Prof. Dr. F. Schüth

Technische Universität München
Prof. Dr. P. Gille, Prof. Dr. R. Gross, Dr. K. Neumaier, Prof. Dr. C. Pfleiderer, Prof. Dr. E. Schubert

Westfälische Wilhelms-Universität Münster
Prof. Dr. H. Eckert, Prof. Dr. W. Jeitschko, Prof. Dr. B. Krebs, Prof. Dr. R. Pöttgen

Forschungszentrum Rossendorf
Prof. Dr. J. Wosnitza, Dr. F. Weickert

Universität des Saarlandes
Prof. Dr. U. Hartmann

Max-Planck-Institut für Festkörperforschung, Stuttgart
Prof. Dr. O. K. Andersen, Dr. H. Barentzen, Dr. D. Fischer, Dr. O. Gunnarson, Prof. Dr. P. Horsch, Prof. Dr. M. Jansen, Prof. Dr. B. Keimer, Dr. R. K. Kremer, Dr. D. Manske, Prof. Dr. H. G. von Schnering, Prof. Dr. A. Simon, Prof. Dr. K. Syassen, Dr. G. Vajenine, Dr. R. Zeyher

Max-Planck-Institut für Metallforschung, Stuttgart
Dr. A. Leineweber, Prof. Dr. E. Mittemeijer, Prof. Dr. G. Schütz

Universität Würzburg
Prof. Dr. R. Claessen, Prof. Dr. W. Hanke, Prof. Dr. F. T. Reinert

International

Argentinien / *Argentina*
Centro Atomicó (Bariloche): Prof. Dr. B. Alascio, Prof. Dr. F. de la Cruz, Prof. Dr. J. Sereni

Belgien / *Belgium*
University of Antwerp, *EMAT*:
Prof. Dr. G. van Tendeloo

Brasilien / *Brazil*
Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro:
Prof. Dr. E. M. Baggio-Saitovitch, Prof. Dr. M. A. Continentino, Dr. J. A. Larrea

Chile / *Chile*
Universidad de Chile: Prof. Dr. E. Spodine
Universidad de Santigo de Chile:
Dr. D. Venegas-Yazigi

China / *China*
Chinese Academy of Sciences, Shanghai Institute of Ceramics, Shanghai: Prof. Dr. J.-T. Zhao
Chinese Academy of Sciences, Institute of Physics, Bejing: Prof. Dr. N. L. Wang, Prof. Dr. Yu Lu
Zhejiang University: Prof. Dr. H. Q. Yuan

Dänemark / *Danemark*
University Aarhus: Prof. Dr. B. B. Iversen, Dr. S. Johnsen, Prof. Dr. G. K. H. Madsen

Frankreich / *France*
CEA (Gif-sur-Yvette): Prof. Dr. P. Bonville, Dr. M. Zhimirky
CEA (Saclay): Dr. C. Pépin
CENG (Grenoble): Dr. J. Flouquet, Dr. B. Grenier, Dr. G. Knebel, Dr. E. Ressouche
CNRS Thias (Paris): Prof. C. Godart
CRTBT/CNRS Grenoble: Dr. J. P. Brison, Dr. K. Matho, Dr. C. Paulsen, Dr. J. L. Tholence
ESRF Grenoble: Dr. M. Hanfland
ILL Grenoble: Dr. T. Chatterji, Dr. M. Enderle, Dr. A. Hiess, Dr. M. M. Koza, Dr. A. Murani
Forschungszentrum Jülich / ILL Grenoble:
Dr. K. Schmalzl, Dr. W. Schmidt
Université Paris-Sud: Prof. Dr. B. Coqblin
Université Bordeaux: Prof. Dr. A. Buzdin
Université de Rennes I: Prof. Dr. J.-F. Halet
Université de Bourgogne: Prof. Dr. F. Bernard

Griechenland / *Greece*
National Technical University of Athens:
Prof. Dr. G. Varelogiannis

Großbritannien / United Kingdom
University of Cambridge: Prof. Dr. G. G. Lonzarich, Prof. Dr. Richard M. Lambert, Dr. F. M. Grosche
University of St. Andrews: Dr. A.P. Mackenzie
ISIS, Rutherford Appleton Laboratory, Didcot:
Dr. D. T. Adroja, Dr. J. Taylor, Dr. H. Wilhelm
University of Birmingham: Prof. Dr. A. J. Schoflied
University of Bristol: Dr. N. Shannon

Indien / *India*
Tata Institute of Fundamental Research, Bombay:
Prof. Dr. L. Gupta, Prof. Dr. S. Ramakrishnan,
Dr. P. Raychaudhuri
Indian Institute of Technology, Kanpur: Dr. Z. Hossain

Japan / *Japan*
University of Hiroshima: Prof. Dr. T. Takabatake
University of Hokkaido, Sapporo: Prof. Dr. M. Ido,
Dr. N. Momone
University of Kyoto: Prof. Dr. K. Ishida,
Prof. Dr. Y. Maeno, Prof. Y. Matsuda
National Institute for Materials Science, Tsukuba:
Dr. T. Matsumoto, Dr. T. Mori, Prof. Dr. M. Tachiki,
Dr. K. Takemura
University of Nagoya: Prof. Dr. N. Sato
University of Osaka: Prof. Dr. Y. Kitoaka,
Prof. Dr. K. Miyake
Tohoku University, Sendai: Prof. Dr. T. Komatsubara,
Prof: Dr. Y. Kuramoto, Prof. Dr. S. Maekawa,
Prof. Dr. M. Motokawa, Prof. Dr. A. Ochiai,
Prof. Dr. T. Sasaki
University of Tokyo, ISSP, Kashiwa Campus:
Prof. Dr. S. Nakatsuji, Prof. Dr. T. Sakakibara,
Dr. Tayama, Prof. Dr. K. Ueda
University of Tokyo, Hongo Campus:
Prof. Dr. M. Imada, Prof. Dr. K. Kanoda,
Prof. Dr. N. Nagoasa, Prof. Dr. M. Ogata,
Dr. S. Watanabe
Tokyo University of Science: Prof. Dr. H. Fukuyama
Tokyo Institute of Technology: Prof. Dr. H. Shiba
Tokyo Metropolitan University: Dr. R. Shiina

Kanada / Canada
Université de Montréal: Prof. Dr. A. Bianchi

Korea / *Korea*
Hallym University Chunchon, Kangwon: Prof. H. Won

Kroatien / *Croatia*
University of Zagreb, Institute of Physics:
Dr. M. Ocko, Prof. Dr. V. Zlatic

Mongolei / *Mongolia*
National University of Mongolia, Ulaanbaatar:
Prof. Dr. Dorj Duichaa

Niederlande / *The Netherlands*
University of Amsterdam: Prof. Dr. F. R. de Boer,
Prof. Dr. P. F. de Châtel, Prof. Dr. J. J. M. Franse
University of Leiden: Prof. Dr. J. Aarts,
Prof. Dr. J. A. Mydosh

Österreich/ Austria
Universität Wien: Prof. Dr. K. Hiebl, Prof. Dr. P. Rogl,
Prof. Dr. J. C. Schuster, Dr. F. Weitzer
Technische Universität Wien:
Prof. Dr. E. Bauer, Prof. Dr. S. Bühler-Paschen,
Prof. Dr. K. Held, Prof. Dr. W. Steiner, Dr. J. Custers

Polen / *Poland*
W. Trzebiatowski Institute of Low Temperature and Structure Research (Wroclaw), Polish Academy of Sciences:
Prof. Dr. Z. Henkie, Prof. Dr. D. Kaczorowski,
Prof. Dr. W. Suski, Prof. Dr. J. Sznajd, Dr. T. Cichorek,
Dr. V. H. Tran
University of Silesia, Katowiece: Prof. Dr. A. Slebarski,
Jagiellonian University Krakow: Prof. Dr. A. Oles,
Dr. Michal Rams, Prof. Dr. J. Spalek
University of Mining and Metallurgy, Kraków:
Prof. Dr. H. Figiel, Prof. Dr. C. Kapusta

Rumänien / *Romania*
Babes-Bolyai University, Cluj-Napoca: Dr. D. Andreica

Russland / *Russian Federation*
Moscow State University: Prof. E. V. Antipov,
Prof. Dr. A. A. Gippius, Prof. Dr. A. V. Shevelkov,
Dr. R. V. Shpanchenko, Prof. Dr. A. N. Vasil'ev
Ioffe Physico-Technical Institute RAS, St. Petersburg:
Prof. Dr. V. N. Gurin
St. Petersburg State University: Prof. S. F. Filatov,
Prof. Dr. O. Frank-Kamenetskaya
Joint Institute for Nuclear Research:
Prof. Dr. V. Yushankhai

Schweden / *Sweden*
Stockholm University: Prof. Dr. M. Nygren,
Prof. Dr. O. Terasaki, Prof. Dr. S. Lidin, Dr. D. Grüner

Schweiz / *Switzerland*
Universität Bern: Prof. Dr. J. Hulliger,
Dr. K. W. Krämer
Universität Genf:, Prof. Dr. Ø. Fischer,
Prof. Dr. T. Giamarchi, Dr. D. Jaccard,
Prof. Dr. D. van der Marel, Prof. Dr. H. Schmid
Paul-Scherrer-Institut Villigen:
Dr. A. Amato, Dr. A. Schenck
ETH Zürich: Prof. Dr. J. Blatter, Prof. Dr. A.-C. Mota,
Prof. Dr. R. Nesper, Prof. Dr. H.R. Ott,
Prof. Dr. T.M. Rice, Prof. Dr. M. Sigrist,
Prof. Dr. W. Steurer
Universität Zürich: Prof. Dr. K. A. Müller

Slowakei / *Slovakia*
Slovak Academy of Sciences, Institute of Physics, Bratislava: Marek Mihalkovic
University of Kosice: Prof. Dr. M. Reiffers

Slowenien / *Slovenia*
University of Ljubljana: Prof. Dr. J. Dolinsek

Taiwan / *Taiwan*
National Tsing Hua University, Hsinchu:
Prof. Dr. M.-K. Wu

Tschechische Republik / *Czech Republic*
Charles University Prague: Prof. Dr. V. Sechovski
Academy of Science of The Czech Republic Prague:
Dr. P. Novák

Türkei/ *Turkey*
Koç University, Istanbul: Prof. Dr. M. Somer

Ukraine / *Ukraine*
National Academy of Science of Ukraine, Kiew:
Dr. V. Filipov, Dr. W. Paderno
University of Lviv: Dr. L. Akselrud
Polytechnical University of Lviv: Dr. L. Vasylechko
National Forest Academy, Lviv: Dr. O. Sichevych

USA / *U.S.A.*
Ames National Laboratory, Ames (Iowa):
Prof. P. Canfield, PhD; Prof. K. Gschneidner, PhD;
Prof. Dr. G. Miller, Prof. Dr. V. Pecharsky
Argonne National Laboratory:
Dr. A. M. Kini, Dr. J. A. Schlueter
Arizona State University: Prof. Dr. Dong-Kyun Seo
Colorado State University, Fort Collins:
Prof. Dr. H. D. Hochheimer
Florida State University Tallahassee:
Prof. S. von Molnár, PhD
University of South Florida, Tempa:
Prof. G. S. Nolas, PhD
LANL, Los Alamos (New Mexico): Dr. A. V. Balatsky,
Dr. A. H. Lacerda, Dr. R. Movshovich, Dr. J. L. Sarrao,
Dr. J. D. Thompson
NHMFL, Tallahassee (Florida):
Dr. G. Boebinger, Prof. Dr. L. P. Gor'kov,
Rice University Houston: Prof. Q. Si PhD,
Dr. S. Kirchner
Rutgers University New Jersey: Prof. E. Abrahams,
PhD; Prof. P. Coleman, PhD; Prof. G. Kotliar, PhD
UF Gainesville: Dr. B. Andraka,
Prof. G. R. Stewart, PhD
UC Berkeley: Prof. N. E. Phillips, PhD
UC Davis: Prof. N. Curro, PhD; Prof. S. M. Kauzlarich,
PhD
UV Irvine: Prof. Z. Fisk, PhD
UC San Diego: Prof. M. B. Maple, PhD
UC Santa Barbara: Prof. D. J. Scalapino, PhD
University of Houston (Texas):
Prof. Dr. A. Guloy, Prof. S. Pan, PhD
University of Nevada, Las Vegas: Prof. A. Cornelius,
PhD
University of Southern California, Los Angeles:
Prof. Dr. K. Maki
Naval Research Laboratory: Dr. D. Parker

Beteiligungen, Kooperationen mit Firmen / *Cooperations with companies*

SusTech GmbH & Co. KG Darmstadt
Prof. Dr. R. Kniep

AXO Dresden GmbH – Applied X-ray Optics and High Precesion Deposition
Th. Holz/AXO Dresden GmbH
R. Dietz/Fraunhofer-Institut für Werkstoff- und Strahltechnik, Dresden)
Dr. H. Borrmann/MPI CPfS)

BASF – Selektive Alkane Oxidation
Prof. Dr. R. Kniep

Patente / *Patents*

Use of thermoelectric materials for low temperature thermoelectric purposes
A. Bentien, F. Steglich (MPI CPfS)
zusammen mit: S. Johnsen, G. K. H. Madsen,
B. B. Iversen (Univ. Aarhus, Dänemark)
Weltweite PCT-Anmeldung, W028067815A2, 2007.

Palladium-Gallium Intermetallic Compounds as Catalysts for the Selective Hydrogenation of Acetylene
J. Osswald, R. Giedigkeit, M. Armbrüster, K. Kovnir,
R. E. Jentoft, T. Ressler, Yu. Grin, R. Schlögl
Europäisches Patent angemeldet, EP1834939A1, 2006.
Internationales Patent angemeldet, WO2007104569, 2007.
Europäisches Patent angemeldet, EP07723306, 2008.
Chinesisches Patent angemeldet, CN0780009214, 2008.
Indonesisches Patent angemeldet, ID200802979, 2008.
Malayisches Patent angemeldet, MA06005310, 2008.
Singapurisches Patent angemeldet, SG00806762-1, 2008.
US Patent angemeldet, US12/282920, 2008.

Methods of Preparing, Optionally Supported, Ordered Intermetallic Palladium Gallium Compounds, the Compounds as such, and Their Use in Catalysis
M. Armbrüster, M. Schmidt, K. Kovnir, M. Friedrich,
K. Weinhold, Yu. Grin, R. Schlögl
Europäisches Patent angemeldet, EP07021904, 2007.
Internationales Patent angemeldet, PCT/EP2008/064668, 2008.

Use of a Mixture of an Ordered Intermetallic Compound and an Inert Material as a Catalyst and Corresponding Hydrogenation Processes
M. Armbrüster, M. Schmidt, K. Kovnir, M. Friedrich,
K. Weinhold, Yu. Grin, R. Schlögl
Europäisches Patent angemeldet, EP07018368, 2007.
Internationales Patent angemeldet,
PCT/EP2008/062424, 2008.

Tagungen, Workshops und Seminare
Conferences, Workshops and Symposia

2006

Experimental Physics of Emergent Materials
Workshop, 15.01.-17.01.2006
Organisation: Prof. Juri Grin

The Nature of Laves Phases VI
Workshop, 13.03.2006
Organisation: Dr. Guido Kreiner

Strongly Correlated Electrons
Workshop, 11.05.2006
Organisation: Dr. Peter Thalmeier

Key User
Personalwesen MPG, Workshop 16.05.-17.05.2006
Organisation: Carmen Kratochwil

2nd Bilateral Workshop on "Basics in Real Space Theories"
Workshop, 17.07.-19.07.2006
Organisation: Prof. Dr. Rüdiger Kniep, Dr. Dirk Zahn, Dr. Frank R. Wagner

11. Fortbildungsseminar Spektroskopie mit Praktikum
23.03.2006
Veranstalter: Firma Varian
Kontakt: Dr. Gudrun Auffermann

Biomineralisation
Workshop, 01.02.2006
Organisation: Prof. Dr. Rüdiger Kniep

2007

Dresdner Abhandlungen zur Chemischen Physik fester Stoffe
Workshop, 12.01.2007
Organisation: Prof. Juri Grin

Electron Localizability and Analysis of Chemical Bonding
Workshop, 28.01.-03.02.2007
Organisation: Dr. Frank R. Wagner, Dr. Miroslav Kohout, Prof. Juri Grin

Electron Density
Workshop, 29.11.-30.11.2007
Organisation: Dr. Horst Borrmann, Prof. Juri Grin

Zur Morphologie von Apatit-Gelatine-Kompositen
Workshop, 15.11.2007
Organisation: Prof. Dr. Rüdiger Kniep

12. Fortbildungsseminar Spektroskopie mit Praktikum
25.01.2007
Veranstalter: Firma Varian
Kontakt: Dr. Gudrun Auffermann

MRS Fall Meeting 2007
Symposium Q: Nitrides and Related Bulk Materials
Nov. 26-30, 2007
Symposium Organiser: Prof. Dr. Rüdiger Kniep

VBL-Tagung der MPG
16.10.-17.10.2007
Organisition: Petra Nowak

MPG-Tagung Rechnungswesen
22.-24.10.2007
Organisation: Petra Nowak (in Zusammenarbeit mit MPI CGB und MPI PkS)

2008

International Conference Advanced Processing of Novel Functional Materials—APNFM 2008,
Congress Center Dresden, 23.01.-25.01.08
Organization: Prof. Juri Grin (MPI CPfS), Prof. Dr. Bernd Kieback (Fh IFAM)
CEO: Dr. Jürgen Schmidt (Fh IFAM)
Secretary: Claudia Strohbach (MPI CPfS)

1*6th International Conference on Solid Compounds of Transition Elements—SCTE 2008*
Westin Bellevue Hotel / Conference Centre, 26.09.-31.09.2008
Organization: Prof. Juri Grin (MPI CPfS)
CEO: Dr. Ulrich Schwarz (MPI (CPfS)
Secretary: Katrin Demian (MPI CPfS)

Chemischer Transport 2008
Workshop, 03.01.2008
Organisation: Dr. Marcus Schmidt

DGM Fachausschusssitzung Intermetallische Phasen
09.01.2008
Organisation: Dr. Guido Kreiner

The Nature of Laves Phases X
Workshop, 10.01.2008
Organisation: Dr. Guido Kreiner

Electron Localizability and Analysis of Chemical Bonding
Workshop, 10.02.-13.02.2008
Organisation: Dr. Frank R. Wagner, Dr. Miroslav Kohout, Prof. Juri Grin

Technologie-Tage
Workshop, 25.02.-27.02.2008
Organisation: Dr. Burkhard Schmidt (zusammen mit HP und Apple)

Barcode
MPG-Workshop, 03.06.-04.06.2008
Organisation: Steffen Kolberg, Hr. Schilling (MPG)

10th German-Japanese Symposium "Collective Quantum Phenomena in Correlated Condensed Matter Systems", Schloß Ringberg, 28.09.-01.10.2008
Organisation: Dr. Christoph Geibel

CPT-Herbsttagung der Bibliothekare der MPG
13.10.-14.10.2008
Organisation: Ina Wanschura

13. Fortbildungsseminar Spektroskopie mit Praktikum
21.02.2008
Veranstalter: Firma Varian
Kontakt: Dr. Gudrun Auffermann

Vorträge auswärtiger Gäste
Lectures of Foreign Guests

Frontiers in Chemical Physics of Solids

Prof. Gilbert Lonzarich, PhD, Cavendish Laboratory Cambridge, UK
New Physics on the Border of Quantum Phase Transitions (22.05.2006)

Prof. Gabriel Kotliar, PhD, Department of Physics and Astronomy, Serin Physics Laboratory, Rutgers University, NJ, USA
Understanding Heavy Fermions: A Dynamical Mean Field Perspective (24.04.2007)

Prof. Douglas J. Scalapino, PhD, Department of Physics, University of California, Santa Barabara, USA
The Name of the Rose – Spin fluctuations (15.11.2007)

Prof. Qimiao Si, PhD, Department of Physics and Astronomy, Rice University, Houston, Texas, USA
Strongly Correlated Electrons: From Quantum Criticality to the High T_C Iron Pnictides (19.06.2008)

CPfS Lecture Series on the Physical Chemistry of Solids

Prof. Dr. H. F. Franzen, Ames, Iowa, USA
Basic Principles of Symmetry and Landau Theory (10.10.2006, 11.10.2006, 12.10.2006, 13.10.2006)

Prof. Gabriella Borzonem, Università di Genova, Switzerland
Chemistry and Reactivity of Nickel Aluminides of Rare-Earth Metals (12.01.2007)

Prof. Donata Maria Mazzone, Università di Genova
Behaviour and constitutional properties of the R-(Cu, Ag, Au)-X alloys (R=rare earth elements, X= p-block elements) (12.01.2007)

Prof. Adriana Saccone, Università di Genova
Mg-alloys with Rare Earth Metals: constitutional and applicative properties. A research activity carried out at the Department of Chemistry of the Genova University (12.01.2007)

Prof. Maria Luisa Fornasini, Università di Genova
Phase stability and crystal chemistry in the Yb-Cu-Sn, Eu-Cu-Sn and Yb-Zn-Al systems (12.01.2007)

Prof. Franco Merlo, Università di Genova
Volume effects in rare earth intermetallics (12.01.2007)

Prof. Vitalij K. Pecharsky, Iowa State University, USA
Complex hydrides—a new frontier for future energy applications (12.01.2007)

Prof. Dr. Wolfgang Jeitschko, Institut für Anorganische und Analytische Chemie, Westfälische Wilhelms-Universität Münster
Displacive Phase Transitions in Solids: crystallographic aspects, structure-chemical considerations, theory and technical applications (21. und 22.06.2007)

Gemeinsames Anorganisches Kolloquium der TU Dresden und des MPI CPfS

Prof. Dr. Christoph Janiak, Institut für Anorganische und Analytische Chemie, Universität Freiburg
Von Koordinationspolymeren zu wasserstoff-verbrückten Netzwerken (30.05.2006)

Prof. Dr. Berthold Kersting, Institut für Anorganische Chemie, Universität Leipzig
CONTAINER-MOLEKÜLE: Von der Steuerung chemischer Reaktionen bis zur Fixierung des Treibhausgases (04.07.2006)

Prof. Dr. Lars Kloo, Inorganic Chemistry, Royal Institute of Technology, Stockholm, Sweden
Subvalent chemistryin room temperature reaction media (06.10.2006)

Prof. Dr. Dirk Volkmer, Anorganische Chemie II, Universität Ulm
Bionische Konzepte im Material-Design (08.05.2007)

Prof. Dr. Thomas Schleid, Institut für Anorganische Chemie, Universität Stuttgart
Anionisch derivatisierte Lanthanoid(III)-Nitride (05.06.2007)
Dr. Florian Weigend, Institut für Nanotechnologie, Forschungszentrum Karlsruhe
Dichtefunktionalrechnungen an homo- und heteroatomaren Metallclustern (13.11.2007)

Prof. Dr. Wolfgang Scherer, Institut für Physik, Universität Augsburg
On the nature and consequences of ligand-induced charge concentrations in chemistry and physics (4.12.2007)

Prof. Dr. Wolfgang Bensch, Institut für Anorganische Chemie, Universität Kiel
Interkalationschemie: Eine attraktive Synthesemethode zur Veränderung struktureller und physikalischer Eigenschaften von Feststoffen (18.12.2007)

Prof. Dr. Stefan Mecking, Universität Konstanz
Nanoskalierung von Polymerkristallen und halbleitenden Polymeren durch organometallische Katalyse (29.01.2008)

Prof. Dr. Joachim Schoenes, Institut für Physik der Kondensierten Materie, Technische Universität Braunschweig
Das ThAsSe Puzzle (11.02.08)

Prof. Dr. Hubertus T. Hintzen, Department of Chemical Engineering and Chemistry, Eindhoven University of Technology, Eindhoven, The Netherlands
Nitride-based materials: from structural to functional properties (15.04.2008)

PD Dr. Tom Nilges, Institut für Anorganische und Analytische Chemie, Westfälische Wilhelms-Universität Münster
Strategien zur Realisierung und Charakterisierung neuer Polyphosphide und Polytelluride des Kupfers und Silbers (29.04.2008)

Prof. Dr. Norbert Stock, Institut für Anorganische Chemie, Christian-Albrechts-Universität, Kiel
Anorganisch-organische Hybridverbindungen – von funktionalisierten porösen Gerüstverbindungen zu „intelligenten" Kern-Schale Partikeln (27.05.2008)

Prof. Dr. M. Rosseinsky, Department of Chemistry, University of Liverpool, UK
New chemistry of oxides and nanoporous materials (10.06.2008)

Prof. Dr. Aziz Dinia, CNRS, Institut de Physique et Chimie des Matériaux de Strasbourg, France
Magnetic tunnel junctions based on the half-metal $SrFe_2MoO_6$ grown by pulsed laser deposition (01.07.2008)

Dr. Arne Thomas, Max Planck Institute of Colloids and Interfaces Research, Campus Golm, Potsdam
Porous Materials: From Hard to Soft Functional Frameworks (28.10.2008)

Prof. Dr. Martin Kaupp, Institut für Anorganische Chemie, Universität Würzburg
Relativistische Quantenchemie als Werkzeug der Anorganischen Chemie: Von den höchsten Oxidationsstufen bis zu Metalloenzymen (09.12.2008)

Lectures

2006

Prof. Dr. Christoph Renner, London Centre for Nanotechnology and Department of Physics and Astronomy, University College London, UK
STM of strongly correlated transition metal oxides: Success and challenges (16.01.2006, Workshop "Experimental Physics of Emergent Materials")

Prof. Dr. Thomas T. M. Palstra, Department of Chemical Physics, Materials Science Centre, University of Groningen, NL
Complex electronic order in oxides and organics (16.01.2006, Workshop "Experimental Physics of Emergent Materials")

Prof. Dr. Ralph Claessen, Physikalisches Institut, Universität Würzburg
Photoemission studies of complex solids: Organics, oxides & others (16.01.2006)

Prof. Dr. Marc S. Golden, Van der Waals-Zeeman Institute for Experimental Physics, University of Amsterdam, NL
Complexity calling: The creation, imaging and control of electronic quantum matter (16.01.2006, Workshop "Experimental Physics of Emergent Materials")

Prof. Dr. Michael Lang, Physikalisches Institut, Johann Wolfgang Goethe-Universität, Frankfurt/Main
Molecule-based interacting electron systems (16.01.2006, Workshop "Experimental Physics of Emergent Materials")

Prof. Dr. Peter Böni, Physik-Department E21, Technische Universität München
Exploring unconventional materials with novel techniques (16.01.2006, Workshop "Experimental Physics of Emergent Materials")

Prof. Dr. Nicola Hüsing, Anorganische Chemie I, Universität Ulm
Nanostrukturiertes SiO_2: Vom dünnen Film zum Monolithe (17.01.2006)

Dipl. Phys. Paul Popovich, Forschungszentrum Karlsruhe
Magnetostriction and thermal expansion of untwined $YBa_2Cu_3O_{7.0}$ single crystals (19.01.2006)

Dr. Daniel Sebastiani, MPI für Polymerforschung, Mainz
Electronic structure based predictions of NMR and NQR spectra of complex supramolecular systems (27.01.2006)

Dr. Ryousuke Shiina, Department of Physics, Tokyo Metropolitan University, Tokyo, Japan
Theory of multipolar orders and fluctuations in f electron systems (16.02.2006)

Prof. Dr. Ernst Bauer, Institut für Festkörperphysik, Technische Universität Wien, Österreich
$REPt_3Si$: A playground for interesting states of matter (10.03.2006)

Prof. Dr. Peter Rogl, Institut für Physikalische Chemie, Universität Wien, Österreich
On the Laves Phase in the System Ti-Fe-Ni-Al (13.03.06, im Rahmen der Veranstaltung „Laves Phases VI")

Dr. Nagesh S. Kini, Department of Applied Chemistry, Graduate School of Engineering, Hiroshima University, Hiroshima, Japan
Synthesis of single crystal 3D polymers of C_{60} under high-pressure and high-temperature conditions, their structure and properties (16.03.2006)

Prof. Dr. Åke Kvick, The European Synchrotron Radiation Facility (ESRF), Grenoble, France
Scientific Opportunities in Materials Science at the European Synchrotron Radiation Facility (31.03.2006)

Dr. Manuel Brando, Department of Physics, University of London, Egham, UK
Quantum criticality in $NbFe_2$ (03.04.2006)

Dr. Tuson Park, Condensed Matter and Thermal Physics, Los Alamos National Laboratory, Los Alamos, NM, USA
Hidden magnetism and quantum criticality in the heavy fermion superconductor $CeRhIn_5$ (04.04.2006)

Prof. Dr. Ole Krogh Andersen, Max-Planck-Institut für Festkörperforschung, Stuttgart
How cation-covalency controls electron localization in $(t_{2g})^1$ perovskites (05.04.2006)

Prof. Dr. Dorj Daichaa, Faculty of Chemistry, National University of Mongolia, Ulaanbaatar, Mongolia
Some results of the investigation on rare-earth elements and environmental chemistry (21.04.2006)

Prof. Dr. Manfred Martin, Institut für Physikalische Chemie, RWTH Aachen
Morphologische Instabilitäten bei Festkörperreaktionen: Mikrostrukturierte Grenzflächen (25.04.2006)

Dr. Ramesh Nath, Experimentalphysik V, Institut für Physik, Universität Augsburg
Magnetic properties of some low-dimensional S=1/2 systems probed by NMR (27.04.2006)

Dr. Georg Kent Hellerup Madsen, Department of Chemistry, University of Aarhus, Aarhus, Denmark
Anharmonic dynamics of clathrate guest-atoms (27.04.2006)

Prof. Dr. E. V. Sampathkumaran, Department of Condensed Matter Physics & Material Sciences, Tata Institute of Fundamental Research, Mumbai, India
Geometrically frustrated spin-chain systems, (Ca, Sr)XYO_6 (X,Y = transition metals) (18.05.2006)

Dr. Matteo Ceccarelli, Department of Physics and Sardinian Laboratory for Computational Materials Science, University of Cagliari, Italy
Microscopic view of a molecular switch: an MD investigation (19.05.2006)

Prof. James S. Schilling, PhD, Department of Physics, Washington University, St. Louis, MO, USA
Studies in Superconductivity at Extreme Pressures (01.06.2006)

Prof. Dr. Claudia Wickleder, Anorganische Chemie II, Universität Siegen
Neue Anorganische Leuchtstoffe (13.06.2006)

Dr. Katrin Pelzer, Fritz-Haber-Institut der MPG, Berlin
Ruthenium nanoparticles stabilized by ligands grafted on the surface (16.06.2006)

Prof. Russell E. Walstedt, PhD, Advanced Science Research Center, JAERI, Tokai, Japan
NMR/NQR Studies of ^{69}Ga in Pu(Rh, Co)Ga_5 Superconductors above and below Tc (22.06.2006)

Prof. Dr. Je-Geun Park, Department of Physics, Sungkyunkwan University, Suwon, Korea
Coupling of multiple degrees of freedom in strongly correlated electron systems (22.06.2006)

Dr. Peter Wahl, Max-Planck-Institut für Festkörperforschung, Stuttgart
Local Spectroscopy of Correlated Electron Systems at Metal Surfaces (06.07.2006)

Prof. Dr. Yuji Aoki, Department of Physics, Tokyo Metropolitan University, Japan
Unconventional superconductivity and quadrupolar order in rare earth skutterudite compounds (17.07.2006)

Dr. Wen-Yong Zhang, Fachgebiet Physikalische Metallkunde, Fachbereich Materialwissenschaft, Technische Universität Darmstadt
Effect of doping on structure, electrical transport and magnetic properties of Na_xCoO_2 layered compound (03.08.2006)

Prof. Dr. Stefan Hüfner, Fachrichtung 10.2 – Experimentalphysik, Universität des Saarlandes
High-resolution photoelectron spectroscopy: surface states, the Kondo resonance and the Fermi liquid (11.08.2006)

Dr. Huiqiu Yuan, Department of Physics, University of Illinois, Urbana, USA
Superconductivity in materials without inversion symmetry: Li_2Pd_3B and Li_2Pt_3B (17.08.2006)

Prof. Dr. B. S. Chandrasekhar, Walther-Meißner-Institut, Gaching
Low Temperature Physics and Physicists sixty years ago: Some Reminiscences (06.09.2006)

Prof. Dr. Satoru Nakatsuji, Institute for Solid State Physics, University of Tokyo, Kashiwa, Chiba, Japan
Frustrated spins and spin liquid behavior of a triangular magnet and a pryochlore Kondo lattice (07.09.2006)

Dr. Katsunori Kubo, Advanced Science Research Center, Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Orbital-controlled superconductivity in Ce^{115} compounds (14.09.2006)

Prof. Douglas MacLaughlin, PhD, Department of Physics, University of California, Riverside, USA
Time reversal symmetry and multiband superconductivity in filled-skutterudite superconductors (21.09.2006)

Dr. Ilya Eremin, MPI for the Physics of Complex Systems Dresden and TU Braunschweig
Magnetic field dependence of the superconducting gap node topology in non-centrosymmetric $CePt_3S$ (21.09.2006)

Dr. Marc Scheffler, Kavli Institute of Nanoscience Delft, Delft University of Technology, Delft, The Netherlands
Drude response of heavy fermions - optics at very low frequencies (28.09.2006)

Prof. Dr. Bernd Harbrecht, Anorganische Chemie, Philipps-Universität Marburg
Tantalreiche Telluride (10.10.2006)

Dr. Katarina Removic-Langer, Physikalisches Institut, Johann Wolfgang Goethe-Universität, Frankfurt am Main
Carboxylate bridged 3d-metal chains with Betaine and Oxalate: Structural and Magnetic Properties (08.11.2006)

Dr. Zakir Hossain, Department of Physics, Indian Institute of Technology Kanpur, Indien
Crystal Field Effect, Magnetism and Superconductivity of Pr-Compounds (09.11.2006)

Dr. Daniela Zander, Fachbereich Bio- und Chemieingenieurwesen, Universität Dortmund
Einfluss der Gießverfahren auf die Mikrostruktur und Korrosion von Mg-Legierungen (10.11.2006)

Prof. Dr. Erwin A. Schuberth, Walther-Meißner-Institut, Garching
NMR an festem ^{3}He bei mK-Temperaturen: ungewöhnliche Spinrelaxation (16.11.2006)

Prof. Dr. Wolfgang Tremel, Institut für Anorganische und Analytische Chemie, Johannes Gutenberg-Universität Mainz
Chalcogenide Nanoparticles - Synthesis, Structure and Reactivity (21.11.2006)

Dr. Kamran Behnia, Ecole Supérieure de Physique et de Chimie Industrielles, Paris, France
Nernst effect, unidentified orders and semi-metallicity in heavy-fermion compounds (24.11.2006)

Prof. Dr. Reinhold Kleiner, Physikalisches Institut - Experimentalphysik II, Universität Tübingen
Fractional Vortices in Superconductors (29.11.2006)

Prof. Dr. Armin Reller, Institut für Physik, Universität Augsburg
Anorganische Funktionsmaterialien für eine effiziente Energietechnologie (05.12.2006)

Prof. Dr. Christian Pfleiderer, Physik Department, TU München
Quantum order in chiral magnets (20.12.2006)

2007

Prof. Dr. Hellmut Eckert, Institut für Physikalische Chemie, Westfälische Wilhelms-Universität Münster
Modern solid state NMR strategies for structural studies of disordered materials (09.01.07)

Dr. Andrea Bianchi, Department of Physics & Astronomy, University of California, Irvine, USA
Magnetic Moment Formation in Solids, or why Heavy fermions still matter (16.01.2007)

Prof. Dr. A. M. Strydom, Physics Department, Rand Afrikaans University, Johannesburg, South Africa
Exploratory studies of physical properties of new $R_3M_4Ge_{13}$ compounds (22.01.2007)

Prof. Dr. Edwin Kroke, Institut für Anorganische Chemie, TU Bergakademie Freiberg
Molekülchemische wege zur Synthese von Hybridmaterialien, Hartstofffen und Hochdruckphasen (06.02.2007)

Dr. Ryousuke Shiina, Department of Physics, Tokyo Metropolitan University, Tokyo, Japan
Role of multipoles in Pr-based skutterudites – present status on $PrOs_4Sb_{12}$ and $PrFe_4P_{12}$ (08.02.2007)

Prof. Qimiao Si, PhD, Department of Physics & Astronomy, Rice University, Houston, Texas, USA
Fermi Surface and Antiferromagnetism in Kondo Lattice Systems (Seminar, 12.02.2007)

Dr. Gerald Wigger, Fachbereich Physik, Freie Universität Berlin
Kondo-type Interactions in non-Cerium Materials (08.03.2007)

Prof. Dr. Richard M. Lambert, University of Cambridge, UK
Where surface science meets heterogeneous catalysis: out of ultra high vacuum and into the real world (16.03.2007)

Prof. Dr. Ernst Bauer, Institut für Festkörperphysik, Technische Universität Wien, Österreich
Ground state properties of Yb_2Pd_2(In, Sn): Two quantum critical points in a single system? (04.04.2007)

Prof. Dr. W. Jeitschko, Institut für Anorganische und Analytische Chemie, Westfälische Wilhelms-Universität Münster
Polyanions in Solids (13.04.2007)

Prof. Dr. Michael Binnewies, Institut für Anorganische Chemie, Universität Hannover
Bildung, Eigenschaften und Anwendungspotential organosubstituierter anorganischer Nanopartikel (17.04.2007)

Dr. Ulrich Rößler, Leibniz-Institut für Festkörper- und Werkstoffforschung Dresden
Modulated and localized spin textures in chiral magnets (19.04.2007)

Prof. Dr. H.-Jürgen Meyer, Abteilung für Festkörperchemie und Theoretische Anorganische Chemie, Institut für Anorganische Chemie, Universität Tübingen
Festkörper-Metathese-Reaktionen für Stoffsynthesen im System Metall-B-C-N

Prof. Dr. Kenji Ishida, Graduate School of Science, Kyoto University, Japan
Quantum critical behaviors observed in 1st and 2nd order transitions (07.05.2007)

Dr. Neil Mathur, Department of Materials Science, University of Cambridge, UK
Transformation of spin information into large electrical signals using carbon nanotubes (25.05.2007)

Dr. Koji Kaneko, Advanced Science Research Center, Japan Atomic Energy Agency, Ibraki, Japan
Quadrupolar interaction and rattling in the heavy fermion superconductor $PrOs_4Sb_{12}$ (31.05.2007)

Dr. Matthias Krack, ETH Zürich, Schweiz
Approaching the nanosecond time scale in ab-initio molecular dynamics simulations (06.06.2007)

Dr. Klaus Morawetz, Institut für Physik, Technische Universität Chemnitz
Bernoulli potentials in superconductors – how electric fields help to understand superconductivity (07.06.2007)

Prof. Dr. Jürgen Köhler, Max-Planck-Institut für Festkörperforschung, Stuttgart
Anionic Late Transition Metals as p Elements (08.06.2007)

Dr. Dietrich Maurer, Institut für Experimentalphysik, Freie Universität Berlin
Vortex dynamic in Hg-1201: Untersuchungen von DC und AC Magnetisierungskurven in der Shubnikov (Vortex-) Phase (13.06.2007)

Prof. Dr. Klaus Lüders, Fachbereich Physik, Freie Universität Berlin
Carbon based superconductors: Little Neighbours of High-T_c's (14.06.2007)

Prof. Dr. Ulrich Abram, Institut für Chemie, Freie Universität Berlin
Technetium und Rhenium – Koordinationschemie vor medizinischem Hintergrund (19.06.2007)

Prof. Dr. Dirk van der Marel, Département de Physique de la Matière Condensée, Geneve, Suisse
Can high Tc superconductivity be explained with the BCS model? An optical approach (21.06.2007)

Prof. Dr. Markus Morgenstern, II. Physikalisches Institut B, RWTH Aachen
Scanning tunneling spectroscopy of interacting electrons: low-dimensional semiconductors and itinerant ferromagnets (25.06.2007)

David Grossin, CRISMAT Laboratory, France
Microwave processing and characterization of applied oxides (KGB; 25.06.2007)

Prof. Dr. Andrea Gauzzi, University "Pierre and Marie Curie"-CNRS, Paris, France
Pressure-induced enhancement of superconductivity and structural instability in the new graphite intercalated superconductor CaC_6 (12.07.2007)

Dr. Angela Trapananti, ESRF, Grenoble, France
Opportunities for high pressure studies using X-ray absorption spectroscopy at the ESRF (18.07.2007)

Prof. Dr. Collin L. Broholm, Department of Physics and Astronomy, The Johns Hopkins University, Baltimore USA
Ferroelectricity in frustrated magnets (19.07.2007)

Prof. Dr. Collin L. Broholm, Department of Physics and Astronomy, The Johns Hopkins University, Baltimore, USA
Spin dynamics in $CeTIn_5$ (20.07.2007)

Prof. Dr. Reinhard Nesper, Laboratorium für Anorganische Chemie, ETH Zürich
Solid State Chemistry and new Materials – from Molecules, Nanoparticles and Bulk Matter to Applications (20.07.2007)

Prof. Dr. Mike Whangbo, Department of Chemistry, North California State University, USA
Spin exchange interactions an electronic structures of magnetic solids (24.07.2007)

Prof. Dr. Shin-ichi Kimura, UVSOR Facility, Institute for Molecular Science, Okazaki National Research Institutes, Japan
Electrodynamics of spin-fluctuation materials (27.07.2007)

Dr. Takahiro Ito, UVSOR Facility, Institute for Molecular Science, Okazaki National Research Institutes, Japan
Angle-resolved photoemission study on strongly correlated f electron systems (27.07.2007)

Dr. Wei Ku, Condensed Matter Physics & Materials Science, Brookhaven National Laboratory, Upton, NY, USA
Wannier Functions in Correlated Materials: Gapless CDW & new superconducting pair suppression (01.08.2007)

Prof. George S. Nolas, PhD, Department of Physics, University of South Florida, Tampa, FL, USA
Fundamental Study of Inorganic Clathrate (06.08.2007)

Dr. Gabriel Seyfarth, Néel Institute (Condensed Matter and Low Temperatures, MCBT) – CNRS 25, Grenoble, France
Multiband Superconductivity in Heavy Fermion Systems $PrOs_4Sb_{12}$ and $CeCoIn_5$ (23.08.2007)

Prof. Dr. Liu Hao Tjeng, II. Physikalisches Institut, Universität zu Köln
Orbital, spin, and charge degrees of freedom in strongly correlated systems: New insights and new opportunities for materials science (06.09.2007)

Prof. Dr. Elżbieta Zipper, University of Silesia, Institute of Physics, Division of Theoretical Physics, Katowice, Poland
Flux Qubit on a Semiconducting Quantum Ring (05.10.2007)

Prof. Dr. Julian Sereni, Low Temperatutre Laboratory, Centro Atómico de Bariloche, Argentina
Ferromagnetic critical behavior in $CePd_{1-x}Rh_x$, (08.10.2007)

Prof. Dr. Christian Bernhard, Department of Physics and FriMat Center for Nanomaterials, University of Fribourg, Switzerland
Infared ellipsometry on cuprate high Tc superconductors – spectroscopic distinction between normal state pseudogap and superconducting gap (12.10.2007)

Prof. Dr. Pavel A. Alekseev, Institute of Superconductivity and Solid State, Russian Research Centre Kurchatov Institute, Moscow, Russian Federation
Excitation spectra of YbB_{12} Kondo-insulator: neutron scattering study (18.10.2007)

Prof. Dr. Philip Coppens, Department of Chemistry, State University of New York at Buffalo, Buffalo, NY, USA
Chemical Bonding by X-ray Diffraction (19.10.2007)

Shivaji Dasgupta, Walter Schottky Institut Garching
Thermally activated persistent photoconductivity and donor binding, energies in AlAs quantum wells (25.10.2007)

Prof. Dr. Klaus Reimann, Max-Born Institut für Nichtlineare Optik und Kurzzeitspektroskopie, Berlin
Non-linear Spectroscopy on n-type GaAs (29.10.2007)

Dr. Uwe Mühle, Physical Failure Analysis, Department (YD PE PFA TMA), Qimonda Dresden GmbH & Co. OHG
TEM-applications in semiconductors industry (02.11.2007)

Prof. Dr. José C. Gómez Sal, Universidad di Cantabria, Facultad de Ciencias, Dep. Fisica de la Materia condensada, Santander, Spain
Intrinsic magnetic inhomogeneities and percolative processes in strongly correlated metallic systems (08.11.2007)

Prof. Dr. Claude Pasquier, Laboratoire de Physique des Solides, Université Paris-Sud, Orsay, France
Microscopic and mesoscopic phase coexistence in molecular conductors (15.11.2007)

Prof. Dr. Martin Greven, Department of Applied Physics and Stanford Synchrotron Radiation Laboratory, Stanford University, Stanford, CA, USA
Crystal Growth, Neutron Scattering, and Spin Correlations: A Tale of two Complex Oxides (22.11.2007)

Dr. Dirk Sander, Max-Planck-Institut für Mikrostrukturphysik, Halle
Electron confinement and magnetic properties of Co nanoislands studied by LT-STM (29.11.2007)

Dr. Marc Scheffler, Delft University of Technology, The Netherlands
Optics on Correlated Electrons: Perspectives at Low Energies (06.12.2007)

Jun.-Prof. Dr. Stefan Süllow, Institut für Physik der Kondensierten Materie, Technische Universität Braunschweig
Magnetic exchange in molecule based magnets and oxide materials (PR, 07.12.2007)

2008

Prof. Dr. Peter Paufler, Institut für Strukturphysik, Fakultät für Mathematik und Naturwissenschaften, Technische Universität Dresden
Laves Phases: The spirit of Dresden (10.01.08, im Rahmen de Veranstaltung „Laves Phases X“)

Prof. Dr. Thorsten Glaser, Fakultät für Chemie, Universität Bielefeld
Gezielte Synthese von Einzelmolekülmagneten (15.01.2008)

Prof. Dr. Bernhard Keimer, Max-Planck-Institut für Festkörperforschung, Stuttgart
New perspectives on the electron-phonon interaction in superconductors (05.02.2008)

Dr. Ryosuke Shiina, Tokyo Metropolitan University, Japan
Spontaneous octupolar ordering and unconventional neutron scattering spectra in f electron systems (21.02.2008)

Niko Johannsen, II Physikalisches Institut, Universität zu Köln
Nernst effect of Ni-doped $NdBa_2Cu_3O_{(7-d)}$ (14.02.2008)

Dr. Roland Schedler, Hahn-Meitner-Institut Berlin
Investigations to the Crystal Electric Field – Phonon Coupling in $CeCu_2$ (06.03.2008)

Prof. Dr. Gertrud Zwicknagl, Institut für Mathematische Physik, Technische Universität Braunschweig
Hall coefficients in $YbRh_2Si_2$ and $YbIr_2Si_2$: An Electronic Structure Study (06.03.2008)

Dr. Cyrus F. Hirjibehedin, London Centre for Nanotechnology, UK
Magnetic Nanostructures Probed at the Atomic Scale (27.03.2008)

Prof. Dr. Sergei Stishov, Institute for High Pressure Physics, Russian Academy of Sciences, Troitsk, Russian Federation
On the phase transition in the itinerant helimagnet MnSi at ambient and high hydrostatic pressures (03.04.2008)

Prof. Dr. Marina Petrukhina, Department of Chemistry, University at Albany, State University of New York, USA
Fullerene Fragments: Synthesis, Molecular Geometry, Solid State Packing and Reactivity (27.04.2008)

Prof. Dr. Christian Jäger, Bundesanstalt für Materialforschung- und Prüfung, Berlin
Mission Impossible? Surfaces of phosphate nanoparticles and the mineral-organic interface in biomaterials (09.05.2008)

Dr. Peng Tong, Department of Physics, Pusan National University, Busan, Republic of Korea
Research on the Intermetallic Antiperovskite Compounds related to the novel superconductor $MgCNi_3$ (15.05.2008)

Dr. Markos Skoulatos, Hahn-Meitner-Institut, Berlin
Spin correlations in frustrated magnets (26.05.2008)

Prof. Stephan von Molnár, PhD, Florida State University, Tallahassee, FL, USA
An overview of europium chalcogenide concentrated magnetic semiconductors (12.06.2008)

Prof. Dr. Roderich Moessner, Max-Planck-Institut für Physik komplexer Systeme
Dresden Order and disorder in magnetic materials (GK, 13.06.2008)

Dr. Yoshifumi Tokiwa, Los Alamos National Laboratory, Los Alamos, New Mexiko, USA
Divergence of magnetic Gruneisen ratio at Quantum Critical Point and impurity effect on FFLO state in $CeCoIn_5$ (19.06.2008)

Prof. Dr. Ana-Celia Mota, Laboratorium für Festkörperphysik, ETH Zürich, Schweiz
Exotic properties of noncentrosymmetric superconductors (25.06.2008)

Prof. Dr. Yoshinori Haga, Advanced Science Research Center, Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Magnetism and superconductivity in new actinide intermetallic compounds (14.07.08)

Prof. Dr. Howard D. Flack, Universite de Geneva, Geneve, Switzerland
Using and understanding the Flack Parameter (11.08.2008)

Dr. Ramzy Daou, Université de Sherbrooke, Quebec, Canada
Electronic transport and the Fermi surface of high-Tc superconductors (28.08.2008)

Dr. Prattap Raychaudhuri, Department of Condensed Matter Physics and Materials Science, Tata Institute of Fundamental Research Mumbai, India
Experimentel studies on Granular and Disordered superconductors (28.08.2008)

Prof. Dr. Jamshed Anwar, University of Bradford, UK
Control of crystal nucleation insights from molecular simulation (17.10.08)

Prof. Dr. Julian Sereni, Low Temperature Laboratory, Centro Atomico Bariloche, San Carlos de Bariloche, Argentina
Exotic phase and critical point in Ce_2Pd_2Sn (23.10.2008)

Dr. Thomas Weber, ETH Zürich, Laboratorium für Kristallographie, Schweiz
Structure determination of quasicrystals made easy (07.11.08)

Nandang Mufti, Laboratory of Solid State Chemistry, Zernike Institute for Advanced Materials, University of Groningen, The Netherlands
Relaxor behavior in multiferroic $Tb_{1-x}Ca_xMnO_3$ (20.11.2008)

Prof. Dr. Mathias Wickleder, Institut für Reine und Angewandte Chemie, Universität Oldenburg
Metallverbindungen mit komplexen Oxoanionen: Von faszinierender Chemie zu neuen Funktionsmaterialien (25.11.2008)

Prof. Dr. Dariusz Kaczorowski, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wroclaw, Poland
On the search for quantum criticality in a ferromagnetic system $UNi_{1-x}Co_xSi_2$ (27.11.2008)

Ph. D. Quentin M. Ramasse, National Centre for Electron Microscopy, Lawrence Berkeley National Laboratory, Berkeley, USA
High Resolution Quantitative Scanning Transmission Electron Microscopy of Silicon Clathrates on the TEAM 0.5 Instrument (18.12.2008)

Gäste (Forschungsaufenthalte)
Visiting Scientists

Dr. Lev Akselrud, Chemical Faculty, Ivan Franko Lviv State University, Ukraine

Dr. Anastasia Alekseeva, Department of Chemistry, Moscow State University, Russian Federation

Dr. Marc Armbrüster, Chemistry Department, University of Cambridge, United Kingdom

Matt Beekman, Physics Department, University of South Florida, Tampa, Florida, USA

Prof. Dr. Frederic Bernard, Institut CARNOT de Bourgogne, Université de Bourgogne, France

Prof. Dr. Michael Binnewies, Institut für Anorganische Chemie, Leibniz Universität Hannover

Prof. Dr. Jürgen Brickmann, Physikalische Chemie, Technische Universität Darmstadt

Prof. Dr. Welf Bronger, Institut für Anorganische Chemie, Rheinisch-Westfälische Technische Hochschule Aachen

Prof. Dr. Silke Bühler-Paschen, Institut für Festkörperphysik, Technische Universität Wien, Österreich

Dr. Tomasz Cichorek, Trzebiatowski Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wroclaw, Poland

Prof. Piers Coleman, PhD, Center for Materials Theory, Rutgers University, Piscataway, NJ, USA

Eglantine Courtois, Laboratoire de Recherche sur la Reactivité des Solides, Université de Bourgogne, France

Dr. Pintu Das, Fachrichtung Experimentalphysik, Universität des Saarlandes, Saarbrücken

Dr. Anatoli Fedorchuk, Chemical Faculty, Ivan Franko Lviv State University, Ukraine

Prof. Zachary Fisk, PhD, Department of Physics & Astronomy, University of California, Irvine, USA

Prof. Dr. Howard D. Flack, Department of Cristallographie, Université de Geneve, Switzerland

Dr. Daniel Fredrickson, Department of Physical, Inorganic and Structural Chemistry, University of Stockholm, Sweden

Prof. Dr. Philipp Gegenwart, Fakultät für Physik, I. Physikalisches Institut, Georg-August-Universität Göttingen

Prof. Dr. Andrey Gippius, Physics Department, Moscow State University, Russian Federation

Prof. Dr. Robert Glaum, Institut für Anorganische Chemie, Rheinische Friedrich-Wilhelm-Universität, Bonn

Dr. Jerzy Goraus, Institute of Physics, University of Silesia, Katowice, Poland

Dr. Daniel Grüner, Department of Physical, Inorganic and Structural Chemistry, University of Stockholm, Sweden

Prof. Dr. Arnold Guloy, Department of Chemistry, University of Houston, Texas, USA

Prof. Dr. Vladimir Gurin, A.F. Ioffe Physical-Technical Institute, Russian Academy of Sciences St. Petersburg, Russian Federation

Prof. Dr. Kurt Hiebl, Institut für Physikalische Chemie, Universität Wien, Austria

Prof. Dr. Zakir Hossain, Department of Physics, I.I.T Kanpur, India

Dr. Ya-Xi Huang, Department of Materials Science and Engineering, Xiamen University, China

Dr. Peter Jeglič, "Jožef Stefan" Institute, University of Ljubljana, Slovenia

Prof. Dr. Wolfgang Jeitschko, Institut für Anorganische und Analytische Chemie, Universität Münster

Dr. Michelle Johannes, Center for Computational Materials Science, Naval Research Laboratory, Washington DC, USA

Simon Johnsen, Department of Chemistry, Aarhus University, Denmark

Prof. Dr. Walter Jung, Institut für Anorganische Chemie der Universität Köln

Prof. Dr. Dariusz Kaczorowski, Trzebiatowski Institute of Low Temperature and Structure Research, Wroclaw, Poland

Dr. Koji Kaneko, Advanced Science Research Center, Japan Atomic Energy Agency, Japan

Dr. Shin-ichi Kimura, Institute for Molecular Science, Okazaki National Research Institutes, Japan (LS gefunden aus den Vorträgen)

Dr. Nagesh S. Kini, Department of Applied Chemistry, Hiroshima University, Japan

Prof. Dr. Boris Kochelaev, Theoretical Physics Department, Kazan State University, Russian Federation

Dr. Michael M. Koza, Institut Laue-Langevin, Grenoble, France

Sophie Le Gallet, Laboratoire de Recherche sur la Réactivité des Solides, Université de Bourgogne, Dijon, France

Dr. Claire Loison, Fakultät für Physik, Universität Bielefeld

Prof. Dr. Klaus Lüders, Fachbereich Physik, Freie Universität Berlin

Prof. Dr. Bruno Lüthi, Physikalisches Institut, Universität Frankfurt/Main

Prof. Douglas MacLaughlin, PhD, Department of Physics and Astronomy, University of California, Riverside, USA

Dr. Dieter Maurer, Fachbereich Physik, Freie Universität Berlin

Dr. Francesco Mercuri, Instituto CNR di Scienze e Technologie Moleculari, Universita di Perugia, Italia

Dr. Marek Mihalkovic, Academy of Science, Bratislava, Slovakia

Wojciech Miiller, Trzebiatowski Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wroclaw, Poland

Prof. Dr. Gordon Miller, Department of Chemistry, Ames Laboratory, Iowa State University, USA

Ludivine Minier, Laboratoire de Recherche sur la Reactivité des Solides, Université de Bourgogne, France

Dr. Takao Mori, National Institute for Materials Science, Tsukuba, Japan

Dr. Elena Morozowa, Department of Physics, Moscow State University, Russian Federation

Prof. Dr. Ana-Celia Mota, Laboratorium für Festkörperphysik, ETH Zürich, Switzerland

Prof. Dr. John A. Mydosh, Mathematisch-Naturwissenschaftliche Fakultät, Fachgruppe Physik, Universität zu Köln

Dr. Sunil Nair, Department of Condensed Matter Physics and Material Science, Tata Institute of Fundamental Research, Mumbai, India

Dr. Vicente Pacheco, Instituto de Fisica „Luis Rivera Terrazas“, Universidad Autónoma de Puebla, Mexico

Dr. David Parker, Department of Physics and Astronomy, University of Southern California, Los Angeles, USA

Marek Pasciak, Trzebiatowski Institute of Low Temperature and Structure Research, Wroclaw, Poland

Prof. Dr. Vitalij K. Pecharsky, Department of Materials Science and Engineering, Ames Laboratory, Iowa State University, Ames, USA

Dr. Catherine Pepin, Institut de Physique Théorique, CEA - Saclay, Gif-sur-Yvette, France

Prof. Dr. Marina Petrukhina, Department of Chemistry, University at Albany, State University of New York, USA

Prof. Dr. Giuseppe Pezzotti, Ceramic Physics Laboratory, Department of Chemistry and Materials Engineering, Kyoto Institute of Technology, Japan

Dr. Adam Pikul, Trzebiatowski Institute of Low Temperature and Structure Research, Wroclaw, Poland

Dr. Alan Porporati, Ceramic Physics Laboratory, Department of Chemistry and Materials Engineering, Kyoto Institute of Technology, Japan

Dr. Arpana Prasad, Department of Physics, Indian Institute of Technology, Kanpur, India

Dr. A. K. Rajarajan, Bhaba Atomic Research Centre, Mumbai, India

Eingeladene Vorträge
Invited Talks

Juri Grin

Spark-Plasma-Sintering: Sintering only or more?
Fraunhofer Institut für Fertigungstechnik und Angewandte Materialforschung, Dresden (März 2006)

Chemical Bonding in the Intergrowth Structures of Intermetallic Compounds
DIS´06, Osaka, Japan (March 2006)

Chemical Bonding and Crystallographic Features (1)
Chemical Bonding and Crystallographic Features (2)
CMA European School in Materials Science, Ljubljana, Slovenia (May 2006)

Spark Plasma Sintern: Sintern oder mehr?
Max-Planck-Institut für Metallforschung, Stuttgart (Juni 2006)

Bonding detection functions for intermetallic compounds
IV National Crystal Chemical Conference of Russian Academy of Science, Chernogolovka, Russian Federation (June 2006)

Chemical Bonding and Crystal Structures of Intermetallic Compounds
15th International Conference on Solid Compounds of Transition Elements, Krakow, Poland (July 2006)

Local Ordering Phenomena in Intermetallic Compounds
Gordon Research Conference, New London, NH, USA (July 2006)

Chemical bonding in cage compounds
25th International Conference on Thermoelectrics, Wien, Austria (August 2006)

Intermetallic Compounds: New Developments in Electron Counting
XXII Congresso Nazionale della Società Chimica Italiana, Firenze, Italia (September 2006)

SPS: More than a sintering?
Matériaux 2006, Dijon, France (November 2006)

Zur chemischen Bindung in intermetallischen Verbindungen
Institut für Anorganische Chemie der Eberhard Karls Universität Tübingen (Januar 2007)

ELF applications for inorganic compounds
Tagung der Deutschen Gesellschaft für Kristallographie, RWTH Aachen (Februar 2007)

Chemical Bonding in Intermetallic Compounds and Saxonian Switzerland
Gedenkkolloquium für Prof. Dr. Dr. h. c. Erwin Parthé, Universität Wien, Österreich (April 2007)

Intermetallische Verbindungen: Komplexität der Kristallstrukturen und chemische Bindung
Universität Siegen (April 2007)

Intermetallische Verbindungen: Strukturchemie und chemische Bindung
Universität St. Petersburg, Russland (Mai 2007)

Cage compounds—from basics to applications
Kyoto Institute of Technology, Japan (May 2007)

Chemistry and physics of clathrates and skutterudites
GDR Thermoelectrique Caen, France (June 2007)

Discussion leader of the session "Advances in Theory of Solids" of the Gordon Research Conference "Solid State Chemistry II", Magdalen College Oxford, UK (September 2007)

o-Co_4Al_{13}, a Low-Scale Prototype of Complex Metallic Alloys
EUROMAT 2007, Nürnberg (September 2007)

Chemical Physics of Intermetallic Compounds
Seoul, South Korea (October 2007)

Progress in Solid State Chemistry
Lesya Ukrainka Volyn State University, Lutsk, Ukraine (October 2007)

Spark-Plasma Synthesis in Inert Gas Atmosphere
PacRim 7, Shanghai, China (November 2007)

Redox reactions on intermetallic compounds
UCSB-MPG Workshop on Inorganic Materials for Energy Conversion, Storage and Conservation, Lake Arrowhead, USA (February 2008)

Chemistry and Physics of Intermetallic Clathrates and Skutterudite-like Compounds
Texas Center for Superconductivity at the University of Houston, USA (March 2008)

New preparation routes for intermetallic clathrates
General Motors R&D Center, Warren, USA (March 2008)

Chemistry and Physics of Intermetallic Clathrates and Skutterudite-like Compounds
University of South Florida, Tampa, USA (March 2008)

Cage Compounds of the Rare-Earth Metals: Interplay of Chemistry and Physics
TMS 2008, New Orleans, USA (March 2008)

Redox-Reaktionen an intermetallischen Verbindungen
Kurt-Hiebl-Kolloquium, Universität Wien, Österreich (April 2008)

Redox reactions and intermetallic compounds
University of Lviv, Ukraine (April 2008)

Redox processes and intermetallic compounds
Max-Planck-Institut für Festkörperforschung Stuttgart (Juni 2008)

Chemistry and Physics of intermetallic skutterudites: spin polarization aspect
4th MAINZ/MATCOR summer school, Rathen (August 2008)

Laves Phases and related compounds in the cobalt-rich part of the Nb-Co system: revisited
12th Symposium on Thermochemistry & Thermophysics of Nuclear Materials, Pörtschach, Austria (September 2008)

Heteroatomic boron—containing 3D networks revisited
ISBB 2008, Matsue, Japan (September 2008)

Clathrate Thermoelectrics
National Institute for Materials Science, Tsukuba, Japan (September 2008)

Intermetallic Compounds of Rare Earth Metals: Layers vs Cages
REMAT 2008, Lądek Zdrój, Trzebieszowice, Poland (September 2008)

Frontiers in Complex Metallics Alloys
Workshop of the European NoE CMA, Zagreb, Croatia (October 2008)

Käfigverbindungen: Chemie und Physik
Veranstaltungszyklus der GDCh, Universität Regensburg (November 2008)

Intermetallic compounds and redox reactions
Fritz-Haber-Institut der Max-Planck-Gesellschaft Berlin (November 2008)

Understanding of intermetallic compounds: layers vs cages
Chemisch-Physikalische Gesellschaft Wien, Österreich, (November 2008)

Chemical Bonding in Laves Phases Revisited
MRS Fall Meeting Boston, USA (December 2008)

Intermetallic Compounds and Redox Reactions
University at Buffalo, The State University of New York, Buffalo, USA (December 2008)

Rüdiger Kniep

Borophosphates
Ludwig-Maximilians-Universität München (9. Februar 2006)

Apatit-Gelatine-Nanokomposite: Zu den Wurzeln der Biomineralisation
Universität Wien, Institut für Anorganische Chemie und Materialchemie (3. März 2006)

Apatit-Gelatine-Nanokomposite: Zu den Wurzeln der Biomineralisation
Universität Linz, Institut für Allgemeine und Anorganische Chemie (7. März 2006)

Borophosphates: A Story with its Origin in Meral Kizilyalli's Lab
Workshop "Recent Developments in Solid State Sciences", Middle East Technical University Ankara, Turkey (June 2-3, 2006)

Formation of patterns via processes of self-organisation: Morphogenesis and real structure of apatite-gelatine-nanocomposites
Moscow-State-University, Russian Federation (June 23, 2006)

Crystal Chemistry of nitrido- and carbometalates
IV National Crystal Chemical Conference, Chernogolovka, Russian Federation (June 26, 2006)

Principles of Biomineralisation: Morphogenesis of Apatite-Gelatine-Nanocomposites
University St. Petersburg, Russian Federation (July 26, 2006)

Origin and role of gelatine-fibril hierarchies inside 3D-organised fluorapatite-gelatine-nanocomposites
Ringberg-Symposium, Max-Planck-Gesellschaft für Metallforschung, Tegernsee (11.-12. Oktober 2006)

Der Zahn im Blickpunkt – Nanokomposite aus Apatit und Gelatine
Fortbildungsveranstaltung Landeszahnärztekammer Sachsen, Chemnitz (14. Oktober 2006)

Apatit-Gelatine-Nanokomposite: Morphogenese, Realstruktur und Anwendungsmöglichkeiten
30. Clemens-Winkler-Kolloquium, Fakultät für Chemie und Physik der TU Bergakademie Freiberg (26. Oktober 2006)

Apatit-Gelatine-Nanokomposite: Hierarchische Musterbildung unter biomimetischen Bedingungen
GDCh-Vortrag, TU München (23. Januar 2007)

Apatit-Gelatine-Nanokomposite: Wie eine Darmstädter Idee zum Produkt wurde
Eduard-Zintl-Kolloquium, TU Darmstadt (26. Januar 2007)

Morphogenese und Struktur von Bio-Funktionsmaterialien: Apatit-Gelatine- und Calcit-Gelatine-Nanokomposite
GDCh-Vortrag, Universität Stuttgart (8. Februar 2007)

Morphogenese und Struktur von Bio-Funktions-materialien: Apatit-Gelatine- und Calcit-Gelatine-Nanokomposite
CRTD-Vortrag, MTZ, Dresden (7. Mai 2007)

Apatite-gelatine and calcite-gelatine nanocomposites – Development of bio-related hierarchical patterns
University of Stockholm, Sweden (May 11, 2007)

Apatite-gelatine- and calcite-gelatine-nanocomposites: development of bio-related hierarchical structures
MC8: Advancing Materials by Chemical Design, London, UK (July 2-5, 2007)

Apatit- und Calcit-Gelatine-Nanokomposite: Anorganische Festkörper in lebenden Systemen
Egon-Wiberg-Vorlesung, LMU München (12. Juli 2007)

Biomineralization
State Key Lab, Shanghai Institute of Ceramics, CAS, China (August 8, 2007)

New developments in nitridometalates and metal-rich nitrides containing alkaline earth elements as the electropositive components
Solid State Chemistry II Gordon Research Conference, Oxford, UK (September 2-7, 2007)

Morphogenese und Struktur von Bio-Funktionsmaterialien: Apatit-Gelatine- und Calcit-Gelatine-Nanokomposite
GDCh-Wissenschaftsforum Chemie 2007, Universität Ulm (16.-19. September 2007)

Hierarchical Structures in Biomimetic Nanocomposites based on Apatite (or Calcite) and Gelatine
IUMRS-ICAM 2007, Bangalore, India (October 8-13, 2007)

Festkörperchemie hart und weich
GDCh-Vortrag, Universität Gießen (6. November 2007)

Apatit und Calcit als nanokristalline Bio-Komposite: Nachahmung von Zähnen und Ohrsteinen im Laboratorium
Plenar-/Abendvortrag. 16. Jahrestagung der Deutschen Gesellschaft für Kristallographie, Erlangen (3.-6. März 2008)

Apatit-Gelatine- und Calcit-Gelatine-Nanokomposite: Von biomimetischen „Zähnen" und Gehörsteinen
Physikalisches Kolloquium, Friedrich-Schiller-Universität Jena (30. Juni 2008)

Apatit-Gelatine- und Calcit-Gelatine-Nanokomposite: Zur Selbstorganisation von Bio-analogen Strukturen
Festvortrag zum Tag der Fakultät, TU München (18. Juli 2008)

Complex Hierarchical Shape Development of a Fluorapatite-Gelatine Nanocomposite Superstructure
Internationales Gelatine Symposium, Freiberg (11.-12. September 2008)

Biomimetic Morphogenesis and Structure of Calcite Otoconia: An Approach towards Deeper Understanding of a Bio-Sensor and its Function
Ringberg Symposium on "Biological Approaches in Materials Sciences" (1.-4. Oktober 2008)

Principles of Biomineralisation/Biomimetic Mineralisation: Complex Shape Development of Apatite-Gelatine- and Calcite-Gelatine-Nanocomposite Superstructures
„Wednesday-Seminars", Fritz-Haber-Institut, Berlin (22. Oktober 2008)

Borophosphates: History and Trends
State Key Lab, Shanghai Institute of Ceramics, CAS, China (November 20, 2008)

Frank Steglich

Interplay between Superconductivity and (Incipient) AF Order in Heavy Fermions
2nd Topical Workshop of SCENET-2 and 11th CHEM-HTSC Workshop, Illetas Calvia, Spain (2006)

Interplay between Incipient Magnetism and Superconductivity in Heavy Fermions
DPG - Spring Meeting of the Division Condensed Matter and 21st General Conference of the Condensed Matter Division, EPS, Dresden (2006)

Non-Phonon-Mediated Superconductivity in Heavy-Electron Metals
International Conference on Quantum Complexity in Condensed Matter (QCCM), Cambridge, UK (2006)

Superconductivity and Magnetism: From Antagonism to Mutual Interplay
International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors (M^2S-HTSC VII), Dresden (2006)

Superconductivity and Magnetism in Strongly Correlated f-Electron Metals
15th International Conference on Solid Compounds of Transition Elements, Krakow, Poland (2006)

Superconductivity in Quantum Critical Heavy-Fermion Metals
9th Japanese-German Symposium on Collective Quantum Phenomena in Strongly Correlated Electron Systems: Electronic Instabilities, Dimensional Effects, and Novel Phases, Hikone, Japan (2006)

Experimental Evidence for Different Types of Unconventional Superconductivity in Heavy Fermions
XXX International Conference of Theoretical Physics: Electron Correlations in Nano- and Macroystems, Ustroń, Poland (2006)

Different Types of Unconventional Cooper Pairing in Heavy-Fermion Superconductors
10th Anniversary Workshop of APCTP "Strongly Correlated Electron Systems", Pohang, South Korea (2006)

Interplay between Superconductivity and Quantum Criticality in Heavy Fermions,
10th Anniversary Workshop of APCTP "Strongly Correlated Electron Systems", Pohang, South Korea (2006)

Experimental Evidence for Different Types of Unconventional Superconductivity in Heavy Fermions
Condensed-matter seminar, HKUST Hongkong, P. R. China (2006)

Experimental Evidence for Different Types of Unconventional Superconductivity in Heavy Fermions
Colloquium, University of Tokyo, Japan (2006)

Experimental Evidence for Different Types of Unconventional Superconductivity in Heavy Fermions
The 93rd Lecture in the Zhong-Guan-Cun Forum on Condensed Matter Physics, Institute of Physics, Chinese Academy od Sciences, Beijeing, P. R. China (2006)

Schwere Elektronen: Supraleitung in der Nähe von Quantenphasenübergängen
Kolloquiumsvortrag, TU Münster (2007)

Unconventional BCS States in Heavy Fermion Superconductors
Symposium "50 Years BCS Theory", DPG - Spring Meeting of the Division Condensed Matter, Regensburg (2007)

Unconventional Superconductivity in the Quantum Critical Heavy Fermion Metal $CeCu_2Si_2$
Symposium "Highly Correlated Electron Systems, Magnetism and Superconductivity" in honor of Prof. Hans Rudolf Ott, Zürich, Switzerland (2007)

New Materials—New Phenomena: Superconductivity of "Heavy Electrons" ("Heavy Fermions")
Outreach Taping "50th Anniversary of BCS Theory" at SCES'07, Houston, USA (2007)

Unconventional BCS States in Heavy Fermions Metals
Int. Conf. on Strongly Correlated Electron Systems SCES'07, Symposium "BCS@50", Houston, USA (2007)

On Unconventional Superconductivity in Heavy Fermions
Int. Workshop "Nanostructured Advanced Materials", Dresden (2007)

Schwere Elektronen: Supraleitung in der Nähe von Quanten-Phasenübergängen
Kolloquiumsvortrag, Universität Braunschweig (2007)

Superconductivity in Heavy Electrons
Int. Workshop "Coherence and incoherence in strongly correlated systems", Rome, Italy (2007)

Superconductivity and Heavy Fermion Quantum Critical Points
13th Czech and Slovak Conference on Magnetism, CSMAG'07, Kosice, Slovakia (2007)

Superconductivity of Heavy Electrons: New Insight into the Enigma
Workshop on Novel Aspects of Superconductivity, Aspen, USA (2007)

Conventional or not Conventional? Quantum Critical Points in Heavy Fermions
ICAM Frontier Symposium "The superfluid universe", Aspen, USA (2007)

On the Interplay between Quantum Criticality and Superconductivity of Heavy Electrons
Int. Workshop "New frontiers in quantum impurity physics: From nano-structures to molecular devices", Dresden (2007)

Experimental Evidence for Different Types of Unconventional Superconductivity in Heavy Fermions
Gordon Research Conference on Solid State Chemistry for Advanced Materials, Oxford, UK (2007)

Unconventional Superconductivity of Heavy Electrons
International Workshop on Applied Physics on Strong Correlation, Tokyo, Japan (2007)

Heavy-Fermion Superconductivity: New Insight into the Enigma
Inauguration ceremony of the academic year 2007/2008, Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wroclaw (2007)

On the Interplay between Quantum Criticality and Superconductivity in Heavy Fermions: $CeCu_2Si_2$ vs $YbRh_2Si_2$
"The Heavy Fermion Frontier" - Workshop in honor of Joe D. Thompson's 60th Birthday, Santa Fe, USA (2007)

Superconductivity in Heavy-Fermion Quantum Critical Points
Inauguration of "Distinguished Lectures in Quantum Magnetism" at Rice University, Houston, USA (2007)

Unconventional Superconducting States in Heavy-Electron Metals
6th International Symposium on "Exploring New Science by Bridging Particle-Matter Hierarchy", Sendai, Japan (2007).

Superconductivity of Heavy-Fermion Electrons: The Quest for Coupling Mechanisms
Kolloquiumsvortrag, MPI für festkörperforschung, Stuttgart (2008)

Supraleitung mit schweren Elektronen: alte Fragen, neue Antworten
Kolloquiumsvortrag, Technische Universität Darmstadt (2008)

Horst Borrmann

Weak interactions in the crystal structures of small molecules
Humboldt Conference on Noncovalent Interactions, Vršac, Serbia (November 15, 2007)

What to expect from Neutron-Diffraction in Structural Chemistry and Materials Science?
Department of Chemistry, University of Belgrade (November 19, 2007)

Single crystal X-ray diffraction: new tricks for an old dog
Department of Chemistry, Iowa State University, Ames, Iowa (August 4, 2008)

Manuel Brando

Quantum phase transitions in $NbFe_2$
University of Vienna, Vienna, Austria (2006)

Quantum criticality in $NbFe_2$
Meeting "The Nature of Laves Phases", MPI-E, Düsseldorf, Germany (2007)

Logarithmic Fermi-liquid breakdown in $NbFe_2$
DPG Frühjahrstagung, Regensburg, Germany (2007)

Magnetization study of stoichiometric and sligthly Ir- and Co-doped $YbRh_2Si_2$
DPG Frühjahrstagung, Berlin, Germany (2008)

Quantum criticality in sligthly Ir- and Co-doped $YbRh_2Si_2$
University of Cambridge, Cambridge, UK (2008)

Quantum criticality in sligthly Ir- and Co-doped $YbRh_2Si_2$
European conference "Physics of Magnetism '08", Poznan, Poland (2008)

Quantum criticality in sligthly Ir- and Co-doped $YbRh_2Si_2$
Institute Laue-Langevin, Grenoble, France (2008)

Quantum criticality in sligthly Ir- and Co-doped $YbRh_2Si_2$
University of Karlsruhe, Karlsruhe, Germany (2008)

Philipp Gegenwart

Experimental Tutorial on Quantum Criticality
Workshop on Quantum Criticality, Lorentz Center Leiden (August 7-18, 2006)

Unconventional Quantum Criticality in $YbRh_2Si_2$
M2S-HTSC VIII Conference, Dresden (July 9-14, 2006)

Christoph Geibel

Frustrated S = 1/2 square lattice systems in complex Vanadium oxides
HFM Workshop "Competing Interactions – Materials aspects", Stockholm, Sweden (June 2006)

$YbRh_2Si_2$, $YbIr_2Si_2$, and $YbRu_2Ge_2$: a challenge for the crystal grower, a fascinating playground for physics of strongly correlated systems
15th International Conference on Solid Compounds of Transition Elements, Kraków, Poland (July 2006)

From valence fluctuations to magnetic and quadrupolar order in Yb-based compounds
International Conference on Magnetism, Kyoto, Japan (August 2006)

A surprise in $YbRu_2Ge_2$: quasi quartet ground state and quadrupolar order
9th Japanese-German Symposium, Hikone Castle, Japan (August 2006)

CeTPO compounds: 2D Kondo lattices with ferromagnetic correlations
Workshop "Exotic States in Materials with Strongly Correlated Electrons", Sinaia, Romania (September 2007)

Unconventional Kondo lattice systems: Eu-compounds and ferromagnetic Ce-systems
Cavendish Laboratory, University of Cambridge, Cambridge, UK (October 2007)

Unconventional Kondo lattice systems: Eu-compounds and ferromagnetic Ce-systems
Tata Institute for Funfamental research, Mumbai, India (November 2007)

Introduction to HeavyFermion systems
Workshop "Correlated Electrons & Frustrated Magnetism", Centre for Theoretical Sciences, Goa, India (November 2007)

Heavy Fermion systems: A challenge for the crystal grower and for our understanding of magnetism and superconductivity
Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India (December 2007)

Heavy Fermion systems: A challenge for the crystal grower and for our understanding of magnetism and superconductivity
Indian Institute of Technology, Kanpur, India (December 2007)

Magnetic frustration in intermetallic compounds
International Workshop on Materials for Frustrated Magnetism, ILL, Grenoble, France (March 2008)

Kondo lattices with ferromagnetic correlations: $YbRh_2Si_2$, CeRuPO and CeFePO
HMI, Berlin, Germany (April 2008)

From antiferromagnetic to ferromagnetic quantum critical points: $CeCu_2Si_2$, $YbRh_2Si_2$ and CeFePO
National Institute for Materials Physics, Bucharest-Magurele, Romania (June 2008)

From $CeCu_2Si_2$ to $SrFe_2As_2$: fascinating physics due to competition or combination of different interactions
Workshop "Competing Orders, Pairing Fluctuations, and Spin Orbit Effects in Novel Unconventional Superconductor", MPI-PKS, Germany (June 2008)

$SrFe_2As_2$: strong coupling between magnetic and structural order parameter
2008 General Workshop of the COST P16-ECOM Action, Santander, Spain (July 2008)

Ce-ferromagnetism and Kondo effect in CeTPnO (T = Ru, Fe, Pn = P, As)
16th International Conference on Solid Compounds of transition Elements, Dresden, Germany (July 2008)

Ce-ferromagnetism and Kondo effect in CeTPnO (T = Ru, Fe, Pn = P, As)
10th German-Japanese Symposium "Collective Quantum Phenomena in Correlated Condensed Matter Systems", Schloß Ringberg, Germany (September 2008)

Flux growth of $CeCu_2Si_2$, $YbRh_2Si_2$ and of layered Fe-Pnictide systems
Journées Cristech 2008, Saint Pierre d´Oleron, France (October 2008)

Magnetism, structural distortion, and superconductivity in pure and doped AFe_2As_2 systems
International Workshop "Physics and Chemistry of FeAs-based superconductors" IFW Dresden, Germany (October 2008)

Magnetic and structural transition in AFe_2As_2 and RFeAsO systems
ICAM Workshop on Fe-Pnictide and related superconductors, University of Maryland, USA (November 2008)

Frank Haarmann

M_4Sn_4 mit M = Na, K, Rb, Cs NMR und ELF
Hemdsärmelkolloquium, Universität Kiel (März 2006)

Local ordering in $Cu_{1-x}Al_2$ studied by $^{63;65}Cu$ and ^{27}Al NMR spectroscopy
NMR-AK-Treffen Pottenstein, Universität Bayreuth (März 2006)

Local ordering in $Cu_{1-x}Al_2$ studied by $^{63;65}Cu$ and ^{27}Al NMR spectroscopy
14. Jahrestagung der Gesellschaft für Kristallographie, Universität Freiburg (März 2006)

Synthese und Charakterisierung von Galliden der Erdalkalimetalle: Homonukleare Gerüste und Molekül-Baugruppen
GDCh-Chemiedozententagung, Universität Hamburg (März 2006)

Kernspin-Resonanz-Spektroskopie (NMR) an intermetallischen Verbindungen
Seminar der Anorganischen Chemie, TU-Chemnitz (Mai 2006)

NMR-Spektroskopie an Galliden mit AlB_2 und $BaAl_4$-Typ Struktur
Hirschegg-Seminar, Kleinwalsertal Österreich, Universität Marburg (Juni 2006)

$Sr_{1-x}Ga_{2+3x}$ mit $0 \leq x \leq 0.076$ (T = 950°C)
Hemdsärmelkolloquium, Universität Bonn (März 2007)

Structure - chemical aspects of strontium aluminides and gallides
15. Jahrestagung der Gesellschaft für Kristallographie, Universität Bremen (März 2007)

Wide-line NMR of intermetallic compounds dominated by large quadrupole coupling
NMR-AK-Treffen Berlin, Freie Universität Berlin (März 2007)

Drei-, vier- und fünfbindige Galliumatome in intermetallischen Verbindungen: elektronische Struktur und Kernspinresonanz-Spektroskopie
GDCh-Chemiedozententagung, Universität Halle (März 2007)

Lokale Ordnung in intermetallischen Phasen: NMR-Untersuchungen an $Ca_xSr_{1-x}Ga_4$ mit $0 \leq x \leq 1$
Hirschegg-Seminar, Kleinwalsertal Österreich, Universität Marburg (Juni 2007)

Wide-line NMR of intermetallic compounds dominated by large quadrupole coupling
MaReMAS-Seminar, Universität Leipzig (Juli 2007)

NMR spectroscopy and crystal chemistry of intermetallic compounds
11th European Conference on Solid State Chemistry, Caen, France (September 2007)

NMR zur strukturellen Charakterisierung intermetallischer Verbindungen
14. Sitzung des Fachausschusses Intermetallische Phasen, MPI-CPfS Dresden (Januar 2008)

Solid state NMR as a local probe in intermetallic clathrates
16. Jahrestagung der Gesellschaft für Kristallographie, Universität Erlangen (März 2008)

$Cu_{1-x}Al_2$: Der andere Weg
Hemdsärmelkolloquium, Universität Mainz (März 2008)

Mischkristallbildung im System $CaGa_4$ – $SrGa_4$: Eine Untersuchung der lokalen Struktur mittels Kernspinresonanz-Spektroskopie
GDCh-Chemiedozententagung, Kaiserslautern (März 2008)

NMR-Spektroskopie an intermetallischen Phasen: Struktur und chemische Bindung
Anorganisches Seminar, Universität Bayreuth (Mai 2008)

NMR-Spektroskopie als lokale Sonde zur Untersuchung der chemischen Bindung in intermetallischen Phasen
Berufungsvortrag, RWTH Aachen (Mai 2008)

NMR of the alkali metal silicides. Réseau RMN structurale dans le Bassin Parisien
Université de Rennes, France (June 2008)

NMR as a local probe in intermetallic compounds
Séminaire de Chimie, Université de Rennes, France (June 2008)

Structure and Chemical Bonding of Alkaline-Earth Digallides
14. Vortragstagung der GDCh, Fachgruppe Festkörperchemie und Materialforschung, Universität Bayreuth (September 2008)

Oleg Janson

Search for new frustrated model compounds guided by DFT calculations
Universität Magdeburg, Fakultät für Naturwissenschaften, Institut für Theoretische Physik, (12. November 2008)

Miroslav Kohout

Electron localizability in real and momentum space
XVth Sagamore Conference on Charge, Spin und Momentum densities, Warwick, UK (2006)

Lokalisierbarkeit: wie sich Elektronen aus dem Weg gehen
Augsburger Physikalisches Kolloquium, Universität Augsburg (2006)

Bonding indicators from electron pair density functionals
Faraday discussion 135: Chemical Concepts from Quantum Mechanics, Manchester, UK (2006)

ELF: Beyond Hartree-Fock
AK14 der Deutschen Gesellschaft für Kristallographie, Aachen (2007)

Metal-ligand bonds in coordination compounds
24th European Crystallographic Meeting, Marrakech, Morocco (2007)

Bonding in solids from the viewpoint of correlation of electronic motion
Goron Conference: Solid State Chemistry II, Oxford, UK (2007)

Guido Kreiner

Structure and Disorder of the Laves Phases in the Co-Nb System
MRS 2008 Fall Meeting, Boston, MA, USA (December 1-5, 2008)

S*ynthesis, Stability and Structure of Mg-based CMAs*
Frontiers in Complex Metallic Alloys CMA-Zagreb'08, Zagreb, Croatia (October 1-4, 2008)

Nb-based Laves Phases—Stability, Stucture and Disorder
16th International Conference on Solid Compounds of Transition Elements, Dresden, Germany (July 26-31, 2008)

Nb-based Laves Phases—Stability, Stucture and Disorder
Department of Chemistry, Faculty of Science, Masaryk University, Brno, Czec Republic (February 28, 2008)

Complex Metallic Alloy Phases—From Simple to Complex Phases
DGM Fachausschusssitzung Intermetallische Phasen, Max-Planck-Institut für Chemische Physik fester Stoffe, Dresden (9. Januar 2008)

Complex Metallic Alloy Phases—From Simple to Complex Phases
Anorganisch Chemische Kolloquium, Institut für Analytische und Anorganische Chemie, Universität Freiburg, Freiburg (12. December 2007)

The Nature of Laves Phases – Eine institutsübergreifende Forschungsinitiative der Max-Planck-Gesellschaft
DGM Fachausschusssitzung Intermetallische Phasen, Max-Planck-Institut für Eisenforschung, Düsseldorf (10. Januar 2007)

Komplexe Metalllegierungsphasen
ZFM-Festkörpertag 2005/2006, Zentrum für Festkörperchemie und Neue Materialien, Universität Hannover, Hannover (27. Januar 2006)

Cornelius Krellner

Crossover from Ferro- to Antiferromagnetism in the layered Kondo systems CeTPO (T = Ru, Os)
Centro Atómico Bariloche, San Carlos di Bariloche, Argentina (February 2006)

Quantum criticality in $YbRh_2Si_2$
Solid State Physics Seminar, ETH Zurich, Switzerland (June 2007)

New Ce-based correlated materials at the border between intermetallics and oxides
15th International Conference on Crystal Growth, Salt Lake City, USA (August 2007)

Stefano Leoni

Phase Transitions in the Solid State
Università di Perugia, Theoretical Chemistry Group, Perugia, Italia (February 14, 2006)

Mechanisms and Intermediates along Pressure-Induced Phase Transitions
ETH Zurich, Campus of the University of Lugano, Parrinello group, Switzerland (March 6, 2006)

A Full-featured Platform for the Simulation of Phase Transitions, Mechanical Properties and Transport Phenomena in Real Materials
EPFL Lausanne, Switzerland (July 11, 2006)

Thinking with the Eyes
University of Manchester, UK (April 20, 2007)

Numerical Simulations and Visualization Approaches
National Computational Center (CSCS), Manno, Switzerland (March 3, 2007)

Advanced Techniques for Material Simulations
North Carolina State University, ERMES Unit, USA (March 15, 2006)

Approaches to Phase Transformations in the Solid State
National Academy of Sciences, Breslau, Poland (May 18, 2007)

The Metal-Insulator Transition in $MgTi_2O_4$ Spinel
University of Wisconsin-Madison, USA (April 2008)

New Results in Phase Transition Simulations
ETH Zürich, Campus of the University of Lugano, Parrinello group, Switzerland (August 13, 2008)

Interface reactivity in Solids
TU Dresden, Cuniberti Gruppe, Nanoseminar (11. Dezember 2008)

Numerical Simulations on nanoionics
MPI FKF Stuttgart, Maier Gruppe (18. Dezember 2008)

Jens Müller

Magnetic Nanoparticles studied by Hall Magnetometry based on GaAs/AlGaAs Heterostructures
Walter-Schottky-Institut, TU München, Seminar Prof. G. Abstreiter (19. Dezember 2006)

Magnetism and Superconductivity in Molecular Metals
18th International Edgar-Lüscher-Seminar: „Actual Topics in Solid State Physics“ – Magnetism and Superconductivity, Klosters (February 03, 2007)

Noise Studies on Hall Magnetometers based on GaAs/AlGaAs Heterostructures
Institut für Festkörper- und Werkstoffforschung (IFW) Dresden, Abteilungsseminar Prof. B. Büchner (17. Oktober 2007)

Magnetic Nanoparticles studied by GaAs/AlGaAs-based Hall Magnetometry—Magnetic Interactions in Fe Nanoparticle/Permalloy Thin-Film Hybrid Systems
Forschungszentrum Dresden Rossendorf, Hochfeld-Magnetlabor, Seminar Prof. J. Wosnitza (23. November 2007)

Elektronische Korrelationen in molekularen Metallen
Seminar des SFB/TRR 49, Goethe-Universität Frankfurt am Main (7. Februar 2008)

Fluctuation Spectroscopy on quasi-two-dimensional Superconductors
Annual Retreat SFB/TRR 49, Schloss Waldthausen (26. September 2008)

Fluctuation Spectroscopy on quasi-two-dimensional Superconductors—relecant energy scales for electronic scattering processes
10th German-Japanese Symposium “Collective Quantum Phenomena in Correlated Condensed Matter Systems“, Schloß Ringberg, Germany (September 30, 2008)

Michael Nicklas

Superconductivity and Magnetism in $CeTIn_5$ (T=Co, Rh or Ir)
Seminars talk at the University of Stuttgart, Germany (June 27, 2006)

Influence of antiferromagnetic fluctuations on the Fulde-Ferrell-Larkin-Ovchinnikov state in $CeCoIn_5$
ICM satellite workshop on Novel Pressure-induced Phenomena in Condensed Matter Systems, Fukuoka, Japan (August 26-29, 2006)

Interplay of Magnetism and Superconductivity in $CeCoIn_5$.
ICAM Workshop on The Heavy Fermion Frontier, Santa Fe, USA (November 11-14, 2007)

Interplay of Magnetism and Superconductivity: Pressure Experiments on Heavy Fermion Superconductors
Seminars talk at the Université de Montréal, Canada, (November 21, 2007)

Possible realization of the Fulde-Ferrell-Larkin-Ovchinnikov superconducting state in $CeCoIn_5$: Results from pressure studies
Gordon Research Conference on Research at High Pressure, University of New England Biddeford, ME, USA (June 29 - July 4, 2008)

Magnetism and Superconductivity in $CeCoIn_5$
Conference on Strongly Correlated Electron Systems (SCES 2008), Buzios/Rio, Brazil (August 17-22, 2008)

Niels Oeschler

Quantum criticality in the heavy-fermion compounds $CeNi_2Ge_2$ and $YbRh_2Si_2$
Department of Physics, University of Johannesburg, South Africa (June 2006)

Thermoelectric properties in ferromagnetic Ce(PdRh)
Physikalisches Institut, Goethe-Universität Frankfurt (Oktober 2006)

Thermomagnetic properties of the strongly correlated semimetal CeNiSn
ARW Workshop, Hvar, Croatia (September 2008)

Helge Rosner

Itinerant iron magnetism and high spin polarization in filled skutterudites
University of Cologne, Colloquium of the SFB 608 (April 2006)

Ab-initio modelling of unusual physical properties - from simple elements to complex compounds
Seminar of the institute of solid state physics, TU Wien, Austria (November 2006)

Cu(II) materials—from crystal chemistry to magnetic models
22. Workshop on Novel materials and superconductivity, Planneralm, Austria (February 2007)

Cu(II) materials—from crystal chemistry to magnetic models
Seminar of the Institute for Crystallography, Sankt Petersburg State University, Russian Federation, May 2007.

Cu(II) materials: from crystal chemistry to magnetic models
Colloquium of the SFB 608, University of Cologne (May 2007)

Ab-initio modelling of unusual physical properties - from simple elements to complex compounds
Seminar of the institute of physics, University of Silesia Katowice, Poland (June 2007)

Cu(II) materials—from crystal chemistry to magnetic model compounds
Seminar 'Theory of condensed matter' of the institute of physics, University of Augsburg (July 2007)

Ab-initio modelling of unusual physical properties - from simple elements to complex compounds
Workshop on novel methods on electronic structure calculations, University of La Plata, Argentina (November 2007)

Cu(II) materials—from crystal chemistry to magnetic model compounds
Winterschool of the Leibnitz Institute for Solid State and Materials Research Dresden, Oberwiesenthal (January 2008)

Superconductivity, magnetism and electronic structure of $SrFe_2As_2$ and related compounds
International Workshop on Iron (Nickel)-Based Superconductors, Beijing, China (October 2008)

Superconductivity, magnetism and electronic structure of $SrFe_2As_2$ and related compounds
Seminar of the Institute of Electrochemistry, Moscow State University, Russian Federation (November 2008)

Elena Rosseeva

Synthesis, characterization and morphogenesis of carbonated fluorapatite-gelatine-nanocomposites: a complex approach towards the mineralization of hard tissues
Christian-Albrechts-Universität zu Kiel (University of Kiel), Germany (8. September 2008)

Burkhard Schmidt

Hot Lanczos: Lanczos-Eigensysteme zur Berechnung thermodynamischer Erwartungswerte
Universität Osnabrück (Januar 2007)

Large Matrices for Small Clusters: Computational Solid-State Theory at the Max Planck Institute for the Chemical Physics of Solids
Universität Karlsruhe (Februar 2007)

Managing Tigers and Leopards
Max-Planck-Institut für Physik komplexer Systeme (Mai 2008)

Ulrich Schwarz

High pressure as a tool fort the preparation of $EuSi_6$ and other cage compounds
CMA Meeting, Stuttgart (Februar 2006)

Jenseits der 8–N Regel: $EuSi_6$
Hemdsärmelkolloquium, Christian-Albrechts-Universität zu Kiel (März 2006)

Hochdruckkristallchemie von Metallen und intermetallischen Verbindungen
Seminar Anorganische Chemie, TU München (Januar 2007)

Druckinduzierte elektronische Änderungen
Seminar Anorganische Chemie, Westfälische Wilhelms Universität Münster (Januar 2008)

New binary silicides by tailoring electronic properties
Zing Conference on Solid State Chemistry, Cancun, Mexico (March 2008)

Tayloring electronic properties by application of high pressure
High-pressure single crystal diffraction workshop, Adam Mickiewicz University Poznan, Poland (April 2008)

Clash of cultures? Under pressure, experiment meets theory
FPLO Workshop "DFT meets experiment", IFW Dresden (August 2008)

Diamant: Vom Schmuck zum Hightech-Material
125. Versammlung der Gesellschaft Deutscher Naturforscher und Ärzte, Tübingen (September 2008)

Oliver Stockert

Pressure tuning of the quantum phase transition in $CeCu_2Si_2$
μSR Users Meeting, Paul Scherrer Institute, Villigen, Switzerland (January 2006)

Quantum phase transitions studied by neutron scattering: demand for new instrumentation
TAS/ThALES workshop of the Institut Laue-Langevin, Rencurel, France (March 2006)

Magnetic quantum phase transitions probed by neutron scattering
International Symposium on Neutron Scattering: Electronic Correlations, Magnetism and Superconductivity (ECoMS), Forschungszentrum Karlsruhe, Karlsruhe (March 2006)

Mit Neutronen ins Innere der Materie blicken
Hochschule für Technik und Wirtschaft, Dresden (Juni 2006)

Magnetism and superconductivity in heavy-fermion systems close to quantum criticality
Technische Universität München, München (June 2006)

Does antiferromagnetism survive in superconducting $CeCu_2Si_2$?
International M^2S conference, Dresden (July 1006)

Neutron scattering in antiferromagnetic and superconducting $CeCu_2Si_2$
International Conference on Research in High Magnetic Fields, Sendai, Japan (August 2006)

Magnetic quantum phase transition in $CeCu_2Si_2$ studied by neutron scattering
9th Japanese-German Symposium, Kyoto, Japan (August 2006)

Magnetic quantum phase transitions studied by neutron scattering
Deutsche Tagung für Forschung mit Synchrotronstrahlung, Neutronen und Ionenstrahlen an Großgeräten (SNI 2006), Hamburg (October 2006)

Magnetism and quantum criticality in heavy-fermion compounds: interplay with superconductivity
Edgar-Lüscher-Seminar, Klosters, Switzerland (February 2007)

Magnetism and quantum criticality in heavy-fermion compounds: interplay with superconductivity
Deutsche Physikalische Gesellschaft, Frühjahrstagung AKF, Regensburg (März 2007)

Magnetism and quantum criticality in $CeCu_2Si_2$: interplay with superconductivity
Gordon Research Conference on Superconductivity, Les Diablerets, Switzerland (September 2007)

Magnetism and quantum criticality in $CeCu_2Si_2$: interplay with superconductivity
Canadian Institute for Advanced Research, Lac Carling, Canada (October 2007)

Magnetism and quantum criticality in $CeCu_2Si_2$: interplay with superconductivity
2nd workshop MSNE, 21st COE, Awaji Island, Japan (December 2007)

Spindynamik und magnetische Ordnung an Quantenphasenübergängen: Magnetismus kontra Supraleitung schwerer Elektronen
Seminar des Transregio 49 an der Universität Frankfurt, Frankfurt am Main (January 2008)

Magnetism and quantum criticality: interplay with superconductivity
Gordon Research Conference on Correlated Electron Systems, Biddeford, United States (June 2008)

Paramagnon-mediated superconductivity in the heavy-fermion compound $CeCu_2Si_2$?
Miniworkshop on Strong Correlations in Materials and Atom Traps, Trieste, Italy (August 2008)

Spin dynamics in superconducting $CeCu_2Si_2$
International Conference on Strongly Correlated Electron Systems SCES'08, Buzios/Rio, Brazil (August 2008)

Magnetism and quantum criticality in heavy-fermion systems: interplay with superconductivity
Max-Planck-Institut für Festkörperforschung, Stuttgart (September 2008)

Magnetism and quantum criticality in heavy-fermion systems: interplay with superconductivity
Joint Theory/College 4 seminar, Institut Laue-Langevin, Grenoble, France (September 2008)

Paramagnon-mediated superconductivity in the heavy-fermion compound $CeCu_2Si_2$?
Helmholtz-Zentrum für Materialien und Energie, Berlin (Oktober 2008)

Peter Thalmeier

Heavy fermion metals
Asia Pacific Center for Theoretical Physics, Jeju, Korea (January 2006)

Rare Earth Borocarbides RNi_2B_2C: almost unconventional superconductors
Asia Pacific Center for Theoretical Physics, Seoul, Korea (January 2006)

Heavy Electron unconventional superconductivity in UPd_2Al_3 and $PrOs_4Sb_{12}$
Seoul National University, Seoul, Korea (January 2006)

The frustrated J1-J2 model in high magnetic fields
International Conference on Highly Frustrated Mangetism, Osaka, Japan (August 2006)

Phases and correlations in Kondo lattice type models
9th Japanese-German Symposium, Hikone, Japan (August 2006)

Multipolar order and superconductivity in f-electron compounds
International Conference on New Quantum Phenomena in Skutterudite and Related Systems, Kobe, Japan (September 2007)

High field properties of frustrated 2d square lattice magnets
Iwate University, Morioka, Japan (October 2007)

Frustrated Magnetism in Vanadium Oxides
The European Conference on Magnetism 2008, Posnan, Poland (June 2008)

Magnetic excitations in heavy fermion superconductors
International Workshop on Competing Orders, Pairing Fluctuations and Spin Orbit Effect in Novel Unconventional Superconductors, Dresden, Germany, (July 2008)

Magnetic excitations in heavy fermion superconductors
Asia Pacific Center for Theoretical Physics, Pohang, Korea (August 2008)

Feedback effect in Rare Earth based FeAs and heavy fermion superconductors
FeAs High Tc Superconducting Multilayers and Related Phenomena, Rom, Universita La Sapienza (December 2008)

Frank R. Wagner

Chemical Bonding in Position Space
Department of Theoretical Chemistry, Lund University, Sweden (2004)

Steffen Wirth

Towards scanning tunneling spectroscopy of correlated electron systems
Physical Institute, University of Frankfurt (April 25, 2006)

Tunneling Spectroscopy on Manganites
Tulane University, New Orleans USA (May 10, 2007)

Tunneling Spectroscopy on Manganites
Louisiana State Univ., Baton Rouge, USA (May 11, 2007)

Scanning Tunneling Spectroscopy on Manganites
MARTECH, Florida State University, USA (May 21, 2007)

Tunneling Spectroscopy on Manganites
Seminar of Research Group 520, Technical University Dresden (June 27, 2007)

Tunnel- und Magnetotransporteigenschaften in elektronisch hochkorrelierten Systemen
Physics Colloquium of the Technical University Dresden (October 16, 2007)

Tunneling Spectroscopy on Manganites
II. Physics Institute B, RWTH Aachen (January 17, 2008)

Tunneling Spectroscopy on Manganites
II. Physics Institute, University of Cologne (January 18, 2008)

Tunneling and Magnetotransport Properties of Strongly Correlated Electron Systems
MPI for Solid State Research (May 21, 2008)

Magnetotransport in heavy fermion metals $CeMIn_5$ (M = Co, Ir): The Influence of antiferromagnetic fluctuations
Colloquium at the Physics and Astronomy Dept., Rice University, USA (November 5, 2008)

Magnetotransport in heavy fermion metals $CeMIn_5$ (M = Co, Ir): The Influence of antiferromagnetic fluctuations
Seminar at Texas Center for Superconductivity, University of Houston, USA (November 6, 2008)

Magnetotransport in heavy fermion metals CeMIn5 (M = Co, Ir): The Influence of antiferromagnetic fluctuations
Seminar at MARTECH, Florida State University, USA (November 10, 2008)

Victor Yushankhai

Self-consistent renormalization theory of spin fluctuations in paramagnetic spinel LiV_2O_4
XIII Training Course in the Physics of Strongly Correlated Systems, Vietri sul Mare (Salerno), Italy (October 6-17, 2008)

Dirk Zahn

Exploring Reaction Mechanisms from Atomistic Simulations: New Insights in Crystal Nucleation, Phase Transitions and Segregation Processes
Berkeley, USA (January 12, 2006)

Molekulardynamische Untersuchungen der Mechanismen von Reaktionen, Aggregationsprozessen sowie von Phasenbildungs- und Phasentrennungs-vorgängen
Chemiedozententagung, Hamburg (21. März 2006)

Untersuchung der Bildung von Nanokristallen mit Hilfe von Molekulardynamiksimulationen
Hemdsärmelkolloquium 2006, Kiel (16. März 2006)

Investigation of Crystal Formation from Molecular Dynamics Simulation
Festkörpertagung FCK06, Aachen (März 2006)

Molekulardynamische Untersuchungen der Mechanismen von Reaktionen, Aggregationsprozessen sowie von Phasenbildungs- und Phasentrennungs-vorgängen
Universität Leipzig (4. Mai 2006)

New Insights into the Mechanisms of Phase Transitions and Phase Separation Processes, Koç University, Istanbul (May 25, 2006)

Exploring the atomistic structure of phase interfaces from molecular dynamic simulations
Bear Creek NY, USA (October 11, 2006)

Molekulardynamische Simulationen von Phasenübergängen, Phasentrennungsprozessen und strukturellen Umwandlungen in Festkörpern
Uni Stuttgart (26. Oktober 2006)

Molecular Simulations on ZnO Aggregation and Ripening
Hemdsärmelkolloquium 2007, Bonn (March 9, 2007)

Atomistic in-situ Investigation of heterogeneous Nucleation Events in Metals and Alloys from Molecular Dynamics Simulations
SPP 1296, Berchtesgaden (April 2, 2007)

New Insights into the Mechanisms of Phase Transitions and Phase Separation Processes
MPI Festkörperforschung Stuttgart (May 23, 2007)

Tackling Energy Barriers for Exploring Nucleation Events from Molecular Dynamics Simulations
Energy-Landscapes Workshop, Petritoli, Italia (July 2007)

Understanding Biominerals from Computer Simulations
Universität Darmstadt (June 26, 2007)

Molekulardynamische Simulationen von Nukleations- und Selbstorganisationsprozessen
Osnabrück (December 3, 2007)

Nucleation and Self-Organization, Metastability and Rare Events in Complex Systems
Erwin Schroedinger Institute, Vienna, Austria (February 20, 2008)

Nanoionics (Computersimulationen zu CaF_2 und CaF_2/BaF_2 Nanoschichtsystemen)
Hemdsärmelkolloquium 2008, Mainz (27. März 2008)

Mechanisms of Ion Aggregation & Self-Organization during the Nucleation of Nanocrystals and Nanocomposite Materials
SFB 569 Kolloquium, Ulm (22. April 2008)

Mechanisms of Ion Aggregation & Self-Organization during the Nucleation of Nanocrystals and Nanocomposite Materials
Koç University, Istanbul, Turkey (May 20, 2008)

Exploring Rare Reaction Events and Nucleation Processes from Molecular Dynamics Simulations
COST P19 Multiscale Modelling of Materials, Brno, Czec Republic (June 25, 2008)

Atomistische Modellierung von Nukleations- und Selbstorganisationsvorgängen
TU Chemnitz (16 Juli 2008)

From Ion Aggregation to Nanocrystal (Self-) Organization: a Transferrable Simulation Platform,
Festkörpertagung, Bayreuth (25. September 2008)

Biominerals in silico: New Insights from Computer Simulations
IMPRS Dresden (October 8, 2008)

Atomistic Simulation Approaches to Structural Tranformations and Self-Organization
MPI for Iron Research, Düsseldorf (October 13, 2008)

Posterauszeichnungen
Best Poster Awards

Posterprämierung durch GDCh-Fachgruppe Festkörperchemie anlässlich der 13. Vortragstagung der GDCh-Fachgruppe Festkörperchemie in Aachen 2006 an *Andreas Schlechte*, R. Niewa, T. Cichorek, Y. Prots, M. Schmidt, R. Ramlau, R. Kniep: Beiträge zu ternären metallischen Zr-Pniktidchalkogeniden.

Poster Award of the Federation of European Materials Societies to *Annu Thomas*: Control of the Crystal Growth of calcium Oxalates (1st prize), presented at the Junior Euromat 2008.

Best Scientific Presentation of Young Scientists, Federov Session, St. Petersburg 2008, to *Elena Roseeva*, J. Buda, P. Simon, U. Schwarz, O. Frank-Kamenetskaya, R. Kniep: Biomimetric Carbonated Fluorapatite-Gelatine Composite: Synthesis, Characterization and Morphogenesis.

Lehrveranstaltungen
University Lectures

Juri Grin

Strukturchemie
Technische Universität Dresden, SS 07, SS 08

Chemical Bonding and Cystallographic Features
European School of Materials Science, Ljubljana, Slovenia, May, 22-27, 2006

Frank Haarmann

hat im Rahmen seiner Habilitation die Vorlesung *Chemie für Physiker, Werkstoffwissenschaftler und Geographen*,
Technische Universität Dresden, WS 06/07 und WS 07/08 zur Hälfte gelesen.

Seminar zur Anorganischen Chemie für Bauingenieure
WS 05/06, gemeinsam mit Ulrich Schwarz

Guido Kreiner

Chemie für Physiker, Werkstoffwissenschaftler und Geographen
Vorlesung, Seminar und Praktikum, Technische Universität Dresden, WS 06/07, WS 07/08, WS 08/09

A Practical Guide to Determine Phase Diagrams
European School of Materials Science, Ljubljana, Slovenia, May, 22-27, 2006

Stefano Leoni

Numerische Methoden (mit G. Seifert, D. Zahn)
Wahlfach (WF) und Schwerpunkt-Diplomfach (SDF), Vorlesung, Technische Universität Dresden SS 06

Numerical Simulations of Complex Materials
(International Max Planck Research School, IMPRS).
Vorlesung im Rahmen der IMPRS SS 06

Spektroskopie und numerische Simulation in der Anorganischen Chemie
Spezialveranstaltungen für Fortgeschrittene Studenten und Doktoranden, Vorlesung, Technische Universität Dresden SS 06

Methods of Computer Simulations in Chemistry, *Physics and Materials Sciences* (IMPRS)
Vorlesung, Technische Universität Dresden WS 06/07

Methoden der Computersimulation in der Chemie (mit G. Seifert, D. Zahn)
Wahlfach (WF) und Schwerpunkt-Diplomfach (SDF).
Vorlesung, Technische Universität Dresden WS 06/07

Chemie für Wasserwirtschaftler
Seminar und Vorlesung (Vorlesung mit Ulrich Schwarz), Technische Universität Dresden WS 06/07

Spektroskopie und numerische Simulation in der Anorganischen Chemie, Spezialveranstaltungen für Fortgeschrittene und Doktoranden. Vorlesung, Technische Universität Dresden SS 07

Methoden der Computersimulation in der Chemie (mit G. Seifert, D. Zahn)
Wahlfach (WF) und Schwerpunkt-Diplomfach (SDF).
Vorlesung, Technische Universität Dresden WS 07/08

Chemie für Wasserwirtschaftler
Seminar und Vorlesung, Technische Universität Dresden WS 07/08

Spektroskopie und numerische Simulation in der Anorganischen Chemie
Spezialveranstaltungen für Fortgeschrittene und Doktoranden. Vorlesung, Technische Universität Dresden SS08

Chemie für Abfallwirtschaftler
Seminar, Technische Universität Dresden, WS 08/009

Jens Müller

Superconductivity
Vorlesung, 2 SWS, TU Dresden, SS 08

Ulrich Schwarz

Anorganische Chemie für Bauingenieure
Vorlesung, Technische Universität Dresden WS 05/06

Seminar zur Anorganischen Chemie für Bauingenieure
WS 05/06, gemeinsam mit Frank Haarmann

Chemie für Wasserwirtschaftler und Wirtschaftsingenieure
Vorlesung, Technische Universität Dresden WS 06/07

Chemie für Wasserwirtschaftler
Vorlesung, Technische Universität Dresden WS 07/08

Seminar zur Anorganischen Chemie für Studierende des Ingenieurstudienganges Abwasser und Altlasten
WS 2005/2006, WS 2006/2007, WS2008/2009
gemeinsam mit Stefano Leoni

Chemie für Wirtschaftsingenieure
Vorlesung, Technische Universität Dresden SS 07, SS 08

Seminar für Studierende des Lehramts Umwelttechnik
WS 2008/2009
Ulrich Schwarz, Stefano Leoni

Oliver Stockert

Streumethoden
Vorlesung, Technische Universität Dresden, SS 08

Scattering methods: neutron and synchrotron radiation for solid state investigations
Vorlesung, Technische Universität Dresden, SS 08

Franziska Weickert

Übungsgruppe (Rechenaufgaben) zur Vorlesung Festkörperphysik
Technische Universität Dresden, WS 07/08

Dirk Zahn

Exploring the Dynamics of Atoms, Molecules and Materials from Computer Simulations
Vorlesung, Max-Planck Research School and TU Dresden, WS 05/06

Methods of Computer Simulation in Chemistry, Physics and Materials Sciences
Vorlesung, Technische Universität Dresden, WS 06/07, WS 07/08, WS 08/09

2nd Bilateral Workshop 'Basics in Real Space Theories' MPI CPfS und Koç Universität Istanbul, SS 06, 17.-19.7.2006

Molecular Modelling and Simulation
Visiting lecturer course, Koç University, Istanbul, SS 08

Praktika im Studiengang Physik, Technische Universität Dresden
Tobias Förster (WS 06/07, SS 07), Jan-Guido Donath (SS 06, WS 06/07), Stefan Lausberg (WS 08/09), Alexander Steppke (WS 08/09), Anton Jesche (SS 08, WS 08/09), Julia Arndt (SS 06, WS 06/07), Stefan Ernst (WS 06/07, SS 07), Jens Brandenburg (WS 07/08, SS 08), Franziska Weikert (WS 06/07, WS 07/08, WS 08/09)

Σ^5 Aktivitäten / *Σ^5 Activities*

Praktika im Studiengang Chemie Diplom
(Fortgeschrittenen Praktikum; Vertieftes Kernfach; Schwerpunkt Diplomfach), bis WS 2008/2009
Koordination: Ulrich Schwarz
Marc Armbrüster, Horst Borrmann, Ulrich Burkhardt, Raul Cardoso, Enkhtsetseg Dashjav, Matthias Friedrich, Silvia Gerlach, Thorsten Goebel, Daniel Grüner, Roman Gumeniuk, Frank Haarmann, Oliver Hochrein, Peter Höhn, Jens Hunger, Franziska Jach, Alexander Kerkau, Kirill Kovnir, Guido Kreiner, Andreas Leithe-Jasper, Stefano Leoni, Katrin Meier, Fabian Nitsche, Oliver Pecher, Helge Rosner, Andreas Schlechte, Marcus Schmidt, Ulrich Schwarz, Paul Simon, Aron Wosylus

Praktikum im Studiengang Chemie Bachelor „Spezielle Anorganische Chemie", ab Sommersemester 2008
Koordination: Ulrich Schwarz
Module: Raul Cardoso, Silvia Goebel, Peter Höhn, Yurii Prots, Ulrich Burkhardt

Praktikum im Masterstudiengang Chemie „Vertiefte Anorganische Chemie", ab WS 2008/2009)
Koordination: Ulrich Schwarz
Frank Haarmann, Peter Höhn, Oliver Pecher

Akademische Qualifikationen *Academic Qualifications*

Diplomarbeiten / *Diploma Theses*

Stefan Ernst
Optimisation of the preparation process for tips used in scanning tunneling microscopy
Technische Universität Dresden (26.6.2006)

Katrin Meier
Hochdrucksynthesen zinnreicher Platin- und Seltenerdmetallverbindungen
Technische Universität Dresden (22.08.2006)

Vivian Petzold
Electronic structure and related superconducting properties of conventional superconductors
Technische Universität Dresden (22.02.2007)

Constanze Lamprecht
Untersuchung der magnetischen und supraleitenden Eigenschaften von RNi_2B_2C (R = Hm, Tm)
Technische Universität Dresden (26.02.2007)

Miriam Schmidt
Elektronische Struktur und magnetische Eigenschaften niedrigdimensionaler Übergangsmetalloxide
Technische Universität Dresden (01.03.2007)

Lisa Siggelkow
Synthese, Kristallstruktur und mechanische Eigenschaften der intermetallischen Phase Nb_2Co_7
Technische Universität Dresden (07.06.2007)

Matthias Friedrich
Nanopartikelsynthese und katalytische Charakterisierung von $Cu_{85}Pd_{15}$ und $Cu_{60}Pd_{40}$
Technische Universität Dresden (10.07.200)

Marija Borna
Synthesis and characterization of copper(II) complex compounds with condensation derivates of hetero-aromatic carbonyl compounds and ethyl hydrazinoacetate hydrochloride
University of Belgrade Faculty of Chemistry, (20.09.2007)

Alexander Kerkau
Untersuchungen zum Stabilitätsbereich und zur Fehlordnung der ternären Laves-Phase $Nb(Cr_{1-x}Co_x)_2$.
Technische Universität Dresden (26.11.2007)

Fabian Nitsche
Verbindungsbildung im System Strontium-Nickel-Stickstoff. Technische Universität Dresden (14.07.2008)

Oliver Pecher
Die intermetallische Phase $Ca_{1-x}Ga_{2+3x}$: Einkristall- und Festkörper-NMR-Untersuchungen zu Kristallstruktur und lokaler Ordnung. Technische Universität Dresden, (14.07.2008)

Alexander Herzog
Elektronische Korrelation im Halbleiter $FeSB_2$: Untersuchung mittels optischer Spektroskopie im Vergleich zu $RuSB_2$
Technische Universität Dresden (26.11.2008)

Bachelor

Matthias Werheid
Synthese und Charakterisierung von $Ba_8Ga_{16-x}Ge_{30+x}$
Technische Universität Dresden, 14.10.2008

Gemeinsame Masterarbeit von
R. J. Aranda García
Síntesis y caracterización de nuevos materiales con propiedades de imanes permanentes.
Master (Maetro en Ciencias), Benemérita Universidad Autónoma de Puebla, Puebla, Mexiko (2006).
(BUAP, Dr. Jesus Vicente Pacheco Espejel) und dem Max-Planck-Institut für Chemische Physik fester Stoffe (Prof. Juri Grin), December 2006.

Dissertationen / *PhD Theses*

Corneliu Miclea
Investigation of superconducting order parameters in heavy-fermion and low-dimensional metallic systems under pressure
Technische Universität Dresden (09.03.2006)

Rene Chemnitzer
Intercalation von Stickstoff und Waserstoff in Sr_2N sowie ortsabhängige Feststoffcharakterisierung mit Laserablation.
Technische Universität Dresden (12.04.2006)

Martin Kirchner
Existenzbereiche und physikalische Eigenschaften metallreicher Perowskite (SE_3X)M (SE = Seltenerd-Metall; X = N, O, M = Al, Ga, In Sn) mit Ergänzungen zu den ternären Systemen EA–In–N
Technische Universität Dresden (11.04.2006)

Caren Göbel
Einfluss von Fluorid auf die Morphogenese und mikroskopische Struktur von Calciumphosphat-Gelatine-Kompositen
Technische Universität Dresden (11.07.2006)

Franziska Weickert
Quantenkristisches Verhalten in hochkorrelierten Elektronensystemen
Technische Universität Dresden (15.09.2006)

Bastian Ewald
Borophosphate der Haupt- und Nebengruppenmetalle: Synthese, Charakterisierung und Strukturchemische Klassifizierung
Technische Universität Dresden (02.11.2006)

Gabriel Alejandro Dionicio
Electrical resistivity of $YbRh_2Si_2$ and EuT_2Ge_2 (T= Co, Cu) at extreme conditions of pressure and temperature
Technische Universität Dresden (15.12.2006)

Johannes Frenzel
Structural, electronic and optical properties of cadmium sulfide nanoparticles
Technische Universität Dresden (19.12.2006)

Igor Veremchuk
Phasengleichgewichte und Kristallstrukturen der Verbindungen in den Systemen Er–Ni–B, Yb–{Fe, Co, Ni}–B und deren Analoge (Titel übersetzt)
National University Lviv, Ukraine (2006)

Daniel Grüner
Untersuchungen zur Natur der Laves-Phasen in Systemen der Übergangsmetalle
Technische Universität Dresden (08.01.2007)

Nikolaus Reinfried
Modifizierung der Werkstoffe auf Basis von Magnesiumsilicid mit Hilfe der Spark-Plasma-Synthese
Technische Universität Dresden (09.02.2007)

Julia Ferstl
New Yb-based systems: From an intermediate-valent to a magnetically ordered state
Technische Universität Dresden (04.04.2007)

Edit Lengyel
Antiferromagnetism and Superconductivity in Ce-based Heavy-Fermion Systems
Technische Universität Dresden (07.09.2007)

Christian Kudla
Strukturell komplexe intermetallische Phasen – Untersuchungen an binären und ternären Phasen der Systeme Ag–Mg und Ag–Ga–Mg
Technische Universität Dresden (16.11.2007)

Rainer Giedigkeit
Strukturelle Ordnung und Unordnung in binären und ternären Verbindungen des Galliums mit Ytterbium und Palladium
Technische Universität Dresden, 27.11.2007

Agnieszka Kawska
An atomistic simulation scheme for modelling crystal formation: nucleation mechanism in ion clusters and fluorapatite-collagen composites
Technische Universität Dresden (03.06.2008)

Ulrike Köhler
Thermoelectric Transport in Rare-Earth Compounds
Technische Universität Dresden (08.05.2008)

Anastasia Alekseeva
Neue ternäre Boride des Magnesiums mit Rhodium und Iridium: Synthese, Kristallstruktur und chemische Bindung (Titel übersetzt)
State University Moscow (2008)

Yulia Zaikina
Polykationische Clathrate des Zinks und des Siliziums: Synthese, Aufbau und thermoelektrische Eigenschaften
State University Moscow (2008)

Liu Yian
Syntheses, Structure ands Properties of Intermetallic Compounds in $RE_xT_yX_z$ (*RE* = Rare Earth, *T* = Transistion Metal, *X*= Sb and Bi) Systems
Shanghai Institute of Ceramics Chinese Academy of Sciences (2008)

Habilitationen

Dirk Zahn
Theoretical Approaches for the Investigation of Research Mechanisms, Crystal Nucleation and Phase
Technische Universität Dresden (24.01 2006)

Enkhtsetseg Dashjav
Carbometalates. Syntheses, Crystal Structures, Physical Properties, and Chemical Bonding.
National University of Mongolia, Ulaanbaatar (Nov. 2008)

Berufungen / *Calls*

Dr. Philipp Gegenwart auf eine Professur (W2) am 1. Physikalischen Institut der Georg-August-Universität Göttingen, 2006.

Huiqui Yuan, Chang-jiang Professor, Zhejiang University Hangzhou, China, 2008.

Dr. Jens Müller auf die Professur (W3) für experimentelle Festkörperphysik an der Johann Wolfgang Goethe-Universität Frankfurt am Main, 2008.

Ehrenämter / *Honorary Positions*

Prof. Dr. Frank Steglich
Vizepräsident der Deutschen Forschungsgemeinschaft DFG (bis 30.06.2007)

Veröffentlichungen *Publications*

2006

Afyon, S., P. Höhn, M. Armbrüster, A. Baranov, F. R. Wagner, M. Somer and R. Kniep: Azidoaurates of the Alkali Metals. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 1671-1680 (2006).

Alekseeva, A. M., A. M. Abakumov, A. Leithe-Jasper, W. Schnelle, Y. Prots, P. S. Chizhov, G. v. Tendeloo, E. V. Antipov and Y. Grin: Mg_8Rh_4B - A new type of boron stabilized Ti_2Ni structure. In: Journal of Solid State Chemistry **179**, 2751-2760 (2006).

Althues, H., R. Palkovits, A. Rumplecker, P. Simon, W. Sigle, M. Bredol, U. Kynast and S. Kaskel: Synthesis and Characterization of Transparent Luminescent ZnS: Mn/PMMA Nanocomposites. In: Chemistry of Materials **18**, 1068-1072 (2006).

Althues, H., P. Simon, F. Philipp and S. Kaskel: Integration of Zinc Oxide Nanoparticles into Transparent Poly(butanediolmonoacrylate) via Photopolymerisation. In: Journal of Nanoscience and Nanotechnology **6**, 409-413 (2006).

Armbrüster, M., K. Kovnir, J. Osswald, R. Giedigkeit, T. Ressler, Y. Grin and R. Schlögl: PdGa - ein selektiver Katalysator für die Semihydrierung von Acetylen. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2083-2083 (2006).

Auffermann, G., R. Kniep and W. Bronger: Reactive Gas Pressure Syntheses of Nitride-Diazenides and Hydridometalates. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 565-571 (2006).

Baenitz, M., A. A. Gippius, A. K. Rajarajan, E. N. Morozova, Z. Hossain, C. Geibel and F. Steglich: Crossover from divalent to valence fluctuating state of Eu in $EuCu_2(Ge_{1-x}Si_x)_2$ probed by $^{63,65}Cu$ - NMR. In: Physica B **378-380**, 683-685 (2006).

Bauer, E., I. Bonalde, A. Eichler, G. Hilscher, Y. Kitaoka, R. Lackner, S. Laumann, H. Michor, M. Nicklas, P. Rogl, E. W. Scheidt, M. Sigrist and M. Yogi: $CePt_3Si$: Heavy Fermion Superconductivity and Magnetic Order without Inversion Symmetry. In: AIP Conference Proceedings 850, 695-702 ((2006).

Bernal, O. O., M. E. Moroz, K. Ishida, H. Murakawa, A. P. Reyes, P. L. Kuhns, D. E. MacLaughlin, J. A. Mydosh and T. J. Gortenmulder: Hidden order and disorder effects in URu_2Si_2. In: Physica B **378-380**, 574-575 (2006).

Bocharova, V., G. Gorodyska, A. Kiriy, M. Stamm, P. Simon, I. Mönch, D. Elefant, X. Lou, F. Stoffelbach, C. Detrembleur and R. Jérôme: Synthesis and Deposition of Water-Dispersed Prussian Blue Nanocrystals on Polymers and CNTs. In: Characterization of Polymer Surfaces and Thin Films. (Eds.) Grundke, Karina; Stamm, Manfred; Adler, Jürgen. Progress in Colloid and Polymer Science 132. Springer, Berlin (2006) 161-167.

Boström, M., H. Lind, S. Lidin, R. Niewa and Y. Grin: Synthesis, crystal structure, phase relations and chemical bonding analysis of the new Nowotny chimney-ladder compound $ZrBi_{1.62}$. In: Solid State Sciences **8**, 1173-1180 (2006).

Boström, M., Y. Prots and Y. Grin: Preparation, crystal structure and chemical bonding analysis of the new binary compounds Rh_4Ga_{21} and Rh_3Ga_{16}. In: Journal of Solid State Chemistry **179**, 2472-2478 (2006).

Boulfelfel, S. E., D. Zahn, O. Hochrein, Y. Grin and S. Leoni: Low-dimensional sublattice melting by pressure: Superionic conduction in the phase interfaces of the fluorite-to-cotunnite transition of CaF_2. In: Physical Review B **74**, 9, 094106-1-7 (2006).

Boulfelfel, S. E., D. Zahn, O. Hochrein, Y. Grin and S. Leoni: Nucleation and growth in the fluorite to $PbCl_2$-type pressure-induced phase transition in CaF_2. In: Abstracts of Papers of the American Chemical Society **231**, Seq. No.: COMP 295 (2006).

Bronger, W., R. Kniep and M. Kohout: Zusammenhänge zwischen Atomvolumina und Bindungseigenschaften, Beispiele aus den Bereichen der Metallhydride und der intermetallischen Verbindungen. In: 20 Jahre Wilhelm-Klemm-Stiftung. (Eds.) Kuratorium der Wilhelm-Klemm-Stiftung. Shaker Verl., Aachen (2006) 55-70.

Brühne, S., E. Uhrig, G. Kreiner and W. Assmus: Local atomic three-dimensional real-space structural analysis of icosahedral Mg-Zn-RE (RE = Y or Ho) alloys: strategy, method and models. In: Philosophical Magazine **86**, 463-468 (2006).

Brüning, E. M., M. Baenitz, A. A. Gippius, S. Paschen, A. M. Strydom and F. Steglich: ^{119}Sn solid-state NMR as a local probe for correlations in $CeRu_4Sn_6$. In: Physica B **378-380**, 839-840 (2006).

Budnyk, S., Y. Prots, Y. B. Kuz'ma and Y. Grin: Crystal structures of trigadolinium tetraphosphidoheptapalladate, $Gd_3Pd_7P_4$, and triterbium tetraphosphidoheptapalladate, $Tb_3Pd_7P_4$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 238-240 (2006).

Budnyk, S., F. Weitzer, C. Kubata, Y. Prots, L. G. Aksel-rud, W. Schnelle, K. Hiebl, R. Nesper, F. R. Wagner and Y. Grin: Barrelane-like germanium clusters in Eu_3Ge_5: Crystal structure, chemical bonding and physical properties. In: Journal of Solid State Chemistry **179**, 2329-2338 (2006).

Burkhardt, U. and M. Ellner: Mosaic-like tilings derivated from o-Co_4Al_{13} and m-Co_4Al_{13} crystal structures. In: Zeitschrift für Kristallographie **221**, 412-419 (2006).

Chizhov, P. S., N. R. Khasanova, M. Baitinger, W. Schnelle, Y. Prots, U. Burkhardt, E. V. Antipov and Y. Grin: $Ce_4(P_{1-x}Si_x)_{3-z}$: A First Example for the Stabiliztion of the Anti-Th_3P_4 Type Structure by Substitution in the Non-Metal Substructure. In: Inorganic Chemistry **45**, 7210-7216 (2006).

Craco, L., S. Leoni and E. Müller-Hartmann: Hidden orbital fluctuations in the solid solution $Y_{1-x}La_xTiO_3$ ($x < 0.2$). In: Physical Review B **74**, 155128-1-5(2006).

Danzenbächer, S., Y. Kucherenko, C. Laubschat, D. V. Vyalikh, Z. Hossain, C. Geibel, X. J. Zhou, W. L. Yang, N. Mannella, Z. Hussain, Z.-X. Shen and S. L. Molodtsov: Energy Dispersion of 4f-Derived Emissions in Photoelectron Spectra of the Heavy-Fermion Compound $YbIr_2Si_2$. In: Physical Review Letters **96**, 106402-1-4 (2006).

Dashjav, E., G. Kreiner, F. R. Wagner, W. Schnelle and R. Kniep: The new carbomolybdate $Sm_2[Mo_2C_3]$ and its relationship to $RE_2[Mo_2C_3]$ carbomolybdate structure. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2094-2094 (2006).

Dashjav, E., W. Schnelle, F. R. Wagner, G. Kreiner and R. Kniep: Crystal structure of praseodymium dimolybdenum disilicide carbide, $PrMo_2Si_2C$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 267-268 (2006).

D*eeken, S., G. Motz, V. Bezugly, H. Borrmann, F. R. Wagner and R. Kempe:* Metal-Metal Bonding in Sterically Frustrated Dipalladium Species. In: Inorganic Chemistry **45**, 9160-9162 (2006).

Demchyna, R., U. Köhler, Y. Prots, W. Schnelle, M. Baenitz, U. Burkhardt, S. Paschen and U. Schwarz: High-Pressure Synthesis and Physical Properties of the Europium-Substituted Barium Clathrate $Ba_{8-x}Eu_xGe_{43}\square_3$ ($x \leq 0.6$). In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 73-78 (2006).

Demchyna, R., S. Leoni, H. Rosner and U. Schwarz: High-pressure crystal chemistry of binary intermetallic compounds. In: Zeitschrift für Kristallographie **221**, 420-434 (2006).

Demchyna, R., Y. Prots, U. Burkhardt, U. Schwarz and Y. Grin: Crystal structure of hafnium palladium gallium, HfPdGa. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 427-428 (2006).

Demchyna, R., Y. Prots, W. Schnelle, U. Burkhardt and U. Schwarz: Crystal structures of (barium, europium) platinum trigermanium, $Ba_{1-x}Eu_xPtGe_3$ (x = 0,0.27,1). In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 2, 109-111 (2006).

Deppe, M., P. Pedrazzini, N. Caroca-Canales, C. Geibel and J. G. Sereni: Investigations of $CePd_{1-x}Rh_x$ single crystals located near a ferromagnetic quantum critical point. In: Physica B **378-380**, 96-97 (2006).

Dionicio, G., H. Wilhelm, Z. Hossain and C. Geibel: Temperature- and pressure-induced valence transition in $EuCo_2Ge_2$. In: Physica B **378-380**, 724-725 (2006).

Dolocan, V. O., P. Lejay, D. Mailly and K. Hasselbach: Observation of two species of vortices in the anisotropic spin-triplet superconductor Sr_2RuO_4. In: Physical Review B **74**, 14, 144505-1-5 (2006).

Donath, J. G., P. Gegenwart, R. Küchler, N. Oeschler, F. Steglich, E. D. Bauer and J. L. Sarrao: Pressure effect on superconductivity in $CeCoIn_{5-x}Sn_x$ studied by thermal expansion. In: Physica B **378-380**, 98-99 (2006).

Drechsler, S.-L., J. Richter, A. A. Gippius, A. Vasiliev, A. A. Bush, A. S. Moskvin, J. Málek, Y. Prots, W. Schnelle and H. Rosner: Helical ground state and weak ferromagnetism in the edge-shared chain cuprate $NaCu_2O_2$. In: Europhysics Letters **73**, 83-89 (2006).

El-Hagary, M., H. Michor, S. Özcan, M. Giovannini, A. Matar, Z. Heiba, P. Kerschl, M. Schönhart, E. Bauer, R. Grössinger, G. Hilscher, J. Freudenberger and H. Rosner: Phase formation and ferrimagnetism of $GdCo_9Si_4$. In: Journal of Physics: Condensed Matter **18**, 4567-4580 (2006).

Ewald, B., Y. Prots, C. Kudla, D. Grüner, R. Cardoso-Gil and R. Kniep: Crystal Structure and Thermochemical Properties of a First Scandium Borophosphate, $Sc(H_2O)_2[BP_2O_8]\cdot H_2O$. In: Chemistry of Materials **18**, 673-679 (2006).

Faulhaber, E., O. Stockert, B. Grenier, B. Ouladdiaf, M. Deppe, C. Geibel, F. Steglich and M. Loewenhaupt: Magnetic phases in $CeCu_2(Si_{1-x}Ge_x)_2$ near the tetracritical point. In: Physica B **378-380**, 78-79 (2006).

Ferstl, J., H. Rosner and C. Geibel: Evidence for fluctuating Fe-moments in RFe_2Ge_2 (R = Lu, Yb). In: Physica B **378-380**, 744-745 (2006).

Fulde, P., P. Thalmeier and G. Zwicknagl: Strongly Correlated Electrons. In: Solid State Physics. (Eds.) Ehrenreich, Henry. Solid State Physics 60. Academic Press, Amsterdam [u.a.] (2006) 1-180.

Gärtner, U. and S. Hempel: Spaziergang : Landschaften / Laubengänge – Kunst am Bau. in Kooperation mit der Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V., Dresden (2006) 60 S. : Ill. p.

Gavilano, J. L., E. Felder, D. Rau, H. R. Ott, P. Millet, F. Mila, T. Cichorek and A. C. Mota: $Na_2V_3O_7$: An unusual low-dimensional quantum magnet. In: Physica B **378-380**, 123-124 (2006).

Gegenwart, P., Y. Tokiwa, J. Custers, C. Geibel and F. Steglich: Magnetic properties close to the quantum critical point in $YbRh_2Si_2$. In: Journal of the Physical Society of Japan / Supplement **75**, 155-159 (2006).

Gegenwart, P., Y. Tokiwa, T. Westerkamp, F. Weickert, J. Custers, J. Ferstl, C. Krellner, C. Geibel, P. Kerschl, K.-H. Müller and F. Steglich: High-field phase diagram of the heavy-fermion metal $YbRh_2Si_2$. In: New Journal of Physics **8**, 1-12 (2006).

Gegenwart, P., F. Weickert, M. Garst, R. S. Perry and Y. Maeno: Metamagnetic Quantum Criticality in $Sr_3Ru_2O_7$ Studied by Thermal Expansion. In: Physical Review Letters **96**, 13, 136402-1-4 (2006).

Gegenwart, P., F. Weickert, R. S. Perry and Y. Maeno: Low-temperature magnetostriction of $Sr_3Ru_2O_7$. In: Physica B **378-380**, 117-118 (2006).

Gippius, A. A., E. N. Morozova and M. Baenitz: Nuclear quadrupole resonance in two sublattice 2-D antiferromagnetic cuprate $Sr_2Cu_3O_4Cl_2$. In: Journal of Magnetism and Magnetic Materials **300**, e503-e506 (2006).

Gippius, A. A., E. N. Morozova, A. S. Moskvin, S.-L. Drechsler and M. Baenitz: Incommensurate helix magnetic order in quasi-1D chain cuprates $LiCu_2O_2$ and $NaCu_2O_2$ as seen by NMR. In: Journal of Magnetism and Magnetic Materials **300**, e335-e338 (2006).

Gippius, A. A., E. N. Morozova, K. S. Okhotnikov, E. A. Alkaev, A. V. Shevelkov, M. Baenitz, A. Leithe-Jasper, H. Rosner, R. Viennois, Y. Grin and F. Steglich: Sb NQR in filled skutterudites MFe_4Sb_{12} (M = Na, Ca, La). In: Physica B **378-380**, 239-240 (2006).

Gippius, A., M. Baenitz, E. Morozova, A. Leithe-Jasper, W. Schnelle, A. Shevelkov, E. Alkaev, A. Rabis, J. Mydosh, Y. Grin and F. Steglich: Crossover between itinerant ferromagnetism and antiferromagnetic fluctuations in filled skutterudites MFe_4Sb_{12} (M = Na, Ba, La) as determined by NMR. In: Journal of Magnetism and Magnetic Materials **300**, e403-e406 (2006).

Grin, Y., F. R. Wagner, M. Armbrüster, M. Kohout, A. Leithe-Jasper, U. Schwarz, U. Wedig and H. G. v. Schnering: $CuAl_2$ revisited: Composition, crystal structure, chemical bonding, compressibility and Raman spectroscopy. In: Journal of Solid State Chemistry **179**, 1707-1719 (2006).

Grüner, D., A. Ormeci and G. Kreiner: Crystal structure of niobium chromium nickel, $Nb(Cr_{1-x}Ni_x)_2$ (x = 0.49). In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 269-270 (2006).

Grüner, D., F. Stein, M. Palm, J. Konrad, A. Ormeci, W. Schnelle, Y. Grin and G. Kreiner: Preparation, phase stability and structure of the C36 Laves phase $Nb_{1-x}Co_{2+x}$. In: Zeitschrift für Kristallographie **221**, 319-333 (2006).

Guloy, A. M., R. Ramlau, Z. Tang, W. Schnelle, M. Baitinger and Y. Grin: A guest-free germanim clathrate. In: Nature **443**, 320-323 (2006).

Haarmann, F., D. Grüner, V. Bezugly, H. Rosner and Y. Grin: Chemical Bonding and Solid State NMR of Alkali Metal Monostannides MSn (M = Li, Na, K, Rb, Cs). In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 1423-1431 (2006).

Haarmann, F., Y. Prots, S. Göbel and H. G. v. Schnering: Crystal structure of tristrontium octagallide, $Sr_{3-x}Ga_{8+3x}$ (x = 0.15). In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 257-258 (2006).

Handtrack, D., F. Despang, C. Sauer, B. Kieback, N. Reinfried and Y. Grin: Fabrication of ultra-fine grained and dispersion-strengthened titanium materials by spark plasma sintering. In: Materials Science and Engineering A **437**, 423-429 (2006).

Hartmann, S., U. Köhler, N. Oeschler, S. Paschen, C. Krellner, C. Geibel and F. Steglich: Thermal transport properties of the heavy-fermion compound $YbRh_2(Si_{1-x}Ge_x)_2$. In: Physica B **378-380**, 70-71 (2006).

Heines, P., H.-L. Keller, M. Armbrüster, U. Schwarz and J. Tse: Pressure-Induced Internal Redox Reaction of $Cs_2[PdI_4] \cdot I_2$, $Cs_2[PdBr_4] \cdot I_2$, and $Cs_2[PdCl_4] \cdot I_2$. In: Inorganic Chemistry **45**, 9818-9825 (2006).

Henkie, Z., T. Cichorek, R. Wawryk, A. Wojakowski and F. Steglich: Kondo phenomena of structural defects in USbTe ferromagnet. In: physica status solidi B **243**, 124-127 (2006).

Henkie, Z., R. Wawryk, A. Wojakowski, T. Cichorek and F. Steglich: Coherent electronic scattering in orbital-Kondo ferromagnet $UAs_{1-x}Se_{1+x}$. In: Physica B **378-380**, 956-958 (2006).

Hiess, A., O. Stockert, M. M. Koza, Z. Hoissain and C. Geibel: Magnetisation dynamics of $YbIr_2Si_2$. In: Physica B **378-380**, 748-749 (2006).

Höhn, P., M. Armbrüster, G. Auffermann, U. Burkhardt, F. Haarmann, A. Mehta and R. Kniep: $Sr_2[(NC)NiN]$: Ein Cyano-Nitrido-Nickelat(0). In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2129-2129 (2006).

Höhn, P., G. Auffermann, R. Ramlau, H. Rosner, W. Schnelle and R. Kniep: $(Ca_7N_4)[M_x]$ (M = Ag, Ga, In, Tl): Linear Metal Chains as Guests in a Subnitride Host. In: Angewandte Chemie **118**, 6833-6837 (2006).

Höhn, P., G. Auffermann, R. Ramlau, H. Rosner, W. Schnelle and R. Kniep: $(Ca_7N_4)[M_x]$ (M = Ag, Ga, In, Tl): Linear Metal Chains as Guests in a Subnitride Host. In: Angewandte Chemie - International Edition **45**, 6681-6685 (2006).

Hoffmann, S. and T. F. Fässler: Condensation of $[Si_3O_9]^{6-}$ Anions in the Solid State to the Dimeric Cyclotrisilicate Anion $[Si_6O_{17}]^{10-}$. In: Inorganic Chemistry **45**, 7968-7972 (2006).

Horvath-Bordon, E., R. Riedel, A. Zerr, P. F. McMillan, G. Auffermann, Y. Prots, W. Bronger, R. Kniep and P. Kroll: High-pressure chemistry of nitride-based materials. In: Chemical Society Reviews **35**, 987-1014 (2006).

Hossain, Z., C. Geibel, T. Radu, Y. Tokiwa, F. Weickert, C. Krellner, H. Jeevan, P. Gegenwart and F. Steglich: Low-temperature properties of the heavy fermion system $YbIr_2Si_2$. In: Physica B **378-380**, 74-75 (2006).

Huang, Y.-X., B. Ewald, W. Schnelle, Y. Prots and R. Kniep: Chirality and Magnetism in a Novel Series of Isotypic Borophosphates: $M^{II}[BPO_4(OH)_2)]$ (M^{II} = Mn, Fe, Co). In: Inorganic Chemistry **45**, 7578-7580 (2006).

Jafari, R. and A. Langari: Second order quantum renormalisation group of XXZ chain with next-nearest neighbour interactions. In: Physica A **364**, 213-222 (2006).

Jeevan, H. S., C. Geibel and Z. Hossain: Quasiquartet crystal-electric-field ground state with possible quadrupolar ordering in the tetragonal compound $YbRu_2Ge_2$. In: Physical Review B **73**, 020407-1-020407-4 (2006).

Johannes, M. D., J. Richter, S.-L. Drechsler and H. Rosner: $Sr_2Cu(PO_4)_2$: A real material realization of the one-dimensional nearest neighbor Heisenberg chain. In: Physical Review B **74**, 174435-1-174435-6 (2006).

Kasinathan, D., J. Kuneš, A. Lazicki, H. Rosner, C. S. Yoo, R. T. Scalettar and W. E. Pickett: Superconductivity and Lattice Instability in Compressed Lithium from Fermi Surface Hot Spots. In: Physical Review Letters **96**, 047004-1-047004-4 (2006).

Kawska, A., J. Brickmann, R. Kniep, O. Hochrein and D. Zahn: An atomistic simulation scheme for modeling crystal formation from solution. In: The Journal of Chemical Physics **124**, 024513-1-024513-7 (2006).

Kimura, S., J. Sichelschmidt, J. Ferstl, C. Krellner, C. Geibel and F. Steglich: Optical observation of non-Fermi-liquid behavior in the heavy fermion state of $YbRh_2Si_2$. In: Physical Review B **74**, 132408-1-132408-4 (2006).

Kini, N. S., E. E. Kaul and C. Geibel: $Zn_2VO(PO_4)_2$: an S = 1/2 Heisenberg antiferromagnetic square lattice system. In: Journal of Physics: Condensed Matter **18**, 1303-1311 (2006).

Kini, N. S., A. M. Strydom, H. S. Jeevan, C. Geibel and S. Ramakrishnan: Transport and thermal properties of weakly ferromagnetic Sr_2IrO_4. In: Journal of Physics: Condensed Matter **18**, 8205-8216 (2006).

Kirchner, M., F. Gäbler, W. Schnelle, F. R. Wagner and R. Niewa: $(La_3Z_x)Al$ and $(Ce_3Z_x)Al$ with Z = C, N, O: preparation, physical properties and chemical bonding of metal-rich perovskites. In: Zeitschrift für Kristallographie **221**, 543-553 (2006).

Kirchner, M., W. Schnelle and R. Niewa: Inverse Perovskites $(Eu_3O)E$ with E = Sn, In - Preparation, Crystal Structures and Physical Properties. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 559-564 (2006).

Kirchner, M., W. Schnelle and R. Niewa: Inverse Perovskites $(RE_3N)Sn$ with RE = La, Ce, Pr, Nd, Sm: Preparation, Crystal Structures and Physical Properties. In: Zeitschrift für Naturforschung B **61**, 813-819 (2006).

Kiriy, A., V. Bocharova, G. Gorodyska, P. Simon, I. Mönch, D. Elefant and M. Stamm: Assembling Prussian Blue Nanoclusters along Single Polyelectrolyte Molecules. In: Metal-Containing and Metallosupramolecular Polymers and Materials. (Eds.) Schubert, Ulrich S.; Newkome, George R.; Manners, Ian. ACS SYMPOSIUM SERIES **928**. Oxford University Press, Washington, DC (2006) 500-513.

Köhler, U., R. Demchyna, S. Paschen, U. Schwarz and F. Steglich: Schottky anomaly in low-temperature specific heat of $Ba_{8-x}Eu_xGe_{43}\square_3$. In: Physica B **378-380**, 263-264 (2006).

Kohout, M., F. R. Wagner and Y. Grin: Atomic Shells From the Electron Localizability in Momentum Space. In: International Journal of Quantum Chemistry **106**, 1499-1507 (2006).

Kolenk'ko, Y. V., K. A. Kovnir, A. I. Gavrilov, A. V. Garshev, J. Frantti, O. I. Lebedev, B. R. Churagulov, G. V. Tendeloo and M. Yoshimura: Hydrothermal synthesis and characterization of nanorods of various titanates and titanium dioxide. In: Journal of Physical Chemistry B **110**, 4030-4038 (2006).

Kovnir, K. A., N. S. Abramchuk, J. V. Zaikina, M. Baitinger, U. Burkhardt, W. Schnelle, A. V. Olenev, O. I. Lebedev, G. v. Tendeloo, E. V. Dikarev and A. V. Shevelkov: $Ge_{40.0}Te_{5.3}I_8$: synthesis, crystal structure, and properties of a new clathrate-I compound. In: Zeitschrift für Kristallographie **221**, 527-532 (2006).

Kovnir, K. A., Y. V. Kolen'ko, S. Ray, J. Li, T. Watanabe, M. Itoh, M. Yoshimura and A. V. Shevelkov: A facile high-yield solvothermal route to tin phosphide Sn_4P_3. In: Journal of Solid State Chemistry **179**, 3756-3762 (2006).

Kovnir, K., J. Osswald, M. Armbrüster, R. Giedigkeit, T. Ressler, Y. Grin and R. Schlögl: PdGa and Pd_3Ga_7: Highly-Selective Catalysts for the Acetylene Partial Hydrogenation. In: Scientific bases for the preparation of heterogeneous catalysts : proceedings of the 9th International Symposium, Louvain-la-Neuve, Belgium, September 10-14, 2006. (Eds.) : International Symposium on the Scientific Bases for the Preparation of Heterogeneous Catalysts <9, 2006, Louvain-la-Neuve>. Studies in surface science and catalysis **162**. Elsevier, Amsterdam (2006) 481-488.

Kovrizhin, D. L., V. Yushankhai and L. Siurakshina: Bose-Einstein condensation of magnons in Cs_2CuCl_4: A dilute gas limit near the saturation magnetic field. In: Physical Review B **74**, 13, 134417-1-134417-6 (2006).

Kramer, M., U. Schwarz and S. Kaskel: Synthesis and properties of the metal-organic framework $Mo_3(BTC)_2$ (TUDMOF-1). In: Journal of Materials Chemsitry **16**, 2245-2248 (2006).

Krawiec, P., E. Kockrick, P. Simon, G. Auffermann and S. Kaskel: Platinum-Catalyzed Template Removal for the in Situ Synthesis of MCM-41 Supported Catalysts. In: Chemistry of Materials **18**, 2663-2669 (2006).

Kudla, C., R. Ramlau and G. Kreiner: Schmelzspinnen - ein Verfahren zur Synthese intermetallischer Verbindungen am Beispiel des Systems Ag-Mg. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2107-2107 (2006).

Küchler, R., P. Gegenwart, J. Custers, O. Stockert, N. Caroca-Canales, C. Geibel, J. G. Sereni and F. Steglich: Quantum Criticality in the Cubic Heavy-Fermion System $CeIn_{3-x}Sn_x$. In: Physical Review Letters **96**, 25, 256403-1-256403-4 (2006).

Küchler, R., P. Gegenwart, F. Weickert, N. Oeschler, T. Cichorek, M. Nicklas, N. Carocca-Canales, C. Geibel and F. Steglich: Thermal expansion and Grüneisen ratio near quantum critical points. In: Physica B **378-380**, 36-39 (2006).

Langari, A. and P. Thalmeier: Antiferromagnetic and spin-gap phases of the anisotropic Kondo necklace model. In: Physical Review B **74**, 024431-1-024431-8 (2006).

Larrea, J., M. B. Fontes, E. M. Baggio-Saitovitch, J. Plessel, M. M. Abd-Elmeguid, J. Ferstl, C. Geibel, A. Pereira, A. Jornada and M. A. Continentino: Phase diagram of the heavy fermion system $YbFe_2Ge_2$ under pressure. In: Physical Review B **74**, 140406-1-140406-4 (2006).

Leithe-Jasper, A., R. Cardoso-Gil, R. Ramlau and U. Burkhardt: Crystal structure of tetraytterbium septarhodium hexaantimony, $Yb_4Rh_7Sb_6$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 255-256 (2006).

Lengyel, E., G. Sparn, M. Nicklas, H. S. Jeevan, C. Geibel and F. Steglich: Heat capacity of $CeCu_2Si_2$ under hydrostatic pressure. In: Physica B **378-380**, 415-416 (2006).

Leoni, S., L. Craco, A. Ormeci and H. Rosner: The role of covalency in the orbital-order of $3d^1$ perovskites. In: Solid State Sciences **8**, 1138-1143 (2006).

Leoni, S. and D. Zahn: Nucleation, growth and domain formation in solid-solid phase transitions. In: Abstracts of Papers of the American Chemical Society **231**, Seq. No.: COMP 294 (2006).

Leoni, S. and D. Zahn: Full-Featured Simulation of Reconstructive Solid-Solid Phase Transitions. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2086-2086 (2006).

Liu, W., Y.-X. Huang, R. Cardoso, W. Schnelle and R. Kniep: $Na_6Cu_3\{B_6P_6O_{27}(O_2BOH)_3\} \cdot 2H_2O$: A Novel Copper Borophosphate with a Tubelike Borophosphate Anion. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2143-2143 (2006).

Liu, W., Y.-X. Huang, Y. Prots, W. Schnelle, H. Rosner and R. Kniep: $LiCu_2[BP_2O_8(OH)_2]$: A Lithium Copper Borophospate with Chains of distorted CuO_5 Square Pyramids. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2143-2143 (2006).

Löhneysen, H. v., H. Bartolf, S. Drotziger, C. Pfleiderer, O. Stockert, D. Souptel, W. Löser and G. Behr: Rare-earth intermetallic compounds at a magnetic instability. In: Journal of Alloys and Compounds **408-412**, 9-15 (2006).

Makongo, J. P. A., Y. Prots, U. Burkhardt, R. Niewa, C. Kudla and G. Kreiner: A case study of complex metallic alloy phases: structure and disorder phenomena of Mg-Pd compounds. In: Philosophical Magazine **86**, 427-433 (2006).

Maurer, D., H. Breitzke, K. Lüders, M. Baenitz, D. A. Pavlov and E. V. Antipov: High vortex mobility in Hg-1201. In: Journal of Physics: Conference Series **43**, 613-617 (2006).

Maurer, D., K. Lüders, H. Breitzke, M. Baenitz, D. A. Pavlov and E. V. Antipov: Weak to strong pinning crossover in Hg-1201. In: Physica C **445-448**, 219-223 (2006).

McMahon, M. I., R. J. Nelmes, U. Schwarz and K. Syassen: Composite incommensurate K-III and a commensurate form: Study of a high-pressure phase of potassium. In: Physical Review B **74**, 140102-1-140102-4 (2006).

Mehta, A., P. Höhn, W. Schnelle, V. Petzold, H. Rosner, U. Burkhardt and R. Kniep: $Ba_2[Ni_3N_2]$: A Low-Valent Nitridonickelate─Synthesis, Crystal Structure, and Physical Properties. In: Chemistry - A European Journal **12**, 1667-1676 (2006).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of potassium scandium (monophosphate-hydrogen-monoborate-monophosphate), $KSc[BP_2O_8(OH)]$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 251-252 (2006).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of rubidium scandium (monophosphate-hydrogen-monoborate-monophosphate), $RbSc[BP_2O_8(OH)]$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 253-254 (2006).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of calcium nickel(II) (monohydrogen-monophosphate-dihydrogenmonoborate-monophosphate), $CaNi[BP_2O_7(OH)_3]$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 429-430 (2006).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: $CsSc[B_2P_3O_{11}(OH)_3]$: A New Borophosphate Oligomer Containing Boron in CN = 3 and 4. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2131-2131 (2006).

Miclea, C. F., M. Nicklas, D. Parker, K. Maki, J. L. Sarrao, J. D. Thompson, G. Sparn and F. Steglich: Pressure Dependence of the Fulde-Ferrell-Larkin-Ovchinnikov State in $CeCoIn_5$. In: Physical Review Letters **96**, 117001-1-117001-4 (2006).

Miclea, C. F., M. Nicklas, J. L. Sarrao, G. Sparn, F. Steglich and J. D. Thompson: Possible Fulde-Ferrell-Larkin-Ovchinnikov superconducting state in $CeCoIn_5$: New evidence from pressure studies. In: Physica B **378-380**, 398-399 (2006).

Miclea, C. F., M. Nicklas, J. L. Sarrao, G. Sparn, F. Steglich and J. D. Thompson: Fulde-Ferrell-Larkin-Ovchinnikov Superconducting State in $CeCoIn_5$: New Evidence from Pressure Studies. In: AIP Conference Proceedings **850**, 713-714 (2006)

Müller, J., Y. Li, S. v. Molnár, Y. Ohno and H. Ohno: Single-electron switching in $Al_xGa_{1-x}As$/GaAs Hall devices. In: Physical Review B **74**, 125310-1-125310-7 (2006).

Natarajan, S., Y. Prots, B. Ewald, R. Niewa and R. Kniep: Polymorphism of $[Zn(2,2'\text{-bipy})(H_2PO_4)_2]_2$. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 37-41 (2006).

Nesper, R. and Y. Grin: Professor Hans Georg von Schnering celebrates his 75th birthday. In: Journal of Solid State Chemistry **179**, 2251-2251 (2006).

Nicklas, M., J. Ferstl, C. Geibel and F. Steglich: Non-Fermi-liquid behavoir and quantum criticality in $Yb_{0.9}La_{0.1}Rh_2Si_2$: electronic transport properties under high pressure. In: Physica B **378-380**, 159-160 (2006).

Niewa, R. and D. A. Zherebtsov: Comment on the Paper: "Synthesis and Electrochemical Study of Antifluorite-type Phases in the Li-M-N-O (M = Ti, V) Systems". In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 387-388 (2006).

Nouneh, K., V. Kityk, R. Viennois, S. Benet, S. Charar, S. Paschen and K. Ozga: Influence of an electron-phonon subsystem on specific heat and two-photon absorption of the semimagnetic semiconductors $Pb_{1-x}Yb_xX$ (X = S, Se, Te) near the semiconductor-isolator phase transformation. In: Physical Review B **73**, 035329-1-035329-8 (2006).

Ormeci, A., K. Koepernik and H. Rosner: First-principles electronic structure study of Sc-II. In: Physical Review B **74**, 104119-1-104119-5 (2006).

Ormeci, A., H. Rosner, F. R. Wagner, M. Kohout and Y. Grin: Electron Localization Function in Full-Potential Representation for Crystalline Materials. In: Journal of Physical Chemistry A **110**, 1100-1105 (2006).

Osswald, J., R. Giedigkeit, K. Kovnir, R. E. Jentoft, M. Armbrüster, F. Girgsdies, T. Ressler, Y. Grin and R. Schlögl: Rational catalyst design by using the concept of active-site isolation for the selective hydrogenation of acetylene: the Pd-Ga intermetallic compounds. (XXXIX. Jahrestreffen Deutscher Katalytiker, 2006-03-15 to 2006-03-17, Weimar, D).

Osswald, J., K. Kovnir, M. Armbrüster, R. E. Jentoft, R. Giedigkeit, T. Ressler, Y. Grin and R. Schlögl: Active-Site Isolated Pd-Ga Intermetallic Compounds for the Selective Hydrogenation of Acetylene. (Bunsentagung 2006, 2006-05-25 to 2006-05-27, Erlangen, D).

Otop, A., H.-H. Klauss, A. Bosse, R. W. A. Hendrikx, J. A. Mydosh and S. Süllow: Magnetic order studied via μSR in moderately disordered single-crystalline UPt_2Si_2. In: Physica B **378-380**, 987-988 (2006).

Otop, A., I. Maksimov, E.-W. Scheidt, J. A. Mydosh and S. Süllow: High- temperature resistivity of URh_2Ge_2. In: Physica B **378-380**, 371-372 (2006).

Panin, R. V., N. R. Khasanova, A. M. Abakumov, W. Schnelle, J. Hadermann and E. V. Antipov: Crystal structure and properties of the $Na_{1-x}Ru_2O_4$phase. In: Russian Chemical Bulletin, International Edition **55**, 10, 1717-1722 (2007).

Paschen, S., S. Budnyk, U. Köhler, Y. Prots, K. Hiebl, F. Steglich and Y. Grin: New type-I clathrates with ordered Eu distribution. In: Physica B **383**, 89-92 (2006).

Pikul, A. P., N. Caroca-Canales, M. Deppe, P. Gegenwart, J. G. Sereni, C. Geibel and F. Steglich: Non-Fermi-liquid behaviour close to the disappearance of ferromagnetism in $CePd_{1-x}Rh_x$. In: Journal of Physics: Condensed Matter **18**, L535-L542 (2006).

Pikul, A. P., D. Kaczorowski, Z. Bukowski, K. Gofryk, U. Burkhardt, Y. Grin and F. Steglich: Localization of magnetic moments of cerium in single crystalline $CePt_4In$. In: Physical Review B **73**, 092406-1-092406-4 (2006).

Quitmann, C. C., V. Bezugly, F. R. Wagner and K. Müller-Buschbaum: Condensation of Rare Earth Pyrazolates: The Dimeric, Trimeric and Polymeric Units $[Gd_2(Pz)_6(PzH)_4]$, $[Nd_3(Pz)_9(PzH)_2]$ and $_\infty^1[Eu(Pz)_2(PzH)_2]$. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 1173-1186 (2006).

Radu, T., H. Wilhelm, V. Yushankhai, D. Kovrizhin, R. Coldea, Z. Tylczynski, T. Lühmann and F. Steglich: Reply [Comment on "Bose-Einstein condensation of magnons in Cs_2CuCl_4" - Reply]. In: Physical Review Letters **96**, 189704-1-189704-1 (2006).

Richter, K. W. and Y. Prots: Crystal structure of cobalt aluminum silicide, $Co_{10+x}Al_{23}Si_{9-2x}$ (x = 0.14), the φ phase in the Co-Al-Si system. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 112-114 (2006).

Richter, K. W. and Y. Prots: Crystal structures of cobalt aluminum silicide, $Co_{19+x}Al_{43+y}Si_{12-y}$ (x = -0.14, y = 0.14, x = 0.49, y = -0.49), the γ phase in the Co-Al-Si system. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 115-118 (2006).

Roger, J., V. Babizhetskyy, R. Jardin, R. Guérin, C. Moinet, U. Burkhardt and J.-F. Haltet: Tin flux synthesis of rare-earth metal silicide compounds $RESi_{1.7}$ (RE = Dy, Ho): a novel ordered structure derived from the AIB_2 type. In: Zeitschrift für Kristallographie **221**, 502-510 (2006).

Rosner, H., D. Koudela, U. Schwarz, A. Handstein, M. Hanfland, I. Opahle, K. Koepernik, M. D. Kuz`min, K.-H. Müller, J. A. Mydosh and M. Richter: Magneto-elastic lattice collaps in YCo_5. In: Nature Physics **2**, 469-472 (2006).

Rother, A., M. Reibold, H. Lichte, T. Leisegang, A. A. Levin, P. Paufler, D. C. Meyer, S. Gemming, I. Chaplygin, G. Seifert, A. Ormeci and H. Rosner: X-ray investigation, high-resolution electron holography, and density functional calculations of single-crystalline $BaTiO_3$. In: Physical Review B **74**, 134116-1-134116-8 (2006).

Schlechte, A., R. Niewa, T. Cichorek, Y. Prots, M. Schmidt, R. Ramlau and R. Kniep: Beiträge zu ternären metallischen Zr Pniktidchalkogeniden. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2107-2107 (2006).

Schmidt, B., N. Shannon and P. Thalmeier: Two-dimensional frustrated spin systems in high magnetic fields. In: Journal of Physics: Conference Series **51**, 207-210 (2006).

Schüpp-Niewa, B., L. Shlyk, Y. Prots and G. Krabbes: Crystal structures of $Ba_5Ru_{3-x-y}Al_xGa_yO_{11}$ with x = 1.24(2), y = 0; x = 0.67(1), y = 0.450(6) and x = 0, y = 1.26(2). In: Journal of Alloys and Compounds **414**, 269-275 (2006).

Schüpp-Niewa, B., L. Shlyk, Y. Prots, R. Niewa and G. Krabbes: Crystal Structure of $Ba_3ZrRu_2O_9$ - a New 6H-$(cch)_2$ Perovskite. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 572-576 (2006).

Sereni, J. G., R. Küchler and C. Geibel: Peculiar quantum criticality in ferromagnetic $CePd_{1-x}Rh_x$. In: Physica B **378-380**, 648-649 (2006).

Shannon, N., T. Momoi and P. Sindzingre: Nematic Order in Square Lattice Frustrated Ferromagnets. In: Physical Review Letters **96**, 027213-1-027213-4 (2006).

Shpanchenko, R. V., E. E. Kaul, C. Geibel and E. V. Antipov: The new lead vanadylphosphate $Pb_2VO(PO_4)_2$. In: Acta Crystallographica Section C **62**, I88-I90 (2006).

Sichelschmidt, J., V. Voevodin, H. J. Im, S. Kimura, H. Rosner, A. Leithe-Jasper, W. Schnelle, U. Burkhardt, J. A. Mydosh, Y. Grin and F. Steglich: Optical Pseudogap from Iron States in Filled Skutterudites AFe_4Sb_{12} (A = Yb, Ca, Ba). In: Physical Review Letters **96**, 037406-1-037406-4 (2006).

Sichevych, O., R. Cardoso-Gil and Y. Grin: Refinement of the crystal structure of europium digallide, $EuGa_2$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 261-262 (2006).

Sichevych, O., Y. Prots and Y. Grin: Re-investigation of the crystal structure of trieuropium octagallide, $Eu_{3-x}Ga_{8+3x}$ (x = 0.12). In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 265-266 (2006).

Sichevych, O., Y. Prots, W. Schnelle, M. Schmidt and Y. Grin: Crystal structure of dieuropium trigallium iridium, Eu_2Ga_3Ir. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 263-264 (2006).

Sichevych, O., W. Schnelle, Y. Prots, U. Burkhardt and Y. Grin: Crystal Structure and Physical Properties of New Ternary Gallides $Eu_2Rh_3Ga_9$ and $Eu_2Ir_3Ga_9$. In: Zeitschrift für Naturforschung B **61**, 904-911 (2006).

Silhanek, A. V., N. Harrison, C. D. Batista, M. Jaime, A. Lacerda, H. Amitsuka and J. A. Mydosh: Γ_5 quasiparticles and avoided quantum criticality in U(Ru, Rh)$_2$Si$_2$. In: Physica B **378-380**, 373-375 (2006).

Simon, P., D. Zahn, H. Lichte and R. Kniep: Intrinsic Electric Dipole Fields and the Induction of Hierarchical Form Developments in Fluorapatite-Gelatine Nanocomposites: A General Principle for Morphogenesis of Biominerals?. In: Angewandte Chemie - International Edition **45**, 1911-1915 (2006).

Simon, P., D. Zahn, H. Lichte and R. Kniep: Intrinsic Electric Dipole Fields and the Induction of Hierarchical Form Developments in Fluorapatite-Gelatine Nanocomposites: A General Principle for Morphogenesis of Biominerals? In: Angewandte Chemie **118**, 1945-1949 (2006).

Singh, S., S. Wirth, M. Nicklas, M. Rams, A. Gladun, F. Steglich, H.-O. Lee and Z. Fisk: Hall effect measurements in the heavy-fermion system CeCoIn$_5$. In: Physica B **378-380**, 821-822 (2006).

Söderberg, K., M. Boström, Y. Kubota, T. Nishimatsu, R. Niewa, U. Häussermann, Y. Grin and O. Terasaki: Crystal structures and phase stability in pseudobinary $CaAl_{2-x}Zn_x$. In: Journal of Solid State Chemistry **179**, 2690-2697 (2006).

Somer, M., U. Aydemir, M. Baitinger and H. G. v. Schnering: Vibrational Spectra of Cluster Anions.2[1] Vibrational Spectra of Compounds with the Cluster Anions$[E_4]^{4-}$: M_4E_4 (M = K, Rb, Cs; E = Ge, Sn) and ß-Na_4Sn_4. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 1281-1286 (2006).

Sparn, G., O. Stockert, F. M. Grosche, H. Q. Yuan, E. Faulhaber, C. Geibel, M. Deppe, H. S. Jeevan, M. Loewenhaupt, G. Zwicknagl and F. Steglich: Superconducting phases and quantum criticality in $CeCu_2Si_2$. In: Journal of Physics and Chemistry of Solids **67**, 529-534 (2006).

Steglich, F.: From Kondo impurities to heavy-fermion superconductivity and quantum critical points. In: Physica B **378-380**, 7-12 (2006).

Steglich, F.: Unconventional forms of superconductivity and quantum criticality in heavy-electron metals. In: physica status solidi, pss Proceedings : The European Conference on the Physics of Magnetism (PM'05). (Eds.) B. Idzikowski, J. Barnás, R. Micnas, A. Jezierski, A. Szajek, R. J. Wojciechowski. Wiley-VCH, Weinheim (2006) XVI-XVI.

Stockert, O., D. Andreica, A. Amato, H. S. Jeevan, C. Geibel and F. Steglich: Magnetic order and superconductivity in single-crystalline $CeCu_2Si_2$. In: Physica B **374-375**, 167-170 (2006).

Stockert, O., E. Faulhaber, K. Schmalzl, W. Schmidt, H. S. Jeevan, M. Deppe, C. Geibel, T. Cichorek, T. Nakanishi, M. Loewenhaupt and F. Steglich: Peculiarities of the antiferromagnetism in $CeCu_2Si_2$. In: Journal of Physics: Conference Series **51**, 211-218 (2006).

Stockert, O., M. M. Koza, J. Ferstl, A. P. Murani, C. Geibel and F. Steglich: Crystalline electric field excitations of the non-Fermi-liquid $YbRh_2Si_2$. In: Physica B **378-380**, 157-158 (2006).

Strydom, A. M., S. Paschen and F. Steglich: Thermal and electronic transport in the intermediate-valent compound CeRhIn. In: Physica B **378-380**, 793-794 (2006).

Strydom, A. M., A. Pikul, F. Steglich and S. Paschen: Possible field-induced quantum criticality in $Ce_3Pd_{20}Si_6$. In: Journal of Physics, Conference Series 51, 239-242 (2006).

Tanh Jeazet, H. B., P. W. Menezes, S. Hoffmann, Y. Prots and R. Kniep: Crystal structures of lead(II) cobalt(II) (monophosphate-hydrogenmonoborate-monophosphate), $PbCo[BP_2O_8(OH)]$, and lead(II) zinc(II) (monophosphate-hydrogenmonoborate-monophosphate), $PbZn[BP_2O_8(OH)]$. In: Zeitschrift für Kristallographie - New Crystal Structures **221**, 431-433 (2006).

Thalmeier, P.: Triplet superconductivity through quadrupolar exciton exchange in $PrOs_4Sb_{12}$. In: Physica B **378-380**, 261-262 (2006).

Thalmeier, P.: Heavy Electron Unconventional Superconductivity in UPd_2Al_3 and $PrOs_4Sb_{12}$. In: Journal of the Physical Society of Japan / Supplement **75**, 204-208 (2006).

Thalmeier, P. and P. McHale: Magnetic-exciton-mediated superconductivity in UPd_2Al_3. In: Journal of Physics and Chemistry of Solids **67**, 329-332 (2006).

Thomas, A., R. Kniep and O. Hochrein: Control of the Crystal Growth of Calcium Oxalates. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2109-2109 (2006).

Thompson, J. D., M. Nicklas, V. A. Sidorov, E. D. Bauer, R. Movshovich, N. J. Curro and J. L. Sarrao: Interplay of magnetism, structure and superconductivity in heavy-fermion systems $CeMIn_5$ and $PuMGa_5$. In: Journal of Alloys and Compounds **408-412**, 16-20 (2006).

Tlatlik, H., P. Simon, A. Kawska, D. Zahn and R. Kniep: Biomimetische Fluorapatit-Gelatine-Nanokomposite: Vorstrukturierung von Gelatine-Matrices durch Ionenimprägnierung und Auswirkungen auf die Formentwicklung. In: Angewandte Chemie **118**, 1939-1944 (2006).

Tlatlik, H., P. Simon, A. Kawska, D. Zahn and R. Kniep: Biomimetic Fluorapatite-Gelatine Nanocomposites: Pre-Structuring of Gelatine Matrices by Ion Impregnation and Its Effect on Form Development. In: Angewandte Chemie - International Edition **45**, 1905-1910 (2006).

Tokiwa, Y., P. Gegenwart, Z. Hossain, J. Ferstl, G. Sparn, C. Geibel and F. Steglich: Low-temperature high-field magnetization of $YbRh_2Si_2$ and $YbIr_2Si_2$ under hydrostatic pressure. In: Physica B **378-380**, 746-747 (2006).

Tokiwa, Y., A. Pikul, P. Gegenwart, F. Steglich, S. L. Bud'ko and P. C. Canfield: Low-temperature thermodynamic properties of the heavy-fermion compound YbAgGe close to the field-induced quantum critical point. In: Physical Review B **73**, 094435-1-094435-6 (2006).

Tokiwa, Y., T. Radu, R. Coldea, H. Wilhelm, Z. Tylczynski and F. Steglich: Magnetic phase transitions in the two-dimensional frustrated quantum antiferromagnet Cs_2CuCl_4. In: Physical Review B **73**, 134414-1-134414-7 (2006).

Tran, V. H., S. Paschen, F. Steglich, R. Troć and Z. Bukowski: Hall effect in the low charge-carrier density ferromagnet $UCo_{0.5}Sb_2$. In: physica status solidi B **243**, 94-97 (2006).

Ushak, S., E. Spodine, E. Le Fur, D. Venegas-Yazigi, J.-Y. Pivan, W. Schnelle, R. Cardoso-Gil and R. Kniep: Two New Hybrid Organic/Inorganic Copper(II)-Oxovanadate(V) Diphosphonates: $[Cu_2(phen)_2(O_3PCH_2PO_3)(V_2O_5)(H_2O)] \cdot H_2O$ and $[Cu_2(phen)_2(O_3P(CH_2)_3PO_3)(V_2O_5)] \cdot C_3H_8$. Synthesis, Structure, and Magnetic Properties. In: Inorganic Chemistry **45**, 393-5398 (2006).

Vasylechko, L., W. Schnelle, M. Schmidt, U. Burkhardt, H. Borrmann, U. Schwarz and Y. Grin: Valence behaviour of ytterbium in $YbNiGa_4$. In: Journal of Alloys and Compounds **416**, 35-42 (2006).

Wang, X., K. Kunc, I. Loa, U. Schwarz and K. Syassen: Effect of pressure on the Raman modes of antimony. In: Physical Review B **74**, 13, 134305-1-134305-10 (2006).

Weickert, F., P. Gegenwart, J. Ferstl, C. Geibel and F. Steglich: Low-temperature electrical resistivity of $Yb_{1-x}La_xRh_2Si_2$. In: Physica B **378-380**, 72-73 (2006).

Weickert, F., P. Gegenwart, H. Won, D. Parker and K. Maki: In-plane angular dependence of the upper critical field in $CeCoIn_5$. In: Physical Review B **74**, 13, 134511-1-134511-5, Seq. No.: 134511 (2006).

Werheit, H., Y. Paderno, V. Filippov, V. Paderno, A. Pietraszko, M. Armbrüster and U. Schwarz: Peculiarities in the Raman spectra of ZrB_{12} and LuB_{12} single crystals. In: Journal of Solid State Chemistry **179**, 9, 2761-2767 (2006).

Wilhelm, H., V. Zlatic and D. Jaccard: Thermoelectrical power of heavy fermion compounds. In: Physica B **378-380**, 644-647 (2006).

Wosnitza, J., G. Goll, A. D. Bianchi, B. Bergk, N. Kozlova, I. Opahle, S. Elgazzar, M. Richter, O. Stockert, H. v. Löhneysen, T. Yoshino and T. Takabatake: Magnetic-field- and temperature-dependent Fermi surface of CeBiPt. In: New Journal of Physics **8**, 1-14, Seq. No.: 174 (2006).

Wosylus, A., Y. Prots, U. Burkhardt, W. Schnelle, U. Schwarz and Y. Grin: Breaking the Zintl rule: High-pressure synthesis of binary $EuSi_6$ and its ternary derivative $EuSi_{6-x}Ga_x$ ($0 \leq x \leq 0.6$). In: Solid State Sciences **8**, 773-781 (2006).

Wosylus, A., Y. Prots, U. Burkhardt, W. Schnelle, U. Schwarz and Y. Grin: High-pressure Synthesis of Strontium Hexasilicide. In: Zeitschrift für Naturforschung B **61**, 1485-1492 (2006).

Yokosawa, T., K. Söderberg, M. Boström, D. Grüner, G. Kreiner and O. Terasaki: Microscopic structures of Laves phases and structurally related compounds: a transmission electron microscopy study. In: Zeitschrift für Kristallographie **221**, 357-374 (2006).

Yuan, H. Q., F. M. Grosche, M. Deppe, G. Sparn, C. Geibel and F. Steglich: Non-Fermi Liquid states in the pressurized $CeCu_2(Si_{1-x}Ge_x)_2$ system: Two critical points. In: Physical Review Letters **96**, 047008-1-4, (2006).

Yuan, H. Q., M. Nicklas, Z. Hossain, C. Geibel and F. Steglich: Quantum phase transition in the heavy-fermion compound $YbIr_2Si_2$. In: Physical Review B **74**, 212403-14 (2006).

Zahn, D.: Exploring the Mechanisms of Reactions in Solution from Transition Path Sampling Molecular Dynamics Simulations. In: Journal of Chemical Theory and Computation **2**, 107-114 (2006).

Zahn, D.: Competing Evaporation and Condensation Processes during the Boiling of Methane. In: Journal of Physical Chemistry B 110, 19601-19604 (2006).

Zahn, D. and O. Hochrein: The Role of Substitutional Defects in Order/Disorder Phenomena OH^- Ions in Hydroxyapatite. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 1, 79-83 (2006).

Zahn, D. and A. Kawska: Investigation of Crystal Formation from Molecular Dynamics Simulation. In: Zeitschrift für Anorganische und Allgemeine Chemie **632**, 2085-2085 (2006).

Zahn, D. and S. Leoni: Mechanisms and Nucleation Characteristics of the Pressure-Induced B1 - B2 Transition in Potassium Halides: A Question of Ion Hardness and Softness. In: Journal of Physical Chemistry B **110**, 22, 10873-10877 (2006).

Zerec, I., B. Schmidt and P. Thalmeier: Kondo lattice model studied with the finite temperature Lanczos method. In: Physical Review B **73**, 24, 245108-1-245108-6 (2006).

Zerec, I., B. Schmidt and P. Thalmeier: Finite temperature properties of Kondo lattice-type model with exact diagonalization. In: Physica B **378-380**, 702-703 (2006).

2007

Alekseeva, A. M., A. M. Abakumov, P. S. Chizhov, A. Leithe-Jasper, W. Schnelle, Y. Prots, J. Hadermann, E. V. Antipov and Y. Grin: Ternary Magnesium Rhodium Boride $Mg_2Rh_{1-x}B_{6+2x}$ with a Modified Y_2ReB_6-Type Crystal Structure. In: Inorganic Chemistry **46**, 7378-7386 (2007).

Althues, H., P. Simon and S. Kaskel: Transparent and luminescent YVO_4 : Eu/polymer nanocomposites prepared by in situ polymerization. In: Journal of Materials Chemsitry **17**, 758-765 (2007).

Anand, V. K., A. Chaudhuri, S. K. Dhar, C. Geibel and Z. Hossain: Magnetic behavior of $PrPd_2B_2C$. In: Physica C **460-462**, 785-786 (2007).

Anand, V. K., C. Geibel and Z. Hossain: Superconducting and magnetic properties of Pt-based borocarbides RPt_2B_2C (R = La, Ce, Pr). In: Physica C **460-462**, 636-638 (2007).

Anand, V. K., Z. Hossain, G. Behr, G. Chen, M. Nicklas and C. Geibel: Magnetocrystalline anisotropy and antiferromagnetic phase transition in $PrRh_2Si_2$. In: Journal of Physics: Condensed Matter **19**, 506205-1-506205-7 (2007).

Anand, V. K., Z. Hossain and C. Geibel: Magnetic properties of $PrPd_2Si_2$ and $PrPt_2Si_2$. In: Journal of Physics: Condensed Matter **19**, 486207-1-486207-6 (2007).

Anand, V. K., A. K. Nandy, S. K. Dhar, C. Geibel and Z. Hossain: Magnetic and transport properties of $Pr_2Ni_3Ge_5$. In: Journal of Magnetism and Magnetic Materials **313**, 164-167 (2007).

Armbrüster, M., M. Schmidt, R. Cardoso-Gil, H. Borrmann and Y. Grin: Crystal structures of iron distannide, $FeSn_2$, and cobalt distannide, $CoSn_2$. In: Zeitschrift für Kristallographie-New Crystal Structures **222**, 83-84 (2007).

Armbrüster, M., W. Schnelle, U. Schwarz and Y. Grin: Chemical Bonding in $TiSb_2$ and VSb_2: A Quantum Chemical and Experimental Study. In: Inorganic Chemistry **46**, 6319-6328 (2007).

Arndt, J., N. Caroca-Canales, M. Dörr, C. Geibel, O. Stockert and M. Loewenhaupt: Metamagnetic-like transition in the cubic heavy fermion compound $CeIn_{3-x}Sn_x$. In: Physica C **460-462**, 684-685 (2007).

Aussieker, T., H.-L. Keller, T. Oldag, Y. Prots, M. Ruck and A. Wosylus: Syntheses and Crystal Structures of the Thallium(I) Iodobismuthates(III) $Tl_7Bi_3I_{16}$ and Tl_3BiI_6. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 603-609 (2007).

Baitinger, M., H. G. v. Schnering, J.-H. Chang, K. Peters and Y. Grin: Crystal structure of sodium barium silicide (2:6:46), $Na_2Ba_6Si_{46}$. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 87-88 (2007).

Baldoni, M., S. Leoni, A. Sgamellotti, G. Seifert and F. Mercuri: Formation, Structure, and Polymorphism of Novel Lowest-Dimensional AgI Nanoaggregates by Encapsulation in Carbon Nanotubes. In: Small **3**, 1730-1734 (2007).

Baranov, A., M. Kohout, F. R. Wagner, Y. Grin and W. Bronger: Spatial chemistry of the aluminium-platinum compounds: a quantum chemical approach. In: Zeitschrift für Kristallographie **222**, 527-531 (2007).

Bendyna, J. K., P. Höhn and R. Kniep: Crystal structure of pentacalcium bis(dinitridocobaltate(I)), $Ca_5[CoN_2]_2$, and a note on "Ca_3CoN_3". In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 165-166 (2007).

Bendyna, J. K., P. Höhn, Y. Prots and R. Kniep: Crystal structure of barium tetracalcium bis(dinitridocobaltate(I)), $BaCa_4[CoN_2]_2$. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 167-168 (2007).

Bendyna, J. K., P. Höhn, W. Schnelle and R. Kniep: $(Sr_6N)[CoN_2][CN_2]_2$: The first low-valency nitride-metalate carbodiimide. In: Science and Technology of Advanced Materials **8**, 393-398 (2007).

Bentien, A., S. Budnyk, Y. Prots, Y. Grin and F. Steglich: Structure and transport properties of new rare-earth gallium telluride $YbGa_6Te_{10}$. In: Journal of Alloys and Compounds **442**, 345-347 (2007).

Bentien, A., S. Johnsen, G. K. H. Madsen, B. B. Iversen and F. Steglich: Colossal Seebeck coefficient in strongly correlated semiconductor $FeSb_2$. In: Europhysics Letters **80**, 17008-p1-17008-p5 (2007).

Bentien, A., S. Johnsen, G. K. H. Madsen, B. B. Iversen and F. Steglich: Colossal Seebeck coefficient in semiconducting $FeSb_2$. In: Europhysics news **38**, 19-19 (2007).

Böhme, B., U. Aydemir, A. Ormeci, W. Schnelle, M. Baitinger and Y. Grin: Synthesis of the intermetallic clathrate $Na_2Ba_6Si_{46}$ by oxidation of Na_2BaSi_4 with HCl. In: Science and Technology of Advanced Materials **8**, 410-415 (2007).

Böhme, B., A. Guloy, Z. Tang, W. Schnelle, U. Burkhardt, M. Baitinger and Y. Grin: Oxidation of M_4Si_4 (M = Na, K) to Clathrates by HCl or H_2O. In: Journal of the American Chemical Society **129**, 5348-5349 (2007).

Bonville, P., M. Rams, K. Królas, J.-P. Sanchez, P. C. Canfield, O. Trovarelli and C. Geibel: Magnetic structures and crystal field in the heavy electron materials YbAgGe and YbPtIn. In: European Physical Journal B **55**, 77-84 (2007).

Boulfelfel, S. E., D. Zahn, Y. Grin and S. Leoni: Walking the Path from B4- to B1-Type Structures in GaN. In: Physical Review Letters **99**, 125505-1-125505-4 (2007).

Brando, M., D. Moroni-Klementowicz, C. Albrecht, W. Duncan, D. Grüner, R. Ballou, B. Fåk and F. M. Grosche: Logarithmic Fermi-liquid breakdown in $Nb_{1.02}Fe_{1.98}$. In: Journal of Magnetism and Magnetic Materials **310**, 852-854 (2007).

Bronger, W., A. Baranov, F. R. Wagner and R. Kniep: Atomvolumina und Ladungsverteilungen in Nitridometallen. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 2553-2557 (2007).

Brüning, E. M., M. Baenitz, A. A. Gippius, A. M. Strydom, F. Steglich and R. E. Walstedt: ^{119}Sn NMR on the correlated semi-metal $CeRu_4Sn_6$. In: Journal of Magnetism and Magnetic Materials **310**, 393-395 (2007).

Capan, C., S. Singh, S. Nair, M. Nicklas, H. Lee, J. F. DiTusa, Z. Fisk, S. Wirth and F. Steglich: Crossover from Landau Fermi liquid to non-Fermi liquid behavior: Indications from Hall measurements on $CeCoIn_5$. In: Physica C **460-462**, 678-679 (2007).

Carrillo-Cabrera, W., U. Aydemir, M. Somer, A. Kircali, T. F. Fässler and S. D. Hoffmann: Cs_4Ge_9·en: A novel compound with $[Ge_9]^{4-}$ Clusters - Synthesis, Crystal Structure and Vibrational Spectra. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 1575-1580 (2007).

Chang, J., I. Eremin, P. Thalmeier and P. Fulde: Eliashberg theory of superconductivity and inelastic rare-earth impurity scattering in the filled skutterudite $La_{1-x}Pr_xOs_4Sb_{12}$. In: Physical Review B **76**, 220510-1-220510-4 (2007).

Chang, J., I. Eremin, P. Thalmeier and P. Fulde: Theory of magnetic excitons in the heavy-fermion superconductor UPd_2Al_3. In: Physical Review B **75**, 024503-1-024503-5 (2007).

Cichorek, T., D. Gnida, R. Niewa, A. Schlechte, M. Schmidt, Y. Prots, R. Ramlau, Z. Henkie, R. Kniep and F. Steglich: Resistivity Anomaly in Structurally Disordered PbFCl-type Arsenide Selenides. In: Journal of Low Temperature Physics **147**, 309-319 (2007).

Craco, L., S. Leoni, M. S. Laad and H. Rosner: Orbital-selective charge dynamics in $YTiO_3$ across the magnetic transition: Combined local-density approximation and dynamical mean-field theory. In: Physical Review B **76**, 115128-1-115128-6 (2007).

Danzenbächer, S., Y. Kucherenko, D. V. Vyalikh, M. Holder, C. Laubschat, A. N. Yaresko, C. Krellner, Z. Hossain, C. Geibel, X. J. Zhou, W. L. Lang, N. Mannella, Z. Hussain, Z.-X. Shen, M. Shi, L. Patthey and S. L. Molodtsov: Momentum dependence of 4*f* hybridization in heavy-fermion compounds: Angle-resolved photoemission study of $YbIr_2Si_2$ and $YbRh_2Si_2$. In: Physical Review B **75**, 045109-1-045109-11 (2007).

Dashjav, E., G. Kreiner, W. Schnelle, F. R. Wagner, R. Kniep and W. Jeitschko: Ternary rare earth and actinoid transition metal carbides viewed as carbometalates. In: Journal of Solid State Chemistry **180**, 636-653 (2007).

Dashjav, E., G. Kreiner, F. R. Wagner, W. Schnelle and R. Kniep: Crystal and Electronic Structures of the New Carbomolybdates(III), $RE_2[Mo_2C_3]$ with RE=Ce, Sm, Tb, and Dy. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 1349-1358 (2007).

Dashjav, E., Y. Prots, G. Kreiner, W. Schnelle, F. R. Wagner and R. Kniep: $Nd_2[MoC_2]$ and $RE_2[WC_2]$, RE = Ce, Pr, Nd: New carbometalates with $Pr_2[MoC_2]$ structure type. In: Science and Technology of Advanced Materials **8**, 364-370 (2007).

Dedkov, Y. S., S. L. Molodtsov, H. Rosner, A. Leithe-Jasper, W. Schnelle, M. Schmidt and Y. Grin: Divalent state of ytterbium in $YbFe_4Sb_{12}$ filled skutterudite. In: Physica C **460 - 462**, 698-699 (2007).

Demchyna, R., Y. Prots and U. Schwarz: Crystal structures of titanium palladium germanium, TiPdGe, two polymorphic modifications. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 173-174 (2007).

Doert, T., C. Graf, P. Schmidt, I. G. Vasilieva, P. Simon and W. Carrillo-Cabrera: The Pr_2Se_3-$PrSe_2$ system: Studies of the phase relationships and the modulated crystal structure of $PrSe_{1.85}$. In: Journal of Solid State Chemistry **180**, 496-509 (2007).

Donath, J. G., P. Gegenwart, F. Steglich, E. D. Bauer and J. L. Sarrao: Pressure effect on antiferromagnetism in $CeRhIn_{5-x}Sn_x$ studied by thermal expansion. In: Physica C **460-462**, 661-662 (2007).

Dóra, B. and P. Thalmeier: Reentrant Kondo effect in Landau-quantized graphene: Influence of the chemical potential. In: Physical Review B **76**, 115435-1-115435-6 (2007).

Dóra, B. and P. Thalmeier: Magnetotransport and thermoelectricity in Landau-quantized disordered graphene. In: Physical Review B **76**, 035402-1-035402-9 (2007).

Drechsler, S.-L., J. Richter, R. Kuzian, J. Málek, N. Tristan, B. Büchner, A. S. Moskvin, A. A. Gippius, A. Vasiliev, O. Volkova, A. Prokofiev, H. Rakoto, J.-M. Broto, W. Schnelle, M. Schmitt, A. Ormeci, C. Loison and H. Rosner: Helimagnetism and weak ferromagnetism in edge-shared chain cuprates. In: Journal of Magnetism and Magnetic Materials **316**, 306-312 (2007).

Drechsler, S.-L., N. Tristan, R. Klingeler, B. Büchner, J. Richter, J. Málek, O. Volkova, A. Vasiliev, M. Schmitt, A. Ormeci, C. Loison, W. Schnelle and H. Rosner: Helimagnetism and weak ferromagnetism in $NaCu_2O_2$ and related frustrated chain cuprates. In: Journal of Physics: Condensed Matter **19**, 145230-1-145230-7 (2007).

Drechsler, S.-L., O. Volkova, A. N. Vasiliev, N. Tristan, J. Richter, M. Schmitt, H. Rosner, J. Málek, R. Klingeler, A. A. Zvyagin and B. Büchner: Frustrated Cuprate Route from Antiferromagnetic to Ferromagnetic Spin-1/2Heisenberg Chains: Li_2ZrCuO_4 as a Missing Link near the Quantum Critical Point. In: Physical Review Letters **98**, 077202-1-077202-4 (2007).

Ehm, D., S. Hüfner, F. Reinert, J. Kroha, P. Wölfle, O. Stockert, C. Geibel and H. von Löhneysen: High-resolution photoemission study on low-T_K Ce systems: Kondo resonance, crystal field structures, and their temperature dependence. In: Physical Review B **76**, 045117-1-045117-14 (2007).

Ehrlich, H., M. Krautter, T. Hanke, P. Simon, C. Knieb, S. Heinemann and H. Worch: First Evidence of the Presence of Chitin in Skeletons of Marine Sponges Part II. Glass Sponges (Hexactinellida: Porifera). In: Journal of Experimental Zoology / B **308**, 473-483 (2007).

Ehrlich, H., M. Maldonado, K.-D. Spindler, C. Eckert, T. Hanke, R. Born, C. Goebel, P. Simon, S. Heinemann and H. Worch: First Evidence of Chitin as a Component of the Skeletal Fibers of Marine Sponges Part I. Verongidae (Demospongia: Porifera). In: Journal of Experimental Zoology / B **308**, 347-356 (2007).

Ernst, S., S. Wirth, M. Rams, V. Dolocan and F. Steglich: Tip preparation for usage in an ultra-low temperature UHV scanning tunneling microscope. In: Science and Technology of Advanced Materials **8**, 347-351 (2007).

Ewald, B., Y.-X. Huang and R. Kniep: Structural Chemistry of Borophosphates, Metalloborophosphates, and Related Compounds. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 1517-1540 (2007).

Faulhaber, E., O. Stockert, K. Schmalzl, H. S. Jeevan, M. Deppe, C. Geibel, F. Steglich and M. Loewenhaupt: Spatial separation of antiferromagnetism and superconductivity in $CeCu_2Si_2$. In: Journal of Magnetism and Magnetic Materials **310**, 295-297 (2007).

Feuerbacher, M., C. Thomas, J. P. A. Makongo, S. Hoffmann, W. Carrillo-Cabrera, R. Cardoso, Y. Grin, G. Kreiner, J.-M. Joubert, T. Schenk, J. Gastaldi, H. Nguyen-Thi, N. Mangelinck-Noël, B. Billia, P. Donnadieu, A. Czyrska-Filemonowicz, A. Zielinska-Lipiec, B. Dubiel, T. Weber, P. Schaub, G. Krauss, V. Gramlich, J. Christensen, S. Lidin, D. Fredrickson, M. Mihalkovic, W. Sikora, J. Malinowski, S. Brühne, T. Proffen, W. Assmus, M. d. Boissieu, F. Bley, J.-L. Chemin, J. Schreuer and W. Steurer: The Samson phase, β-Mg_2Al_3, revisited. In: Zeitschrift für Kristallographie **222**, 259-288 (2007).

Frenzel, J., J.-O. Joswig and G. Seifert: Optical Excitations in Cadmium Sulfide Nanoparticles. In: Journal of Physical Chemistry C **111**, 10761-10770 (2007).

Gäbler, F. and R. Niewa: Stacking Design of Inverse Perovskites: The Systems $(Sr_{3-x}Ba_xN)E$, E = Bi, Sb. In: Inorganic Chemistry **46**, 3, 859-865 (2007).

Gäbler, F., Y. Prots and R. Niewa: First Observation of an Inverse Ruddlesden-Popper Series: $(A_{3n+1}ON_{n-1})Bi_{n+1}$ with A = Sr, Ba and n = 1, 3. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 1, 93-97 (2007).

Gamza, M., W. Schnelle, A. Slebarski and H. Rosner: Electronic structure of $CeRh_2Sn_4$. In: Materials Science-Poland **25**, 2, 269-274 (2007).

Gegenwart, P., T. Westerkamp, C. Krellner, Y. Tokiwa, S. Paschen, C. Geibel, F. Steglich, E. Abrahams and Q. Si: Multiple energy scales at a quantum critical point. In: Science **315**, 969-971 (2007).

Georgiou, M., G. Varelogiannis and P. Thalmeier: Interplay of staggered SC with CDW in a fully polarized ferromagnet. In: Physica C **460 - 462**, 1033-1034 (2007).

Gerlach, S., R. Cardoso-Gil, E. Milke and M. Schmidt: Zum chemischen Transport und zur Kristallstruktur von Seltenerdmetallantimonaten(V) - $SESbO_4$. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 83-92 (2007).

Gippius, A. A., E. N. Morozova, K. S. Okhotnikov, M. Baenitz, W. Liu, Y.-H. Huang, M. Schmitt and H. Rosner: NMR study of low dimensional spin system $Cu_2(PO_3)_2CH_2$. In: Physica C **460-462**, 927-928 (2007).

Gippius, A. A., E. N. Morozova, K. S. Okhotnikov, A. S. Moskvin, M. Baenitz and S. Drechsler: Comparative NMR study of incommensurate helix magnetic order in quasi-1D chain cuprates $LiCu_2O_2$ and $NaCu_2O_2$. In: Journal of Magnetism and Magnetic Materials **316**, 298-301 (2007).

Gofryk, K., D. Kaczorowski, T. Plackowski, J. Mucha, A. Leithe-Jasper, W. Schnelle and Y. Grin: Magnetic, transport, and thermal properties of the half-Heusler compounds ErPdSb and YPdSb. In: Physical Review B **75**, 224426-1-224426-11 (2007).

Goll, G., O. Stockert, M. Prager, T. Yoshino and T. Takabatake: Low-energy excitations in CeBiPt. In: Journal of Magnetism and Magnetic Materials **310**, 1773-1774 (2007).

Grin, Y., R. Kniep and F. Steglich: Chemical physics of solids. In: Science and Technology of Advanced Materials **8**, 339-340 (2007).

Grin, Y. and J. C. Schuster: Crystal structure of rhenium aluminum (1:4.01), Re_8Al_{33-x} (x = 0.93), the low-temperature phase of $ReAl_4$. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 85-86 (2007).

Grin, Y., U. Schwarz and W. Steurer: Crystal Structure and Chemical Bonding. In: Alloy Physics. (Eds.) Pfeiler, Wolfgang. Wiley-VCH, Weinheim (2007) 19-62.

Gu, Q. F., G. Krauss, Y. Grin and W. Steurer: Comparative high-pressure study and chemical bonding analysis of Rh_3Bi_{14} and isostructural $Rh_3Bi_{12}Br_2$. In: Journal of Solid State Chemistry **180**, 940-948 (2007).

Guo, Y., Y. Grin, W. Schnelle and W. Li: Structure and magnetic properties of $EuMn_xGa_{3-x}$. In: Journal of Applied Physics **101**, 09N505-1-09N505-3 (2007).

Guritanu, V., D. van der Marel, J. Teyssier, T. Jarlborg, H. Wilhelm, M. Schmidt and F. Steglich: Optical evidence for heavy charge carriers in FeGe. In: Physical Review B **75**, 155114-1-155114-4 (2007).

Haarmann, F., M. Armbrüster and Y. Grin: Local Ordering in the Intermetallic Compound $Cu_{1-x}Al_2$ Studied by NMR Spectroscopy. In: Chemistry of Materials **19**, 1147-1153 (2007).

Haas, S., K. Maki, T. Dahm and P. Thalmeier: Anatomy of Gossamer superconductivity. In: Current Applied Physics **7**, 64-67 (2007).

Hasselbach, K., V. O. Dolocan, P. Lejay and D. Mailly: Observation of vortex coalescence, vortex chains and crossing vortices in the anisotropic spin-triplet superconductor Sr_2RuO_4. In: Physica C **460-462**, 277-280 (2007).

Henle, J., P. Simon, A. Frenzel, S. Scholz and S. Kaskel: Nanosized BiOX (X = Cl, Br, I) Particles Synthesized in Reverse Microemulsions. In: Chemistry of Materials **19**, 366-373 (2007).

Hong, Z. R., B. Maennig, R. Lessmann, M. Pfeiffer, K. Leo and P. Simon: Improved efficiency of zinc phthalocyanine/C_{60} based photovoltaic cells via nanoscale interface modification. In: Applied Physics Letters **90**, 203505-1-203505-3 (2007).

Huang, Y.-X., O. Hochrein, D. Zahn, Y. Prots, H. Borrmann and R. Kniep: Control of Channel Shapes in a Microporous Manganese(II)-Borophosphate Framwork by Variation of Size and Shape of Organic Template Cations. In: Chemistry - A European Journal **13**, 1737-1745 (2007).

Huang, Y.-X., Y. Prots, W. Schnelle and R. Kniep: A new borophosphate chain anion in an organotemplated iron(III)borophosphate: Synthesis, crystal structure and magnetic properties of $(C_4H_{12}N_2)_3Fe_6^{III}(H_2O)_4[B_6P_{12}O_{50}(OH)_2] \cdot 2H_2O$. In: Science and Technology of Advanced Materials **8**, 399-405 (2007).

Isaeva, A. A., A. I. Baranov, T. Doert, B. A. Popovkin, V. A. Kulbachinskii, P. V. Gurin, V. G. Kytin and V. I. Shtanov: $Ni_{7-\delta}SnTe_2$: Modulated crystal structure refinement, electronic structure and anisotropy of electroconductivity. In: Journal of Solid State Chemistry **180**, 221-232 (2007).

Janson, O., R. O. Kuzian, S.-L. Drechsler and H. Rosner: Electronic structure and magnetic properties of the spin-1/2 Heisenberg magnet Bi_2CuO_4. In: Physical Review B **76**, 115119-1-115119-9 (2007).

Janson, O. and H. Rosner: Electronic structure and magnetic properties of Bi_2CuO_4. In: Physica C **460-462**, 458-459 (2007).

Jung, W., J. Lörincz, R. Ramlau, H. Borrmann, Y. Prots, F. Haarmann, W. Schnelle, U. Burkhardt, M. Baitinger and Y. Grin: $K_7B_7Si_{39}$, a Borosilicide with the Clathrate I Structure. In: Angewandte Chemie - International Edition **46**, 6725-6728 (2007).

Jung, W., J. Lörincz, R. Ramlau, H. Borrmann, Y. Prots, F. Haarmann, W. Schnelle, U. Burkhardt, M. Baitinger and Y. Grin: $K_7B_7Si_{39}$, ein Borosilicid mit Clathrat-I-Struktur. In: Angewandte Chemie **119**, 6846-6850 (2007).

Kaczorowski, D., Y. Prots, U. Burkhardt and Y. Grin: Electronic properties and crystal structures of $RE_3Rh_2Ga_2$ and $RE_3Rh_3Si_2$ (RE = La, Ce). In: Intermetallics **15**, 225-232 (2007).

Kasinathan, D., K. Koepernik, J. Kunes, H. Rosner and W. E. Pickett: Origin of strong coupling in lithium under pressure. In: Physica C **460**, Part 1, 133-136 (2007).

Kasinathan, D., K. Koepernik, U. Nitzsche and H. Rosner: Ferromagnetism Induced by Orbital Order in the Charge-Transfer Insulator Cs_2AgF_4: An Electronic Structure Study. In: Physical Review Letters **99**, 247210-1-247210-4 (2007).

Kasinathan, D., K. Koepernik and W. E. Pickett: Pressure-driven magnetic moment collapse in the ground state of MnO. In: New Journal of Physics **9**, 235-1-235-10 (2007).

Kawska, A., J. Brickmann, R. Kniep and D. Zahn: Aus der Geburtsstube von Nanokristallen: Computersimulationen der Aggregation von Ionen und der Entstehung geordneter Strukturen. In: Wissenschaftliche Zeitschrift der Technischen Universität Dresden **56**, 19-23 (2007).

Kniep, R. and P. Simon: Fluorapatite-Gelatine-Nanocomposites: Self-Organized Morphogenesis, Real Structure and Relations to Natural Hard Materials. In: Crystallization and Self-Organization Process. (Eds.) Naka, Kensuke. Topics in current chemistry **270**. Springer, Berlin [u.a.] (2007) 73-125.

Kockrick, E., P. Krawiec, W. Schnelle, D. Geiger, F. M. Schappacher, R. Pottgen and S. Kaskel: Space-Confined Formation of FePt Nanoparticles in Ordered Mesoporous Silica SBA-15. In: Advanced Materials **19**, 3021-3026 (2007).

Köhler, U., A. P. Pikul, N. Oeschler, T. Westerkamp, A. M. Strydom and F. Steglich: Low-temperature study of the strongly correlated compound $Ce_3Rh_4Sn_{13}$. In: Journal of Physics: Condensed Matter **19**, 386207-1-386201-11 (2007).

Kohout, M.: Bonding indicators from electron pair density functionals. In: Faraday Discussions **135**, 43-54 (2007).

Kolen'ko, Y. V., K. A. Kovnir, I. S. Neira, T. Taniguchi, T. Ishigaki, T. Watanabe, N. Sakamoto and M. Yoshimura: A Novel, Controlled, and High-Yield Solvothermal Drying Route to Nanosized Barium Titanate Powders. In: Journal of Physical Chemistry C **111**, 7306-7318 (2007).

Kovnir, K., M. Armbrüster, D. Teschner, T. V. Venkov, F. C. Jentoft, A. Knop-Gericke, Y. Grin and R. Schlögl: A new approach to well-defined, stable and site-isolated catalysts. In: Science and Technology of Advanced Materials **8**, 420-427 (2007).

Kraus, H., V. B. Mikhailik, L. Vasylechko, D. Day, K. B. Hutton, J. Telfer and Y. Prots: Effect of Ca doping on the structure and scintillation properties of $ZnWO_4$. In: physica status solidi A **204**, 730-736 (2007).

Krellner, C., S. Hass, C. Goldmann, K. P. Pernstich, D. J. Gundlach and B. Batlogg: Density of bulk trap states in organic semiconductor crystals: Discrete levels induced by oxygen in rubrene. In: Physical Review B **75**, 245115-1-245115-5 (2007).

Krellner, C., N. S. Kini, E. M. Brüning, K. Koch, H. Rosner, M. Nicklas, M. Baenitz and C. Geibel: CeRuPO: A rare example of a ferromagnetic Kondo lattice. In: Physical Review B **76**, 104418-1-104418-10 (2007).

Küchler, R., P. Gegenwart, C. Geibel and F. Steglich: Systematic Study of the Grüneisen ratio near quantum critical points. In: Science and Technology of Advanced Materials **8**, 428-433 (2007).

Lang, M., M. de Souza, A. Brühl, C. Strack, B. Wolf, J. A. Schlueter, J. Müller and D. Schweitzer: Comparative transport and thermal expansion studies on quasi-2D organic superconductors close to the metal-to-insulator transition. In: Physica C **460-462**, 129-132 (2007).

Larrea J, J., M. Fontes, E. Baggio-Saitovitch, M. M. Abd-Elmeguid, J. Plessel, J. Ferstl, C. Geibel and M. Continentino: $YbFe_2Ge_2$ heavy fermion system under pressure. In: Journal of Magnetism and Magnetic Materials **310**, e206-e208 (2007).

Liang, Y., R. Cardoso-Gil, W. Schnelle, M. Schmidt, J. T. Zhao and Y. Grin: Chemical Bonding and Physical Properties of Yb_5Bi_3. In: Zeitschrift für Naturforschung B **62**, 935-940 (2007).

Lichte, H., P. Formanek, A. Lenk, M. Linck, C. Matzeck, M. Lehmann and P. Simon: Electron Holography: Applications to Materials Questions. In: Annual Review of Materials Research **37**, 539-588 (2007).

Loison, C., A. Leithe-Jasper and H. Rosner: Electronic structures of intermetallic borides RPd_3B_x (R=rare-earth metals). In: Physical Review B **75**, 205135-1-205135-9 (2007).

Lozan, V., J. Hunger and B. Kersting: Preparation and characterization of dinuclear palladium tetraamin-thiophenolate complexes coligated by bridging acetate and acetamidate units. In: Inorganica Chimica Acta **360**, 3189-3195 (2007).

LV, Y. Z., Y. L. Ji, C. P. Li, L. Guo, H. B. Xu and P. Somon: Shape Evolution of ZnO Nanostructures Modified by Trioctylphosphine Oxide. In: Solid State Phenomena **121-123**, 25-28 (2007).

Matysiak, R., G. Kamieniarz, P. Gegenwart, H. Aoki and A. Ochiai: Field-dependent specific-heat of the pure and diluted 4f electron system Yb_4As_3. In: Inorganica Chimica Acta **360**, 3955-3958 (2007).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of hemicalcium diaquanickel(II) catena-(monoborodiphosphate) monohydrate, $Ca_{0.5}Ni(H_2O)_2[BP_2O_8]•H_2O$. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 1-2 (2007).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: $CsSc[B_2P_3O_{11}(OH)_3]$: A New Borophosphate Oligomer Containing Boron in Three- and Fourfold Coordination. In: Inorganic Chemistry **46**, 7503-7508 (2007).

Millot, N., S. Le Gallet, D. Aymes, F. Bernard and Y. Grin: Spark plasma sintering of cobalt ferrite nanopowders prepared by coprecipitation and hydrothermal synthesis. In: Journal of the European Ceramic Society **27**, 921-926 (2007).

Molodtsov, S. L., S. Danzenbächer, Y. Kucherenko, C. Laubschat, D. V. Vyalikh, Z. Hossain, C. Geibel, X. J. Zhou, W. L. Yang, N. Mannella, Z. Hussain, Z.-X. Shen, M. Shi and L. Patthey: Hybridization of 4f states in heavy-fermion compounds $YbRh_2Si_2$ and $YbIr_2Si_2$. In: Journal of Magnetism and Magnetic Materials **310**, 443-445 (2007).

Mori, T., H. Borrmann, S. Okada, K. Kudou, A. Leithe-Jasper, U. Burkhardt and Y. Grin: Crystal structure, chemical bonding, electrical transport, and magnetic behavior of $TmAlB_4$. In: Physical Review B **76**, 064404-1-064404-10 (2007).

Müller, C., H.-J. Flad, M. Kohout and J. Reinhold: Quantum Monte Carlo calculation of correlation effects on bond orders. In: Theoretical Chemistry Accounts **117**, 41-48 (2007).

Müller, K. A.: Die Supraleitung in Oxiden. In: Dresdner Abhandlungen zur Chemischen Physik fester Stoffe, 1. Max-Planck-Institut für Chemische Physik fester Stoffe, Dresden (2007).

Müller, K.-H., G. Fuchs, S.-L. Drechsler, I. Opahle, H. Eschrig, L. Schultz, G. Behr, W. Löser, D. Souptel, A. Wälte, K. Nenkov, Y. Naidyuk and H. Rosner: Multiband superconductivity in $HoNi_2B_2C$. In: Physica C **460-462**, 99-102 (2007).

Nair, S. and A. K. Nigam: Critical exponents and the correlation length in the manganite spin glass $Eu_{0.5}Ba_{0.5}MnO_3$. In: Physical Review B **75**, 214415-1-214415-6 (2007).

Nakanishi, T., M. Nicklas, G. Sparn and F. Steglich: Compact Hydrostatic Pressure Cell for Precise Resistivity Measurements up to 10 GPa Using PPMS. In: Journal of the Physical Society of Japan – Supplement A **76**, 223-225 (2007).

Nicklas, M., C. F. Miclea, J. L. Sarrao, J. D. Thompson, G. Sparn and F. Steglich: Influence of antiferromagnetic fluctuations on the Fulde-Ferrell-Larkin-Ovchinnikov state in $CeCoIn_5$. In: Journal of Low Temperature Physics **146**, 669-680 (2007).

Nicklas, M., C. F. Miclea, J. L. Sarrao, J. D. Thompson, G. Sparn and F. Steglich: Antiferromagnetic fluctuations and the Fulde-Ferrell-Larkin-Ovchinnikov state in $CeCoIn_5$. In: Journal of the Physical Society of Japan - Supplement A **76**, 128-131 (2007).

Nicklas, M., O. Stockert, T. Park, K. Habicht, K. Kiefer, L. D. Pham, J. D. Thompson, Z. Fisk and F. Steglich: Magnetic structure of Cd-doped $CeCoIn_5$. In: Physical Review B **76**, 052401-1-052401-4 (2007).

Nouneh, K., I. V. Kityk, R. Viennois, S. Benet, S. Charar, S. Malynych and S. Paschen: Photoinduced non-linear optical monitoring of novel semimagnetic semiconductors $Pb_{1-x}Yb_xX$ (X=S, Se, Te). In: Materials Letters **61**, 1142-1145 (2007).

Nouneh, K., I. V. Kityk, R. Viennois, S. Benet, S. Charar and K. J. Plucinski: Nonlinear optical diagnostic of semimagnetic semiconductors $Pb_{1-x}Yb_xX$ (X=S, Se, Te). In: Materials Research Bulletin **42**, 236-248 (2007).

Padmanabhan, B., H. L. Bhat, S. Elizabeth, S. Rößler, U. K. Rößler, K. Dörr and K. H. Müller: Critical properties in single crystals of $Pr_{1-x}Pb_xMnO_3$. In: Physical Review B **75**, 024419-1-024419-7 (2007).

Panin, R. V., N. R. Khasanova, A. M. Abakumov, E. V. Antipov, G. Van Tendeloo and W. Schnelle: Synthesis and crystal structure of the palladium oxides $NaPd_3O_4$, Na_2PdO_3 and $K_3Pd_2O_4$. In: Journal of Solid State Chemistry **180**, 1566-1574 (2007).

Parker, D. and P. Thalmeier: Graphite-superconductor junctions as a probe of order-parameter symmetry. In: Physical Review B **76**, 064525-1-064525-6 (2007).

Parker, D. and P. Thalmeier: Theory of tunneling spectroscopy in UPd_2Al_3. In: Physical Review B **75**, 184502-1-184502-8 (2007).

Paschen, S., M. Müller, J. Custers, M. Kriegisch, A. Prokofiev, G. Hilscher, W. Steiner, A. Pikul, F. Steglich and A. M. Strydom: Quantum critical behaviour in $Ce_3Pd_{20}Si_6$? In: Journal of Magnetism and Magnetic Materials **316**, 90-92 (2007).

Pedrazzini, P., H. Wilhelm, D. Jaccard, T. Jarlborg, M. Schmidt, M. Hanfland, L. Akselrud, H. Q. Yuan, U. Schwarz, Y. Grin and F. Steglich: Metallic State in Cubic FeGe Beyond Its Quantum Phase Transition. In: Physical Review Letters **98**, 047204-1-047204-4 (2007).

Prots, Y., U. Aydemir, S. S. Öztürk and M. Somer: Crystal structure of tetrapotassium diarsenidozincate, K_4ZnAs_2. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 163-164 (2007).

Prots, Y., R. Demchyna, U. Burkhardt and U. Schwarz: Crystal structure and twinning of HfPdGe. In: Zeitschrift für Kristallographie **222**, 513-520 (2007).

Radu, T., Y. Tokiwa, R. Coldea, P. Gegenwart, Z. Tylczynski and F. Steglich: Field induced magnetic phase transition as a magnon Bose Einstein condensation. In: Science and Technology of Advanced Materials **8**, 406-409 (2007).

Radu, T., H. Wilhelm, V. Yushankhai, D. Kovrizhin, R. Coldea, Z. Tylczynski, T. Lühmann and F. Steglich: Comment on "Bose-Einstein condensation of magnons in Cs_2CuC_{l4}" - Reply. In: Physical Review Letters **98**, 039702-1-039702-1 (2007).

Rajarajan, A. K., A. Rabis, M. Baenitz, A. A. Gippius, E. N. Morozowa, J. A. Mydosh and F. Steglich: NMR investigations of U_2Ru_2Sn: A possible Kondo insulator. In: Physical Review B **76**, 024424-1-024424-5 (2007).

Recknagel, C., N. Reinfried, P. Höhn, W. Schnelle, H. Rosner, Y. Grin and A. Leithe-Jasper: Application of spark plasma sintering to the fabrication of binary and ternary skutterudites. In: Science and Technology of Advanced Materials **8**, 357-363 (2007).

Richter, K. W., Y. Prots, H. Borrmann, R. Ramlau and Y. Grin: Crystal structure and local order in $Co_6AI_{11-x}Si_{6+x}$. In: Acta Crystallographica Section B - Structural Science **63**, 551-560 (2007).

Rößler, S., S. Ernst, B. Padmanabhan, S. Elizabeth, H. L. Bhat, S. Wirth and F. Steglich: Scanning Tunneling Spectroscopy on $Pr_{0.68}Pb_{0.32}MnO_3$ Single Crystals. In: IEEE Transactions on Magnetics **43**, 3064-3066 (2007).

Rosner, H., M. D. Johannes, S.-L. Drechsler, M. Schmitt, O. Janson, W. Schnelle, W. Liu, Y.-X. Huang and R. Kniep: Cu^{II} materials - From crystal chemistry to magnetic model compounds. In: Science and Technology of Advanced Materials **8**, 352-356 (2007).

Schepers, T., J. Brickmann, O. Hochrein and D. Zahn: Atomistic Simulation Study of Calcium, Phosphate and Fluoride Ion Association to the Teleopeptide-Tails of Collagen - Initial Steps to Biomineral Formation. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 411-414 (2007).

Schlechte, A., R. Niewa, H. Borrmann, G. Auffermann, M. Schmidt and R. Kniep: Crystal structure of hafnium arsenide selenide, $HfAs_{1.69}Se_{0.21}$. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 369-370 (2007).

Schlechte, A., R. Niewa, M. Schmidt, G. Auffermann, Y. Prots, W. Schnelle, D. Gnida, T. Cichorek, F. Steglich and R. Kniep: Thermo-chemical properties and electrical resistivity of Zr-based arsenide chalcogenides. In: Science and Technology of Advanced Materials **8**, 341-346 (2007).

Schlechte, A., Y. Prots, R. Niewa, T. Doert, M. Schmidt and R. Kniep: CeAsSe - Ein neues ternäres Seltenerd-Pniktidchalkogenid. In: Zeitschrift für Kristallographie - Supplement **25**, Seq. No.: TS-07/079-62-id54 (2007).

Schmidt, B., N. Shannon and P. Thalmeier: The frustrated J_1-J_2 model in high magnetic fields. In: Journal of Physics: Condensed Matter **19**, 145211-1-145211-6 (2007).

Schmidt, B., N. Shannon and P. Thalmeier: Thermodynamic properties of the J_1–J_2 model at finite magnetic fields. In: Journal of Magnetism and Magnetic Materials **310**, 1231-1233 (2007).

Schmidt, B., P. Thalmeier and N. Shannon: Magnetocaloric effect in the frustrated square lattice J_1-J_2 model. In: Physical Review B **76**, 125113-1-125113-19 (2007).

Schmidt, J., M. Boehling, U. Burkhardt and Y. Grin: Preparation of titanium diboride TiB_2 by spark plasma sintering at slow heating rate. In: Science and Technology of Advanced Materials **8**, 376-382 (2007).

Schneidewind, A., A. M. Mills, W. Schnelle, O. Stockert, B. Ouladdiaf and M. Ruck: Competition between 3d and 4f magnetism in $Ce_2Fe_2S_5$. In: Journal of Magnetism and Magnetic Materials **310**, 1706-1708 (2007).

Schnering, H. G. v., A. Zürn, J.-H. Chang, M. Baitinger and Y. Grin: The Intrinsic Shape of the cubic cP124 Clathrate Structure. In: Zeitschrift für Anorganische und Allgemeine Chemie **633**, 1147-1153 (2007).

Schüpp-Niewa, B., L. Shlyk, Y. Prots, G. Krabbes and R. Niewa: $Ba_3YRu_{0.73(2)}Al_{1.27(2)}O_8$ and $Ba_5Y_2Ru_{1.52(2)}Al_{1.47(2)}O_{13.5}$: New Perovskite Ruthenates with Partial Octahedra Replacement. In: Zeitschrift für Naturforschung B **62**, 1383-1389 (2007).

Senyshyn, A., W. Schnelle, L. Vasylechko, H. Ehrenberg and M. Berkowski: Crystalline electric field and lattice contributions to thermodynamic properties of $PrGaO_3$: specific heat and thermal expansion. In: Journal of Physics: Condensed Matter **19**, 156214-1-156214-8 (2007).

Sereni, J. G., N. Caroca-Canales and C. Geibel: Ferromagnetic instability at the edge of intermediate valence. In: Journal of Magnetism and Magnetic Materials **310**, e214-e216 (2007).

Sereni, J. G., T. Westerkamp, R. Küchler, N. Caroca-Canales, P. Gegenwart and C. Geibel: Ferromagnetic quantum criticality in the alloy $CePd_{1-x}Rh_x$. In: Physical Review B **75**, 024432-1-024432-8 (2007).

Sichelschmidt, J., V. Voevodin, J. A. Mydosh and F. Steglich: Far-infrared optical investigation of the heavy-fermion semiconductor U_2Ru_2Sn. In: Journal of Magnetism and Magnetic Materials **310**, 434-436 (2007).

Sichelschmidt, J., J. Wykhoff, H.-A. Krug von Nidda, I. I. Fazlishanov, Z. Hossain, C. Krellner, C. Geibel and F. Steglich: Electron spin resonance of $YbIr_2Si_2$ below the Kondo temperature. In: Journal of Physics: Condensed Matter **19**, 1, 016211-1-016211-6 (2007).

Sichelschmidt, J., J. Wykhoff, H.-A. Krugg von Nidda, J. Ferstl, C. Geibel and F. Steglich: Spin dynamics of $YbRh_2Si_2$ observed by electron spin resonance. In: Journal of Physics: Condensed Matter **19**, 116204-1-116204-6 (2007).

Singh, S., C. Capan, M. Nicklas, M. Rams, A. Gladun, H. Lee, J. F. DiTusa, Z. Fisk, F. Steglich and S. Wirth: Probing the Quantum Critical Behavior of $CeCoIn_5$ via Hall Effect Measurements. In: Physical Review Letters **98**, 057001-1-057001-4 (2007).

Skoulatos, M., J. P. Goff, N. Shannon, E. E. Kaul, C. Geibel, A. P. Murani, M. Enderle and A. R. Wildes: Spin correlations in the frustrated square lattice $Pb_2VO(PO_4)_2$. In: Journal of Magnetism and Magnetic Materials **310**, 1257-1259 (2007).

Steglich, F.: Superconductivity and magnetism: From antagonism to mutual interplay. In: Physica C **460-462**, 7-12 (2007).

Stockert, O., M. Enderle and H. von Löhneysen: Magnetic Fluctuations at a Field-Induced Quantum Phase Transition. In: Physical Review Letters **99**, 237203-1-237203-4 (2007).

Stockert, O., M. M. Koza, J. Ferstl, C. Geibel and F. Steglich: Low-energy spin fluctuations in the non-Fermi-liquid compound $YbRh_2Si_2$. In: Science and Technology of Advanced Materials **8**, 371-375 (2007).

Stockert, O., M. Nicklas, P. Thalmeier, P. Gegenwart and F. Steglich: Magnetism and Quantum Criticality in Heavy-Fermion Compounds: Interplay with Superconductivity. In: Novel Materials. (Eds.) Kronmüller, Helmut. Handbook of Magnetism and Advanced Magnetic Materials **4**. Wiley, Chichester (2007) 2461-2480.

Strojek, W., C.M. Fehse, H. Eckert, B. Ewald and R. Kniep: Site discrimination in the crystalline borophosphate $Na_5B_2P_3O_{13}$ using advanced solid-state NMR techniques. In: Solid State Nuclear Magnetic Resonance **32**, 89-98 (2007).

Strydom, A. M., A. D. Hillier, D. T. Adroja, S. Paschen and F. Steglich: Low-temperature muon spin relaxation measurements on $CeRu_4Sn_6$. In: Journal of Magnetism and Magnetic Materials **310**, 377-379 (2007).

Thalmeier, P. and A. Langari: Field-induced quantum phase transition in the anisotropic Kondo necklace model. In: Physical Review B **75**, 174426-1-174426-14 (2007).

Toyota, N., M. Lang and J. Müller: Low-dimensional molecular metals. Springer series in solid-state sciences **154**. Springer, Berlin; Heidelberg (2007) XVII, 300 S.: Ill., graph. Darst.

Tran, V. H., W. Miiller, M. Baenitz and F. Steglich: Short-range magnetic ordering in $URh_{0.7}Ru_{0.3}Ge$. In: Journal of Physics: Condensed Matter **19**, 096201-1-096201-10 (2007).

Tsirlin, A. A., R. V. Shpanchenko, E. V. Antipov, C. Bougerol, J. Hadermann, G. Van Tendeloo, W. Schnelle and H. Rosner: Spin ladder compound $Pb_{0.55}Cd_{0.45}V_2O_5$: Synthesis and investigation. In: Physical Review B **76**, 104429-1-104429-7 (2007).

Tsui, Y., A. Brühl, K. Removic-Langer, V. Pashchenko, B. Wolf, G. Donath, A. Pikul, T. Kretz, H.-W. Lerner, M. Wagner, A. Salguero, T. Saha-Dasgupta, B. Rahaman, R. Valenti and M. Lang: Field-induced phase transition in a metalorganic spin-dimer system - a potential model system to study Bose-Einstein condensation of magnons. In: Journal of Magnetism and Magnetic Materials **310**, 1319-1321 (2007).

Valenti, R., T. Saha-Dasgupta, H. O. Jeschke, B. Rahaman, H. Rosner, P. Lemmens, R. Takagi and M. Johnsson: Comparative investigation of the coupled-tetrahedra quantum spin systems $Cu_2Te_2O_5X_2$, X = Cl, Br and $Cu_4Te_5O_{12}Cl_4$. In: Physica C **560**, Part 1, 462-463 (2007).

Vasylechko, L., A. Senyshyn, D. Trots, R. Niewa, W. Schnelle and M. Knapp: $CeAlO_3$ and $Ce_{1-x}R_xAlO_3$ (R = La, Nd) solid solutions: Crystal structure, thermal expansion and phase transitions. In: Journal of Solid State Chemistry **180**, 1277-1290 (2007).

Viennois, R., L. Girard, L. C. Chapon, D. T. Adroja, R. I. Bewley, D. Ravot, P. S. Riseborough and S. Paschen: Spin gap in $CeFe_4Sb_{12}$ studied by heat capacity and inelastic neutron scattering. In: Physical Review B **76**, 174438-1-174438-9 (2007).

von Löhneysen, H., O. Stockert and M. Enderle: Magnetic fluctuations at the field-tuned vs. concentration-tuned quantum phase transition in $CeCu_{6-x}Au_x$. In: Journal of Magnetism and Magnetic Materials **310**, 822-827 (2007).

Wagner, F. R., V. Bezugly, M. Kohout and Y. Grin: Charge Decomposition Analysis of the Electron Localizability Indicator: A Bridge between the Orbital and Direct Space Representation of the Chemical Bond. In: Chemistry - A European Journal **13**, 5724-5741 (2007).

Walter, M., J. Somers, A. Fernandez, E. D. Specht, J. D. Hunn, P. Boulet, M. A. Denecke and C. Göbel: Structure of yttria stabilized zirconia beads produced by gel supported precipitation. In: Journal of Material Science **42**, 4650-4658 (2007).

Weickert, F., P. Gegenwart, R. S. Perry and Y. Maeno: Alternating-field magnetoresistance measurements on $Sr_3Ru_2O_7$. In: Physica C **460**, 520-521 (2007).

Wilhelm, H., M. Schmidt, R. Cardoso-Gil, U. Burkhardt, M. Hanfland, U. Schwarz and L. Akselrud: Structural investigations of ε-FeGe at high pressure and low temperature. In: Science and Technology of Advanced Materials **8**, 416-419 (2007).

Witte, U., R. Schedler, U. Stockert and M. Loewenhaupt: The Investigation of the Crystallin Electric Field of $CeCu_2$ and $CeCu_6$. In: Journal of Low Temperature Physics **147**, 3/4, 97-110 (2007).

Witte, U., O. Stockert, R. Schedler, L. P. Regnault and M. Loewenhaupt: Crystalline electric field excitations in $CeCu_6$ studied by single crystal measurements with polarized neutrons. In: Physica B **397**, 20-22 (2007).

Wontcheu, J., W. Kockelmann, Z.-L. Huang, W. Schnelle and W. Bensch: Synthesis, crystal structures, metal-atom distribution and magnetic properties of $Cr_{5-x}Ti_xSe_8$ ($x \approx 2, 3, 4$). In: Solid State Sciences **9**, 506-514 (2007).

Wosylus, A., Y. Prots, U. Burkhardt, W. Schnelle and U. Schwarz: High-pressure synthesis of the electron-excess compound $CaSi_6$. In: Science and Technology of Advanced Materials **8**, 383-388 (2007).

Wykhoff, J., J. Sichelschmidt, J. Ferstl, C. Krellner, C. Geibel, F. Steglich, I. Fazlishanov and H.-A. Krug von Nidda: Electron spin resonance in $YbRh_2Si_2$: The role of the residual linewidth. In: Physica C **460-462**, 686-687 (2007).

Wykhoff, J., J. Sichelschmidt, G. Lapertot, G. Knebel, J. Flouquet, I. I. Fazlishanov, H.-A. Krug von Nidda, C. Krellner, C. Geibel and F. Steglich: On the local and itinerant properties of the ESR in $YbRh_2Si_2$. In: Science and Technology of Advanced Materials **8**, 389-392 (2007).

You, T.-S., Y. Grin and G. J. Miller: Planar versus Puckered Nets in the Polar Intermetallic Series EuGa*Tt* (*Tt* = Si, Ge, Sn). In: Inorganic Chemistry **46**, 8801-8811 (2007).

Yuan, H. Q. and F. Steglich: Unconventional superconductivity and quantum criticality in pressurized $CeCu_2(Si_{1-x}Ge_x)_2$. In: Physica C **460-462**, 141-144 (2007).

Yushankhai, V., A. Yaresko, P. Fulde and P. Thalmeier: Dynamic spin susceptibility of paramagnetic spinel LiV_2O_4. In: Physical Review B **76**, 085111-1-085111-10 (2007).

Zahn, D.: Atomistic Mechanisms of Phase Separation and Formation of Solid Solutions: Model Studies of NaCl, NaCl-NaF, and $Na(Cl_{1-x}Br_x)$ Crystallization from the Melt. In: Journal of Physical Chemistry B **111**, 5249-5253 (2007).

Zahn, D.: On the Atomistic Mechanisms of Alkane (Methane-Pentane) Separation by Distillation: A Molecular Dynamics Study. In: Journal of Physical Chemistry B **111**, 12518-12523 (2007).

Zahn, D., O. Hochrein, A. Kawska, J. Brickmann and R. Kniep: Towards an atomistic understanding of apatite-collagen biomaterials: linking molecular simulation studies of complex-, crystal- and composite-formation to experimental findings. In: Journal of Materials Science **42**, 8966-8973 (2007).

Zahn, D., O. Hochrein, A. Kawska, G. Seifert, Y. Grin, R. Kniep and S. Leoni: Extending the scope of 'in silico experiments': Theoretical approaches for the investigation of reaction mechanisms, nucleation events and phase transitions. In: Science and Technology of Advanced Materials **8**, 434-441 (2007).

Zaikina, J. V., K. A. Kovnir, U. Schwarz, H. Borrmann and A. V. Shevelkov: Crystal structure of silicon phosphorus telluride, $Si_{46-x}P_xTe_y$ (y=7.35, 6.98, 6.88; $x \leq 2y$), a cationic clathrate-I. In: Zeitschrift für Kristallographie - New Crystal Structures **222**, 177-179 (2007).

Zaikina, J. V., K. A. Kovnir, A. V. Sobolev, I. A. Presniakov, Y. Prots, M. Baitinger, W. Schnelle, A. V. Olenev, O. I. Lebedev, G. Van Tendeloo, Y. Grin and A. V. Shevelkov: $Sn_{20.5}\square_{3.5}As_{22}I_8$: A Largely Disordered Cationic Clathrate with a New Type of Superstructure and Abnormally Low Thermal Conductivity. In: Chemistry - A European Journal **13**, 5090-5099 (2007).

Zaikina, J. V., W. Schnelle, K. A. Kovnir, A. V. Olenev, Y. Grin and A. V. Shevelkov: Crystal structure, thermoelectric and magnetic properties of the type-I clathrate solid solutions $Sn_{24}P_{19.3(2)}Br_xI_{8-x}$ ($0 \leq X \leq 8$) and $Sn_{24}P_{19.3(2)}Cl_yI_{8-y}$ ($y \leq 0.8$). In: Solid State Sciences **9**, 664-671 (2007).

Zerec, I., B. Schmidt and P. Thalmeier: Kondo lattice model in magnetic field. In: Journal of Magnetism and Magnetic Materials **310**, e48-e50 (2007).

2008

Adroja, D. T., A. D. Hillier, J.-G. Park, W. Kockelmann, K. A. McEwen, B. D. Rainford, K.-H. Jang, C. Geibel and T. Takabatake: Muon spin relaxation study of non-Fermi-liquid behavior near the ferromagnetic quantum critical point in $CePd_{0.15}Rh_{0.85}$. In: Physical Review **B 78**, 014412-1-014412-11 (2008).

Agrawal, M., A. Pich, S. Gupta, N. E. Zafeiropoulos, P. Simon and M. Stamm: Synthesis of Novel Tantalum Oxide Sub-micrometer Hollow Spheres with Tailored Shell Thickness. In: Langmuir **24**, 1013-1018 (2008).

Anand, V. K., Z. Hossain and C. Geibel: Magnetic and transport properties of $PrTGe_3$ (T = Ni, Rh). In: Solid State Communications **146**, 335-339 (2008).

Anand, V. K., Z. Hossain and C. Geibel: Magnetic order in $Pr_2Pd_3Ge_5$ and possible heavy-fermion behavior in $Pr_2Rh_3Ge_5$. In: Physical Review **B 77**, 184407-1-184407-6 (2008).

Anand, V. K., B. Pandey, Z. Hossain, H. C. Verma and C. Geibel: Antiferromagnetism in Fe-doped $PrRh_2Si_2$: a Mössbauer study. In: Hyperfine Interactions **184**, 173-177 (2008).

Aydemir, U., A. Ormeci, H. Borrmann, B. Böhme, F. Zürcher, B. Uslu, T. Goebel, W. Schnelle, P. Simon, W. Carrillo-Cabrera, F. Haarmann, M. Baitinger, R. Nesper, H. G. von Schnering and Y. Grin: The Metallic Zintl Phase Ba_3Si_4 - Synthesis, Crystal Structure, Chemical Bonding, and Physical Properties. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 1651-1661 (2008).

Baburin, I. A., S. Leoni and G. Seifert: Enumeration of Not-Yet-Synthesized Zeolitic Zinc Imidazolate MOF Networks: A Topological and DFT Approach. In: Journal of Physical Chemistry B **112**, 9437-9443 (2008).

Baranov, A. I. and M. Kohout: Electron Localizability for Hexagonal Element Structures. In: Journal of Computational Chemistry **29**, 2161-2171 (2008).

Baranov, A., M. Kohout, F. R. Wagner, Y. Grin, R. Kniep and W. Bronger: On the Volume Chemistry of Solid Compounds: the Legacy of Wilhelm Biltz. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 2747-2753 (2008).

Bendyna, J. K., P. Höhn and R. Kniep: Crystal structure of tristrontium trinitridoferrate(III), $Sr_3[FeN_3]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 109-110 (2008).

Bendyna, J. K., P. Höhn and R. Kniep: Crystal structure of octastrontium bistrinitridomanganate(IV) trinitridomanganate(III), $Sr_8[Mn^{IV}N_3]_2[Mn^{III}N_3]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 185-186 (2008).

Bendyna, J. K., P. Höhn and R. Kniep: Crystal structure of octastrontium bistrinitridomanganate(III) dinitridoferrate(II), $Sr_8[MnN_3]_2[FeN_2]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 183-184 (2008).

Bendyna, J. K., P. Höhn and R. Kniep: Crystal structure of octastrontium bistrinitridoferrate(III) dinitridoferrate(II), $Sr_8[FeN_3]_2[FeN_2]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 181-182 (2008).

Bendyna, J. K., P. Höhn, W. Schnelle and R. Kniep: Crystal structures and physical properties of the mixed valency compounds $Sr_8M_3N_8$ (M = Fe, Fe + Mn) and Sr8Mn3N9. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 2029-2029 (2008).

Bergk, B., V. Petzold, H. Rosner, S.-L. Drechsler, M. Bartkowiak, O. Ignatchik, A. D. Bianchi, I. Sheikin, P. C. Canfield and J. Wosnitza: Anisotropic Multiband Many-Body Interactions in $LuNi_2B_2C$. In: Physical Review Letters **100**, 257004-1-257004-4 (2008).

Bezugly, V., P. Wielgus, F. R. Wagner, M. Kohout and Y. Grin: Electron Localizability Indicators ELI and ELIA: The Case of Highly Correlated Wavefunctions for the Argon Atom. In: Journal of Computational Chemistry **29**, 1198-1207 (2008).

Bigall, N. C., T. Härtling, M. Klose, P. Simon, L. Eng and A. Eychmüller: Monodisperse Platinum Nanospheres with Adjustable Diameters from 10 to 100 nm: Synthesis and Distinct Optical Properties. In: Nano Letters **8**, 4588-4592 (2008).

Bigall, N. C., M. Reitzig, W. Naumann, P. Simon, K.-H. van Pée and A. Eychmüller: Fungal Templates for Noble-Metal Nanoparticles and Their Application in Catalysis. In: Angewandte Chemie **120**, 7994-7997 (2008).

Bigall, N. C., M. Reitzig, W. Naumann, P. Simon, K.-H. van Pée and A. Eychmüller: Fungal Templates for Noble-Metal Nanoparticles and Their Application in Catalysis. In: Angewandte Chemie - International Edition **47**, 7876-7879 (2008).

Boulfelfel, S. E. and S. Leoni: Competing intermediates in the pressure-induced wurtzite to rocksalt phase transition in ZnO. In: Physical Review B **78**, 125204-1-125204-7 (2008).

Bräunling, D., S. Leoni, A. M. Mills and M. Ruck: Gerüstverbindungen mit beweglichen La^{III}-Kationen: Synthesen, Kristallstrukturen und Strukturdynamik der Lanthan(III)-Eisen(II)-Sulfid-Halogenide $La_{53}Fe_{12}S_{90}X_3$ (X = Cl, Br, I). In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 107-114 (2008).

Brando, M., W. J. Duncan, D. Moroni-Klementowicz, C. Albrecht, D. Grüner, R. Ballou and F. M. Grosche: Logarithmic Fermi-Liquid Breakdown in $NbFe_2$. In: Physical Review Letters **101**, 026401-1-026401-4 (2008).

Brüning, E. M., C. Krellner, M. Baenitz, A. Jesche, F. Steglich and C. Geibel: CeFePO: A Heavy Fermion Metal with Ferromagnetic Correlations. In: Physical Review Letters **101**, 117206-1-117206-4 (2008).

Butovskii, M. V., O. L. Tok, F. R. Wagner and R. Kempe: Bismetallocene - Lanthanoid-Übergangsmetall-Bindungen durch Alkaneliminierung. In: Angewandte Chemie **120**, 6569-6572 (2008).

Butovskii, M. V., O. L. Tok, F. R. Wagner and R. Kempe: Bismetallocenes: Lanthanoid-Transition-Metal Bonds through Alkane Elimination. In: Angewandte Chemie - International Edition **47**, 6469-6472 (2008).

Cabouro, G., S. Chevalier, E. Gaffet, Y. Grin and F. Bernard: Reactive sintering of molybdenum disilicide by spark plasma sintering from mechanically activated powder mixtures: Processing parameters and properties. In: Journal of Alloys and Compounds **465**, 344-355 (2008).

Capan, C., S. Singh, S. Wirth, M. Nicklas, H. Lee, Z. Fisk, J. DiTusa and F. Steglich: New hints on the origin of quantum criticality in $CeCoIn_5$: A Hall effect study. In: Physica B **403**, 1290-1292 (2008).

Chizhov, P. S., Y. Prots and E. V. Antipov: Crystal Structure of cerium platinum phosphide, $CePt_4P_2$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 331-332 (2008).

Condron, C. L., S. M. Kauzlarich, T. Ikeda, G. J. Snyder, F. Haarmann and P. Jeglič: Synthesis, Structure, and High-Temperature Thermoelectric Properties of Boron-Doped $Ba_8Al_{14}Si_{31}$ Clathrate I Phases. In: Inorganic Chemistry **47**, 8204-8212 (2008).

Craco, L.: Quantum orbital entanglement: A view from the extended periodic Anderson model. In: Physical Review B **77**, 125122-1-125122-6 (2008).

Craco, L., M. S. Laad, S. Leoni and H. Rosner: Normal-state correlated electronic structure of iron pnictides from first principles. In: Physical Review B **78**, 134511-1-134511-7 (2008).

Craco, L., M. S. Laad, S. Leoni and H. Rosner: Theory of the orbital-selective Mott transition in ferromagnetic YTiO3 under high pressure. In: Physical Review B **77**, 075108-1-075108-5 (2008).

Craco, L., P. Lombardo, R. Hayn, G. I. Japaridze and E. Müller-Hartmann: Electronic phase transitions in the half-filled ionic Hubbard model. In: Physical Review B **78**, 075121-1-075121-4 (2008).

Das, P., M. R. Koblischka, H. Rosner, T. Wolf and U. Hartmann: Excitation of a bosonic mode by electron tunneling into a cuprate superconductor $NdBa_2Cu_3O_{7-\delta}$. In: Physical Review B **78**, 214505-1-214505-5 (2008).

Das, P., M. R. Koblischka, S. Turner, G. van Tendeloo, T. Wolf, M. Jirsa and U. Hartmann: Direct observation of nanometer-scale pinning sites in $(Nd_{0.33}Eu_{0.20}Gd_{0.47})Ba_2Cu_3O_{7-\delta}$ single crystals. In: Europhysics Letters **83**, 37005-p1-37005-p4 (2008).

Dashjav, E., Y. Prots, G. Kreiner, W. Schnelle, F. R. Wagner and R. Kniep: Chemical bonding analysis and properties of $La_7Os_4C_9$ - A new structure type containing C- and C_2-units as Os-coordinating ligands. In: Journal of Solid State Chemistry **181**, 3121-3130 (2008).

Davaasuren, B., E. Dashjav, G. Kreiner, H. Borrmann and R. Kniep: A new 1D-Modulated Crystal Structure of a Gd-Compound with Anionic Complexes $[CFe(C_2)_2]$ and $[Fe(C_2)_2]$. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 2019-2019 (2008).

Deppe, M., S. Hartmann, M. E. Macovei, N. Oeschler, M. Nicklas and C. Geibel: Investigation of $Yb_2Pt_6Al_{15}$ single crystals: heavy fermion system with a large local moment degeneracy. In: New Journal of Physics **10**, 093017-1-093017-7 (2008).

Donath, J. G., P. Gegenwart, M. Nicklas, F. Steglich, L. D. Pham and Z. Fisk: Pressure dependence of the Néel and the superconducting transition temperature of $CeCo(In_{0.9}Cd_{0.1})_5$ studied by thermal expansion. In: Physica B **403**, 839-841 (2008).

Donath, J. G., F. Steglich, E. D. Bauer, J. L. Sarrao and P. Gegenwart: Dimensional crossover of quantum critical behavior in $CeCoIn_5$. In: Physical Review Letters **100**, 136401-1-136401-4 (2008).

Dóra, B., K. Ziegler and P. Thalmeier: Effect of weak disorder on the density of states in graphene. In: Physical Review B **77**, 115422-1-115422-6 (2008).

Duchstein, P., O. Hochrein and D. Zahn: Automated Motif Indentification in Solids. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 11, 2035-2035 (2008).

Ehrlich, H., S. Heinemann, C. Heinemann, P. Simon, V. V. Bazhenov, N. P. Shapkin, R. Born, K. R. Tabachnick, T. Hanke and H. Worch: Nanostructural Organization of Naturally Occurring Composites - Part I: Silica-Collagen-Based Biocomposites. In: Journal of Nanomaterials, 623838-1-623838-8 (2008).

Ehrlich, H., D. Janussen, P. Simon, V. V. Bazhenov, N. P. Shapkin, C. Erler, M. Mertig, R. Born, S. Heinemann, T. Hanke, H. Worch and J. N. Vournakis: Nanostructural Organization of Naturally Occurring Composites - Part II: Silica-Chitin-Based Biocomposites. In: Journal of Nanomaterials, 670235-1-670235-8 (2008).

Eremin, I., G. Zwicknagl, P. Thalmeier and P. Fulde: Feedback Spin Resonance in Superconducting $CeCu_2Si_2$ and $CeCoIn_5$. In: Physical Review Letters **101**, 187001-1-187001-4 (2008).

Ferreira, L. M., T. Park, V. Sidorov, M. Nicklas, E. M. Bittar, R. Lora-Serrano, E. N. Hering, S. M. Ramos, M. B. Fontes, E. Baggio-Saitovich, H. Lee, J. L. Sarrao, J. D. Thompson and P. G. Pagliuso: Tuning the Pressure-Induced Superconducting Phase in Doped $CeRhIn_5$. In: Physical Review Letters **101**, 017005-1-017005-4 (2008).

Friedemann, S., N. Oeschler, C. Krellner, C. Geibel, S. Wirth, F. Steglich, S. Paschen, S. MaQuilon and Z. Fisk: Band-structure and anomalous contributions to the Hall effect of $YbRh_2Si_2$. In: Physica B **403**, 1251-1253 (2008).

Fujiwara, K., Y. Hata, K. Kobayashi, K. Miyoshi, J. Takeuchi, Y. Shimaoka, H. Kotegawa, T. C. Kobayashi, C. Geibel and F. Steglich: High Pressure NQR Measurement in $CeCu_2Si_2$ up to Sudden Disappearance of Superconductivity. In: Journal of the Physical Society of Japan **77**, 12, 123711-1-123711-4 (2008).

Gäbler, F., W. Schnelle, A. Senyshyn and R. Niewa: Magnetic structure of the inverse perovskite $(Ce_3N)In$. In: Solid State Sciences **10**, 1910-1915 (2008).

Gamża, M., W. Schnelle, A. Ślebarski, U. Burkhardt, R. Gumeniuk and H. Rosner: Electronic structure and thermodynamic properties of $Ce_3Rh_4Sn_{13}$ and $La_3Rh_4Sn_{13}$. In: Journal of Physics: Condensed Matter **20**, 395208-1-395208-13 (2008).

Gamża, M., A. Ślebarski and H. Rosner: Electronic structure of $Ce_5Rh_4Sn_{10}$ from XPS and band structure calculations. In: The European Physical Journal B **63**, 1-9 (2008).

Gamża, M., A. Ślebarski and H. Rosner: Electronic structure of $CeRhSn_2$ and $LaRhSn_2$ from x-ray photoemission spectroscopy and band structure calculations. In: Journal of Physics: Condensed Matter **20**, 025201-1-025201-8 (2008).

Gegenwart, P., Q. Si and F. Steglich: Quantum criticality in heavy-fermion metals. In: Nature Physics **4**, 186-197 (2008).

Gegenwart, P., T. Westerkamp, C. Krellner, M. Brando, Y. Tokiwa, C. Geibel and F. Steglich: Unconventional quantum criticality in $YbRh_2Si_2$. In: Physica B **403**, 1184-1188 (2008).

Gelinsky, M., P. B. Welzel, P. Simon, A. Bernhardt and U. König: Porous three-dimensional scaffolds made of mineralised collagen: Preparation and properties of a biomimetic nanocomposite material for tissue engineering of bone. In: Chemical Engineering Journal **137**, 84-96 (2008).

Georgiou, M., G. Varelogiannis and P. Thalmeier: Coexistence of CDW with staggered superconductivity in a ferromagnetic material. In: Europhysics Letters **82**, 67007-p1-67007-p5 (2008).

Gippius, A. A., A. S. Moskvin and S.-L. Drechsler: Spin polarization of the magnetic spiral in $NaCu_2O_2$ as seen by nuclear magnetic resonance spectroscopy. In: Physical Review B **77**, 180403-1-180403-4 (2008).

Goebel, T. and F. Haarmann: A new Zintl Compound: Rb_7NaSi_8. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 11, 2040-2040 (2008).

Goebel, T., Y. Prots and F. Haarmann: Refinement of the crystal structure of tetrasodium tetrasilicide, Na_4Si_4. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 187-188 (2008).

Grin, Y.: Chemical Bonding and Crystallographic Features. In: Basics of Thermodynamics and Phase Transitions in Complex Intermetallics. (Eds.) Esther Belin-Ferré. Book series on complex metallic alloys **1**. Word Scientific, New Jersey [u.a.] (2008) 367-376.

Grüner, D., E. Bischoff, A. Kerkau, A. Ormeci, Y. Prots, H. Borrmann and G. Kreiner: Site occupation reversal in the C14 Laves phase $Nb(Cr_{1-x}Co_x)_2$. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 2040-2040 (2008).

Gumeniuk, R., Y. Prots, W. Schnelle and A. Leithe-Jasper: Refinement of the crystal structures of scandium nickel boride, $Sc_2Ni_{21}B_6$ and zirconium nickel boride, $Zr_2Ni_{21}B_6$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 327-328 (2008).

Gumeniuk, R., H. Rosner, W. Schnelle, M. Nicklas, A. Leithe-Jasper and Y. Grin: Optimization of the superconducting transition temperature of the filled skutterudite $BaPt_4Ge_{12}$ by gold substitution. In: Physical Review B **78**, 052504-1-052504-4 (2008).

Gumeniuk, R., W. Schnelle, H. Rosner, M. Nicklas, A. Leithe-Jasper and Y. Grin: Superconductivity in the Platinum Germanides MPt_4Ge_{12} (M = Rare-Earth or Alkaline-Earth Metal) with Filled Skutterudite Structure. In: Physical Review Letters **100**, 017002-1-017002-4 (2008).

Haarmann, F., K. Koch, D. Grüner, W. Schnelle, O. Pecher, R. Cardoso-Gil, H. Borrmann, H. Rosner and Y. Grin: Structure and Chemical Bonding of Alkaline-Earth Digallides. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 2022-2022 (2008).

Harikrishnan, S., C. M. Naveen Kumar, H. L. Bhat, S. Elizabeth, U. K. Rößler, K. Dörr, S. Rößler and S. Wirth: Investigations on the spin-glass state in $Dy_{0.5}Sr_{0.5}MnO_3$ single crystals through structural, magnetic and thermal properties. In: Journal of Physics: Condensed Matter **20**, 275234-1-275234-10 (2008).

Hartmann, S., M. Deppe, N. Oeschler, N. Caroca-Canales, J. Sereni and C. Geibel: Ferromagnetism in $CePd_{1-x}Rh_x$ single crystals. In: Journal of Optoelectronics and Advanced Materials **10**, 7, 1607-1611 (2008).

Heying, B., U. C. Rodewald, G. Heymann, W. Hermes, F. M. Schappacher, J. F. Riecken, C. P. Sebastian, H. Huppertz and R. Pöttgen: The High-temperature Modification of LuAgSn and High-pressure High-temperature Experiments on DyAgSn, HoAgSn, and YbAgSn. In: Zeitschrift für Naturforschung B **63**, 193-198 (2008).

Hochrein, O., A. Thomas and R. Kniep: Revealing the Crystal Structure of Anhydrous Calcium Oxalate, $Ca[C_2O_4]$, by a Combination of Atomistic Simulation and Rietveld Refinement. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 1826-1829 (2008).

Höhn, P., F. Nitsche and R. Kniep: Ni_3Sr_2 - eine neue Phase im binären System Ni-Sr. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 2046-2046 (2008).

Hoffmann, S., H. B. T. Jeazet, P. W. Menezes, Y. Prots and R. Kniep: $Na_3Pb_{II}[B(O_3POH)_4]$: An Alkali-Metal Lead Borophosphate with Heterocubane-like Units Na_3PbO_4. In: Inorganic Chemistry **47**, 10193-10195 (2008).

Huang, Y.-X., J. Buder, R. Cardoso-Gil, Y. Prots, W. Carillo-Cabrera, P. Simon and R. Kniep: Shape Development and Structure of a Complex (Otoconia-Like?) Calcite-Gelatine Composite. In: Angewandte Chemie - International Edition **47**, 8280-8284 (2008).

Huang, Y.-X., J. Buder, R. Cardoso-Gil, Y. Prots, W. Carillo-Cabrera, P. Simon and R. Kniep: Shape Development and Structure of a Complex (Otoconia-Like?) Calcite-Gelatine Composite. In: Angewandte Chemie **120**, 8404-8408 (2008).

Huang, Y.-X., Y. Prots and R. Kniep: $Zn[BPO_4(OH)_2]$: A Zinc Borophosphate with the Rare Moganite-Type Topology. In: Chemistry - A European Journal **14**, 1757-1761 (2008).

Janson, O., J. Richter and H. Rosner: Modified Kagome Physics in the Natural Spin-1/2 Kagome Lattice Systems: Kapellasite $Cu_3Zn(OH)_6Cl_2$ and Haydeeite $Cu_3Mg(OH)_6Cl_2$. In: Physical Review Letters **101**, 106403-1-106403-4 (2008).

Jeevan, H. S., Z. Hossain, D. Kasinathan, H. Rosner, C. Geibel and P. Gegenwart: High-temperature superconductivity in $Eu_{0.5}K_{0.5}Fe_2As_2$. In: Physical Review B **78**, 092406-1-092406-4 (2008).

Jeevan, H. S., Z. Hossain, D. Kasinathan, H. Rosner, C. Geibel and P. Gegenwart: Electrical resistivity and specific heat of single-crystalline $EuFe_2As_2$: A magnetic homologue of $SrFe_2As_2$. In: Physical Review B **78**, 052502-1-052502-4 (2008).

Jesche, A., N. Caroca-Canales, H. Rosner, H. Borrmann, A. Ormeci, D. Kasinathan, H. H. Klauss, H. Luetkens, R. Khasanov, A. Amato, A. Hoser, K. Kaneko, C. Krellner and C. Geibel: Strong coupling between magnetic and structural order parameters in $SrFe_2As_2$. In: Physical Review B **78**, 180504-1-180504-4 (2008).

Kaneko, K., A. Hoser, N. Caroca-Canales, A. Jesche, C. Krellner, O. Stockert and C. Geibel: Columnar magnetic structure coupled with orthorombic distortion in the antiferromagnetic iron arsenide $SrFe_2As_2$. In: Physical Review B **78**, 212502-1-212502-4 (2008).

Kasinathan, D., K. Koepernik and H. Rosner: Quasi-One-Dimensional Magnetism Driven by Unusual Orbital Ordering in $CuSb_2O_6$. In: Physical Review Letters **100**, 237202-1-237202-4 (2008).

Kawska, A., P. Duchstein, O. Hochrein and D. Zahn: Atomistic Mechanisms of ZnO Aggregation from Ethanolic Solution: Ion Association, Proton Transfer, and Self Organization. In: Nano Letters **8**, 2336-2340 (2008).

Kawska, A., P. Duchstein, O. Hochrein and D. Zahn: From Ion Aggregation to Nanocrystal (Self-)Organization: a Transferable Simulation Platform. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 11, 2017-2017 (2008).

Kawska, A., O. Hochrein, J. Brickmann, R. Kniep and D. Zahn: The Nucleation Mechanism of Fluorapatite-Collagen Composites: Ion Association and Motif Control by Collagen Proteins. In: Angewandte Chemie **120**, 5060-5063 (2008).

Kawska, A., O. Hochrein, J. Brickmann, R. Kniep and D. Zahn: The Nucleation Mechanism of Fluorapatite-Collagen Composites: Ion Association an Motif Control by Collagen Proteins. In: Angewandte Chemie - International Edition **47**, 4982-4985 (2008).

Kim, G.-M., A. S. Asran, G. H. Michler, P. Simon and J.-S. Kim: Electrospun PVA/HAp nanocomposite nanofibers: biomimetics of mineralized hard tissues at a lower level of complexity. In: Bioinspiration & Biomimetics **3**, 046003-1-046003-12 (2008).

Klein, M., A. Nuber, F. Reinert, J. Kroha, O. Stockert and H. v. Löhneysen: Signature of Quantum Criticality in Photoemission Spectroscopy. In: Physical Review Letters **101**, 266404-1-266404-4 (2008).

Kniep, R. and P. Simon: "Hidden" Hierarchy of Microfibrils within 3D-Periodic Fluorapatite-Gelatine Nanocomposites: Development of Complexity and Form in a Biomimetic System. In: Angewandte Chemie – International Edition **47**, 1405-1409 (2008).

Kniep, R. and P. Simon: "Hidden" Hierarchy of Microfibrils within 3D-Periodic Fluorapatite-Gelatine Nanocomposites: Development of Complexity and Form in a Biomimetic System. In: Angewandte Chemie **120**, 1427-1431 (2008).

Köhler, U., N. Oeschler, F. Steglich, S. Maquilon and Z. Fisk: Energy scales of $Lu_{1-x}Yb_xRh_2Si_2$ by means of thermopower investigations. In: Physical Review B **77**, 104412-1-104412-6 (2008).

Kohout, M., F. R. Wagner and Y. Grin: Electron localizability indicator for correlated wavefunctions. III: singlet and triplet pairs. In: Theoretical Chemistry Accounts **119**, 413-420 (2008).

Koudela, D., U. Schwarz, H. Rosner, U. Burkhardt, A. Handstein, M. Hanfland, M. D. Kuz'min, I. Opahle, K. Koepernik, K.-H. Müller and M. Richter: Magnetic and elastic properties of YCo_5 and $LaCo_5$ under pressure. In: Physical Review B **77**, 024411-1-024411-7 (2008).

Kovnir, K., M. Schmidt, C. Waurisch, M. Armbrüster, Y. Prots and Y. Grin: Refinement of the crystal structure of dipalladium gallium, Pd_2Ga. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 7-8 (2008).

Kovnir, K., D. Teschner, M. Armbrüster, P. Schnörch, M. Hävecker, A. Knop-Gericke, Y. Grin and R. Schlögl: Pinning the catalytic centre: A new concept for catalysts development. In: Noble Traces - BESSY Highlights 2007, 22-23 (2008).

Kraft, R., R.-D. Hoffmann, C. P. Sebastian, R. Pöttgen, Y. Prots, W. Schnelle, M. Schmidt and Y. Grin: Magnesium-Containing Polyanion and Intermediate Europium Valence: Crystal Structure, Chemical Bonding, and Properties of $EuMg_{1-x}Tl_{1+x}$ (x = 0.013-0.058). In: Chemistry of Materials **20**, 1948-1955 (2008).

Krellner, C., N. Caroca-Canales, A. Jesche, H. Rosner, A. Ormeci and C. Geibel: Magnetic and structural transitions in layered iron arsenide systems: AFe_2As_2 versus RFeAsO. In: Physical Review B **78**, 100504-1-100504-4 (2008).

Krellner, C., T. Förster, H. Jeevan, C. Geibel and J. Sichelschmidt: Relevance of Ferromagnetic Correlations for the Electron Spin Resonance in Kondo Lattice Systems. In: Physical Review Letters **100**, 066401-1-066401-4 (2008).

Krellner, C. and C. Geibel: Single crystal growth and anisotropy of CeRuPO. In: Journal of Crystal Growth **310**, 1875-1880 (2008).

Kriegisch, M., J. Custers, C. Geibel, G. Hilscher, C. Krellner, M. Müller, F. Steglich and S. Paschen: Hall effect of $YbIr_2Si_2$. In: Physica B **403**, 1295-1297 (2008).

Kumar, M., M. Nicklas, A. Jesche, N. Caroca-Canales, M. Schmitt, M. Hanfland, D. Kasinathan, U. Schwarz, H. Rosner and C. Geibel: Effect of pressure on the magnetostructural transition in $SrFe_2As_2$. In: Physical Review B **78**, 184516-1-184516-5 (2008).

Kutuzov, A. S., A. M. Skvortsova, S. I. Belov, J. Sichelschmidt, J. Wykhoff, I. Eremin, C. Krellner, C. Geibel and B. I. Kochelaev: Magnetic susceptibility of $YbRh_2Si_2$ and $YbIr_2Si_2$ on the basis of a localized 4f electron approach. In: Journal of Physics: Condensed Matter **20**, 455208-1-455208-6 (2008).

Leithe-Jasper, A., W. Schnelle, C. Geibel and H. Rosner: Superconducting State in $SrFe_{2-x}Co_xAs_2$ by Internal Doping of the Iron Arsenide Layers. In: Physical Review Letters **101**, 207004-1-207004-4 (2008).

Leithe-Jasper, A., W. Schnelle, H. Rosner, R. Cardoso-Gil, M. Baenitz, J. A. Mydosh, Y. Grin, M. Reissner and W. Steiner: $TlFe_4Sb_{12}$: Weak itinerant ferromagnetic analogue to alkali-metal iron-antimony skutterudites. In: Physical Review B **77**, 6, 064412-1-064412-9, Seq. No.: 064412 (2008).

Leoni, S. and S. E. Boulfelfel: The Role of Interfaces in Ionic Conductors and Ferroelectrics. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 11, 2013-2013 (2008).

Leoni, S., R. Ramlau, K. Meier, M. Schmidt and U. Schwarz: Nanodomain fragmentation and local rearrangements in CdSe under pressure. In: Proceedings of the National Academy of Sciences of the United States of America **105**, 19612-19616 (2008).

Leoni, S., A. N. Yaresko, N. Perkins, H. Rosner and L. Craco: Orbital-spin order and the origin of structural distortion in $MgTi_2O_4$. In: Physical Review B **78**, 125105-1-125105-5 (2008).

Liang, Y., H. Borrmann, M. Baenitz, W. Schnelle, S. Budnyk, J. T. Zhao and Y. Grin: $Sn_xPt_4Sn_ySb_{12-y}$: A Skutterudite with Covalently Bonded Filler. In: Inorganic Chemistry **47**, 9489-9496 (2008).

Lin, Z.-S., Y.-X. Huang, Y. Prots, J.-T. Zhao and R. Kniep: $Na_5(NH_4)Mn_3[B_9P_6O_{33}(OH)_3] \cdot 1.5H_2O$. In: Acta Crystallographica Section E **64**, i82-i83 (2008).

Lin, Z.-S., Y.-X. Huang, Y. Prots, J.-T. Zhao and R. Kniep: Crystal structure of potassium vanadium (monophosphate-hydrogenmonoborate-monophosphate), $KV[BP_2O_8(OH)]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 323-324 (2008).

Luschtinetz, R., A. F. Oliveira, J. Frenzel, J.-O. Joswig, G. Seifert and H. A. Duarte: Adsorption of phosphonic and ethylphosphonic acid on aluminium oxide surfaces. In: Surface Science **602**, 1347-1359 (2008).

Macovei, M. E., M. Nicklas, C. Krellner, C. Geibel and F. Steglich: The effect of pressure and Ir substitution in $YbRh_2Si_2$. In: Journal of Physics: Condensed Matter **20**, 505205-1-505205-5 (2008).

Málek, J., S.-L. Drechsler, U. Nitzsche, H. Rosner and H. Eschrig: Temperature-dependent optical conductivity of undoped cuprates with weak exchange. In: Physical Review B **78**, 060508-1-060508-4 (2008).

Maurer, D., K. Lüders, M. Baenitz, D. A. Pavlov and E. V. Antipov: Flux pinning regimes in Hg-1201. In: Physica C **468**, 1305-1307 (2008).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of hemicalcium diaquairon(II) catena-(monoborodiphosphate) monohydrate, $Ca_{0.5}Fe(H_2O)_2[BP_2O_8] \cdot H_2O$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 9-10 (2008).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of lithium diaquacobalt(II) catena-monoboro-diphosphate monohydrate, $LiCo(H_2O)_2[BP_2O_8] \cdot H_2O$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 333-334 (2008).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of calcium iron(II) hydrogenmonophosphate-dihydrogenmonoborate-monophosphate, $CaFe[BP_2O_7(OH)_3]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 335-336 (2008).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of barium iron(II) (monophosphate-hydrogenmonoborate-monophosphate), $BaFe[BP_2O_8(OH)]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 337-338 (2008).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of barium cobalt(II) (monophosphate-hydrogenmonoborate-monophosphate), $BaCo[BP_2O_8(OH)]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 339-340 (2008).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of dilithium scandium (monophosphate-monohydrogenmonophosphate), $Li_2Sc[(PO_4)(HPO_4)]$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 319-320 (2008).

Menezes, P. W., S. Hoffmann, Y. Prots and R. Kniep: Crystal structure of caesium scandium bis(monohydrogen-monophosphate), $CsSc(HPO_4)_2$. In: Zeitschrift für Kristallographie - New Crystal Structures **223**, 321-322 (2008).

Mikhailik, V. B., H. Kraus, V. Kapustyanyk, M. Panasyuk, Y. Prots, V. Tsybulskyi and L. Vasylechko: Structure, luminescence and scintillation properties of the $MgWO_4$-$MgMoO_4$ system. In: Journal of Physics: Condensed Matter **20**, 365219-1-365219-8 (2008).

Mori, T., R. Cardoso-Gil, A. Leithe-Jasper, W. Schnelle, H. Borrmann and Y. Grin: Synthesis and magnetic properties of the $ThMoB_4$-type modification of $ErAlB_4$. In: Journal of Applied Physics **103**, 07B730-1-07B730-3 (2008).

Müller, J., S. von Molnár and S. Wirth: Room temperature magnetoresistance switching of Permalloy thin films induced by iron nanoparticles. In: Applied Physics Letters **92**, 093121-1-093121-3 (2008).

Mujica, C., J. Llanos, V. Sánchez, P. Bocaz and R. Cardoso-Gil: Crystal Structure of a New Bismuth Perrhenate $Bi(ReO_4)_3H_2O$. In: Journal of the Chilean Chemical Society **53**, 1364-1366 (2008).

Nair, S., S. Wirth, M. Nicklas, A. Gladun, F. Steglich, J. L. Sarrao and J. D. Thompson: Hall effect measurements in the heavy fermion system $CeIrIn_5$. In: Physica B **403**, 837-838 (2008).

Nair, S., S. Wirth, M. Nicklas, J. L. Sarrao, J. D. Thompson, Z. Fisk and F. Steglich: Precursor State to Unconventional Superconductivity in $CeIrIn_5$. In: Physical Review Letters **100**, 137003-1-137003-4 (2008).

Nath, R., D. Kasinathan, H. Rosner, M. Baenitz and C. Geibel: Electronic and magnetic properties of $K_2CuP_2O_7$: A model S = ½ Heisenberg chain system. In: Physical Review B **77**, 134451-1-134451-8 (2008).

Nath, R., A. A. Tsirlin, E. E. Kaul, M. Baenitz, N. Büttgen, C. Geibel and H. Rosner: Strong frustration due to competing ferromagnetic and antiferromagnetic interactions: Magnetic properties of $M(VO)_2(PO_4)_2$ (M = Ca and Sr). In: Physical Review B **78**, 024418-1-024418-13 (2008).

Nath, R., A. A. Tsirlin, H. Rosner and C. Geibel: Magnetic properties of $BaCdVO(PO_4)_2$: A strongly frustrated spin-1/2 square lattice close to the quantum critical regime. In: Physical Review B **78**, 064422-1-064422-7 (2008).

Nikonova, O. A., K. Jansson, V. G. Kessler, M. Sundberg, A. I. Baranov, A. V. Shevelkov, D. V. Drobot and G. A. Seisenbaeva: Electrochemical Synthesis, Structural Characterization, and Decomposition of Rhenium Oxoethoxide, $Re_4O_4(OEt)_{12}$. Ligand Influence on the Structure and Bonding in the High-Valent Tetranuclear Planar Rhenium Alkoxide Clusters. In: Inorganic Chemistry **47**, 1295-1300 (2008).

Noor, A., F. R. Wagner and R. Kempe: Metall-Metall-Abstände am Limit: ein Komplex mit ultrakurzer Cr-Cr-Bindung. In: Angewandte Chemie **120**, 7356-7359 (2008).

Noor, A., F. R. Wagner and R. Kempe: Metal-Metal Distances at the Limit: A Coordination Compound with an Ultrashort Chromium-Chromium Bond. In: Angewandte Chemie - International Edition **47**, 7246-7249 (2008).

Oeschler, N., R. A. Fisher, N. E. Phillips, J. E. Gordon, M.-L. Foo and R. J. Cava: Evidence for two-band superconductivity and non-magnetic pair breaking in $Na_{0.3}CoO_2 \cdot 1.3H_2O$; effects of sample age. In: Europhysics Letters **82**, 47011-1-47011-5 (2008).

Oeschler, N., S. Hartmann, A. P. Pikul, C. Krellner, C. Geibel and F. Steglich: Low-temperature specific heat of $YbRh_2Si_2$. In: Physica B **403**, 1254-1256 (2008).

Osswald, J., R. Giedigkeit, R. E. Jentoft, M. Armbrüster, F. Girgsdies, K. Kovnir, T. Ressler, Y. Grin and R. Schlögl: Palladium-gallium intermetallic compounds for the selective hydrogenation of acetylene Part I: Preparation and structural investigation under reaction conditions. In: Journal of Catalysis **258**, 210-218 (2008).

Osswald, J., K. Kovnir, M. Armbrüster, R. Giedigleit, R. E. Jentoft, U. Wild, Y. Grin and R. Schlögl: Palladium-gallium intermetallic compounds for the selective hydrogenation of acetylene Part II: Surface characterization and catalytic performance. In: Journal of Catalysis **258**, 219-227 (2008).

Paparcone, R., N. Riemann, M. Zerara, J. Brickmann, D. Zahn, P. Simon and R. Kniep: On the generation of intrinsic electric dipole fields as the basis for the understanding of the morphogenesis of fluoroapatite-gelatine nano-composites. In: Chemistry Central Journal **2**, Suppl. 1, 39-39 (2008).

Parker, D. and P. Thalmeier: Inelastic quasiparticle scattering and T1-1 NQR relaxation rate in $Pr_{1-x}La_xOs_4Sb_{12}$. In: Physical Review B **77**, 184503-1-184503-5 (2008).

Philipp, F., P. Schmidt, E. Milke, M. Binnewies and S. Hoffmann: Synthesis of the titanium phosphide telluride Ti_2PTe_2: A thermochemical approach. In: Journal of Solid State Chemistry **181**, 758-767 (2008).

Philipp, F., P. Schmidt, M. Ruck, W. Schnelle and A. Isaeva: The layered metal Ti_2PTe_2. In: Journal of Solid State Chemistry **181**, 2859-2863 (2008).

Pikul, A. P., D. Kaczorowski, Z. Bukowski and F. Steglich: Heat capacity studies of single-crystalline CePt4In. In: Physica B **403**, 842-843 (2008).

Pöttgen, R., V. Hlukhyy, A. Baranov and Y. Grin: Crystal Structure and Chemical Bonding of Mg_3Ru_2. In: Inorganic Chemistry **47**, 6051-6055 (2008).

Prasad, A., V. K. Anand, Z. Hossain, P. L. Paulose and C. Geibel: Anisotropic magnetic behavior in $EuIr_2Ge_2$ single crystal. In: Journal of Physics: Condensed Matter **20**, 285217-1-285217-5 (2008).

Qu, Z., L. Spinu, H. Yuan, V. Dobrosavljević, W. Bao, J. W. Lynn, M. Nicklas, J. Peng, T. Liu, D. Fobes, E. Flesch and Z. Q. Mao: Unusual heavy-mass nearly ferromagnetic state with a surprisingly large Wilson ratio in the double layered ruthenates $(Sr_{1-x}Ca_x)_3Ru_2O_7$. In: Physical Review B **78**, 180407-1-180407-4 (2008).

Racu, A.-M., D. Menzel, J. Schoenes, M. Marutzky, S. Johnsen and B. B. Iversen: Phonon properties in narrow gap FeSi and $FeSb_2$ single crystals. In: Journal of Applied Physics **103**, 07C912-1-07C912-3 (2008).

Raskar, D. B., H. Eckert, B. Ewald and R. Kniep: Characterization of local environments in crystalline borophosphates using single and double resonance NMR. In: Solid State Nuclear Magnetic Resonance **34**, 20-31 (2008).

Reinstorf, A., P. Simon, B. Nies and W. Pompe: Design of calcium phosphate materials for bone regeneration - on the way to nanostructures. In: VDI Berichte **2027**, 143-149 (2008).

Reissner, M., E. Bauer, W. Steiner, P. Rogl, A. Leithe-Jasper and Y. Grin: Skutterudites, a thermoelectric material investigated by high field Mössbauer spectroscopy. In: Hyperfine Interact **182**, 15-22 (2008).

Rezania, H., A. Langari and P. Thalmeier: Green's function approach to quantum criticality in the anisotropic Kondo necklace model. In: Physical Review B **77**, 094438-1-094438-12 (2008).

Rößler, S., S. Ernst, B. Padmanabhan, S. Elizabeth, H. L. Bhat, F. Steglich and S. Wirth: Nanometer-scale phase separation in a colossal magnetoresistive manganite. In: Europhysics Letters **83**, 17009-p1-17009-p5 (2008).

Rosseeva, E. V., J. Buder, P. Simon, U. Schwarz, O. V. Frank-Kamenetskaya and R. Kniep: Synthesis, Characterization, and Morphogenesis of Carbonated Fluorapatite-Gelatine Nanocomposites: A Complex Biomimetic Approach toward the Mineralization of Hard Tissues. In: Chemistry of Materials **20**, 19, 6003-6013 (2008).

Schmitt, M., M. Schmidt, W. Schnelle, S.-L. Drechsler and H. Rosner: Crystal water induced alteration of magnetic exchange interactions. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 11, 2076-2076 (2008).

Schneider, M., A. Gladun, A. Kreyssig, J. Wosnitza, V. Petzold, H. Rosner, G. Behr, D. Souptel, K.-H. Müller, S.-L. Drechsler and G. Fuchs: Heat and charge transport in YNi_2B_2C and $HoNi_2B_2C$ single crystals. In: Journal of Physics: Condensed Matter **20**, 175221-1-175221-7 (2008).

Schnelle, W., A. Leithe-Jasper, H. Rosner, R. Cardoso-Gil, R. Gumeniuk, D. Trots, J. A. Mydosh and Y. Grin: Magnetic, thermal, and electronic properties of iron-antimony filled skutterudites MFe_4Sb_{12} (M = Na, K, Ca, Sr, Ba, La, Yb). In: Physical Review B **77**, 094421-1-094421-16 (2008).

Schwarz, U., A. Wosylus, B. Böhme, M. Baitinger, M. Hanfland and Y. Grin: A 3D Network of Four-Bonded Germanium: A Link between Open and Dense. In: Angewandte Chemie - International Edition **47**, 6790-6793 (2008).

Schwarz, U., A. Wosylus, B. Böhme, M. Baitinger, M. Hanfland and Y. Grin: Ein 3D-Netzwerk des vierbindigen Germaniums als Bindeglied zwischen offenen und dichten Elementstrukturen. In: Angewandte Chemie **120**, 6895-6898 (2008).

Sichelschmidt, J., S. Kimura, C. Krellner, C. Geibel and F. Steglich: Optical properties of $YbRh_2Si_2$ and $YbIr_2Si_2$: A comparison. In: Physica B **403**, 775-777 (2008).

Siggelkow, L., U. Burkhardt, G. Kreiner, M. Palm and F. Stein: Unusual mechanical behaviour of the intermetallic phase Nb_2Co_7. In: Materials Science and Engineering A **497**, 174-180 (2008).

Simon, P., H. Lichte, P. Formanek, M. Lehmann, R. Huhle, W. Carillo-Cabrera, A. Harscher and H. Ehrlich: Electron holography of biological samples. In: Micron **39**, 229-256 (2008).

Steglich, F., C. Geibel, F. M. Grosche, M. Loewenhaupt, O. Stockert, S. Wirth and H. Q. Yuan: Experimental evidence for unconventional BCS states in heavy-fermion metals. In: Physica B **403**, 968-972 (2008).

Stein, F., D. Jiang, M. Palm, G. Sauthoff, D. Grüner and G. Kreiner: Experimental reinvestigation of the Co-Nb phase diagram. In: Intermetallics **16**, 785-792 (2008).

Stockert, O., J. Arndt, A. Schneidewind, H. Schneider, H. S. Jeevan, C. Geibel, F. Steglich and M. Loewenhaupt: Magnetism and superconductivity in the heavy-fermion compound $CeCu_2Si_2$ studied by neutron scattering. In: Physica B **403**, 973-976 (2008).

Strydom, A. M., N. Oeschler and F. Steglich: $R_3Ir_4Ge_{13}$ (R = Yb, Lu): Thermal and magnetic properties. In: Physica B **403**, 746-748 (2008).

Takimoto, T.: Anomalous Spin Response in Non-centrosymmetric Compounds. In: Journal of the Physical Society of Japan **77**, 113706-1-113706-4 (2008).

Takimoto, T. and P. Thalmeier: Theory of induced quadrupolar order in tetragonal $YbRu_2Ge_2$. In: Physical Review B **77**, 045105-1-045105-12 (2008).

Taraphder, A., M. S. Laad, L. Craco and A. N. Yaresko: GdI_2: A New Ferromagnetic Excitonic Solid? In: Physical Review Letters **101**, 136410-1-136410-4 (2008).

Thalmeier, P.: Quantum frustrated and correlated electron systems. In: Iranian Journal of Physics Research **8**, 2, 25-38 (2008).

Thalmeier, P., T. Takimoto, J. Chang and I. Eremin: Multipolar Order and Superconductivity in f-Electron Compounds. In: Journal of the Physical Society of Japan / Supplement **77, A**, 43-47 (2008).

Thalmeier, P., M. E. Zhitomirsky, B. Schmidt and N. Shannon: Quantum effects in magnetization of J1-J2 square lattice antiferromagnet. In: Physical Review B **77**, 104441-1-104441-11 (2008).

Tsirlin, A. A., A. A. Belik, R. V. Shpanchenko, E. V. Antipov, E. Takayama-Muromachi and H. Rosner: Frustrated spin-1/2 square lattice in the layered perovskite $PbVO_3$. In: Physical Review B **77**, 092402-1-092402-4 (2008).

Tsirlin, A. A., R. Nath, C. Geibel and H. Rosner: Magnetic properties of $Ag_2VOP_2O_7$: An unexpected spin dimer system. In: Physical Review B **77**, 104436-1-104436-7 (2008).

Veremchuk, I., T. Mori, Y. Prots, W. Schnelle, A. Leithe-Jasper, M. Kohout and Y. Grin: Synthesis, chemical bonding and physical properties of $RERhB_4$ (RE = Y, Dy-Lu). In: Journal of Solid State Chemistry **181**, 1983-1991 (2008).

Vyalikh, D. V., S. Danzenbächer, A. N. Yaresko, M. Holder, Y. Kucherenko, C. Laubschat, C. Krellner, Z. Hossain, C. Geibel, M. Shi, L. Patthey and S. L. Molodtsov: Photoemission Insight into Heavy-Fermion Behavior in $YbRh_2Si_2$. In: Physical Review Letters **100**, 056402-1-056402-4 (2008).

Wagner, F. R., M. Kohout and Y. Grin: Direct Space Decomposition of ELI-D: Interplay of Charge Density and Pair-Volume Function for Different Bonding Situations. In: Journal of Physical Chemistry A **112**, 9814-9828 (2008).

Weber, F., A. Kreyssig, L. Pintschovius, R. Heid, W. Reichardt, D. Reznik, O. Stockert and K. Hradil: Direct Observation of the Superconducting Gap in Phonon Spectra. In: Physical Review Letters **101**, 237002-1-237002-4 (2008).

Weihrich, R., W. Schnelle and H. Rosner: Vom Mineral X zur Spintronic. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 11, 2023-2023 (2008).

Westerkamp, T., P. Gegenwart, C. Krellner, C. Geibel and F. Steglich: Low-temperature magnetic susceptibility of $Yb(Rh_{1-x}M_x)_2Si_2$(M = Ir, Co) single crystals. In: Physica B **403**, 1236-1238 (2008).

Wirth, S., S. Rößler, S. Ernst, B. Padmanabhan, H. L. Bhat, S. Elizabeth and F. Steglich: Density of states and spatially inhomogeneous conductance near the metal-insulator transition in $Pr_{0.68}Pb_{0.32}MnO_3$ single crystals. In: Journal of Physics: Condensed Matter **20**, 434231-1-434231-5 (2008).

Wosylus, A., Y. Prots, W. Schnelle, M. Hanfland and U. Schwarz: Crystal Structure Refinements of Ge(tP12), Physical Properties and Pressure-induced Phase Transformation Ge(tP12) ↔ Ge(tI4). In: Zeitschrift für Naturforschung B **63**, 608-614 (2008).

Yushankhai, V., T. Takimoto and P. Thalmeier: Spin fluctuations probed by NMR in paramagnetic spinel LiV_2O_4: a self-consistent renormalization theory. In: Journal of Physics: Condensed Matter **20**, 465221-1-465221-5 (2008).

Yushankhai, V., P. Thalmeier and T. Takimoto: Self-consistent renormalization theory of spin fluctuations in paramagnetic spinel LiV_2O_4. In: Physical Review B **77**, 125126-1-125126-6 (2008).

Zahn, D.: Minimum energy pathways of brittle and ductile deformation/fracture processes. In: Journal of Chemical Physics **128**, 184707-1-184707-6 (2008).

Zahn, D.: Length-dependent nucleation mechanisms rule the vaporization of n-alkanes. In: Chemical Physics Letters **467**, 80-83 (2008).

Zahn, D., F. Haarmann and Y. Grin: Atomistic Simulation Study of $Cu_{0.327}Ni_{0.673}$ Alloys: from Solid Solution to Phase Segregation. In: Zeitschrift für Anorganische und Allgemeine Chemie **634**, 2562-2566 (2008).

Zahn, D. and O. Hochrein: On the composition and atomic arrangement of calcium-deficient hydroxyapatite: An ab-initio analysis. In: Journal of Solid State Chemistry **181**, 1712-1716 (2008).

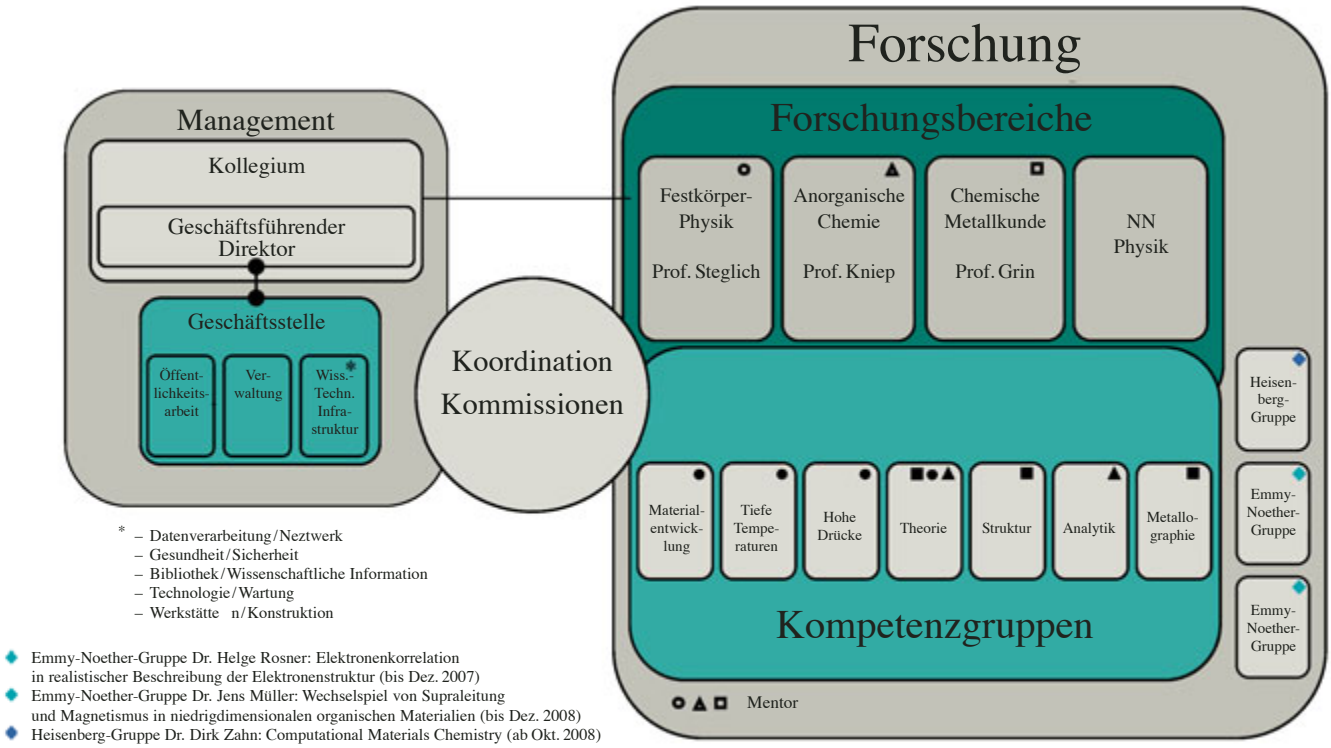
Zaharko, O., J. L. Gavilano, T. Strässle, C. F. Miclea, A. C. Mota, Y. Filinchuk, D. Chernyshov, P. P. Deen, B. Rahaman, T. Saha-Dasgupta, R. Valentí, Y. Matsushita, A. Dönni and H. Kitazawa: Structural and magnetic aspects of the nanotube system $Na_{2-x}V_3O_7$. In: Physical Review B **78**, 214426-1-214426-12 (2008).

Zaikina, J. V., K. A. Kovnir, F. Haarmann, W. Schnelle, U. Burkhardt, H. Borrmann, U. Schwarz, Y. Grin and A. V. Shevelkov: The First Silicon-Based Cationic Clathrate III with High Thermal Stability: $Si_{172-x}P_xTe_y$ (x = 2y, y > 20). In: Chemistry - A European Journal **14**, 5414-5422 (2008).

Zhang, H., J.-T. Zhao, Y. Grin, X.-J. Wang, M.-B. Tang, Z.-Y. Man, H.-H. Chen and X.-X. Yang: A new type of thermoelectric material, $EuZn_2Sb_2$. In: The Journal of Chemical Physics **129**, 164713-1-164713-5 (2008).

Zhu, Y., C. Wu, Y. Ramaswamy, E. Kockrick, P. Simon, S. Kaskel and H. Zreiqat: Preparation, characterization and in vitro bioactivity of mesoporous bioactive glasses (MBGs) scaffolds for bone tissue engineering. In: Microporous and Mesoporous Materials **112**, 494-503 (2008).

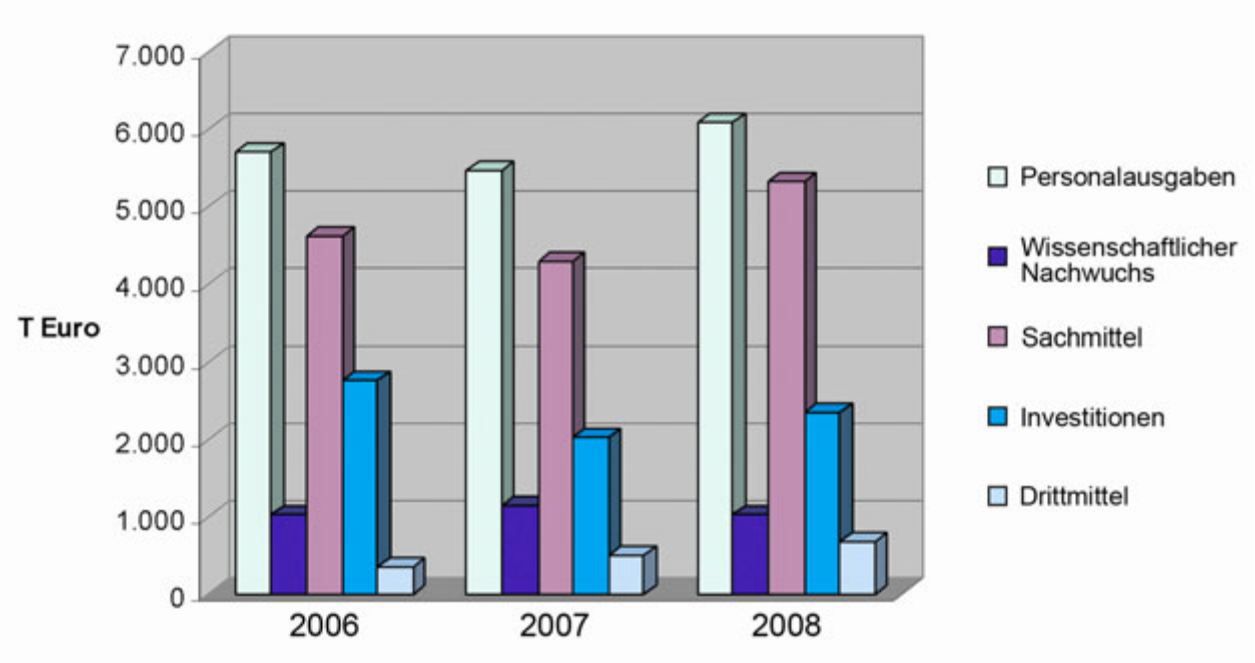
Organisation des Institutes
Organization of the Institute



* – Datenverarbeitung / Neztwerk
– Gesundheit / Sicherheit
– Bibliothek / Wissenschaftliche Information
– Technologie / Wartung
– Werkstätte n / Konstruktion

- Emmy-Noether-Gruppe Dr. Helge Rosner: Elektronenkorrelation in realistischer Beschreibung der Elektronenstruktur (bis Dez. 2007)
- Emmy-Noether-Gruppe Dr. Jens Müller: Wechselspiel von Supraleitung und Magnetismus in niedrigdimensionalen organischen Materialien (bis Dez. 2008)
- Heisenberg-Gruppe Dr. Dirk Zahn: Computational Materials Chemistry (ab Okt. 2008)

Entwicklung der Ausgaben des Institutes (Institutionelle Förderung / Drittmittel)
Trend in Expenditure (Institutional Funding / Third-Party Funds)



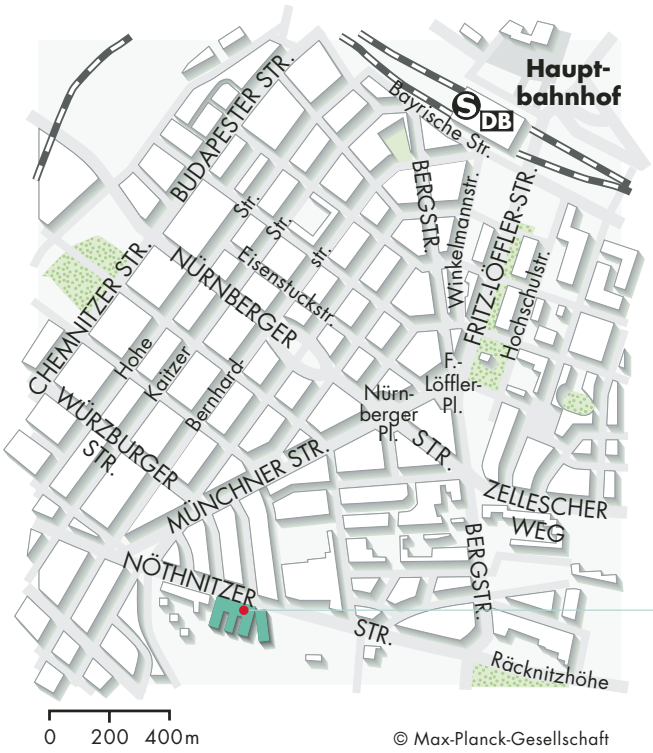
Öffentlichkeitsarbeit / *Public Relations*

Medien
– regionale und überregionale Presse (Pressemitteilungen)
– Rundfunk und Fernsehen

Aktionen, Besuche
– Besuche von wissenschaftlichen Delegationen und Politikergruppen
– Führungen für Lehrer- und Schülergruppen, Studentengruppen und interessierte Bürger
– Betreuung von experimentell orientierten Schülerarbeiten („Besondere Lernleistungen“)
– Schulpraktika
– Kunstausstellungen / Vernissagen
– Firmenpräsentationen und Workshops
– Lehrlingsausbildung

Großveranstaltungen
– *Dresden – Stadt der Wissenschaften 2006*
(s. Zusammenarbeit mit anderen Institutionen)
– *Dresdner Lange Nacht der Wissenschaften,* Veranstalter: Dresdner Wissenschaftseinrichtungen und Netzwerk Dresden – Stadt der Wissenschaften
27.6.2006, 18.00 – 1.00 Uhr, 2300 Besucher
29.6.2007, 18.00 – 1.00 Uhr, 3900 Besucher
– Jahrestagung der Max-Planck-Gesellschaft im Dresdner Kongresszentrum vom 24.6. – 27.6.2008; betreuter Institutsstand im Kongresscenter; Führungen im Institut während des Rahmenprogramms Jahrbuch der Max-Planck-Gesellschaft

Zusammenarbeit mit anderen Institutionen, Mitarbeit und Mitgliedschaft in Netzwerken
– *Netzwerk „Dresden – Stadt der Wissenschaften” e.V.*
  • Der Stifterverband schrieb 2003 zum ersten Mal den Wettbewerb „Stadt der Wissenschaften“ für das Jahr 2005 aus, an dem sich die Stadt Dresden beteiligte und zu den drei Finalisten gehörte. Die Gründung des Netzwerkes folgte danach mit Blick auf die Bewerbung von Dresden in der folgenden Ausschreibung. Mitte 2005 errang die Stadt Dresden den Titel „Stadt der Wissenschaften 2006“, in dessen Rahmen sich das Institut aktiv an folgenden Veranstaltungen beteiligte:
  Lange Nacht der Wissenschaften (s. oben, Besucherzahl gesamt ca. 30.000)
  Faszination Technologie, „Haus der Technik“ im Dresdner Hauptbahnhof, 5.11.2006 (ca. 3000 Besucher)
  • Aus den Aktivitäten im Rahmen der „Stadt der Wissenschaften 2006“ wurde der *Juniordoktor* weitergeführt. Das Institut bot 2007/2008 zwei und 2008/2009 vier interaktive Vorlesungen an.
  • 2007 Journalistenreise
– *Technische Universität Dresden*
Führungen im Rahmen der Sommeruniversität 2006, 2007, 2008
– *Materialforschungsverbund Dresden e.V.*



Max-Planck-Institut
für Chemische Physik fester Stoffe

Anreise mit dem Auto
Wechseln Sie von der Autobahn A4 am Autobahndreieck Dresden-West auf die A17. An der Ausfahrt Dresden-Südvorstadt verlassen Sie die A17 und fahren auf der B170 in Richtung Stadtmitte ca. 2,5 km bis zur zweiten großen Kreuzung mit einer Ampelanlage. Dort biegen Sie der Beschilderung „Plauen“ folgend nach links in die Nöthnitzer Straße ein.

Von der Stadtmitte kommend folgen Sie bitte den Hinweisen „A17“, „B170“ bzw. „Prag“. Nachdem Sie den Campus der Technischen Universität passiert haben, biegen Sie bitte dem Hinweis „Plauen“ folgend an der nächsten großen Ampelkreuzung scharf nach rechts in die Nöthnitzer Straße ein.

Anreise mit der Bahn
Von beiden Dresdner Bahnhöfen (Hauptbahnhof und Bahnhof Dresden-Neustadt) bringt Sie die Straßenbahnlinie 3 in Richtung Coschütz bis zur Haltestelle Nöthnitzer Straße.

Anreise mit dem Flugzeug
Die S-Bahnlinie 2 bringt Sie vom Flughafen bis zum Hauptbahnhof Dresden bzw. Bahnhof Dresden-Neustadt. Von dort siehe Anreise mit der Bahn.

Arrival by car
Change the motorway A4 at the interchange Dresden-West to the motorway A17 to Prague. At the exit Dresden-Südvorstadt follow the B170 towards the city center (Stadtzentrum) for about 2.5 km to the second intersection with traffic lights (sign “Plauen”). Turn to the left into Nöthnitzer Straße.

From the city center follow the signs “A17”, “B170” or “Prag”. After passing Dresden University campus turn to the right (sign “Plauen”) into Nöthnitzer Straße at the traffic lights.

Arrival by train
From both railway stations, Hauptbahnhof Dresden (Central Station) and Bahnhof Dresden-Neustadt take streetcar no. 3 (destination Coschütz) to Nöthnitzer Straße.

Arrival by plane
Take the S-Bahn (suburban railway) no. 2 from the airport to Hauptbahnhof Dresden (Central Station) or Bahnhof Dresden-Neustadt. From here see arrival by train.