



PUBLICATIONS

Acartürk, T., K. Semmelroth, G. Pensl, S.E. Sadow and U. Starke. Concentration of N and P in SiC investigated by time-of-flight secondary ion mass spectrometry (TOF-SIMS). Materials Science Forum **483-485**, 453–456 (2005).

Achary, S.N., A.K. Tyagi and J. Köhler. Lattice thermal expansion studies of V₂GeO₄F₂: A topaz type oxide-fluoride. Materials Research Bulletin **40**, 1143–1147 (2005).

Acosta-Diaz, P. see Costantini, G.

Agrawal, S., M.J. Frederick, F. Lupo, P. Victor, O. Nalamasu and G. Ramanath. Directed growth and electrical-transport properties of carbon nanotube architectures on indium tin oxide films on silicon-based substrates. Advanced Functional Materials **15**, 1922–1926 (2005).

Agrawal, S., A. Kumar, M.J. Frederick and G. Ramanath. Hybrid microstructures from aligned carbon nanotubes and silica particles. Small **1**, 823–826 (2005).

Ahlert, S., R.E. Dinnebier and M. Jansen. The crystal structures of the high-temperature phases of Ag₄Mn₃O₈. Zeitschrift für anorganische und allgemeine Chemie **631**, 90–98 (2005).

Ahn, K., R.K. Kremer, A. Simon, W.G. Marshall, P. Puschnig and C. Ambrosch-Draxl. Influence of pressure on the structure and electronic properties of the layered superconductor Y₂C₂I₂. Journal of Physics: Condensed Matter **17**, S3121–S3130 (2005).

Ahrens, M. see Klemme, S.

Aku-Leh, C., J. Zhao, R. Merlin, J. Menéndez and M. Cardona. Long-lived optical phonons in ZnO studied with impulsive stimulated Raman scattering. Physical Review B **71**, 205211 (2005).

Alam, M.S., S. Strömsdörfer, V. Dremov, P. Müller, J. Kortus, M. Ruben and J.M. Lehn. Addressing the Metal Centers of [2x2] Co₄^{II} Grid-Type Complexes by STM/STS. Angewandte Chemie International Edition **44**, 7896–7900 (2005).

Albrecht, J., A.T. Matveev, M. Djupmyr, G. Schütz, B. Stuhlhofer and H.-U. Habermeier. Bending of magnetic avalanches in MgB₂ thin films. Applied Physics Letters **87**, 182501 (2005).

Albrecht, J., S. Soltan and H.-U. Habermeier. Magnetic pinning of flux lines in heterostructures of cuprates and manganites. Physical Review B **72**, 092502 (2005).

Albu-Yaron, A., T. Arad, R. Popovitz-Biro, M. Bar-Sadan, Y. Prior, M. Jansen and R. Tenne. Preparation and structural characterization of stable Cs₂O closed-cage structures. Angewandte Chemie International Edition **44**, 4169–4172 (2005).

Aldon, L., J. Olivier-Fourcade, J.C. Jumas, M. Holzapfel, C. Darie and P. Strobel. Redox behaviour of iron during delithiation in Li_xCo_{1-y}Fe_yO₂ solid solution: An in situ ⁵⁷Fe Mössbauer study. Journal of Power Sources **146**, 259–263 (2005).

Alvarez, G., M. Mayr, A. Moreo and E. Dagotto. Areas of superconductivity and giant proximity effects in underdoped cuprates. Physical Review B **71**, 014514 (2005).

Andergassen, S. see Enss, T.; Meden, V.

Andersen, O.K. see Pavarini, E.; Zurek, E.

Aristov, D.N. and R. Zeyher. Optical conductivity and the sum rule in the DDW state. Physica B **359**, 530–532 (2005).

Aristov, D.N. and R. Zeyher. Optical conductivity of unconventional charge-density-wave systems: Role of vertex corrections. *Physical Review B* **72**, 115118 (2005).

Arita, R. Electronic structure of sodium cobalt oxide: Comparing mono- and bilayer hydrate. *Physical Review B* **71**, 132503 (2005).

Arita, R. and K. Held. Orbital-selective Mott-Hubbard transition in the two-band Hubbard model. *Physical Review B* **72**, 201102 (2005).

Arita, R. see Onari, S.; Tezuka, M.

Arnaud, B., S. Lebègue and M. Alouani. Excitonic and quasiparticle lifetime effects on silicon electron energy loss spectra from first principles. *Physical Review B* **71**, 035308 (2005).

Artukovic, E., M. Kaempgen, D.S. Hecht, S. Roth and G. Grüner. Transparent and flexible carbon nanotube transistors. *Nano Letters* **5**, 757–760 (2005).

Arulraj, A., R.E. Dinnebier, S. Carlson, M. Hanfland and S. van Smaalen. Shear strain in Nd_{0.5}Ca_{0.5}MnO₃ at high pressures. *Physical Review Letters* **94**, 165504 (2005).

Arumugam, N., M. Sofin and M. Jansen. Crystal structure of tripotassium monosodium ditungstate, K₃Na[WO₄]₂. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 531–532 (2005).

Audouard, A., D. Vignolles, E. Haanappel, I. Sheikin, R.B. Lyubovskii and R.N. Lyubovskaya. Magnetic oscillations in a two-dimensional network of compensated electron and hole orbits. *Europhysics Letters* **71**, 783–789 (2005).

Ayari, M., V. Paul-Boncour, J. Lamloumi, A. Percheron-Guégan and M. Guillot. Study of the aging of LaNi_{3.55}Mn_{0.4}Al_{0.3}(Co_{1-x}Fe_x)_{0.75} (0≤x≤1) compounds in Ni-MH batteries by SEM and magnetic measurements. *Journal of Magnetism and Magnetic Materials* **288**, 374–383 (2005).

Azbel', M.Y. Exact law of live nature. *Physica A* **353**, 625–636 (2005).

Babinski, A., S. Awirothananon, J. Lapointe, Z. Wasilewski, S. Raymond and M. Potemski. Single-dot spectroscopy in high magnetic fields. *Physica E* **26**, 190–193 (2005).

Babizhetsky, V., Hj. Mattausch, R. Gautier, J. Bauer, J.F. Halet and A. Simon. B₅C₅ anionic molecules trapped in a solid matrix: The crystal and electronic structures of LaBC. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 1041–1046 (2005).

Babizhetsky, V., I. Veremchuk, N. Chaban and Y. Kuz'ma. Crystal structure of diytterbium pentadecanickel nonaboride, Yb₂Ni₁₅B₉. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 1–2 (2005).

Babizhetsky, V. see Roger, J.; Simon, A.; Veremchuk, I.V.

Bala, J. and P. Horsch. Spin-orbital physics in the optical conductivity of quarter-filled manganites. *Physical Review B* **72**, 012404 (2005).

Bala, J. and A.M. Oleś. Spin wave excitations in ferromagnetic manganites with orbital order. *Physica B* **359**, 675–677 (2005).

Balasubramanian, K. and M. Burghard. Chemically functionalized carbon nanotubes. *Small* **1**, 180–192 (2005).

Balasubramanian, K. and M. Burghard. Nanocylinders with highly potential utility – Functionalized carbon nanotubes. *Chemie in unserer Zeit* **39**, 16–25 (2005).

Balasubramanian, K., M. Burghard, K. Kern, M. Scolari and A. Mews. Photocurrent imaging of charge transport barriers in carbon nanotube devices. *Nano Letters* **5**, 507–510 (2005).

Balasubramanian, K. see Sordan, R.

Balaya, P. and P.S. Goyal. Non-Debye conductivity relaxation in a mixed glassformer system. *Journal of Non-Crystalline Solids* **351**, 1573–1576 (2005).

- Balci, S. see Bittner, A.M.
- Balog, P. see Orosel, D.; Tyagi, A.K.
- Baltes, E., D. Schweitzer and P. Wyder.* Low integer Landau level filling factors ν and indications for the fractional $\nu = 1/2$ in the 2D organic metal κ -(BEDT-TTF)₂I₃. Solid State Communications **136**, 238–243 (2005).
- Banks, M. see Yahia, H.B.
- Barentzen, H.* Systematic strong-coupling expansion of the $T \otimes t$ Jahn-Teller system. Journal of Physics: Condensed Matter **17**, 4713–4729 (2005).
- Barra, A.L., D. Gatteschi, R. Sessoli and L. Sorace.* High-field/high-frequency EPR studies of spin clusters with integer spin: the multi-frequency approach. Magnetic Resonance in Chemistry **43**, S183–S191 (2005).
- Barth, J.V., G. Costantini and K. Kern.* Engineering atomic and molecular nanostructures at surfaces. Nature **437**, 671–679 (2005).
- Baumann, F.S., J. Fleig, M. Konuma, U. Starke, H.-U. Habermeier and J. Maier.* Strong performance improvement of La_{0.6}Sr_{0.4}Co_{0.8}Fe_{0.2}O_{3- δ} SOFC cathodes by electrochemical activation. Journal of the Electrochemical Society **152**, A2074–A2079 (2005).
- Bayrakci, S.P., I. Mirebeau, P. Bourges, Y. Sidis, M. Enderle, J. Mesot, D.P. Chen, C.T. Lin and B. Keimer.* Magnetic Ordering and Spin Waves in Na_{0.82}CoO₂. Physical Review Letters **94**, 157205 (2005).
- Bdikin, I.K., A.N. Maljuk, A.B. Kulakov, C.T. Lin, P. Kumar, B. Kumar, G.C. Trigunayat, G.A. Emel'chenko and A.L. Khoklin.* X-ray and AFM studies of Bi₂Sr₂CaCu₂O_{8+x} single-crystals grown by different methods. Journal of Crystal Growth **275**, e1799–e1805 (2005).
- Becker, R., M. Johnsson, R.K. Kremer and P. Lemmens.* Crystal structure and magnetic properties of Cu₃(TeO₃)₂Br₂ – a layered compound with a new Cu(II) coordination polyhedron. Journal of Solid State Chemistry **178**, 2024–2029 (2005).
- Bek, A., R. Vogelgesang and K. Kern.* Optical nonlinearity versus mechanical anharmonicity contrast in dynamic mode apertureless scanning near-field optical microscopy. Applied Physics Letters **87**, 163115 (2005).
- Bhattacharyya, A.J., J. Fleig, Y.-G. Guo and J. Maier.* Local conductivity effects in polymer electrolytes. Advanced Materials **17**, 2630–2634 (2005).
- Bhattacharyya, A.J. see Pötschke, P.
- Biaso, F., C. Duboc, B. Barbara, G. Serratrice, F. Thomas, D. Charapoff and C. Béguin.* High-field EPR study of frozen aqueous solutions of iron(III) citrate complexes. European Journal of Inorganic Chemistry **2005**, 467–478 (2005).
- Bittner, A.M.* Biomolecular rods and tubes in nanotechnology. Naturwissenschaften **92**, 51–64 (2005).
- Bittner, A.M., X.C. Wu, S. Balci, M. Knez, A. Kadri and K. Kern.* Bottom-up synthesis and top-down organisation of semiconductor and metal clusters on surfaces. European Journal of Inorganic Chemistry **2005**, 3717–3728 (2005).
- Bittner, A.M. see Katsaros, G.; Wu, X.C.
- Blöß, S.P., J. Nuss and M. Jansen.* Crystal structure of diethyl ether-tetrachloro-diethylamido-tantalum(V), TaCl₄(C₄H₁₀N)(C₄H₁₀O). Zeitschrift für Kristallographie: New Crystal Structures **220**, 215–216 (2005).
- Boeri, L. see Giantomassi, M.
- Boris, A. see Mihailova, B.; Pimenov, A.V.
- Bose, S.K., T. Kato and O. Jepsen.* Superconductivity in boron under pressure: A full-potential linear muffin-tin orbitals study. Physical Review B **72**, 184509 (2005).

- Bouguerra, A., S. Khène, S. de Brion, G. Chouteau and G. Fillion.* High field magnetic transitions in the mixed holmium-yttrium iron garnet $\text{Ho}_{0.43}\text{Y}_{2.57}\text{Fe}_5\text{O}_{12}$. *Journal of Physics: Condensed Matter* **17**, 241–248 (2005).
- Bourdarot, F., B. Fåk, F. Lapierre, I. Sheikin and P. Lejay.* Magnetic phase diagram of $\text{U}(\text{Ru}_{0.98}\text{Rh}_{0.02})_2\text{Si}_2$. *Physica B* **359**, 1132–1134 (2005).
- Bourges, P., B. Keimer, S. Pailhès, L.P. Regnault, Y. Sidis and C. Ulrich.* The resonant magnetic mode: A common feature of high- T_c superconductors. *Physica C* **424**, 45–49 (2005).
- Brener, S. and W. Metzner.* Semiclassical theory of electron drag in strong magnetic fields. *JETP Letters* **81**, 498–502 (2005).
- Brillante, A., R.G. Della Valle, L. Farina, E. Venuti, C. Cavazzoni, A.P.J. Emerson and K. Syassen.* High-pressure dissociation of crystalline para-dilobenzene: Optical experiments and Car-Parrinello calculations. *Journal of the American Chemical Society* **127**, 3038–3043 (2005).
- Brown, P.J., K.U. Neumann, A. Simon, F. Ueno and K.R.A. Ziebeck.* Magnetization distribution in COS_2 ; is it a half metallic ferromagnet? *Journal of Physics: Condensed Matter* **17**, 1583–1592 (2005).
- Briück, S. and J. Albrecht.* Experimental evidence of the dominant role of low-angle grain boundaries for the critical current density in epitaxially grown $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ thin films. *Physical Review B* **71**, 174508 (2005).
- Bruno, M., A. Toschi, L. Dell'Anna and C. Castellani.* Quasiparticle dephasing time in disordered d-wave superconductors. *Physical Review B* **72**, 104512 (2005).
- Bulusheva, L.G., P.N. Gevko, A.V. Okotrub, N.F. Yudanov, I.V. Yushina, E. Flahaut, U. Dettlaff-Weglikowska and S. Roth.* Inertness of Near-Armchair Carbon Nanotubes towards Fluorination. In: *Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials*; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. *AIP Conference Proceedings* **786**, 228–231 (2005). American Institute of Physics, New York, USA.
- Burgert, R., K. Koch, H. Schnockel, M. Weisser, H.J. Meyer and H.G. von Schnering.* Mass spectrometric investigations of the dissociation of $[\text{C}@\text{W}_6\text{Cl}_{17}]^-$ ions in the gas phase. *Angewandte Chemie International Edition* **44**, 265–269 (2005).
- Burghard, M.* Asymmetric end-functionatization of carbon nanotubes. *Small* **1**, 1148–1150 (2005).
- Burghard, M.* Electronic and vibrational properties of chemically modified single-wall carbon nanotubes. *Surface Science Reports* **58**, 1–109 (2005).
- Burghard, M. see Balasubramanian, K.; Paredes, J.I.; Raible, I.; Sordan, R.
- Bussmann-Holder, A., A.R. Bishop and T. Egami.* Relaxor ferroelectrics and intrinsic inhomogeneity. *Europhysics Letters* **71**, 249–255 (2005).
- Bussmann-Holder, A. and H. Keller.* Polaron formation as origin of unconventional isotope effects in cuprate superconductors. *European Physical Journal B* **44**, 487–490 (2005).
- Bussmann-Holder, A., H. Keller, A.R. Bishop, A. Simon, R. Micnas and K.A. Müller.* Unconventional isotope effects as evidence for polaron formation in cuprates. *Europhysics Letters* **72**, 423–429 (2005).
- Bussmann-Holder, A., H. Keller and K.A. Müller.* Evidences for polaron formation in cuprates. *Structure and Bonding* **114**, 365–384 (2005).
- Bussmann-Holder, A. see Filippi, M.; Gulacs, M.; Micnas, R.
- Bychkov, Y.A. and G. Martinez.* Magnetoplasmons and cyclotron resonance in a two-dimensional electron gas. *Physical Review B* **72**, 195328 (2005).
- Byszewski, M. see Orlita, M.
- Cador, O., D. Gatteschi, R. Sessoli, A.L. Barra, G.A. Timco and R.E.P. Winpenny.* Spin frustration effects in an odd-member antiferromagnetic ring and the magnetic Möbius strip. *Journal of Magnetism and Magnetic Materials* **290**, 55–60 (2005).

- Čančarević, Z., J.C. Schön and M. Jansen. Prediction of possible high-pressure phases of Cu₃N. Zeitschrift für anorganische und allgemeine Chemie **631**, 1167–1171 (2005).
- Čančarević, Z.P., J.C. Schön, D. Fischer and M. Jansen. Theoretical and experimental exploration of the energy landscape of LiI. Materials Science Forum **494**, 61–66 (2005).
- Cantelli, R., A. Paolone, S. Roth and U. Dettlaff. Hydrogen dynamics in HiPco carbon nanotubes. Journal of Alloys and Compounds **404–406**, 630–633 (2005).
- Capogna, L., M. Mayr, P. Horsch, M. Raichle, R.K. Kremer, M. Sofin, A. Maljuk, M. Jansen and B. Keimer. Helicoidal magnetic order in the spin-chain compound NaCu₂O₂. Physical Review B **71**, 140402 (2005).
- Cardona, M. Electron-phonon interaction in tetrahedral semiconductors. Solid State Communications **133**, 3–18 (2005).
- Cardona, M. Martin Stutzmann: Editor, teacher, scientist and friend. physica status solidi (b) **242**, 493–494 (2005).
- Cardona, M., R.K. Kremer, M. Sanati, S.K. Estreicher and T.R. Anthony. Measurements of the heat capacity of diamond with different isotopic compositions. Solid State Communications **133**, 465–468 (2005).
- Cardona, M. and W. Marx. The disaster of the Nazi-power in science as reflected by some leading journals and scientists in physics. A bibliometric study. Scientometrics **64**, 313–324 (2005).
- Cardona, M. and M.L.W. Thewalt. Isotope effects on the optical spectra of semiconductors. Reviews of Modern Physics **77**, 1173–1224 (2005).
- Carrasco, J., F. Illas, N. Lopez, E.A. Kotomin, Y.F. Zhukovskii, S. Piskunov, J. Maier and K. Hermansson. First principles simulations of F centers in cubic SrTiO₃. physica status solidi (c) **2**, 153–158 (2005).
- Carretta, S., P. Santini, G. Amoretti, M. Afronte, A. Ghirri, I. Sheikin, S. Piligkos, G. Timco and R.E.P. Winpenny. Topology and spin dynamics in magnetic molecules. Physical Review B **72**, 060403 (2005).
- Casanova, M., S. de Brion, A. Labarta and X. Batlle. Coexistence of short-range ferromagnetic and anti-ferromagnetic correlations in Ge-rich Gd₅(Si_xGe_{1-x})₄ alloys. Journal of Physics D **38**, 3343–3347 (2005).
- Cásek, P., C. Bernhard, J. Humlíček and D. Munzar. Interpretation of in-plane infrared response of high-T_c cuprate superconductors involving spin fluctuations using quasiparticle spectral functions. Physical Review B **72**, 134526 (2005).
- Cech, J. see Dettlaff-Weglikowska, U.; Hornbostel, B.; Pötschke, P.
- Chakhalian, J., Z. Salman, J. Brewer, A. Froese, J. He, D. Mandrus and R. Jin. Magnetism in purple bronze Li_{0.9}Mo₆O₁₇. Physica B **359**, 1333–1335 (2005).
- Chakhalian, J. see Stahn, J.; Zegkinoglou, I.
- Chandra Shekar, N.V., M. Rajagopalan, J.F. Meng, D.A. Polvani and J.V. Badding. Electronic structure and thermoelectric power of cerium compounds at high pressure. Journal of Alloys and Compounds **388**, 215–220 (2005).
- Chen, D.P., A. Maljuk and C.T. Lin. Floating zone growth of lithium iron (II) phosphate single crystals. Journal of Crystal Growth **284**, 86–90 (2005).
- Chen, D.P. see Bayrakci, S.P.; Lin, C.T.; Vaulxde , C.; Zhang, X.N.
- Chen, H.Y., M.N. Collomb, C. Duboc, G. Blondin, E. Riviere, J.W. Faller, R.H. Crabtree and G.W. Brudvig. New linear high-valent tetrานuclear manganese-oxo cluster relevant to the oxygen-evolving complex of photosystem II with oxo, hydroxo, and aqua coordinated to a single Mn(IV). Inorganic Chemistry **44**, 9567–9573 (2005).
- Chen, X.J., H.-U. Habermeier, H. Zhang, G. Gu, M. Varela, J. Santamaria and C.C. Almasan. Metal-insulator transition above room temperature in maximum colossal magnetoresistance manganite thin films. Physical Review B **72**, 104403 (2005).

Chitta, V.A., W. Desrat, D.K. Maude, B.A. Piot, N.F. Oliveira, P.H.O. Rappl, A.Y. Ueta and E. Abramof. Multivalley transport and the integer quantum Hall effect in a PbTe quantum well. *Physical Review B* **72**, 195326 (2005).

Choi, K.-Y., P. Lemmens, T. Sahaoui, G. Güntherodt, Y.G. Pashkevich, V.P. Gnezdilov, P. Reutler, L. Pinsard-Gaudart, B. Büchner and A. Revcolevschi. Existence of orbital polarons in ferromagnetic insulating $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ ($0.11 \leq x \leq 0.14$) revealed by giant phonon softening. *Physical Review B* **71**, 174402 (2005).

Choi, K.Y., P. Lemmens, G. Güntherodt, Y.G. Pashkevich, V.P. Gnezdilov, P. Reutler, L. Pinsard-Gaudart, B. Büchner and A. Revcolevschi. Orbiton-mediated multiphonon scattering in $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$. *Physical Review B* **72**, 024301 (2005).

Choi, K.Y., A. Oosawa, H. Tanaka and P. Lemmens. Inelastic light scattering experiments on the coupled spin dimer system $\text{Tl}_{1-x}\text{K}_x\text{CuCl}_3$. *Progress of Theoretical Physics, Supplement* **159**, 195–199 (2005).

Christ, A., T. Zentgraf, J. Kuhl, N.A. Gippius, S.G. Tikhodeev and H. Giessen. Optical Properties of Planar Metallo-Dielectric Photonic Crystal Superlattices. In: CLEO/IQEC Technical Conference and PhAST Conference. Baltimore, Maryland, 2005. Trends in Optics and Photonics paper QMK4, on CD (2005). Optical Society of America, Long Beach, CA, USA.

Christ, A. see Gippius, N.A.; Linden, S.; Tikhodeev, S.G.

Clade, J. and M. Jansen. Crystal structure of tetrakis(phenylamino)silane, $\text{Si}(\text{C}_6\text{H}_5\text{NH})_4$. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 237–238 (2005).

Clade, J. and M. Jansen. Crystal structures of triphenyl thiophosphate and selenophosphate, $(\text{C}_6\text{H}_5)_3\text{PO}_3\text{X}$ ($\text{X} = \text{S}, \text{Se}$). *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 234–236 (2005).

Clair, S., W. Pons, H. Brune, K. Kern and J.V. Barth. Mesoscopic metallosupramolecular texturing by hierarchic assembly. *Angewandte Chemie International Edition* **44**, 7294–7297 (2005).

Clary, D.C., D.J. Wales, J.C. Schön and P.G. Wolynes. Discussion. *Philosophical Transactions of the Royal Society of London. Series A: Mathematical and Physical Sciences* **363**, 375–377 (2005).

Classen, T., G. Fratesi, G. Costantini, S. Fabris, F.L. Stadler, C. Kim, S. de Gironcoli, S. Baroni and K. Kern. Templated growth of metal-organic coordination chains at surfaces. *Angewandte Chemie International Edition* **44**, 6142–6145 (2005).

Costantini, G., A. Rastelli, C. Manzano, P. Acosta-Diaz, G. Katsaros, R. Songmuang, O.G. Schmidt, H. Von Kanel and K. Kern. Pyramids and domes in the InAs/GaAs(001) and Ge/Si(001) systems. *Journal of Crystal Growth* **278**, 38–45 (2005).

Costantini, G. see Barth, J.V.; Classen, T.; Denker, U.; Katsaros, G.; Zhong, Z.

Crandles, D.A., M. Reedyk, G. Wardlaw, F.S. Razavi, T. Hagino, S. Nagata, I. Shimono and R.K. Kremer. Absence of the 90 K structural transition in CuV_2S_4 crystals grown by chemical vapour transport using TeCl_4 . *Journal of Physics: Condensed Matter* **17**, 4813–4823 (2005).

Croitoru, M.D., G. Bertsche, D.R. Kern, C. Burkhardt, S. Bauerdt, S. Sahakalkan and S. Roth. Visualisation and in situ contacting of carbon nanotubes in a scanning electron microscope. *Journal of Vacuum Science & Technology B* **23**, 2789–2792 (2005).

Daghofer, M., A.M. Oleś and W. von der Linden. Onset of metallic ferromagnetism in a doped spin-orbital chain. *physica status solidi (b)* **242**, 311–316 (2005).

Dahan, P. and I.D. Vagner. Nuclear spin relaxation rate of magnetic impurities in quantum Hall effect systems. *Physical Review B* **72**, 115328 (2005).

Darie, C., P. Bordet, S. de Brion, M. Holzapfel, O. Isnard, A. Lecchi, J.E. Lorenzo and E. Suard. Magnetic structure of the spin-1/2 layer compound NaNiO_2 . *European Physical Journal B* **43**, 159–162 (2005).

De Souza, R.A., J. Fleig, J. Maier, Z. Zhang, W. Sigle and M. Rühle. Electrical resistance of low-angle tilt grain boundaries in acceptor-doped SrTiO_3 as a function of misorientation angle. *Journal of Applied Physics* **97**, 053502 (2005).

De Souza, R.A., J. Zehnpfenning, M. Martin and J. Maier. Determining oxygen isotope profiles in oxides with Time-of-Flight SIMS. Solid State Ionics **176**, 1465–1471 (2005).

Deiseroth, H.J., K. Aleksandrov and R.K. Kremer. Structural and magnetic properties of Mn₂GeSe₄. Zeitschrift für anorganische und allgemeine Chemie **631**, 448–450 (2005).

Dell'Anna, L. see Bruno, M.

Deng, S., A. Simon and J. Köhler. A ‘flat/stEEP band’ model for superconductivity. International Journal of Modern Physics B **19**, 29–36 (2005).

Deng, S., A. Simon and J. Köhler. Pairing mechanisms viewed from physics and chemistry. Structure and Bonding **114**, 103–141 (2005).

Denker, U., A. Rastelli, M. Stoffel, J. Tersoff, G. Katsaros, G. Costantini, K. Kern, N.Y. Jin-Phillipp, D.E. Jesson and O.G. Schmidt. Lateral motion of SiGe islands driven by surface-mediated alloying. Physical Review Letters **94**, 216103 (2005).

Dettlaff-Weglikowska, U., V. Skákalová, R. Graupner, S.H. Jhang, B.H. Kim, H.J. Lee, L. Ley, Y.W. Park, S. Berber, D. Tomanek and S. Roth. Effect of SOCl₂ treatment on electrical and mechanical properties of single-wall carbon nanotube networks. Journal of the American Chemical Society **127**, 5125–5131 (2005).

Dettlaff-Weglikowska, U., J. Wang, J. Liang, B. Hornbostel, J. Cech and S. Roth. Purity Evaluation of Bulk Single Wall Carbon Nanotube Materials. In: Proceedings of the XIXth International Winterschool/Euro-conference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 129–134 (2005). American Institute of Physics, New York, USA.

Diaz, S., S. de Brion, G. Chouteau, P. Strobel, B. Canals, J.R. Carvajal, H. Rakoto and J.M. Broto. Magnetic frustration in the spinel compounds GeNi₂O₄ and GeCo₂O₄. Journal of Applied Physics **97**, 10A512 (2005).

Dietsche, W. see Kulik, L.V.; Schulte, M.

Dinnebier, R.E. 2D Powder Diffraction. Newsletter of the Commission on Powder Diffraction (International Union of Crystallography) **32**, ISSN 1591-9552 (2005).

Dinnebier, R.E., H. Nuss and M. Jansen. Anhydrous CuC₄O₄, a channel structure solved from X-ray powder diffraction data. Zeitschrift für anorganische und allgemeine Chemie **631**, 2328–2332 (2005).

Dinnebier, R.E., H. Nuss and M. Jansen. Disodium rhodizonate: a powder diffraction study. Acta Crystallographica E **61**, M2148–M2150 (2005).

Dinnebier, R.E., H. Nuss and M. Jansen. The crystal structures of solvent-free alkali-metal squarates from powder diffraction data. Zeitschrift für Kristallographie **220**, 954–961 (2005).

Dinnebier, R.E., S. van Smaalen, F. Olbrich and S. Carlson. Effect of crystal packing on the structures of polymeric metallocenes. Inorganic Chemistry **44**, 964–968 (2005).

Dinnebier, R.E., S. Vensky, M. Jansen and J.C. Hanson. Crystal structures and topological aspects of the high-temperature phases and decomposition products of the alkali-metal oxalates M₂[C₂O₄] (M = K, Rb, Cs). Chemistry – A European Journal **11**, 1119–1129 (2005).

Dinnebier, R.E. see Ahlert, S.; Arulraj, A.; Hildebrandt, L.; Hinrichsen, B.; Karpov, A.; Okudera, H.; Paneerselvam, R.; Ruth, K.; Schmidt, M.U.; van Smaalen, S.; Sofina, N.; Solovyov, L.A.; Vensky, S.; Łodyga-Chruścińska, E.

Djupmyr, M., G. Cristiani, H.-U. Habermeier and J. Albrecht. Anisotropic temperature-dependent current densities in vicinal YBa₂Cu₃O_{7-δ}. Physical Review B **72**, 220507 (2005).

Dmitriev, V.M., L.F. Rybaltchenko, P. Wyder, A.G.M. Jansen, N.N. Prentslau and W. Suski. Evidence for superconductivity and a pseudogap in the new magnetic compound PrAg₆In₆. Low Temperature Physics **31**, 47–51 (2005).

Dolgov, O.V., R.K. Kremer, J. Kortus, A.A. Golubov and S.V. Shulga. Thermodynamics of two-band superconductors: The case of MgB₂. Physical Review B **72**, 024504 (2005).

Dolgov, O.V., I.I. Mazin, A.A. Golubov, S.Y. Savrasov and E.G. Maksimov. Critical Temperature and Enhanced Isotope Effect in the Presence of Paramagnons in Phonon-Mediated Superconductors. Physical Review Letters **95**, 257003 (2005).

Dolgov, O. see Kortus, J.; Kulic, M.L.; Maksimov, E.G.

Dorozhkin, P.S., S.V. Tovstonog, S.A. Mikhailov, I.V. Kukushkin, J.H. Smet and K. von Klitzing. Resonant detection of microwave radiation in a circular two-dimensional electron system with quantum point contacts. Applied Physics Letters **87**, 092107 (2005).

Dorozhkin, S.I., J.H. Smet, V. Umansky and K. von Klitzing. Microwave photoresponse in the two-dimensional electron system caused by intra-Landau-level transitions. Physical Review B **71**, 201306 (2005).

Dorozhkin, S. see Murzin, S.S.

Drichko, N., K. Petukhov, M. Dressel, O. Bogdanova, E. Zhilyaeva, R. Lyubovskaya, A. Greco and J. Merino. Indications of electronic correlations in the 1/5-filled two-dimensional conductor β'' -(BEDO-TTF)₅[CsHg(SCN)₄]₂. Physical Review B **72**, 024524 (2005).

Egorov, V. see Kramer, R.B.G.

Enderle, M., C. Mukherjee, B. Fåk, R.K. Kremer, J.M. Broto, H. Rosner, S.L. Drechsler, J. Richter, J. Malek, A. Prokofiev, W. Assmus, S. Pujol, J.L. Raggazzoni, H. Rakoto, M. Rheinstädter and H.M. Rønnow. Quantum helimagnetism of the frustrated spin-1/2 chain LiCuVO₄. Europhysics Letters **70**, 237–243 (2005).

Enders, A., D. Repetto, D. Peterka and K. Kern. Temperature dependence of the magnetism in Fe/Cu(001). Physical Review B **72**, 054446 (2005).

Enders, A. see Kuhnke, K.

Endicott, J., A. Patanè, D. Maude, L. Eaves, M. Hopkinson and G. Hill. Effect of hydrostatic pressure on the fragmented conduction band structure of dilute Ga(AsN) alloys. Physical Review B **72**, 041306R (2005).

Enss, T., V. Meden, S. Andergassen, X. Barnabé-Thériault, W. Metzner and K. Schönhammer. Impurity and correlation effects on transport in one-dimensional quantum wires. Physical Review B **71**, 155401 (2005).

Enss, T. see Meden, V.

Eremin, I. and D. Manske. Fermi-liquid-based theory for the in-plane magnetic anisotropy in untwinned high-T_c superconductors. Physical Review Letters **94**, 067006 (2005).

Esser, N., M. Rakel, C. Cobet, W.G. Schmidt, W. Braun and M. Cardona. VUV-ellipsometry on GaN: Probing conduction band properties by core level excitations. physica status solidi (b) **242**, 2601–2609 (2005).

Evarestov, R.A., A.V. Bandura, V.E. Alexandrov and E.A. Kotomin. DFT LCAO and plane wave calculations of SrZrO₃. physica status solidi (b) **242**, R11–R13 (2005).

Evarestov, R.A., E.A. Kotomin, Y.A. Mastrikov, D. Gryaznov, E. Heifets and J. Maier. Comparative density-functional LCAO and plane-wave calculations of LaMnO₃ surfaces. Physical Review B **72**, 214411 (2005).

Evarestov, R.A. see Kotomin, E.A.

Fan, L. see Obergfell, D.

Feiner, L.F. and A.M. Oleš. Orbital liquid in ferromagnetic manganites: The orbital Hubbard model for e_g electrons. Physical Review B **71**, 144422 (2005).

Feldbacher, M., K. Held and F.F. Assaad. Mott-Hubbard transition in d=∞ revisited by projective quantum Monte Carlo simulations. Physica B **359**, 654–656 (2005).

Feng, Y., G. Yan, Y. Zhao, P.X. Zhang, E. Mossang, A. Sulpice and L. Zhou. Significant enhancement of flux pinning in MgB₂/Fe/Cu superconducting wires fabricated by in situ powder-in-tube method. *Physica C* **426**, 1216–1219 (2005).

Filippi, M., A. Bianconi and A. Bussmann-Holder. Feshbach shape resonances in nanoscale multiband systems for high T_c superconductivity. *Journal de Physique IV* **131**, 49–54 (2005).

Fischer, D., R. Hoppe, K.M. Mogare and M. Jansen. Syntheses, crystal structures and magnetic properties of Rb₂RuO₄ and K₂RuO₄. *Zeitschrift für Naturforschung B* **60**, 1113–1117 (2005).

Fischer, D. see Čančarević, Z.P.

Fleig, J. On the current-voltage characteristics of charge transfer reactions at mixed conducting electrodes on solid electrolytes. *Physical Chemistry Chemical Physics* **7**, 2027–2037 (2005).

Fleig, J. and J. Jamnik. Work function changes of polarized electrodes on solid electrolytes. *Journal of the Electrochemical Society* **152**, E138–E145 (2005).

Fuks, D., S. Dorfman, S. Piskunov and E.A. Kotomin. Ab initio thermodynamics of Ba_cSr_(1-c)TiO₃ solid solutions. *Physical Review B* **71**, 014111 (2005).

Ganesan, P.G., A. Kumar and G. Ramanath. Surface oxide reduction and bilayer molecular assembly of a thiol-terminated organosilane on Cu. *Applied Physics Letters* **87**, 011905 (2005).

Gautier-Luneau, I., D. Phanon, C. Duboc, D. Luneau and J.L. Pierre. Electron delocalisation in a trinuclear copper(II) complex: high-field EPR characterization and magnetic properties of Na₃[Cu₃(mal)₃(H₂O)]·H₂O. *Dalton Transactions* **2005**, 3795–3799 (2005).

Geisler, M.C., S. Chowdhury, J.H. Smet, L. Höppel, V. Umansky, R.R. Gerhardts and K. von Klitzing. Experimental evidence for predicted magnetotransport anomalies in rectangular superlattices. *Physical Review B* **72**, 045320 (2005).

Gemmimg, S., G. Seifert, C. Mühle, M. Jansen, A. Albu-Yaron, T. Arad and R. Tenne. Electron microscopy, spectroscopy, and first-principles calculations of Cs₂O. *Journal of Solid State Chemistry* **178**, 1190–1196 (2005).

Gerhardts, R.R. see Geisler, M.C.; von Klitzing, K.

Gersch, R., C. Honerkamp, D. Rohe and W. Metzner. Fermionic renormalization group flow into phases with broken discrete symmetry: charge-density wave mean-field model. *European Physical Journal B* **48**, 349–358 (2005).

Gerward, L., J.S. Olsen, L. Petit, G. Vaitheeswaran, V. Kanchana and A. Svane. Bulk modulus of CeO₂ and PrO₂ – An experimental and theoretical study. *Journal of Alloys and Compounds* **400**, 56–61 (2005).

Giantomassi, M., L. Boeri and G.B. Bachelet. Electrons and phonons in the ternary alloy CaAl_{2-x}Si_x as a function of composition. *Physical Review B* **72**, 224512 (2005).

Gibin, A., G.G. Devyatlykh, A.V. Gusev, R.K. Kremer, M. Cardona and H. Pohl. Heat capacity of isotopically enriched ²⁸Si, ²⁹Si and ³⁰Si in the temperature range 4 K < T < 100 K. *Solid State Communications* **133**, 569–572 (2005).

Gich, M., A. Roig, C. Frontera, E. Molins, J. Sort, M. Popovici, G. Chouteau, D. Martín y Marero and J. Nogués. Large coercivity and low-temperature magnetic reorientation in ε-Fe₂O₃ nanoparticles. *Journal of Applied Physics* **98**, 044307 (2005).

Gippius, N.A., S.G. Tikhodeev, A. Christ, J. Kuhl and H. Giessen. Waveguide plasmon polaritons in metal-dielectric photonic crystal slabs. *Physics of the Solid State* **47**, 145–149 (2005).

Gnezdilov, V., V. Kurnosov, A. Yeremenko, Y. Pashkevich, P. Lemmens, J. Tranquada, K.Y. Choi, G. Güntherodt and K. Nakajima. Phonons and magnons in stripe-ordered nickelates. A Raman scattering study. *Low Temperature Physics* **31**, 154–160 (2005).

Gordon, A., N. Logoboy and W. Joss. Formation of Condon domains as a phase transition. *Solid State Communications* **133**, 135–138 (2005).

Gryaznov, D., J. Fleig and J. Maier. Numerical study of grain boundary diffusion in nanocrystalline materials. *Defect and Diffusion Forum* **237-240**, 1043–1048 (2005).

Gryaznov, D. see Evarestov, R.A.

Guillot, M., J. Ostorero, G. Armstrong, F. Zhang and Y. Xu. Magnetic properties of Sc-substituted ytterbium iron garnet under high dc field (33 Tesla). *Journal of Applied Physics* **97**, 10F106 (2005).

Gulacsi, M., A. Bussmann-Holder and A.R. Bishop. Spin and lattice effects in the Kondo lattice model. *Physical Review B* **71**, 214415 (2005).

Gunnarsson, O., J.E. Han, E. Koch and V.H. Crespi. Superconductivity in Alkali-Doped Fullerides. *Structure and Bonding* **114**, 71–101 (2005).

Gunnarsson, O. see Han, J.E.; Rösch, O.

Guo, Y.-G., J.-S. Lee and J. Maier. AgI nanoplates with mesoscopic superionic conductivity at room temperature. *Advanced Materials* **17**, 2815–2819 (2005).

Guo, Y.G. see Bhattacharyya, A.J.

Gvozdikova, M.V. and M.E. Zhitomirsky. A Monte Carlo study of the first-order transition in a Heisenberg FCC antiferromagnet. *JETP Letters* **81**, 236–240 (2005).

Habermeier, H.-U. see Albrecht, J.; Baumann, F.S.; Chen, X.J.; Djupmyr, M.; Krockenberger, Y.; Lebedev, O.I.; Matveev, A.T.; Soltan, S.; Stahn, J.; Wang, Z.H.

Haluska, M., V. Skákalová, D. Carroll and S. Roth. The Influence of Sulfur Promoter on the Production of SWCNTs by the Arc-Discharge Process. In: *Proceedings of the XIXth International Winterschool/Euro-conference on Electronic Properties of Novel Materials*; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. *AIP Conference Proceedings* **786**, 87–91 (2005). American Institute of Physics, New York, USA.

Haluska, M. see Hornbostel, B.; Obergfell, D.; Scalia, G.

Han, J.E., O. Gunnarsson and V.H. Crespi. Superconductivity in Fullerides. In: *Frontiers in Superconducting Materials*, 231–254 (2005); A.V. Narlikar (Ed.). Springer Verlag, Berlin/Heidelberg, Germany.

Hannemann, A., J.C. Schön and M. Jansen. Modeling the sol-gel synthesis route of amorphous Si₃B₃N₇. *Journal of Materials Chemistry* **15**, 1167–1178 (2005).

Hannemann, A., J.C. Schön and M. Jansen. Stability of nanovoids in amorphous Si₃B₃N₇. *Philosophical Magazine* **85**, 2621–2639 (2005).

Hannemann, A., J.C. Schön, M. Jansen and P. Sibani. Nonequilibrium dynamics in amorphous Si₃B₃N₇. *Journal of Physical Chemistry B* **109**, 11770–11776 (2005).

Haufe, O., M. Hecht, A. Grupp, M. Mehring and M. Jansen. Isolation and spectroscopic characterization of new endohedral fullerenes in the size gap of C₇₄ to C₇₆. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 126–130 (2005).

He, M., X.L. Chen, H. Okudera and A. Simon. (K_{1-x}Na_x)₂Al₂B₂O₇ with x ≤ 0.6: A promising nonlinear optical crystal. *Chemistry of Materials* **17**, 2193–2196 (2005).

He, M., H. Okudera, J. Fleig, A. Simon, X.L. Chen and J. Maier. The Al³⁺ stabilized phase Li_{3-3x}Al_xBO₃. *Journal of Solid State Chemistry* **178**, 680–687 (2005).

He, M., H. Okudera and A. Simon. Ca_{1-x}Na_{2x}Al₂B₂O₇: A structure with tunable density of Na⁺ vacancies. *Inorganic Chemistry* **44**, 4421–4426 (2005).

He, M., A. Simon and V. Doppel. Zr stabilized Ti₅Te₄-type hafnium telluride. *Zeitschrift für Naturforschung B* **60**, 284–288 (2005).

Hebling, J., A.G. Stepanov, G. Almasi and J. Kuhl. Enhanced polariton decay in LiNbO₃ due to stimulated emission of acoustic phonons. In: *Ultrafast Phenomena XIV*; T. Kobayashi, T. Okada, T. Kobayashi, K.A. Nelson, S. De Silvestri, (Eds.). Niigata, Japan, 2004. Springer Series in Chemical Physics **79**, 786–788 (2005). Springer Verlag Berlin/Heidelberg, Germany.

Heim, S., R. Wanner, M. Stoffel and E. Kasper. Resonance phase operation of a SiGeHBT. Materials Science in Semiconductor Processing **8**, 319–322 (2005).

Held, K., J.W. Allen, V.I. Anisimov, V. Eyert, G. Keller, H.D. Kim, S.K. Mo and D. Vollhardt. Two aspects of the Mott-Hubbard transition in Cr-doped V₂O₃. Physica B **359**, 642–644 (2005).

Held, K. see Arita, R.; Feldbacher, M.; Nekrasov, I.A.; Vollhardt, D.; Yang, Y.F.

Heyning, O.T., P. Bernier and M. Glerup. A low cost method for the direct synthesis of highly Y-branched nanotubes. Chemical Physics Letters **409**, 43–47 (2005).

Hildebrandt, L., R.E. Dinnebier and M. Jansen. Crystal structure and ionic conductivity of cesium trifluoromethyl sulfonate, CsSO₃CF₃. Zeitschrift für anorganische und allgemeine Chemie **631**, 1660–1666 (2005).

Hildebrandt, L. see van Wüllen, L.

Hinkov, V. see Pimenov, A.V.

Hinrichsen, B., R.E. Dinnebier and M. Jansen. Powder3D: A Software for tailored for in situ powder diffraction studies. Newsletter of the Commission on Powder Diffraction (International Union of Crystallography) **32**, ISSN 1591-9552 (2005).

Hinrichsen, B. see Paneerselvam, R.

Hoch, C. see Lefevre, C.; Mattausch, Hj.

Höner zu Siederdissen, T., N.C. Nielsen, J. Kuhl, M. Schaarschmidt, J. Forstner, A. Knorr, G. Khitrova, H.M. Gibbs, S.W. Koch and H. Giessen. Transition between different coherent light-matter interaction regimes analyzed by phase-resolved pulse propagation. Optics Letters **30**, 1384–1386 (2005).

Höner zu Siederdissen, T. see Nielsen, N.C.

Hoffmann, K.H. and J.C. Schön. Kinetic features of preferential trapping on energy landscapes. Foundations of Physics Letters **18**, 171–182 (2005).

Hofmann, S., M. Cantoro, M. Kaempgen, D.J. Kang, V.B. Golovko, H.W. Li, Z. Yang, J. Geng, W.T.S. Huck, B.F.G. Johnson, S. Roth and J. Robertson. Catalyst patterning methods for surface-bound chemical vapor deposition of carbon nanotubes. Applied Physics A **81**, 1559–1567 (2005).

Holzapfel, M., C. Darie, P. Bordet, E. Chappel, M.D. Núñez-Regueiro, S. Diaz, S. de Brion, G. Chouteau and P. Strobel. Mixed layered oxide phases Na_xLi_{1-x}NiO₂: a detailed description of their preparation and structural and magnetic identification. Solid State Sciences **7**, 497–506 (2005).

Holzinger, M., J. Steinmetz, S. Roth, M. Glerup and R. Graupner. Purification and Functionalisation of Nitrogen-Doped Single-Walled Carbon Nanotubes. In: Proceedings of the XIXth International Winter-school/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 211–214 (2005). American Institute of Physics, New York, USA.

Honerkamp, C. Charge instabilities at the metamagnetic transition of itinerant electron systems. Physical Review B **72**, 115103 (2005).

Honerkamp, C. Ultracold fermions with several flavors. physica status solidi (b) **242**, 347–355 (2005).

Honerkamp, C. and M. Salmhofer. Eliashberg equations derived from the functional renormalization group. Progress of Theoretical Physics **113**, 1145–1158 (2005).

Honolka, J. see Kuhnke, K.

Hore, S. and R. Kern. Implication of device functioning due to back reaction of electrons via the conducting glass substrate in dye sensitized solar cells. Applied Physics Letters **87**, 263504 (2005).

Hornbostel, B., M. Haluska, J. Cech, U. Dettlaff and S. Roth. Arc discharge and laser ablation synthesis of single-walled carbon nanotubes. In: Carbon Nanotubes: From Basic Research to Nanotechnology; V.N. Popov, P. Lambin (Eds.). NATO Science Series II: Mathematics, Physics and Chemistry **222**, 1–18 (2005). Springer Verlag, Dordrecht, The Netherlands.

- Hornbostel, B. see Dettlaff-Weglikowska, U.; Pötschke, P.
- Horsch, P. and G. Khahullin.* Doping dependence of density response and bond-stretching phonons in cuprates. *Physica B* **359**, 620–622 (2005).
- Horsch, P., M. Sofin, M. Mayr and M. Jansen.* Wigner crystallization in $\text{Na}_3\text{Cu}_2\text{O}_4$ and $\text{Na}_8\text{Cu}_5\text{O}_{10}$ chain compounds. *Physical Review Letters* **94**, 076403 (2005).
- Horsch, P. see Bala, J.; Capogna, L.; Oleš, A.M.
- Horvatić, M., C. Berthier, F. Tedoldi, A. Comment, M. Sofin, M. Jansen and R. Stern.* High-field NMR insights into quantum spin systems. *Progress of Theoretical Physics, Supplement* **159**, 106–113 (2005).
- Hozoi, L., S. Nishimoto and A. Yamasaki.* Mobile Zhang-Rice singlets: Electron correlations and bond-length fluctuations in copper oxides. *Physical Review B* **72**, 144510 (2005).
- Hozoi, L., S. Nishimoto and A. Yamasaki.* Near degeneracy and pseudo Jahn-Teller effects in mixed-valence ladders: The phase transition in NaV_2O_5 . *Physical Review B* **72**, 195117 (2005).
- Hüttel, A.K., S. Ludwig, H. Lorenz, K. Eberl and J.P. Kotthaus.* Direct control of the tunnel splitting in a one-electron double quantum dot. *Physical Review B* **72**, 081310 (2005).
- Hulman, M., V. Skákalová, S. Roth and H. Kuzmany.* Raman spectroscopy of single-wall carbon nanotubes and graphite irradiated by γ rays. *Journal of Applied Physics* **98**, 024311 (2005).
- Ischenko, V., U. Englert and M. Jansen.* Conformational dimorphism of 1,1,3,3,5,5-hexachloro-1,3,5-trigermacyclohexane: Solvent-induced crystallization of a metastable polymorph containing boat-shaped molecules. *Chemistry – A European Journal* **11**, 1375–1383 (2005).
- Isnard, O. and M. Guillot.* High magnetic field investigation of the field-induced transition in the $\text{Nd}_2\text{Fe}_{17}\text{H}_x$ compounds. *Journal of Applied Physics* **98**, 033912 (2005).
- Jäschke, T. and M. Jansen.* Improved durability of Si/B/N/C random inorganic networks. *Journal of the European Ceramic Society* **25**, 211–220 (2005).
- Jandl, S., A.A. Mukhin, V.Y. Ivanov, V. Nekvasil and M.L. Sadowski.* Raman-active phonons and Nd^{3+} crystal-field studies of weakly doped $\text{Nd}_{1-x}\text{Sr}_x\text{MnO}_3$. *Physical Review B* **72**, 024423 (2005).
- Jandl, S., V. Nekvasil, M. Diviš, A.A. Mukhin, J. Holsä and M.L. Sadowski.* Infrared study of the crystal-field excitations in NdMnO_3 in high magnetic fields. *Physical Review B* **71**, 024417 (2005).
- Jansen, M.* Effects of relativistic motion of electrons on the chemistry of gold and platinum. *Solid State Sciences* **7**, 1464–1474 (2005).
- Jansen, M. (Editor).* Solid-State Chemistry of Inorganic Materials V **848**, 541 pages, 2005. MRS Materials Research Society, Warrendale, PA, USA.
- Jansen, M. see Ahlert, S.; Albu-Yaron, A.; Arumugam, N.; Blöß, S.P.; Capogna, L.; Clade, J.; Dinnebier, R.E.; Fischer, D.; Gemming, S.; Hannemann, A.; Haufe, O.; Hildebrandt, L.; Hinrichsen, B.; Horsch, P.; Horvatić, M.; Ischenko, V.; Jäschke, T.; Karpov, A.; Klein, W.; Li, J.; Makarova, M.V.; Maljuk, A.N.; Mogare, K.M.; Mühlé, C.; Nuss, H.; Nuss, J.; Oberndorfer, C.P.M.; Orosel, D.; Panthöfer, M.; Reich, A.; Scheer, M.; Schön, J.C.; Schulz-Dobrick, M.; Schwerdtfeger, P.; Sharma, S.; Sörgel, T.; Sofin, M.; Sofina, N.; Vensky, S.; van Wüllen, L.; Zaitsev, D.D.; Čančarević, Z.
- Jauch, W. and M. Reehuis.* Electron-density distribution in cubic SrTiO_3 : a comparative γ -ray diffraction study. *Acta Crystallographica A* **61**, 411–417 (2005).
- Jepsen, O. see Bose, S.K.; Saha, K.K.; Tsetseris, L.; Zurek, E.
- Jhang, S.H., S.W. Lee, D.S. Lee, Y.W. Park, G.H. Jeong, T. Hirata, R. Hatakeyama, U. Dettlaff, S. Roth, M.S. Kabir and E.E.B. Campbell.* Random telegraph noise in carbon nanotube peapod transistors. *Fullerenes, Nanotubes, and Carbon Nanostructures, Supplement* **13**, 195–198 (2005).
- Jiang, C. see Smet, J.H.
- Joss, W. see Gordon, A.; Kramer, R.B.G.; Logoboy, N.; Oliva, A.B.

Julien, M.H., Y. Tokunaga, T. Fehér, M. Horvatić and C. Berthier. Comment on: ‘Localized behavior near the Zn impurity in $\text{YBa}_2\text{Cu}_4\text{O}_8$ as measured by nuclear quadrupole resonance’. *Physical Review B* **71**, 176501 (2005).

Jung, C., F. Lendzian, V. Schunemann, M. Richter, L.H. Bottger, A.X. Trautwein, J. Contzen, M. Galander, D.K. Ghosh and A.L. Barra. Multi-frequency EPR and Mossbauer spectroscopic studies on freeze-quenched reaction intermediates of nitric oxide synthase. *Magnetic Resonance in Chemistry* **43**, S84–S95 (2005).

Jung, C., V. Schunemann, F. Lendzian, A.X. Trautwein, J. Contzen, M. Galander, L.H. Bottger, M. Richter and A.L. Barra. Spectroscopic characterization of the iron-oxo intermediate in cytochrome P450. *Biological Chemistry* **386**, 1043–1053 (2005).

Kaempgen, M. Transparent und leitfähige Beschichtungen mit Kohlenstoff-Nanoröhrchen. *Jahrbuch der Oberflächentechnik* **2005**, 88–93 (2005).

Kaempgen, M., G.S. Duesberg and S. Roth. Transparent carbon nanotube coatings. *Applied Surface Science* **252**, 425–429 (2005).

Kaempgen, M. and S. Roth. Ultra Microelectrodes from MWCNT Bundles. In: *Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials*; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. *AIP Conference Proceedings* **786**, 591–595 (2005). American Institute of Physics, New York, USA.

Kaempgen, M. and S. Roth. Ultra microelectrodes from MWCNT bundles. *Synthetic Metals* **152**, 353–356 (2005).

Kaempgen, M. see Artukovic, E.; Hofmann, S.; Skákalová, V.

Kamp, B., R. Merkle, R. Lauck and J. Maier. Chemical diffusion of oxygen in tin dioxide: Effects of dopants and oxygen partial pressure. *Journal of Solid State Chemistry* **178**, 3027–3039 (2005).

Kar, G.S. see Rastelli, A.; Stoffel, M.

Karachevtsev, V.A., A.Y. Glamazda, V.S. Leontiev, P.V. Mateichenko and U. Dettlaff-Weglikowska. SWNTs with DNA in Aqueous Solution and Film. In: *Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials*; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. *AIP Conference Proceedings* **786**, 257–261 (2005). American Institute of Physics, New York, USA.

Karplus, M., P.G. Wolynes, C.M. Dobson, A.H. Zewail, J. Clarke and J.C. Schön. Energy landscapes and solved protein-folding problems – Discussion. *Philosophical Transactions of the Royal Society of London. Series A: Mathematical and Physical Sciences* **363**, 464–467 (2005).

Karpov, A. and M. Jansen. A New Family of Binary Layered Compounds of Platinum with Alkali Metals ($\text{A} = \text{K}, \text{Rb}, \text{Cs}$). *Zeitschrift für anorganische und allgemeine Chemie* **632**, 84–90 (2005).

Karpov, A. and M. Jansen. $[\text{Tl}_8]^{6-}$ in $\text{Cs}_8\text{Tl}_8\text{O}$: A naked eight-vertex closo-deltaeder as a cluster anion. *Angewandte Chemie International Edition* **44**, 7639–7643 (2005).

Karpov, A., U. Wedig, R.E. Dinnebier and M. Jansen. Dibariumplatinide: $(\text{Ba}^{2+})_2\text{Pt}^{2-}\cdot 2\text{e}^-$ and its relation to the alkaline-earth-metal subnitrides. *Angewandte Chemie International Edition* **44**, 770–773 (2005).

Karpov, A. see Mühle, C.

Katanin, A.A. Electronic self-energy and triplet pairing fluctuations in the vicinity of a ferromagnetic instability in two-dimensional systems: Quasistatic approach. *Physical Review B* **72**, 035111 (2005).

Katanin, A.A. and A.P. Kampf. Order-parameter symmetries for magnetic and superconducting instabilities: Bethe-Salpeter analysis of functional renormalization-group solutions. *Physical Review B* **72**, 205128 (2005).

Katanin, A.A. and A.P. Kampf. Quasiparticle anisotropy and pseudogap formation: a functional renormalization group study. *Physica B* **359**, 557–559 (2005).

Katanin, A.A., A.P. Kampf and V.Y. Irkhin. Anomalous self-energy and Fermi surface quasisplitting in the vicinity of a ferromagnetic instability. *Physical Review B* **71**, 085105 (2005).

Katsaros, G., G. Costantini, M. Stoffel, R. Esteban, A.M. Bittner, A. Rastelli, U. Denker, O.G. Schmidt and K. Kern. Kinetic origin of island intermixing during the growth of Ge on Si(001). *Physical Review B* **72**, 195320 (2005).

Katsaros, G. see Costantini, G.; Denker, U.; Zhong, Z.

Keimer, B. Superconductors: the mystery goes on. *Physics World* **18**, 48–48 (2005).

Keimer, B. see Bayrakci, S.P.; Bourges, P.; Capogna, L.; Krockenberger, Y.; Machtoub, L.H.; Maljuk, A.N.; Pailhès, S.; Pimenov, A.V.; Stahn, J.; Zegkinoglou, I.; Zhang, X.N.

Kern, K. see Balasubramanian, K.; Barth, J.V.; Bek, A.; Bittner, A.M.; Clair, S.; Classen, T.; Costantini, G.; Denker, U.; Enders, A.; Katsaros, G.; Klinke, C.; Kuhnke, K.; Lin, N.; Schneider, M.A.; Sordan, R.; Stepanow, S.; Vidal, F.; Wahl, P.; Wu, X.C.; Zhong, Z.

Khaliullin, G. see Oleś, A.M.

Kienle, L. see von Kreutzbrück, M.; Oeckler, O.; Reichelt, W.; Vensky, S.

Kikuchi, H., Y. Fujii, M. Chiba, S. Mitsudo, T. Idehara, T. Tonegawa, K. Okamoto, T. Sakai, T. Kuwai, K. Kindo, A. Matsuo, W. Higemoto, K. Nishiyama, M. Horvatić and C. Bertheir. Magnetic properties of the diamond chain compound Cu₃(CO₃)₂(OH)₂. *Progress of Theoretical Physics, Supplement* **159**, 1–10 (2005).

Kim, S.H., D.K. Seo, R.K. Kremer, J. Köhler, A. Villesuzanne and M.H. Whangbo. Observation of unusual hysteretic magnetic properties of the rare earth intermetallic compound PrMnSi₂: Magnetic susceptibility, magnetization, heat capacity, and electronic band structure studies. *Chemistry of Materials* **17**, 3711–3716 (2005).

Kim, S.H., D.K. Seo, R.K. Kremer, M. Köhler, A. Villesuzanne and M.H. Whangbo. Large negative magneto-resistance of the rare-earth transition-metal intermetallic compound PrMnSi₂. *Chemistry of Materials* **17**, 6338–6341 (2005).

Kim, S. see Yu, H.Y.

Kiravittaya, S., H. Heidemeyer and O.G. Schmidt. Lateral quantum-dot replication in three-dimensional quantum-dot crystals. *Applied Physics Letters* **86**, 263113 (2005).

Kiravittaya, S., A. Rastelli and O.G. Schmidt. Self-assembled InAs quantum dots on patterned GaAs(001) substrates: Formation and shape evolution. *Applied Physics Letters* **87**, 243112 (2005).

Kiravittaya, S. and O.G. Schmidt. Comment on: ‘A growth pathway for highly ordered quantum dot arrays’ [Applied Physics Letters **85**, 5974 (2004)]. *Applied Physics Letters* **86**, 206101 (2005).

Kiravittaya, S., R. Songmuang, A. Rastelli, H. Heidemeyer and O.G. Schmidt. Multi-scale ordering in self-assembled InAs/GaAs(001) quantum dots. *Nanoscale Research Letters* **1**, 100301 (2005).

Kiravittaya, S. see Krause, B.; Novák, J.; Stoffel, M.

Kiselev, M.N., D.N. Aristov and K. Kikoin. Spin gap in a spiral staircase model. *Physica B* **359**, 1406–1408 (2005).

Kiselev, M.N., D.N. Aristov and K. Kikoin. Spin gap in chains with hidden symmetries. *Physical Review B* **71**, 092404 (2005).

Klein, W., J. Curda and M. Jansen. Dilead(II) trimercury(II) tetraoxide chromate(VI), Pb₂(Hg₃O₄)(CrO₄). *Acta Crystallographica C* **61**, I63–I64 (2005).

Klein, W., J. Curda, E.-M. Peters and M. Jansen. Disilver oxotellurate(VI), Ag₂TeO₄. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 723–727 (2005).

Klein, W., J. Curda, E.-M. Peters and M. Jansen. New silver(I) oxotellurates(IV/VI). *Zeitschrift für anorganische und allgemeine Chemie* **631**, 2893–2899 (2005).

- Klein, W. and M. Jansen.* Silver(I) trimercury(II) antimonate(V), $\text{AgHg}_3\text{SbO}_6$. *Acta Crystallographica C* **61**, I94–I95 (2005).
- Klein, W. and M. Jansen.* Synthesis and crystal structure of strontium ozonide ammoniate, $\text{Sr}(\text{O}_3)_2 \cdot 9\text{NH}_3$. *Zeitschrift für Naturforschung B* **60**, 426–430 (2005).
- Klein, W. and M. Jansen.* Trisilver oxoruthenate(V), Ag_3RuO_4 . *Acta Crystallographica C* **61**, I1–I2 (2005).
- Klemme, S. and M. Ahrens.* Low-temperature heat capacity of magnesioferrite (MgFe_2O_4). *Physics and Chemistry of Minerals* **32**, 374–378 (2005).
- Klinke, C., J.M. Bonard and K. Kern.* Thermodynamic calculations on the catalytic growth of multiwall carbon nanotubes. *Physical Review B* **71**, 035403 (2005).
- Klinke, C., E. Delvigne, J.V. Barth and K. Kern.* Enhanced field emission from multiwall carbon nanotube films by secondary growth. *Journal of Physical Chemistry B* **109**, 21677–21680 (2005).
- von Klitzing, K., R. Gerhardts and J. Weis.* 25 Jahre Quanten-Hall-Effekt. *Physik Journal* **6**, 37–44 (2005).
- von Klitzing, K.* Developments in the quantum Hall effect. *Philosophical Transactions of the Royal Society of London. Series A: Mathematical and Physical Sciences* **363**, 2203–2219 (2005).
- von Klitzing, K. see Dorozhkin, P.S.; Dorozhkin, S.I.; Geisler, M.C.; Kukushkin, I.V.; Kulik, L.V.; Lebedev, M.V.; Smet, J.H.
- Kodama, K., S. Miyahara, M. Takigawa, M. Horvatić, C. Berthier, F. Mila, H. Kageyama and Y. Ueda.* Field-induced effects of anisotropic magnetic interactions in $\text{SrCu}_2(\text{BO}_3)_2$. *Journal of Physics: Condensed Matter* **17**, L61–L68 (2005).
- Köhler, J.* Halides: Solid-State Chemistry. In: *Encyclopedia of Inorganic Chemistry* 10 Volume Set **III**, 1741–1761 (2005); R.B. King (Ed.). John Wiley & Sons, New York, London, Sidney.
- Köhler, J., J.H. Chang and M.H. Whangbo.* Bonding and oxidation state of a transition metal atom encapsulated in an isolated octahedral cluster cation of main group elements: Synthesis, crystal structure, and electronic structure of $\text{Pt}_2\text{In}_{14}\text{Ga}_3\text{O}_8\text{F}_{15}$ containing highly positive 18-electron complex $[\text{PtIn}_6]^{10+}$ and low-valent In^+ ions. *Journal of the American Chemical Society* **127**, 2277–2284 (2005).
- Köhler, J., H. Friedrich, M.H. Whangbo and A. Villesuzanne.* Synthesis and characterization of $[\text{PtIn}_6](\text{GeO}_4)_2\text{O}$ and its solid solution $[\text{PtIn}_6](\text{GaO}_4)_{2-x}(\text{GeO}_4)_x\text{O}_{x/2}$ ($0 \leq x \leq 2$): Gradual color change of the solid solution from black ($x = 0$) to yellow ($x = 2$) as a consequence of quantum dot effect. *Journal of the American Chemical Society* **127**, 12990–12996 (2005).
- Köhler, J., H. Okudera, D. Reuter and A. Simon.* Crystal structure of $\alpha\text{-GeBr}_4$, room temperature modification. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 523–523 (2005).
- Köhler, J., H. Okudera and A. Simon.* Crystal structure of $\beta\text{-GeBr}_4$, low temperature modification. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 524–524 (2005).
- Köhler, J. see Achary, S.N.; Deng, S.; Kim, S.H.; Tyagi, A.K.
- Kollar, M., M. Eckstein, K. Byczuk, N. Blümer, P. van Dongen, M.H.R. de Cuba, W. Metzner, D. Tanasković, V. Dobrosavljević, G. Kotliar and D. Vollhardt.* Green functions for nearest- and next-nearest-neighbor hopping on the Bethe lattice. *Annalen der Physik* **14**, 642–657 (2005).
- Konemann, J., R.J. Haug, D.K. Maude, V.I. Fal'ko and B.L. Altshuler.* Spin-orbit coupling and anisotropy of spin splitting in quantum dots. *Physical Review Letters* **94**, 226404 (2005).
- Konuma, M. see Baumann, F.S.; Matveev, A.T.; Soubatch, S.
- Korona, K.P., P. Wojnar, J.A. Gaj, G. Karczewski, J. Kossut and J. Kuhl.* Influence of quantum dot density on excitonic transport and recombination in CdZnTe/ZnTe QD structures. *Solid State Communications* **133**, 369–373 (2005).
- Korona, K.P., A. Wysmołek, R. Stepniewski, J. Kuhl, D.C. Look, S.K. Lee and J.Y. Han.* Dynamics of Ground and Excited States of Bound Excitons in Gallium Nitride. *Journal of Luminescence* **112**, 30–33 (2005).

Kortus, J., O.V. Dolgov, R.K. Kremer and A.A. Golubov. Band Filling and Interband Scattering Effects in MgB₂: Carbon versus Aluminum Doping. *Physical Review Letters* **94**, 027002 (2005).

Kortus, J., O.V. Dolgov, R.K. Kremer and A.A. Golubov. Kortus et al. Reply. *Physical Review Letters* **95**, 099702 (2005).

Kotomin, E.A., R.A. Evarestov, Y.A. Mastrikov and J. Maier. DFT plane wave calculations of the atomic and electronic structure of LaMnO₃(001) surface. *Physical Chemistry Chemical Physics* **7**, 2346–2350 (2005).

Kotomin, E.A. see Carrasco, J.; Evarestov, R.A.; Fuks, D.; Mastrikow, Y.A.; Piskunov, S.; Zhukovskii, Y.F.

Kramer, R.B.G., V.S. Egorov, V.A. Gasparov, A.G.M. Jansen and W. Joss. Direct observation of condon domains in silver by hall probes. *Physical Review Letters* **95**, 267209 (2005).

Kramer, R.B.G., V.S. Egorov, A. Gordon, N. Logoboy, W. Joss and V.A. Gasparov. ‘Magnetic’ phase transition in silver. *Physica B* **362**, 50–55 (2005).

Kramer, R.B.G., V.S. Egorov, A.G.M. Jansen and W. Joss. Hysteresis in the de Haas-van Alphen effect. *Physical Review Letters* **95**, 187204 (2005).

Krause, B., T.H. Metzger, A. Rastelli, R. Songmuang, S. Kiravittaya and O.G. Schmidt. Shape, strain, and ordering of lateral InAs quantum dot molecules. *Physical Review B* **72**, 085339 (2005).

Kreitlow, J., S. Sullow, D. Menzel, J. Schoenes, P. Lemmens and M. Johnsson. Unusual criticality of Cu₂Te₂O₅Br₂ under pressure. *Journal of Magnetism and Magnetic Materials* **290**, 959–961 (2005).

Kremer, R.K., M. Cardona, E. Schmitt, J. Blumm, S.K. Estreicher, M. Sanati, M. Bockowski, I. Grzegory, T. Suski and A. Jezowski. Heat capacity of α -GaN: Isotope effects. *Physical Review B* **72**, 075209 (2005).

Kremer, R.K. see Ahn, K.; Becker, R.; Capogna, L.; Cardona, M.; Crandles, D.A.; Deiseroth, H.J.; Dolgov, O.V.; Enderle, M.; Gibin, A.; Kim, S.H.; Kortus, J.; Liu, G.X.; Mironov, Y.V.; Ryazanov, M.; Simon, A.; Stolovits, A.; Wang, X.; Yahia, H.B.; Zeng, H.Y.

Kreuer, K.-D. see Schuster, M.

von Kreutzbruck, M., B. Mogwitz, F. Gruhl, L. Kienle, C. Korte and J. Janek. Magnetoresistance in Ag_{2+ δ} Se with high silver excess. *Applied Physics Letters* **86**, 072102 (2005).

Krivokapic, I., C. Noble, S. Klitgaard, P. Tregenna-Piggott, H. Weihe and A.L. Barra. Anisotropic hyperfine interaction in the manganese(III) hexaaqua ion. *Angewandte Chemie International Edition* **44**, 3613–3616 (2005).

Krockenberger, Y., I. Fritsch, G. Cristiani, A. Matveev, L. Alff, H.-U. Habermeier and B. Keimer. Epitaxial growth of Na_xCoO₂ thin films by pulsed laser deposition. *Thin Solid Films* **486**, 170–173 (2005).

Krockenberger, Y. see Tsukada, A.

Kuhl, J. see Christ, A.; Gippius, N.A.; Hebling, J.; Höner zu Siederdissen, T.; Korona, K.P.; Linden, S.; Nielsen, N.C.; Palfalvi, L.; Stepanov, A.G.; Tikhodeev, S.G.

Kuhnke, K., T.Y. Lee, A. Enders, J. Honolka, M. Heßler, K. Fauth, G. Schiitz and K. Kern. Stripes are stars! Pt helps Fe to stay magnetised. *BESSY Highlights* **2005**, 18–19 (2005).

Kukushkin, I.V., S.A. Mikhailov, J.H. Smet and K. von Klitzing. Miniature quantum-well microwave spectrometer operating at liquid-nitrogen temperatures. *Applied Physics Letters* **86**, 044101 (2005).

Kukushkin, I.V., J.H. Smet, V.A. Kovalev, S.I. Gubarev, K. von Klitzing and W. Wegscheider. Spectrum of one-dimensional plasmons in a single stripe of two-dimensional electrons. *Physical Review B* **72**, 161317 (2005).

Kukushkin, I.V. see Dorozhkin, P.S.; Kulik, L.V.; Lebedev, M.V.

Kulić, M.L. and O.V. Dolgov. Dominance of the electron-phonon interaction with forward scattering peak in high-T_c superconductors: Theoretical explanation of the ARPES kink. *Physical Review B* **71**, 092505 (2005).

Kulić, M.L. and O.V. Dolgov. Forward scattering peak in the electron-phonon interaction and impurity scattering of cuprate superconductors. *physica status solidi (b)* **242**, 151–178 (2005).

Kulik, L.V., I.V. Kukushkin, S. Dickmann, V.E. Kirpichev, A.B. Van'kov, A.L. Parakhonsky, J.H. Smet, K. von Klitzing and W. Wegscheider. Cyclotron spin-flip mode as the lowest-energy excitation of unpolarized integer quantum Hall states. *Physical Review B* **72**, 073304 (2005).

Kulik, L.V., I.V. Kukushkin, S.V. Tovstonog, V.E. Kirpichev, V.E. Bisti, W. Dietsche, M. Hauser and K. von Klitzing. Dipole excitations in a bilayer electron system in a parallel magnetic field. *Physical Review B* **71**, 165303 (2005).

Kunc, K., I. Loa, A. Grzegorczyk and K. Syassen. Li₂O at high pressures: structural properties, phase-transition, and phonons. *physica status solidi (b)* **242**, 1857–1863 (2005).

Kunc, K. see Wang, X.

Kunstmann, J. and A. Quandt. Constricted boron nanotubes. *Chemical Physics Letters* **402**, 21–26 (2005).

Kuntscher, C.A., S. Frank, I. Loa, K. Syassen, T. Yamauchi and Y. Ueda. Infrared properties of the quasi-one-dimensional superconductor β-Na_{0.33}V₂O₅ under pressure. *Physical Review B* **71**, 220502 (2005).

Lamas, T.E., A.A. Quivy, C.S. Sergio, G.M. Gusev and J.C. Portal. High mobility of a three-dimensional hole gas in parabolic quantum wells grown on GaAs(311)A substrates. *Journal of Applied Physics* **97**, 076107 (2005).

Latyshev, Y.I., P. Monceau, S.A. Brazovski, A.P. Orlov, A.A. Sinchenko, T. Fournier and E. Mossang. Interlayer tunneling spectroscopy of layered CDW materials. *Journal de Physique IV* **131**, 197–202 (2005).

Latyshev, Y.I., P. Monceau, S. Brazovskii, A.P. Orlov and T. Fournier. Observation of charge density wave solitons in overlapping tunnel junctions. *Physical Review Letters* **95**, 266402 (2005).

Lebedev, M.V., I.V. Kukushkin, A.L. Parakhonskiĭ, V.E. Kirpichev, O.V. Volkov and K. von Klitzing. Fluctuations of the intersubband splitting energy and the potential well shape of two-dimensional electrons in the quantum hall effect regime. *JETP Letters* **82**, 124–128 (2005).

Lebedev, O.I., G. Van Tendeloo, G. Cristiani, H.-U. Habermeier and A.T. Matveev. Structure-properties relationship in ferromagnetic superconducting RuSr₂GdCu₂O₈. *Physical Review B* **71**, 134523 (2005).

Lee, J.-S., J. Fleig, J. Maier, T.J. Chung and D.Y. Kim. Microcontact impedance spectroscopy in nitrogen-graded zirconia. *Solid State Ionics* **176**, 1711–1716 (2005).

Lee, J.-S., J. Fleig, J. Maier, D.-Y. Kim and T.-J. Chung. Local conductivity of nitrogen-graded zirconia. *Journal of the American Ceramic Society* **88**, 3067–3074 (2005).

Lee, J.-S. and J. Maier. High barrier effects of (000 bar 1) – (000 bar 1) zinc oxide bicrystals: Implication for varistor ceramics with inversion boundaries. *Journal of Materials Research* **20**, 2101–2109 (2005).

Lee, J.-S. see Guo, Y.-G.; Yu, J.H.

Lee, J.Y., A.N. Aleshin, D.W. Kim, H.J. Lee, Y.S. Kim, G. Wegner, V. Enkelmann, S. Roth and Y.W. Park. Field-effect mobility anisotropy in PDA-PTS single crystals. *Synthetic Metals* **152**, 169–172 (2005).

Lee, J.Y., S. Roth and Y.W. Park. Organic Thin Film Transistor with Carbon Nanotube Electrodes. In: Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 508–511 (2005). American Institute of Physics, New York, USA.

Lee, T.Y. see Kuhnke, K.

Lee, W.Y. see Soubatch, S.

Lefèvre, C., C. Hoch, R. Eger and A. Simon. Crystal structure of hexagadolinium cobalt decabromide, Gd₆CoBr₁₀, a Y₆RuI₁₀-type structure. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 3–4 (2005).

Lemmens, P. and K.Y. Choi. Scattering: Inelastic Scattering Technique – Raman. In: Encyclopaedia of Condensed Matter Physics, (2005); G. Bassani, G. Liedl, P. Wyder (Eds.). Elsevier Publishers, Amsterdam, The Netherlands.

Lemmens, P., K.Y. Choi, R. Valenti, T. Saha-Dasgupta, E. Abel, Y.S. Lee and F.C. Chou. Spin gap formation in the quantum spin systems TiOX, X=Cl and Br. *New Journal of Physics* **7**, 74 (2005).

Lesiak, A., B. Chwalisz, A. Wysmołek, M. Potemski, R. Stepniewski and V. Thierry-Mieg. Carriers diffusion in GaAs/AlAs type II quantum well. *Acta Physica Polonica A* **108**, 755–760 (2005).

Lévy, F., I. Sheikin, B. Grenier and A.D. Huxley. Magnetic field-induced superconductivity in the ferromagnet URhGe. *Science* **309**, 1343–1346 (2005).

Li, S. see Zheng, C.

Liang, J. see Dettlaff-Weglikowska, U.

Lin, C.T., D.P. Chen, P. Lemmens, X.N. Zhang, A. Maljuk and P.X. Zhang. Study of intercalation/deintercalation of Na_xCoO₂ single crystals. *Journal of Crystal Growth* **275**, 606–616 (2005).

Lin, C.T. see Bayrakci, S.P.; Bdikin, I.K.; Chen, D.P.; Maljuk, A.N.; Pailhès, S.; Shaltiel, D.; Vaulxde , C.; Wang, X.L.; You, L.X.; Zhang, X.N.; Zhao, S.P.; Zheng, G.Q.

Lin, N., A. Dmitriev, H. Spillmann, J. Weckesser, M. Abel, P. Messina, J.V. Barth and K. Kern. Observing and steering the formation of coordination compounds on surfaces at the single-molecule level. In: Proceedings ‘CLUSTERS AND NANO-ASSEMBLIES: Physical and Biological Systems’, 301–305 (2005); P. Jena, S.N. Khanna, B.K. Rao (Eds.). World Scientific Publishing Co. Pte. Ltd., Singapore, Singapore.

Lin, N., D. Payer, A. Dmitriev, T. Strunskus, C. Woll, J.V. Barth and K. Kern. Two-dimensional adatom gas bestowing dynamic heterogeneity on surfaces. *Angewandte Chemie International Edition* **44**, 1488–1491 (2005).

Lin, N., S. Stepanow, F. Vidal, J.V. Barth and K. Kern. Manipulating 2D metal-organic networks via ligand control. *Chemical Communications* **2005**, 1681–1683 (2005).

Lin, N. see Stepanow, S.; Vidal, F.

Linden, S., N. Rau, U. Neuberth, A. Naber, M. Wegener, S. Pereira, K. Busch, A. Christ and J. Kuhl. Near-field optical microscopy and spectroscopy of one-dimensional metallic photonic crystal slabs. *Physical Review B* **71**, 245119 (2005).

Liu, G.X., X.-M. Ren, R.K. Kremer and Q.J. Meng. Novel molecular staircase self-assembly from the cations of 1-(4'-nitrobenzyl)pyridinium: synthesis, crystal structure, magnetic property and spin dimer analyses. *Journal of Molecular Structure* **743**, 125–133 (2005).

Loa, I., F.X. Zhang, K. Syassen, P. Lemmens, W. Crichton, H. Kageyama and Y. Ueda. Crystal structure and lattice dynamics of SrCu₂(BO₃)₂ at high pressures. *Physica B* **359**, 980–982 (2005).

Loa, I. see Kunc, K.; Kuntscher, C.A.; Ponosov, Y.S.; Vajenine, G.V.; Wang, X.

Lobanov, D.N., A.V. Novikov, N.V. Vostokov, Y.N. Drozdov, A.N. Yablonskiy, Z.F. Krasilnik, M. Stoffel, U. Denker and O.G. Schmidt. Growth and photoluminescence of self-assembled islands obtained during the deposition of Ge on a strained SiGe layer. *Optical Materials* **27**, 818–821 (2005).

Lodyga-Chruścińska, E., M. Zakrzewski, S. Kuberski, A. Paluszakiewicz, R.E. Dinnebier and K. Sugimoto. Preliminary characterization of new polymorphic forms of bupivacaine HCl. *Annals of the Polish Chemical Society* **2005**, 87–90 (2005).

Logoboy, N., A. Gordon, I.D. Vagner and W. Joss. Non-linear behaviour of diamagnetic moments in Condon domain phase. *Solid State Communications* **134**, 497–502 (2005).

Logoboy, N. see Gordon, A.; Kramer, R.B.G.

Lukachuk, M., Y.V. Galadzhun, R.I. Zaremba, M.V. Dzevenko, Y.M. Kalychak, V.I. Zaremba, U.C. Rodewald and R. Pöttgen. New rare earth metal-rich indides $\text{RE}_{14}\text{Ni}_3\text{In}_3$ ($\text{RE} = \text{Sc}, \text{Y}, \text{Gd-Tm}, \text{Lu}$) – synthesis and crystal chemistry. *Journal of Solid State Chemistry* **178**, 2724–2733 (2005).

Lukachuk, M. see Rodewald, U.C.

Machón, M., S. Reich, J. Maultzsch, H. Okudera, A. Simon, R. Herges and C. Thomsen. Structural, electronic, and vibrational properties of (4,4) picotube crystals. *Physical Review B* **72**, 155402 (2005).

Machtoub, L.H., B. Keimer and K. Yamada. Large Magnetic Field-Induced Spectral Weight Enhancement of High-Energy Spin Excitations in $\text{La}_{1.88}\text{Sr}_{0.12}\text{CuO}_4$. *Physical Review Letters* **94**, 107009 (2005).

Maier, D. and A.B. Kulakov. In Situ Investigation of Phase Equilibria and Growth Mechanisms of Compositions near the $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ Stoichiometry by High-Temperature Optical Microscopy. *Crystal Growth & Design* **5**, 1751–1754 (2005).

Maier, J. Chemical potential of charge carriers in solids. *Zeitschrift für Physikalische Chemie* **219**, 35–46 (2005).

Maier, J. Ionic and Mixed Conductivity in Condensed Phases. In: *Encyclopaedia of Condensed Matter Physics*, 9–21 (2005); G. Bassani, G. Liedl, P. Wyder (Eds.). Elsevier Publishers, Amsterdam, The Netherlands.

Maier, J. Nanoionics: ion transport and electrochemical storage in confined systems. *Nature Materials* **4**, 805–815 (2005).

Maier, J. Thermodynamics and Kinetics of Charge Carriers in Solids. In: *Modern Aspects of Electrochemistry* **38**, 1–173 (2005); B.E. Conway, C.G. Vayenas, R.E. White (Eds.). Springer Verlag, Berlin/Heidelberg, Germany.

Maier, J. Utility of simple rate equations for solid state reactions. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 433–442 (2005).

Maier, J. see Baumann, F.S.; Bhattacharyya, A.J.; Carrasco, J.; De Souza, R.A.; Everagestov, R.A.; Gryaznov, D.; Guo, Y.-G.; He, M.; Kamp, B.; Kotomin, E.A.; Lee, J.-S.; Mastrikow, Y.A.; Merkle, R.; Piskunov, S.; Rahmati, B.; Schuster, M.; Yu, J.H.; Zhang, Z.; Zhukovskii, Y.F.

Majewski, P., S. Geprägs, A. Boger, M. Opel, A. Erb, R. Gross, G. Vaitheeswaran, V. Kanchana, A. Delin, F. Wilhelm, A. Rogalev and L. Alff. Magnetic moments of W 5d in Ca_2CrWO_6 and Sr_2CrWO_6 double perovskites. *Physical Review B* **72**, 132402 (2005).

Makarova, M.V., P.E. Kazin, Y.D. Tretyakov, M. Jansen, M. Reissner and W. Steiner. Zr, Hf, Mo and W-containing oxide phases as pinning additives in Bi-2212 superconductor. *Physica C* **419**, 61–69 (2005).

Maksimov, E.G., O.V. Dolgov and M.L. Kulić. Electron-phonon interaction with the forward scattering peak and the angle-resolved photoemission spectra isotope shift in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$. *Physical Review B* **72**, 212505 (2005).

Malachias, A., T.U. Schülli, G. Medeiros-Ribeiro, L.G. Cancado, M. Stoffel, O.G. Schmidt, T.H. Metzger and R. Magalhães-Paniago. X-ray study of atomic ordering in self-assembled Ge islands grown on Si(001). *Physical Review B* **72**, 165315 (2005).

Maljuk, A.N., A.B. Kulakov, M. Sofin, L. Capogna, C.T. Lin, M. Jansen and B. Keimer. Phase equilibria and NaCu_2O_2 crystal growth in the Na-Cu-O system. *Journal of Crystal Growth* **275**, e643–e646 (2005).

Maljuk, A.N. see Bdikin, I.K.; Capogna, L.; Chen, D.P.; Lin, C.T.

Manjón, F.J., M. Mollar, B. Mari, N. Garro, A. Cantarero, R. Lauck and M. Cardona. Effect of isotopic mass on the photoluminescence spectra of beta zinc sulfide. *Solid State Communications* **133**, 253–258 (2005).

Manske, D., I. Eremin and K.H. Bennemann. Theory for key experiments in cuprate superconductors. In: Proceedings of the NATO Advanced Research Workshop: New Challenges in Superconductivity: Experimental Advances and Emerging Theories; J. Ashkenazi, M.V. Eremin, J.L. Cohn, I. Eremin, D. Manske, D. Pavuna, F. Zuo (Eds.). Miami, Florida, 2004. NATO Science Series II: Mathematics, Physics and Chemistry **183**, 165–171 (2005). Kluwer Academic Publishers, Dordrecht, The Netherlands.

Manske, D. see Eremin, I.; Nogueira, F.S.; Tsukada, A.

Mantell, C., H.Y. Chen, R.H. Crabtree, G.W. Brudvig, J. Pecaut, M.N. Collomb and C. Duboc. High-spin chloro mononuclear Mn-III complexes: A multifrequency high-field EPR study. *ChemPhysChem* **6**, 541–546 (2005).

Marx, W. and H. Schier. CAS versus Google. *Nachrichten aus der Chemie* **53**, 1228–1232 (2005).

Marx, W. see Cardona, M.

Mastrikow, Y.A., Y.F. Zhukovskii, E.A. Kotomin, J. Maier and Y.N. Shunin. Diffusion of Silver Vacancies on AgCl(111)/ α -Al₂O₃(0001) Interface: First Principles Simulations. In: Proceedings of the 2nd International Conference on Information Technologies and Management 2004, 118–125 (2005). Riga, Latvia.

Matsunaga, N., K. Hino, T. Ohta, K. Yamashita, K. Nomura, T. Sasaki, A. Ayari, P. Monceau, M. Watanabe, J. Yamada and S. Nakatsuji. Effect of the dimerized gap due to anion ordering in the field-induced spin-density-wave of quasi-one dimensional organic conductors. *Journal de Physique IV* **131**, 269–272 (2005).

Mattausch, Hj., C. Hoch and A. Simon. Crystal structure of dodecacericium heptadecaiodide triethanide, Ce₁₂I₁₇(C₂)₃. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 301–302 (2005).

Mattausch, Hj., C. Hoch and A. Simon. Three new ethanide iodides of La: La₅I₉(C₂), La₆I₁₀(C₂) and La₁₀I₁₅(C₂)₂. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 1423–1429 (2005).

Mattausch, Hj. and A. Simon. Crystal structure of dodecalanthanum heptadecaiodide triethanide, La₁₂I₁₇(C₂)₃. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 299–300 (2005).

Mattausch, Hj. and A. Simon. Crystal structure of hexalanthanum osmium decaiodide, La₆OsI₁₀. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 121–121 (2005).

Mattausch, Hj. and A. Simon. Crystal structure of tetragadolinium monosilicide hexabromide, Gd₄SiBr₆. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 313–313 (2005).

Mattausch, Hj., C. Zheng, M. Ryazanov and A. Simon. Reduced lanthanum halides with Ge as interstitials: La₂I₂Ge, La₂I₂Ge₂, La₃Cl₂Ge₃, La₃Br₂Ge₃, La₃I₃Ge, La₆I₅Ge₃ and La_{7+x}I₁₂Ge. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 302–308 (2005).

Mattausch, Hj. see Babizhetksky, V.; Oeckler, O.; Ryazanov, M.; Simon, A.; Stolovits, A.; Zeng, H.Y.; Zheng, C.

Matveev, A.T., J. Albrecht, M. Konuma, B. Stuhlhofer, U. Starke and H.-U. Habermeier. Highly homogeneous MgB₂ films prepared by a new post-annealing process. *Superconductor Science and Technology* **18**, 1313–1316 (2005).

Mayr, M., G. Alvarez, C. Sen and E. Dagotto. Phase fluctuations in strongly coupled d-wave superconductors. *Physical Review Letters* **94**, 217001 (2005).

Meden, V., T. Enss, S. Andergassen, W. Metzner and K. Schönhammer. Correlation effects on resonant tunneling in one-dimensional quantum wires. *Physical Review B* **71**, 041302 (2005).

Mercier, O.R., R.G. Buckley, H.J. Trodahl, C. Bernhard and G. Balakrishnan. Low-energy excitations in La_{1.2}Sr_{1.8}Mn₂O₇ investigated by ellipsometry. *Physical Review B* **72**, 214437 (2005).

Merkle, R. and J. Maier. On the Tamman-rule. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 1163–1166 (2005).

Merkle, R. see Kamp, B.

Metzner, W. see Brener, S.; Enss, T.; Gersch, R.; Kollar, M.; Meden, V.; Rohe, D.; Yamase, H.

Meyer, J.C., M. Paillet, T. Michel, A. Moreac, A. Neumann, G.S. Duesberg, S. Roth and J.L. Sauvajol. Raman modes of index-identified freestanding single-walled carbon nanotubes. *Physical Review Letters* **95**, 217401 (2005).

Meyer, J.C., M. Paillet and S. Roth. Single-molecule torsional pendulum. *Science* **309**, 1539–1541 (2005).

Meyer, J.C., M. Paillet, J.-L. Sauvajol, D. Obergfell, A. Neumann, G. Duesberg and S. Roth. Novel Free-standing Nanotube Devices for Combining TEM and Electron Diffraction with Raman and Transport. In: Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 512–515 (2005). American Institute of Physics, New York, USA.

Meyer, J.C. see Michel, T.; Obergfell, D.; Paillet, M.

Meziani, Y.M., B. Maleyre, M.L. Sadowski, S. Ruffenach, O. Briot and W. Knap. Terahertz investigation of high quality indium nitride epitaxial layers. *physica status solidi (a)* **202**, 590–592 (2005).

Michel, F., S. Torelli, F. Thomas, C. Duboc, C. Philouze, C. Belle, S. Hamman, E. Saint-Aman and J.L. Pierre. An unprecedented bridging phenoxy radical in dicopper(II) complexes: Evidence for an $S = 3/2$ spin state. *Angewandte Chemie International Edition* **44**, 438–441 (2005).

Michel, T., M. Paillet, P. Poncharal, A. Zahab, J.-L. Sauvajol, J.C. Meyer and S. Roth. Raman spectroscopy of isolated single-walled carbon nanotubes. In: Carbon Nanotubes: From Basic Research to Nanotechnology; V.N. Popov, P. Lambin (Eds.). NATO Science Series II: Mathematics, Physics and Chemistry **222**, 121–122 (2005). Springer Verlag, Dordrecht, The Netherlands.

Micnas, R., S. Robaszkiewicz and A. Bussmann-Holder. Two-component scenarios for non-conventional (Exotic) superconductors. *Structure and Bonding* **114**, 13–69 (2005).

Micotti, E., A. Lascialfari, F. Borsa, M.H. Julien, C. Berthier, M. Horvatić, J. van Slageren and D. Gatteschi. Spin dynamics at the level crossing in the molecular antiferromagnetic ring $[Cr_8F_8Piv_{16}]$ from proton NMR. *Physical Review B* **72**, 020405R (2005).

Mikhailova, B., U. Bismayer, B. Güttler, M. Gospodinov, A. Boris, C. Bernhard and M. Aroyo. Nanoscale phase transformations in relaxor-ferroelectric lead scandium tantalate and lead scandium niobate. *Zeitschrift für Kristallographie* **220**, 740–747 (2005).

Mironov, Y.V., S.S. Yarovoi, D.Y. Naumov, S.G. Kozlova, V.N. Ikorskyy, R.K. Kremer, A. Simon and V.E. Fedorov. $V_4S_9Br_4$: A novel high-spin vanadium cluster thiobromide with square-planar metal core. *Journal of Physical Chemistry B* **109**, 23804–23807 (2005).

Mironov, Y.V., S.S. Yarovoi, D.Y. Naumov, N.V. Kuratieva, S.G. Kozlova, A. Simon and V.E. Fedorov. First examples of chalcogenide rhenium cluster complexes with cubane like anions $[Re_4Q_4F_{12}]^{4-}$ ($Q = S, Se$). *European Journal of Inorganic Chemistry* **2005**, 2476–2479 (2005).

Miu, L., T. Adachi, Y. Koike, D. Miu, S. Diaz and G. Chouteau. Origin of experimental order-disorder transition line curvature in the $La_{2-x}Sr_xCuO_4$ single crystal vortex system at low temperatures. *Physical Review B* **72**, 052513 (2005).

Mogare, K.M., W. Klein and M. Jansen. Synthesis and crystal structure of potassium osmate(VIII), K_2OsO_5 . *Zeitschrift für anorganische und allgemeine Chemie* **631**, 468–471 (2005).

Mogare, K.M. see Fischer, D.

Mostovoy, M. Helicoidal Ordering in Iron Perovskites. *Physical Review Letters* **94**, 137205 (2005).

Mostovoy, M. Helicoidal magnetic ordering in double exchange systems. *Journal of Physics: Condensed Matter* **17**, S753–S769 (2005).

Mostovoy, M.V., F.M. Marchetti, B.D. Simons and P.B. Littlewood. Effects of disorder on coexistence and competition between superconducting and insulating states. *Physical Review B* **71**, 224502 (2005).

Mühle, C., A. Karpov and M. Jansen. Crystal Structure Elucidation of Anhydrous $Rb_2[Pt(CN)_4]$ from X-Ray Powder Diffraction Data. *Zeitschrift für Naturforschung B* **60**, 1269–1272 (2005).

Mühle, C., A. Karpov, A. Verhoeven and M. Jansen. Crystal structures, dimorphism and lithium mobility of Li_7MO_6 ($\text{M} = \text{Bi}, \text{Ru}, \text{Os}$). *Zeitschrift für anorganische und allgemeine Chemie* **631**, 2321–2327 (2005).

Mühle, C., J. Nuss and M. Jansen. Crystal structure of dirubidium barium di-tetracyanoplatinate(II), $\text{Rb}_2\text{Ba}[\text{Pt}(\text{CN})_4]_2$. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 528–528 (2005).

Murzin, S.S., S.I. Dorozhkin, D.K. Maude and A.G.M. Jansen. Scaling flow diagram in the fractional quantum Hall regime of $\text{GaAs}/\text{Al}_x\text{Ga}_{1-x}\text{As}$ heterostructures. *Physical Review B* **72**, 195317 (2005).

Murzin, S.S., M. Weiss, D.A. Knyazev, A.G.M. Jansen and K. Eberl. Spin splitting in the quantum Hall effect of disordered GaAs layers with strong overlap of the spin subbands. *Physical Review B* **71**, 155328 (2005).

Nekrasov, I.A., G. Keller, D.E. Kondakov, A.V. Kozhevnikov, T. Pruschke, K. Held, D. Vollhardt and V.I. Anisimov. Comparative study of correlation effects in CaVO_3 and SrVO_3 . *Physical Review B* **72**, 155106 (2005).

Nielsen, N.C., T. Höner zu Siederdissen, J. Kuhl, M. Schaarschmidt, J. Förstner, A. Knorr, S.W. Koch and H. Giessen. Temporal and Spatial Pulse Compression in a Nonlinear Defocusing Material. In: *Ultrafast Phenomena XIV*; T. Kobayashi, T. Okada, T. Kobayashi, K.A. Nelson, S. De Silvestri, (Eds.). Niigata, Japan, 2004. Springer Series in Chemical Physics **79**, 19–21 (2005). Springer Verlag Berlin/Heidelberg, Germany.

Nielsen, N.C., T. Höner zu Siederdissen, J. Kuhl, M. Schaarschmidt, J. Förstner, A. Knorr and H. Giessen. Phase evolution of solitonlike optical pulses during excitonic Rabi flopping in a semiconductor. *Physical Review Letters* **94**, 057406 (2005).

Nielsen, N.C. see Höner zu Siederdissen, T.

Nogueira, F.S. and D. Manske. Critical dynamics, duality, and the exact dynamic exponent in extreme type-II superconductors. *Physical Review B* **72**, 014541 (2005).

Novák, J., V. Holý, J. Stangl, G. Bauer, E. Wintersberger, S. Kiravittaya and O.G. Schmidt. A method for the characterization of strain fields in buried quantum dots using x-ray standing waves. *Journal of Physics D* **38**, A137–A142 (2005).

Nuss, H. and M. Jansen. 1,4,7,10,13,16-hexaoxacycloocta-decane-ammonia (1/2). *Acta Crystallographica E* **61**, O3142–O3144 (2005).

Nuss, H., J. Nuss and M. Jansen. Crystal structure of 2,6-dimethylpyridinium hydrochloride, $(\text{C}_7\text{H}_{10}\text{N})\text{Cl}$. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 95–96 (2005).

Nuss, H. see Dinnebier, R.E.

Nuss, J. and M. Jansen. Crystall structure of dineodymium antimonide, Nd_2Sb . *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 529–530 (2005).

Nuss, J. see Blöß, S.P.; Mühle, C.; Nuss, H.; Pavarini, E.

Obergfell, D., J.C. Meyer, M. Haluska, A. Khlobystov, S. Yang, L. Fan, D. Liu and S. Roth. Transport and TEM on the Same Individual Carbon Nanotubes and Peapods. In: *Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials*; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 548–553 (2005). American Institute of Physics, New York, USA.

Obergfell, D. see Meyer, J.C.; Siegle, V.

Oberndorfer, C.P.M., K.E. Adelsberger and M. Jansen. Electrochemical deintercalation of $\text{Ag}_5\text{Pb}_2\text{O}_6$. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 385–392 (2005).

Oeckler, O., Hj. Mattausch and A. Simon. $\text{Ce}_{29}\text{Al}_{14}\text{I}_{28}$: A composite of intermetallic phase and metal clusters. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 3013–3018 (2005).

Oeckler, O., T. Weber, L. Kienle, Hj. Mattausch and A. Simon. Cluster disorder and ordering principles in Al-stabilized ‘LaI’. *Angewandte Chemie International Edition* **44**, 3917–3921 (2005).

Okudera, H., R.E. Dinnebier and A. Simon. The crystal structure of γ -P₄, a low temperature modification of white phosphorus. *Zeitschrift für Kristallographie* **220**, 259–264 (2005).

Okudera, H., Y. Masubuchi, S. Kikkawa and A. Yoshiasa. Structure of oxide ion-conducting lanthanum oxyapatite, La_{9.33}(SiO₄)₆O₂. *Solid State Ionics* **176**, 1473–1478 (2005).

Oleś, A.M. Reply to ‘Comment on ‘Orbital ordering and orbital fluctuations in transition metal oxides’ [phys. stat. sol. (b) 242, No. 4, 962 (2005)]. *physica status solidi (b)* **242**, 963–963 (2005).

Oleś, A.M., P. Horsch and G. Khaliullin. Magnetic interactions and optical spectral weights in Mott insulators with orbital degrees of freedom. *physica status solidi (b)* **242**, 384–391 (2005).

Oleś, A.M., P. Horsch and G. Khaliullin. Temperature dependence of the optical spectral weights in LaMnO₃. *Physica B* **359**, 1288–1290 (2005).

Oleś, A.M., G. Khaliullin, P. Horsch and L.F. Feiner. Fingerprints of spin-orbital physics in cubic Mott insulators: Magnetic exchange interactions and optical spectral weights. *Physical Review B* **72**, 214431 (2005).

Oleś, A.M. see Bala, J.; Daghofer, M.; Feiner, L.F.; Piekarz, P.; Reitsma, A.J.W.

Oliva, A.B., M.N. Biltcliffe, M. Cox, A. Day, S. Fanshawe, G. Harding, G. Howells, W. Joss, L. Ronayette and R. Wotherspoon. Preliminary results of final test of the GHMFL 40 T hybrid magnet. *IEEE Transactions on Applied Superconductivity* **15**, 1311–1316 (2005).

Olshanetsky, E.B., Z.D. Kvon, D.V. Shegllov, A.V. Latyshev, A.I. Toropov and J.C. Portal. Temperature dependence of Aharonov-Bohm oscillations in small quasi-ballistic interferometers. *JETP Letters* **81**, 625–628 (2005).

Olshanetsky, E.B., V. Renard, Z.D. Kvon, J.C. Portal, N.J. Woods, J. Zhang and J.J. Harris. Interaction-induced transverse magnetoresistance with a temperature-dependent sign in a n-Si/SiGe structure. *Europhysics Letters* **71**, 665–671 (2005).

Onari, S., R. Arita, K. Kuroki and H. Aoki. Spin-triplet superconductivity induced by charge fluctuations in extended Hubbard model. *Journal of the Physical Society of Japan* **74**, 2579–2585 (2005).

Orlita, M., M. Byszewski, G.H. Döhler, R. Grill, S. Malzer, J. Soubusta and M. Zvára. Luminescence of indirect excitons in high in-plane magnetic fields. *Physica E* **30**, 1–6 (2005).

Orlita, M., R. Grill, P. Hlídek, M. Zvára, G.H. Döhler, S. Malzer and M. Byszewski. Luminescence of double quantum wells subject to in-plane magnetic fields. *Physical Review B* **72**, 165314 (2005).

Orosel, D., P. Balog, H. Liu, J. Qian and M. Jansen. Sb₂O₄ at high pressures and high temperatures. *Journal of Solid State Chemistry* **178**, 2602–2607 (2005).

Ortner, G., I. Yugova, G.B.H. von Högersthal, A. Larionov, H. Kurtze, D.R. Yakovlev, M. Bayer, S. Fafard, Z. Wasilewski, P. Hawrylak, Y.B. Lyanda-Geller, T.L. Reinecke, A. Babinski, M. Potemski, V.B. Timofeev and A. Forchel. Fine structure in the excitonic emission of InAs/GaAs quantum dot molecules. *Physical Review B* **71**, 125335 (2005).

Pailhès, S., P. Bourges, Y. Sidis, C. Bernhard, B. Keimer, C.T. Lin and J.L. Tallon. Absence of an isotope effect in the magnetic resonance in high- T_c superconductors. *Physical Review B* **71**, 220507 (2005).

Paillet, M., V. Jourdain, P. Poncharal, J.L. Sauvajol, A. Zahab, J.C. Meyer, S. Roth, N. Cordente, C. Amiens and B. Chaudret. Growth and physical properties of individual single-walled carbon nanotubes. *Diamond and Related Materials* **14**, 1426–1431 (2005).

Paillet, M., P. Poncharal, A. Zahab, J.L. Sauvajol, J.C. Meyer and S. Roth. Vanishing of the breit-wigner-fano component in individual single-wall carbon nanotubes. *Physical Review Letters* **94**, 237401 (2005).

Palfalvi, L., J. Hebling, J. Kuhl, A. Peter and K. Polgar. Temperature dependence of the absorption and refraction of Mg-doped congruent and stoichiometric LiNbO₃ in the THz range. *Journal of Applied Physics* **97**, 123505 (2005).

Paneerselvam, R., B. Hinrichsen, M. Joswig and R.E. Dinnebier. Detection of Ellipses in Powder Diffraction Patterns using Hough Transformation. *Newsletter of the Commission on Powder Diffraction (International Union of Crystallography)* **32**, ISSN 1591-9552 (2005).

Panella, B., M. Hirscher and S. Roth. Hydrogen adsorption in different carbon nanostructures. *Carbon* **43**, 2209–2214 (2005).

Panella, B., L. Kossykh, U. Dettlaff-Weglikowska, M. Hirscher, G. Zerbi and S. Roth. Volumetric measurement of hydrogen storage in HCl-treated polyaniline and polypyrrole. *Synthetic Metals* **151**, 208–210 (2005).

Panthöfer, M., D. Shopova and M. Jansen. Crystal Structure and Stability of the Fullerene – Chalcogene Co-Crystal C₆₀Se₈CS₂. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 1387–1390 (2005).

Paredes, J.I., M. Burghard, A. Martínez-Alonso and J.M.D. Tascón. Graphitization of carbon nanofibers: visualizing the structural evolution on the nanometer and atomic scales by scanning tunneling microscopy. *Applied Physics A* **80**, 675–682 (2005).

Park, K., M.R. Pederson, T. Baruah, N. Bernstein, J. Kortus, S.L. Richardson, E. del Barco, A.D. Kent, S. Hill and N.S. Dalal. Incommensurate transverse anisotropy induced by disorder and spin-orbit-vibron coupling in Mn₁₂ acetate. *Journal of Applied Physics* **97**, 10M505 (2005).

Paul-Boncour, V., M. Guillot, G. André, F. Bourée, G. Wiesinger and A. Percheron-Guégan. Origin of the first order magnetostructural transition in YFe₂D_{4.2}. *Journal of Alloys and Compounds* **404–406**, 355–359 (2005).

Paul-Boncour, V., M. Guillot, G. Wiesinger and G. André. Giant isotope effect on the itinerant-electron metamagnetism in YFe₂(H_yD_{1-y})_{4.2}. *Physical Review B* **72**, 174430 (2005).

Pavarini, E., A. Yamasaki, J. Nuss and O.K. Andersen. How chemistry controls electron localization in 3d¹ perovskites: a Wannier-function study. *New Journal of Physics* **7**, 188, 89 pages (2005).

Payer, D. see Lin, N.

Pershin, Y.V. and I.D. Vagner. Analytical theory of persistent currents in mesoscopic rings. *Journal of Computational and Theoretical Nanoscience* **2**, 396–400 (2005).

Peters, K., E.-M. Peters, B.G. Kim and T. Linker. Crystal structure of ethyl (3aR,4R,5R,6R,7aR)-4,5-diacetoxy-6-acetoxymethyl-2-oxy-3a,5,6,7a-tetrahydro-4H-pyrano[3,2-d]isoxazole-3-carboxylate, C₁₆H₂₁NO₁₁. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 21–22 (2005).

Peters, K., E.-M. Peters, U. Linker and T. Linker. Crystal structure of 1,1,2,2-tetramethoxycarbonylethanol, C₂H(CH₃OCO)₄OH. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 19–20 (2005).

Peters, K., E.-M. Peters, F. Rebien and T. Linker. Crystal structure of methyl(1R,2S,3R,4S)-1-phenyl-3,4-epoxy-1,2,3,4-tetrahydronaphthalene-2-carboxylate, C₁₈H₁₆O₃. *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 17–18 (2005).

Petrenko, O.A., M.R. Lees, G. Balakrishnan, S. de Brion and G. Chouteau. Revised magnetic properties of CuFeO₂ – a case of mistaken identity. *Journal of Physics: Condensed Matter* **17**, 2741–2747 (2005).

Petukhov, K., W. Wernsdorfer, A.L. Barra and V. Mosser. Resonant photon absorption in Fe₈ single-molecule magnets detected via magnetization measurements. *Physical Review B* **72**, 052401 (2005).

Piekarz, P., K. Parlinski, P.T. Jochym, A.M. Oleś, J.P. Sanchez and J. Rebizant. First-principles study of phonon modes in PuCoGa₅ superconductor. *Physical Review B* **72**, 014521 (2005).

Pilawa, B., R. Boffinger, I. Keilhauer, R. Leppin, I. Odenwald, W. Wendl, C. Berthier and A. Horvatić. Spin dynamics of the ferric wheel Fe₆(triethanolamine 3-)₆ studied by electron and nuclear spin resonance. *Physical Review B* **71**, 184419 (2005).

Pilgkos, S., G. Rajaraman, M. Soler, N. Kirchner, J. van Slageren, R. Bircher, S. Parsons, H.U. Güdel, J. Kortus, W. Wernsdorfer, G. Christou and E.K. Brechin. Studies of an Enneanuclear Manganese Single-Molecule Magnet. *Journal of the American Chemical Society* **127**, 5572–5580 (2005).

Pimenov, A.V., A.V. Boris, L. Yu, V. Hinkov, T. Wolf, J.L. Tallon, B. Keimer and C. Bernhard. Nickel Impurity-Induced Enhancement of the Pseudogap of Cuprate High- T_c Superconductors. Physical Review Letters **94**, 227003 (2005).

Piot, B.A., D.K. Maude, M. Henini, Z.R. Wasilewski, K.J. Friedland, R. Hey, K.H. Ploog, A.I. Toropov, R. Airey and G. Hill. Quantum Hall ferromagnet at high filling factors: A magnetic-field-induced Stoner transition. Physical Review B **72**, 245325 (2005).

Piskunov, S., E.A. Kotomin, D. Fuks and S. Dorfman. Ab initio calculations of the atomic and electronic structure of layered Ba_{0.5}Sr_{0.5}TiO₃ structures. Materials Science and Engineering B **118**, 15–18 (2005).

Piskunov, S., E.A. Kotomin, E. Heifets, J. Maier, R.I. Eglitis and G. Borstel. Hybrid DFT calculations of the atomic and electronic structure for ABO₃ perovskite (001) surfaces. Surface Science **575**, 75–88 (2005).

Pötschke, P., A.R. Bhattacharyya, A. Janke, S. Pegel, A. Leonhardt, C. Täschner, M. Ritschel, S. Roth, B. Hornbostel and J. Cech. Melt mixing as method to disperse carbon nanotubes into thermoplastic polymers. Fullerenes, Nanotubes, and Carbon Nanostructures, Supplement **13**, 211–224 (2005).

Pötschke, P., B. Hornbostel, S. Roth, U. Vohrer, S.M. Dudkin and I. Alig. Purification and Percolation – Unexpected Phenomena in Nanotube Polymer Composites. In: Proceedings of the XIXth International Winter-school/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 596–601 (2005). American Institute of Physics, New York, USA.

Ponosov, Y.S., I. Loa, V.E. Mogilenskikh and K. Syassen. Raman scattering in osmium under pressure. Physical Review B **71**, 220301 (2005).

Preisler, V., R. Ferreira, S. Hameau, L.A. de Vaulchier, Y. Guldner, M.L. Sadowski and A. Lemaitre. Hole-LO phonon interaction in InAs/GaAs quantum dots. Physical Review B **72**, 115309 (2005).

Proust, C., K. Behnia, R. Bel, D. Maude and S.I. Vedeneev. Heat transport in Bi_{2+x}Sr_{2-x}CuO_{6+δ}: Departure from the Wiedemann-Franz law in the vicinity of the metal-insulator transition. Physical Review B **72**, 214511 (2005).

Putti, M., V. Braccini, C. Ferdeghini, F. Gatti, G. Grasso, P. Manfrinetti, D. Marre, A. Palenzona, I. Pallecchi, C. Tarantini, I. Sheikin, H.U. Aebersold and E. Lehmann. Neutron irradiation of Mg¹¹B₂: From the enhancement to the suppression of superconducting properties. Applied Physics Letters **86**, 112503 (2005).

Rager, T. and J. Golczewski. Solar-thermal zinc oxide reduction assisted by a second redox pair. Zeitschrift für Physikalische Chemie **219**, 235–246 (2005).

Rahmati, B., J. Fleig, E. Bischoff, W. Sigle, J. Maier and A. Rühle. Microstructural studies on the reoxidation behavior of Nb-doped SrTiO₃ ceramics. Journal of the European Ceramic Society **25**, 2211–2214 (2005).

Rahmati, B., J. Fleig, W. Sigle, E. Bischoff, J. Maier and M. Rühle. Oxidation of reduced polycrystalline Nb-doped SrTiO₃: Characterization of surface islands. Surface Science **595**, 115–126 (2005).

Raible, I., M. Burghard, U. Schlecht, A. Yasuda and T. Vossmeyer. V₂O₅ nanofibres: novel gas sensors with extremely high sensitivity and selectivity to amines. Sensors and Actuators B **106**, 730–735 (2005).

Raichle, M. see Capogna, L.

Rajagopalan, M. Structural Phase Transition Induced by Pressure in the Ordered Alloy FeRh. International Journal of Modern Physics B **19**, 3389–3395 (2005).

Rajagopalan, M., N.V. Chandra Shekar and P.C. Sahu. Electronic structure and structural stability of ThGa₂ under pressure: an ab initio study. Philosophical Magazine Letters **85**, 27–32 (2005).

Rajagopalan, M., N.V. Chandra Shekar and P.C. Sahu. Theoretical investigation of the electronic structure and structural phase stability of CeGa₂ under pressure. Physica B **355**, 59–63 (2005).

Ramanath, G. see Agrawal, S.; Ganesan, P.G.; Yan, Q.Y.

Rastelli, A., M. Stoffel, J. Tersoff, G.S. Kar and O.G. Schmidt. Kinetic evolution and equilibrium morphology of strained islands. *Physical Review Letters* **95**, 026103 (2005).

Rastelli, A. see Costantini, G.; Denker, U.; Katsaros, G.; Kiravittaya, S.; Krause, B.; Schildermans, N.; Stoffel, M.

Rauwel, E., W. Prellier, B. Mercey, S. de Brion and G. Chouteau. Stress deformations and structural quenching in charge-ordered $\text{Sm}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$ thin films. *Journal of Applied Physics* **98**, 093903 (2005).

Razavi, F. see Crandles, D.A.

Reehuis, M. see Jauch, W.

Reich, A., M. Panthöfer, H. Modrow, U. Wedig and M. Jansen. The Structure of $\text{Ba}@\text{C}_{74}$. *Science Highlights from the National Synchrotron Light Source* **2005**, (2005).

Reichelt, W., U. Steiner, T. Sohnle, O. Oeckler, V. Duppel and L. Kienle. Mixed crystals in the system $\text{Cu}_3\text{Mo}_2\text{O}_9/\text{Zn}_3\text{Mo}_2\text{O}_9$. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 596–603 (2005).

Reitsma, A.J.W., L.F. Feiner and A.M. Oleś. Orbital and spin physics in LiNiO_2 and NaNiO_2 . *New Journal of Physics* **7**, 121 (2005).

Ren, X.-M., H. Okudera, J.L. Xie and Q.J. Meng. An ion-pair compound based on $[\text{Pd}(\text{mnt})_2]^-$ with strong antiferromagnetically coupled interaction: synthesis, crystal structure, magnetic property. *Journal of Molecular Structure* **733**, 119–124 (2005).

Renard, V.T., I.V. Gornyi, O.A. Tkachenko, V.A. Tkachenko, Z.D. Kvon, E.B. Olshanetsky, A.I. Toropov and J.C. Portal. Quantum corrections to the conductivity and Hall coefficient of a two-dimensional electron gas in a dirty $\text{Al}_x\text{Ga}_{1-x}\text{As}/\text{GaAs}/\text{Al}_x\text{Ga}_{1-x}\text{As}$ quantum well: From the diffusive to the ballistic regime. *Physical Review B* **72**, 075313 (2005).

Repetto, D. see Enders, A.

Reynaud, S., F. Debray, J.P. Franc and T. Maitre. Hydrodynamics and heat transfer in two-dimensional minichannels. *International Journal of Heat and Mass Transfer* **48**, 3197–3211 (2005).

Richard, P., S. Jandl, M. Poirier, P. Fournier, V. Nekvasil and M.L. Sadowski. Infrared Zeeman study of the Nd^{3+} - Cu^{2+} anisotropic exchange interaction in Nd_2CuO_4 . *Physical Review B* **72**, 014506 (2005).

Richter, G. and T. Wagner. Nucleation and growth of Pd clusters on (001) SrTiO_3 : Determination of diffusion and adsorption energies from cluster densities. *Journal of Applied Physics* **98**, 094908 (2005).

Rikken, G.L.J.A., B.A. van Tiggelen, V. Krstić and G. Wagnière. Light induced dynamic magnetochiral anisotropy. *Chemical Physics Letters* **403**, 298–302 (2005).

Rikken, G.L.J.A. and P. Wyder. Magnetoelectric anisotropy in diffusive transport. *Physical Review Letters* **94**, 016601 (2005).

Rodewald, U.C., M. Lukachuk, R.D. Hoffmann and R. Pöttgen. Syntheses and structure of $\text{Gd}_3\text{Rh}_{1.940(7)}\text{In}_4$. *Monatshefte für Chemie* **136**, 1985–1991 (2005).

Rösch, O. and O. Gunnarsson. Dispersion of incoherent spectral features in systems with strong electron-phonon coupling. *European Physical Journal B* **43**, 11–18 (2005).

Rösch, O., O. Gunnarsson, X.J. Zhou, T. Yoshida, T. Sasagawa, A. Fujimori, Z. Hussain, Z.X. Shen and S. Uchida. Polaronic Behavior of Undoped High- T_c Cuprate Superconductors from Angle-Resolved Photo-emission Spectra. *Physical Review Letters* **95**, 227002 (2005).

Rösch, O., J.E. Han, O. Gunnarsson and V.H. Crespi. Interplay between electron-phonon and electron-electron interactions. *physica status solidi (b)* **242**, 118–132 (2005).

Roger, J., V. Babizhetskyy, S. Cordier, J. Bauer, K. Hiebl, L. Le Pollès, S.E. Ashbrook, J.F. Halet and R. Guérin. Crystal structures, physical properties and NMR experiments on the ternary rare-earth metal silicide boride compounds $\text{RE}_5\text{Si}_2\text{B}_8$ ($\text{RE} = \text{Y}, \text{Sm}, \text{Gd}, \text{Tb}, \text{Dy}, \text{Ho}$). *Journal of Solid State Chemistry* **178**, 1851–1863 (2005).

Rogez, G., J.N. Rebilly, A.L. Barra, L. Sorace, G. Blondin, N. Kirchner, M. Duran, J. van Slageren, S. Parsons, L. Ricard, A. Marvilliers and T. Mallah. Very large ising-type magnetic anisotropy in a mono-nuclear Ni-II complex. *Angewandte Chemie International Edition* **44**, 1876–1879 (2005).

Rohe, D. and W. Metzner. Pseudogap at hot spots in the two-dimensional Hubbard model at weak coupling. *Physical Review B* **71**, 115116 (2005).

Rohe, D. see Gersch, R.

Roth, A. see van Wülen, L.

Roth, S. Sind Kohlenstoff-Nanoröhrchen nur eine Modewelle? *Physik in unserer Zeit* **36**, 151–151 (2005).

Roth, S. see Artukovic, E.; Bulusheva, L.G.; Cantelli, R.; Croitoru, M.D.; Dettlaff-Weglikowska, U.; Haluska, M.; Hofmann, S.; Holzinger, M.; Hornbostel, B.; Hulman, M.; Jhang, S.H.; Kaempgen, M.; Lee, J.Y.; Meyer, J.C.; Michel, T.; Obergfell, D.; Paillet, M.; Panella, B.; Pötschke, P.; Scalia, G.; Schmid, M.; Siegle, V.; Skákalová, V.; Woo, Y.; Yu, H.Y.

Ruiz-Trejo, E. and R.A. De Souza. Dopant substitution and oxygen migration in the complex perovskite oxide Ba₃CaNb₂O₉: A computational study. *Journal of Solid State Chemistry* **178**, 1959–1967 (2005).

Ruth, K., R.E. Dinnebier, S.W. Tönnes, E. Alig, I. Sänger, H.W. Lerner and M. Wagner. Solvent-free methyl-thiomethylolithium [LiCH₂SMe].._o: solid state structure and thermal decomposition. *Chemical Communications* **2005**, 3442–3444 (2005).

Rutkowska, A., D. Wasik, A. Witowski, M. Sadowski, W. Orlowski, G. Strzelecka, A. Hruban, M. Kaminska, A. Twardowski and M. Potemski. Infrared spectroscopy of GaAs doped with Mn. *Acta Physica Polonica A* **108**, 845–849 (2005).

Ryabova, E.S., P. Rydberg, M. Kolberg, E. Harbitz, A.L. Barra, U. Ryde, K.K. Andersson and E. Nordlander. A comparative reactivity study of microperoxidases based on hemin, mesohemin and deuterohemin. *Journal of Inorganic Biochemistry* **99**, 852–863 (2005).

Ryazanov, M., A. Simon, R.K. Kremer and Hj. Mattausch. Influence of hydrogen on the magnetic and electrical properties of GdI₂H_x (0 ≤ x ≤ 1). *Journal of Solid State Chemistry* **178**, 2339–2345 (2005).

Ryazanov, M., A. Simon, R.K. Kremer and Hj. Mattausch. Large negative magnetoresistance in the hydride halides GdI₂H_x: A system with competing magnetic interactions. *Physical Review B* **72**, 092408 (2005).

Ryazanov, M. see Mattausch, Hj.

Saha, K.K., A. Mookerjee and O. Jepsen. Electronic structure of random binary alloys: An augmented space formulation in reciprocal space. *Physical Review B* **71**, 094207 (2005).

Sahakalkan, S. see Croitoru, M.D.

Scalia, G., M. Haluska, U. Dettlaff-Weglikowska, F. Giesselmann and S. Roth. Polarized Raman Spectroscopy Study of SWCNT Orientational Order in an Aligning Liquid Crystalline Matrix. In: Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 114–117 (2005). American Institute of Physics, New York, USA.

Scheer, M., U. Vogel, U. Becker, G. Balazs, P. Scheer, W. Höhne, M. Becker and M. Jansen. Synthesis and characterisation of novel complexes containing group 15 elements and their potential use as molecular precursors for the formation of transition metal pnictides. *European Journal of Inorganic Chemistry* **2005**, 135–141 (2005).

Schier, H. see Marx, W.

Schildermans, N., M. Hayne, V.V. Moshchalkov, A. Rastelli and O.G. Schmidt. Nonparabolic band effects in GaAs/Al_xGa_{1-x}As quantum dots and ultrathin quantum wells. *Physical Review B* **72**, 115312 (2005).

Schmid, M., C. Goze-Bac, M. Mehring and S. Roth. ⁷Li NMR on Li Intercalated Carbon Nanotubes. In: Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 202–206 (2005). American Institute of Physics, New York, USA.

- Schmidt, M.U., M. Ermrich and R.E. Dinnebier.* Determination of the structure of the violet pigment $C_{22}H_{12}C_{12}N_6O_4$ from a non-indexed X-ray powder diagram. *Acta Crystallographica B* **61**, 37–45 (2005).
- Schmidt, O. see Costantini, G.; Denker, U.; Katsaros, G.; Kiravittaya, S.; Krause, B.; Lobanov, D.N.; Malachias, A.; Novák, J.; Rastelli, A.; Schildermans, N.; Schulli, T.U.; Stoffel, M.; Vostokov, N.V.; Zhong, Z.
- Schneider, M.A., L. Vitali, P. Wahl, N. Knorr, L. Diekhöner, G. Wittich, M. Vogelgesang and K. Kern.* Kondo state of Co impurities at noble metal surfaces. *Applied Physics A* **80**, 937–941 (2005).
- Schneider, M.A., P. Wahl, L. Diekhöner, L. Vitali, G. Wittich and K. Kern.* Kondo effect of Co adatoms on Ag monolayers on noble metal surfaces. *Japanese Journal of Applied Physics* **44**, 5328–5331 (2005).
- von Schnerring, H.G., J. Llanos, J.H. Chang, K. Peters, E.-M. Peters and R. Nesper.* Refinement of the crystal structures of the tetrahedro-tetragermanides K_4Ge_4 , Rb_4Ge_4 and Cs_4Ge_4 . *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 324–326 (2005).
- Schön, J.C. and M. Jansen.* From configuration space to thermodynamic space: Predicting new inorganic solids via global exploration of their energy landscapes. *Materials Research Society Symposium Proceedings* **848**, 333–344 (2005).
- Schulli, T.U., M. Stoffel, A. Hesse, J. Stangl, R.T. Lechner, E. Wintersberger, M. Sztucki, T.H. Metzger, O.G. Schmidt and G. Bauer.* Influence of growth temperature on interdiffusion in uncapped SiGe-islands on Si(001) determined by anomalous x-ray diffraction and reciprocal space mapping. *Physical Review B* **71**, 035326 (2005).
- Schulte, M., J.G.S. Lok, G. Denninger and W. Dietsche.* Electron spin resonance on a two-dimensional electron gas in a single AlAs quantum well. *Physical Review Letters* **94**, 137601 (2005).
- Schulz-Dobrick, M., M. Panthöfer and M. Jansen.* Supramolecular arrangement of C_{60} and phenol into a square packing arrangement π - π interacting and hydrogen-bonded rods in $C_{60}\cdot 5C_6H_5OH$. *European Journal of Inorganic Chemistry* **2005**, 4064–4069 (2005).
- Schulz-Dobrick, M., K.V. Sarathy and M. Jansen.* Surfactant-free synthesis and functionalization of gold nanoparticles. *Journal of the American Chemical Society* **127**, 12816–12817 (2005).
- Schulz-Dobrick, M. see Sörgel, T.
- Schuster, M., T. Rager, A. Noda, K.-D. Kreuer and J. Maier.* About the choice of the protogenic group in PEM separator materials for intermediate temperature, low humidity operation: A critical comparison of sulfonic acid, phosphonic acid and imidazole functionalized model compounds. *Fuel Cells* **5**, 355–365 (2005).
- Schwerdtfeger, P., R. Bast, M.C.L. Gerry, C.R. Jacob, M. Jansen, V. Kello, A.-V. Mudring, A.J. Sadlej, T. Saue, T. Sohnel and F.E. Wagner.* The quadrupole moment of the $3/2^+$ nuclear ground state of ^{197}Au from electric field gradient relativistic coupled cluster and density-functional theory of small molecules and the solid state. *Journal of Chemical Physics* **122**, 124317 (2005).
- Shaltiel, D., H.A.K. von Nidda, A. Loidl, C.T. Lin, B. Liang, T. Kurz and B. Bogoslavsky.* Interaction of AC magnetic field with the vortex system in highly anisotropic Bi-2223 superconductor; intercalation effects. Comparison with Bi-2212. *Physica C* **433**, 93–100 (2005).
- Sharma, S., M. Panthöfer, M. Jansen and A. Ramanan.* Ion exchange synthesis of silver vanadates from organically templated layered vanadates. *Materials Chemistry and Physics* **91**, 257–260 (2005).
- Sherwin, R., R.J.H. Clark, R. Lauck and M. Cardona.* Effect of isotope substitution and doping on the Raman spectrum of galena (PbS). *Solid State Communications* **134**, 565–570 (2005).
- Shopova, D. see Panthöfer, M.
- Siegle, V., D. Obergfell, F.J. Ahlers and S. Roth.* Coupling of Surface Acoustic Waves to Single Walled Carbon Nanotubes. In: *Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials*; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. *AIP Conference Proceedings* **786**, 558–561 (2005). American Institute of Physics, New York, USA.

- Simon, A.* Superconductivity – a source of surprises. *Solid State Sciences* **7**, 1451–1455 (2005).
- Simon, A., V. Babizhetsky, O. Oeckler, Hj. Mattausch, J. Bauer and R.K. Kremer.* Crystal structure and real structure investigations on the intermittent superconductivity of ‘La₅B₂C₆’. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 316–326 (2005).
- Simon, A. see Ahn, K.; Babizhetsky, V.; Brown, P.J.; Bussmann-Holder, A.; Deng, S.; He, M.; Köhler, J.; Lefevre, C.; Machón, M.; Mattausch, Hj.; Mironov, Y.V.; Oeckler, O.; Okudera, H.; Ryazanov, M.; Stolovits, A.; Vajenine, G.V.; Wang, X.; Yarovoi, S.S.; Zeng, H.Y.; Zheng, C.
- Skierbiszewski, C., K. Dybko, W. Knap, M. Siekacz, W. Krupczyński, G. Nowak, M. Boćkowski, J. Łusakowski, Z.R. Wasilewski, D. Maude, T. Suski and S. Porowski.* High mobility two-dimensional electron gas in AlGaN/GaN heterostructures grown on bulk GaN by plasma assisted molecular beam epitaxy. *Applied Physics Letters* **86**, 102106 (2005).
- Skákalová, V., U. Dettlaff-Weglikowska and S. Roth.* Electrical and mechanical properties of nanocomposites of single wall carbon nanotubes with PMMA. *Synthetic Metals* **152**, 349–352 (2005).
- Skákalová, V., A.B. Kaiser, U. Dettlaff-Weglikowska, K. Hrnčariková and S. Roth.* Effect of chemical treatment on electrical conductivity, infrared absorption, and Raman spectra of single-walled carbon nanotubes. *Journal of Physical Chemistry B* **109**, 7174–7181 (2005).
- Skákalová, V., A.B. Kaiser, M. Kaempgen and S. Roth.* Electron Transport – From Buckypaper to Thin Single-Wall Nanotube Networks. In: Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 562–565 (2005). American Institute of Physics, New York, USA.
- van Smaalen, S., R.E. Dinnebier, J. Hanson, J. Gollwitzer, F. Büillesfeld, A. Prokofiev and W. Assmus.* High-temperature behavior of vanadyl pyrophosphate (VO)₂P₂O₇. *Journal of Solid State Chemistry* **178**, 2225–2230 (2005).
- Smet, J.H., B. Gorshunov, C. Jiang, L. Pfeiffer, K. West, V. Umansy, M. Dressel, R. Meisels, F. Kuchar and K. von Klitzing.* Circular-polarization-dependent study of the microwave photoconductivity in a two-dimensional electron system. *Physical Review Letters* **95**, 116804 (2005).
- Smet, J. see Dorozhkin, P.S.; Dorozhkin, S.I.; Geisler, M.C.; Kukushkin, I.V.; Kulik, L.V.
- Sörgel, T. and M. Jansen.* A new hexagonal modification of AgNiO₂. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 2970–2972 (2005).
- Sörgel, T. and M. Schulz-Dobrick.* European Conference on Solid-State Chemistry in Sheffield. *Angewandte Chemie International Edition* **44**, 7160–7162 (2005).
- Sofin, M. and M. Jansen.* New route of preparation and properties of NaNiO₂. *Zeitschrift für Naturforschung B* **60**, 701–704 (2005).
- Sofin, M. and M. Jansen.* Synthesis, structure and magnetic properties of β-Na₃FeO₃. *Solid State Sciences* **8**, 19–23 (2005).
- Sofin, M., E.-M. Peters and M. Jansen.* Synthesis and crystal structure of CsCu₃O₂, containing a new type of oxocuprate(I) polyanion (*Z. Anorg. Allg. Chem.* (2003), 629, 2435). *Zeitschrift für anorganische und allgemeine Chemie* **631**, 2517–2517 (2005).
- Sofin, M., E.-M. Peters and M. Jansen.* Synthesis, structure and properties of new chain cuprates, Na₃Cu₂O₄ and Na₈Cu₅O₁₀. *Journal of Solid State Chemistry* **178**, 3708–3714 (2005).
- Sofin, M. see Arumugam, N.; Capogna, L.; Horsch, P.; Horvatić, M.; Maljuk, A.N.
- Sofina, N., R.E. Dinnebier and M. Jansen.* The crystal structure of disodium phosphonate, Na₂HPO₃. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 2994–2996 (2005).
- Sofina, N. see van Wüllen, L.

- Sokolov, V.I., F. Fillaux, F. Romain, P. Lemmens and N.B. Gruzdev.* A Raman Study of Lattice Vibrations in II-VI Semiconductors Doped with 3d Elements. *Physics of the Solid State* **47**, 1567–1569 (2005).
- Solovyov, L.A., O.V. Belousov, R.E. Dinnebier, A.N. Shmakov and S.D. Kirik.* X-ray diffraction structure analysis of MCM-48 mesoporous silica. *Journal of Physical Chemistry B* **109**, 3233–3237 (2005).
- Soltan, S., J. Albrecht and H.-U. Habermeier.* Spin-polarized quasiparticle injection effects in YBCO thin films. *Solid State Communications* **135**, 461–465 (2005).
- Soltan, S. see Albrecht, J.
- Songmuang, R. see Costantini, G.; Kiravittaya, S.; Krause, B.
- Sordan, R., K. Balasubramanian, M. Burghard and K. Kern.* Coulomb blockade phenomena in electromigration break junctions. *Applied Physics Letters* **87**, 013106 (2005).
- Soubatch, S., S.E. Saddow, S.P. Rao, W.Y. Lee, M. Konuma and U. Starke.* Structure and morphology of 4H-SiC wafer surfaces after H₂-etching. *Materials Science Forum* **483**, 761–764 (2005).
- Soubatch, S. and U. Starke.* Nucleation and reaction of Ag on 4H-SiC(0001). *Materials Science Forum* **483**, 741–744 (2005).
- Stahn, J., J. Chakhalian, C. Niedermayer, J. Hoppler, T. Gutberlet, J. Voigt, F. Treubel, H.-U. Habermeier, G. Cristiani, B. Keimer and C. Bernhard.* Magnetic proximity effect in perovskite superconductor/ferromagnet multilayers. *Physical Review B* **71**, 140509 (2005).
- Stamenov, P., V. Krstic and J.M.D. Coey.* Shubnikov-de Haas and Hall quantum oscillations in graphite. *Journal of Magnetism and Magnetic Materials* **290**, 1402–1404 (2005).
- Starke, U. see Acartürk, T.; Baumann, F.S.; Matveev, A.T.; Soubatch, S.
- Steinmetz, J., M. Glerup, M. Paillet, P. Bernier and M. Holzinger.* Production of pure nanotube fibers using a modified wet-spinning method. *Carbon* **43**, 2397–2400 (2005).
- Stepanov, A.G., J. Hebling and J. Kuhl.* THz generation via optical rectification with ultrashort laser pulse focused to a line. *Applied Physics B* **81**, 23–26 (2005).
- Stepanov, A.G., J. Hebling and J. Kuhl.* Transient Grating Generation and Waveform Shaping of Free-Space Propagating, Picosecond, Narrow-Band THz Radiation. In: *Ultrafast Phenomena XIV*; T. Kobayashi, T. Okada, T. Kobayashi, K.A. Nelson, S. De Silvestri, (Eds.). Niigata, Japan, 2004. Springer Series in Chemical Physics **79**, 714–716 (2005). Springer Verlag Berlin/Heidelberg, Germany.
- Stepanov, A.G., J. Kuhl, I.Z. Kozma, E. Riedle, G. Almasi and J. Hebling.* Scaling up the energy of THz pulses created by optical rectification. *Optics Express* **13**, 5762–5768 (2005).
- Stepanov, A.G. see Hebling, J.
- Stepanow, S., N. Lin, F. Vidal, A. Landa, M. Ruben, J.V. Barth and K. Kern.* Programming supramolecular assembly and chirality in two-dimensional dicarboxylate networks on a Cu(100) surface. *Nano Letters* **5**, 901–904 (2005).
- Stepanow, S. see Lin, N.; Vidal, F.
- Stoffel, M., G.S. Kar and O.G. Schmidt.* Ge rich Esaki diodes with high peak to valley current ratios. *Materials Science and Engineering C* **25**, 826–829 (2005).
- Stoffel, M., A. Rastelli, S. Kiravittaya and O.G. Schmidt.* Strain-mediated lateral SiGe island motion in single and stacked layers. *Physical Review B* **72**, 205411 (2005).
- Stoffel, M. see Denker, U.; Heim, S.; Katsaros, G.; Lobanov, D.N.; Malachias, A.; Rastelli, A.; Schulli, T.U.; Vostokov, N.V.; Zhong, Z.
- Stolovits, A., A. Sherman, R.K. Kremer, Hj. Mattausch, H. Okudera, X.-M. Ren, A. Simon and J.R. O'Brien.* Quantum interference of electrons in Nb_{5-δ}Te₄ single crystals. *Physical Review B* **71**, 144519 (2005).
- Strempfer, J. see Zegkinoglou, I.

Strohm, C., G.L.J.A. Rikken and P. Wyder. Phenomenological evidence for the phonon Hall effect. Physical Review Letters **95**, 155901 (2005).

Studenikin, S.A., M. Potemski, A. Sachrajda, M. Hilke, L.N. Pfeiffer and K.W. West. Microwave-induced resistance oscillations on a high-mobility two-dimensional electron gas: Exact waveform, absorption/reflection and temperature damping. Physical Review B **71**, 245313 (2005).

Studenikin, S.A., M. Potemski, A.S. Sachrajda, M. Hilke, L.N. Pfeiffer and K.W. West. Microwave absorption/reflection and magneto-transport experiments on high-mobility electron gas. IEEE Transactions on Nanotechnology **4**, 124–131 (2005).

Sugimoto, K. see Łodyga-Chruścińska, E.

Svane, A., V. Kanchana, G. Vaitheswaran, G. Santi, W.M. Temmerman, Z. Szotek, P. Strange and L. Petit. Electronic structure of samarium monopnictides and monochalcogenides. Physical Review B **71**, 045119 (2005).

Syassen, K. see Brillante, A.; Kunc, K.; Kuntscher, C.A.; Loa, I.; Ponosov, Y.S.; Vajenine, G.V.; Wang, X.

Tarantini, C., V. Braccini, C. Ferdeghini, F. Gatti, P. Manfrinetti, D. Marre, A. Palenzona, I. Pallecchi, C. Bernini, A. Tumino, I. Sheikin, H.U. Aebersold, E. Lehmann and A. Putti. Critical field of magnesium diboride in substituted and irradiated samples. IEEE Transactions on Applied Superconductivity **15**, 3223–3226 (2005).

Taylor, D.M.J. and D.P. Hampshire. Relationship between the n-value and critical current in Nb₃Sn superconducting wires exhibiting intrinsic and extrinsic behaviour. Superconductor Science and Technology **18**, S297–S302 (2005).

Taylor, D.M.J. and D.P. Hampshire. The scaling law for the strain dependence of the critical current density in Nb₃Sn superconducting wires. Superconductor Science and Technology **18**, S241–S252 (2005).

Tengå, A., F.J. García-García, A.S. Mikhaylukhin, B. Espinosa-Arronte, M. Andersson and U. Häussermann. Sphalerite-chalcopyrite polymorphism in semimetallic ZnSnSb₂. Chemistry of Materials **17**, 6080–6085 (2005).

Teran, F.J., L. Eaves, L. Mansouri, H. Buhmann, D.K. Maude, M. Potemski, M. Henini and G. Hill. Trion formation in narrow GaAs quantum well structures. Physical Review B **71**, 161309 (2005).

Tezuka, M., R. Arita and H. Aoki. Density-matrix renormalization group study of pairing when electron-electron and electron-phonon interactions coexist: Effect of the electronic band structure. Physical Review Letters **95**, 226401 (2005).

Tikhodeev, S.G., N.A. Gippius, A. Christ, T. Zentgraf, J. Kuhl and H. Giessen. Waveguide-plasmon polaritons in photonic crystal slabs with metal nanowires. physica status solidi (c) **2**, 795–800 (2005).

Tikhodeev, S.G. see Christ, A.; Gippius, N.A.

Tkachenko, V.A., O.A. Tkachenko, Z.D. Kvon, D.G. Baksheev, A.L. Aseev and J.C. Portal. Coherent scattering in a small quantum dot. JETP Letters **80**, 588–592 (2005).

Torrelles, X., J. Zegenhagen, J. Rius, T. Gloege, L.X. Cao and W. Moritz. Atomic structure of a long-range ordered vicinal surface of SrTiO₃. Surface Science **589**, 184–191 (2005).

Toschi, A., M. Capone and C. Castellani. Energetic balance of the superconducting transition across the BCS-Bose Einstein crossover in the attractive Hubbard model. Physical Review B **72**, 235118 (2005).

Toschi, A. see Bruno, M.

Tsetseris, L. and O. Jepsen. Relativistic Nth order muffin-tin orbital theory. Physical Review B **71**, 195115 (2005).

Tsukada, A., Y. Krockenberger, M. Noda, H. Yamamoto, D. Manske, L. Alff and M. Naito. New class of T'-structure cuprate superconductors. Solid State Communications **133**, 427–431 (2005).

Tyagi, A.K., J. Köhler, P. Balog and J. Weber. Syntheses and structures of Li_3ScF_6 and high pressure LiScF_{4-} , luminescence properties of LiScF_4 , a new phase in the system LiF-ScF_3 . Journal of Solid State Chemistry **178**, 2620–2625 (2005).

Ulrich, C. see Bourges, P.

Vaitheeswaran, G., V. Kanchana and A. Delin. Pseudo-half-metallicity in the double perovskite $\text{Sr}_2\text{CrReO}_6$ from density-functional calculations. Applied Physics Letters **86**, 032513 (2005).

Vajenine, G.V., A. Grzechnik, K. Syassen, I. Loa, M. Hanfland and A. Simon. Interplay of metallic and ionic bonding in layered subnitrides AE_2N ($\text{AE} = \text{Ca}, \text{Sr}, \text{or Ba}$) under high pressure. Comptes Rendus Chimie **8**, 1897–1905 (2005).

Valiron, O., L. Peris, G. Rikken, A. Schweitzer, Y. Saoudi, C. Remy and D. Job. Cellular disorders induced by high magnetic fields. Journal of Magnetic Resonance Imaging **22**, 334–340 (2005).

Vartanyants, I.A., I.K. Robinson, J.D. Onken, M.A. Pfeifer, G.J. Williams, F. Pfeiffer, H. Metzger, Z. Zhong and G. Bauer. Coherent x-ray diffraction from quantum dots. Physical Review B **71**, 245302 (2005).

de Vaulx, C., M.H. Julien, C. Berthier, M. Horvatić, P. Bordet, V. Simonet, D.P. Chen and C.T. Lin. Non-magnetic insulator state in Na_1CoO_2 and phase separation of Na vacancies. Physical Review Letters **95**, 186405 (2005).

Vedeneev, S.I. and D.K. Maude. Quasiparticle density of states of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ single crystals probed using tunneling spectroscopy in the 30–50 mK temperature range in high magnetic fields. Physical Review B **72**, 144519 (2005).

Vedeneev, S.I. and D.K. Maude. Vortexlike excitations in a nonsuperconducting single-layer compound $\text{Bi}_{2+x}\text{Sr}_{2-x}\text{CuO}_{6+\delta}$ single crystal in high magnetic fields. Physical Review B **72**, 214514 (2005).

Vensky, S., L. Kienle, R.E. Dinnebier, A.S. Masadeh, S.J.L. Billinge and M. Jansen. The real structure of Na_3BiO_4 by electron microscopy, HR-XRD and PDF analysis. Zeitschrift für Kristallographie **220**, 231–244 (2005).

Veremchuk, I.V., N.F. Chaban, V.S. Babizhetskyy, O.T. Pilyushchak and Y.B. Kuz'ma. 1070-K section of the Yb-Fe-B phase diagram. Inorganic Materials **41**, 700–705 (2005).

Verhoeven, A. see Mühle, C.

Vidal, F., E. Delvigne, S. Stepanow, N. Lin, J.V. Barth and K. Kern. Chiral phase transition in two-dimensional supramolecular assemblies of prochiral molecules. Journal of the American Chemical Society **127**, 10101–10106 (2005).

Vitali, L. see Schneider, M.A.; Wahl, P.

Vogelgesang, M. see Schneider, M.A.

Vogelgesang, R. see Bek, A.; Wahl, P.

Vollhardt, D., K. Held, G. Keller, R. Bulla, T. Pruschke, I.A. Nekrasov and V.I. Anisimov. Dynamical mean-field theory and its applications to real materials. Journal of the Physical Society of Japan **74**, 136–146 (2005).

Vostokov, N.V., Y.N. Drozdov, Z.F. Krasil'nik, D.N. Lobanov, A.V. Novikov, A.N. Yablonskii, M. Stoffel, U. Denker, O.G. Schmidt, O.M. Gorbenko and I.P. Soshnikov. Influence of a predeposited $\text{Si}_{1-x}\text{Ge}_x$ layer on the growth of self-assembled SiGe/Si(001) islands. Physics of the Solid State **47**, 26–29 (2005).

Wagner, T. see Richter, G.

Wahl, P., L. Diekhöner, G. Wittich, L. Vitali, M.A. Schneider and K. Kern. Kondo effect of molecular complexes at surfaces: Ligand control of the local spin coupling. Physical Review Letters **95**, 166601 (2005).

Wahl, P., M.A. Schneider, L. Diekhöner, R. Vogelgesang and K. Kern. Phase coherence length and quantum interference patterns at step edges – Wahl et al.: Reply. Physical Review Letters **95**, 029702 (2005).

Wahl, P. see Schneider, M.A.

- Wang, J. see Dettlaff-Weglikowska, U.
- Wang, X., I. Loa, K. Kunc, K. Syassen and M. Amboage. Effect of pressure on the structural properties and Raman modes of LiCoO₂. *Physical Review B* **72**, 224102 (2005).
- Wang, X., I. Loa, K. Syassen, R.K. Kremer, A. Simon, M. Hanfland and K. Ahn. Structural properties of the sesquicarbide superconductor La₂C₃ at high pressure. *Physical Review B* **72**, 064520 (2005).
- Wang, X., I. Loa, K. Syassen, P. Lemmens, M. Hanfland and M. Johnsson. The effect of pressure on the structural properties of the spin-tetrahedra compound Cu₂Te₂O₅Br₂. *Journal of Physics: Condensed Matter* **17**, S807–S812 (2005).
- Wang, X.L., A.H. Li, S. Yu, S. Ooi, K. Hirata, C.T. Lin, E.W. Collings, M.D. Sumption, M. Bhatia, S.Y. Ding and S.X. Dou. Thermally assisted flux flow and individual vortex pinning in Bi₂Sr₂Ca₂Cu₃O₁₀ single crystals grown by the traveling solvent floating zone technique. *Journal of Applied Physics* **97**, 10B114 (2005).
- Wang, Z.H., G. Cristiani, H.-U. Habermeier and J.A.C. Bland. Double magnetic switching, domain wall processes, and interfacial exchange coupling in an exchange-biased bilayer film. *Physical Review B* **72**, 054407 (2005).
- Weber, J. see Tyagi, A.K.
- Wedig, U. see Karpov, A.; Reich, A.
- Weis, J. see von Klitzing, K.
- Wiltshire, J.G., L.J. Li, L.M. Herz, R.J. Nicholas, M. Glerup, J.L. Sauvajol and A.N. Khlobystov. Chirality-dependent boron-mediated growth of nitrogen-doped single-walled carbon nanotubes. *Physical Review B* **72**, 205431 (2005).
- Wittich, G. see Schneider, M.A.; Wahl, P.
- Woo, Y. and S. Roth. Effect of Contact Improvement on the FET Characteristics of an Individual Single Walled Carbon Nanotube. In: Proceedings of the XIXth International Winterschool/Euroconference on Electronic Properties of Novel Materials; H. Kuzmany, J. Fink, M. Mehring, S. Roth (Eds.). Kirchberg, Tirol, Austria, 2005. AIP Conference Proceedings **786**, 566–569 (2005). American Institute of Physics, New York, USA.
- Wu, X.C., A.M. Bittner and K. Kern. Synthesis, photoluminescence, and adsorption of CdS/dendrimer nanocomposites. *Journal of Physical Chemistry B* **109**, 230–239 (2005).
- van Wüllen, L., L. Hildebrandt and M. Jansen. Cation mobility and anion reorientation in lithium trifluoromethane sulfonate, LiCF₃SO₃. *Solid State Ionics* **176**, 1449–1456 (2005).
- van Wüllen, L., A. Roth and M. Jansen. The role of carbon in the nitridic high performance ceramics in the system Si-B-N-C [Solid State NMR 27 (2005) 90–98]. *Solid State Nuclear Magnetic Resonance* **27**, 271–271 (2005).
- van Wüllen, L. and M. Jansen. The role of carbon in the nitridic high performance ceramics in the system Si-B-N-C. *Solid State Nuclear Magnetic Resonance* **27**, 90–98 (2005).
- van Wüllen, L., N. Sofina, L. Hildebrandt and M. Jansen. NMR studies of cation transport in crystalline ion conductors. In: Proceedings of the International Conference on Solid State Ionics, 223–225 (2005); Baden-Baden, Germany.
- van Wüllen, L., S. Vensky, W. Hoffbauer and M. Jansen. ¹⁰⁹Ag chemical shifts of different silver oxidation states in binary and ternary silver oxides. *Solid State Sciences* **7**, 920–924 (2005).
- Xu, H.L., Y. Feng, Z. Xu, C.S. Li, G. Yan, Y.F. Wu, Z.L. Chen, E. Mossang and A. Sulpice. Effects of ZrH₂ doping and sintering temperature on the critical current density of MgB₂ wires. *Physica C* **426-431**, 1244–1248 (2005).
- Xu, X.L., Y. Feng, Z. Xu, C.S. Li, G. Yan, E. Mossang and A. Sulpice. Effect of sintering temperature on properties of MgB₂ wire sheathed by low carbon steel tube. *Physica C* **419**, 94–100 (2005).

Yahia, H.B., E. Gaudin, J. Darriet, M. Banks, R.K. Kremer, A. Villesuzanne and M.H. Whangbo. Synthesis, crystal structure, magnetic properties, and electronic structure of the new ternary vanadate CuMnVO₄. Inorganic Chemistry **44**, 3087–3093 (2005).

Yamasaki, A. see Hozoi, L.; Pavarini, E.

Yamase, H., V. Oganesyan and W. Metzner. Mean-field theory for symmetry-breaking Fermi surface deformations on a square lattice. Physical Review B **72**, 035114 (2005).

Yan, Q.Y., T. Kim, A. Purkayastha, P.G. Ganesan, M. Shima and G. Ramanath. Enhanced chemical ordering and coercivity in FePt alloy nanoparticles by Sb-doping. Advanced Materials **17**, 2233–2237 (2005).

Yang, Y.F. and K. Held. Nonequilibrium transport through parallel double quantum dots in the Kondo regime. Physical Review B **72**, 235308 (2005).

Yarovoi, S.S., Y.V. Mironov, S.F. Solodovnikov, D.Y. Naumov, N.K. Moroz, S.G. Kozlova, A. Simon and V.E. Fedorov. Unexpected ligand substitutions in the cluster core {Re₆Se₈} : synthesis and structure of the novel cluster compound Cs₁₁(H₃O)[Re₆Se₄O₄Cl₆]₃·4H₂O. Chemical Communications **2005**, 719–721 (2005).

Ye, S.F., B. Sarkar, C. Duboc, J. Fiedler and W. Kaim. The redox series [M(bpy)₂(Q)]ⁿ⁺, M = Ru or Os, Q = 3,5-di-tert-butyl-N-phenyl-1,2-benzoquinonemonoimine. Isolation and a complete X and W band EPR study of the semiquinone states (n=1). Inorganic Chemistry **44**, 2843–2847 (2005).

Yoshias, A., M. Okube, O. Kamishima, H. Arima, H. Okudera, Y. Terada and A. Nakatsuka. Anharmonic effective pair potentials in α-, β- and γ-CuI determined by extended X-ray absorption fine structure. Solid State Ionics **176**, 2487–2491 (2005).

You, L.X., A. Yurgens, D. Winkler, C.T. Lin and B. Liang. Superconducting properties of ultrathin Bi₂Sr₂CaCu₂O_{8+x} single crystals. Journal of Applied Physics **98**, 033913 (2005).

Yu, H.Y., D.S. Lee, S.H. Lee, S.S. Kim, S.W. Lee, Y.W. Park, U. Dettlaff-Weglikowska and S. Roth. Single-electron transistor mediated by C₆₀ insertion inside a carbon nanotube. Applied Physics Letters **87**, 163118 (2005).

Yu, J.H., J.-S. Lee and J. Maier. Formation of protonic defects in perovskite-type oxides with redox-active acceptors: case study on Fe-doped SrTiO₃. Physical Chemistry Chemical Physics **7**, 3560–3564 (2005).

Yu, L. see Pimenov, A.V.

Zaitsev, D.D., P.E. Kazin, Y.D. Tretyakov and M. Jansen. Synthesis and magnetic properties of glass-ceramic composites SrFe₁₂O₁₉-SrSiO₃. Journal of Magnetism and Magnetic Materials **292**, 59–64 (2005).

Zaitsev, D.D., P.E. Kazin, A.S. Vanetsev, V.K. Ivanov, Y.D. Tret'yakov and M. Jansen. Synthesis of magnetic glass ceramics based on strontium hexaferrite by microwave heating. Doklady Chemistry **402**, 69–71 (2005).

Zani, L., E. Mossang, A. Tena, J.P. Serries and H. Cloez. J_C(B,T) characterization of NbTi strands used in ITER PF-relevant insert and full-scale sample. IEEE Transactions on Applied Superconductivity **15**, 3506–3509 (2005).

Zegkinoglou, I., J. Strempfer, C.S. Nelson, J.P. Hill, J. Chakhalian, C. Bernhard, J.C. Lang, G. Srayer, H. Fukazawa, S. Nakatsuji, Y. Maeno and B. Keimer. Orbital Ordering Transition in Ca₂RuO₄ Observed with Resonant X-Ray Diffraction. Physical Review Letters **95**, 136401 (2005).

Zemljic, M.M. and P. Prelovsek. Resistivity and optical conductivity of cuprates within the t-J model. Physical Review B **72**, 075108 (2005).

Zeng, H.Y., H. Okudera, C. Zheng, Hj. Mattausch, R.K. Kremer and A. Simon. La₃Cl₃BC – Structure, bonding and electrical conductivity. Zeitschrift für Naturforschung B **60**, 499–504 (2005).

Zentgraf, T. see Christ, A.; Tikhodeev, S.G.

Zeyher, R. and A. Greco. D charge-density-wave versus superconducting phase fluctuations in underdoped high-T_c superconductors. physica status solidi (b) **242**, 356–362 (2005).

- Zeyher, R. see Aristov, D.N.
- Zhang, J. see Olshanetsky, E.B.
- Zhang, X.N., P. Lemmens, V. Gnezdilov, K.Y. Choi, B. Keimer, D.P. Chen, C.T. Lin and F.C. Chou. Phonon scattering and stability of $\text{Na}_{0.5}\text{CoO}_2$. *Physica B* **359**, 424–426 (2005).
- Zhang, Y.Z., Z. Wang, X.E. Lu, H.H. Wen, J.F. de Marneffe, R. Deltour, A.G.M. Jansen and P. Wyder. Deviations from plastic barriers in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ thin films. *Physical Review B* **71**, 052502 (2005).
- Zhang, Y.Z., Z. Wang, D.N. Zheng, H.H. Wen, Z.X. Zhao, J.F. Marneffe, R. Deltour, A.G.M. Jansen and P. Wyder. Anisotropic properties of Bi-2201 thin films grown on vicinal substrates. *Modern Physics Letters B* **19**, 585–588 (2005).
- Zhang, Z., W. Sigle, R.A. De Souza, W. Kurtz, J. Maier and M. Rühle. Comparative studies of microstructure and impedance of small-angle symmetrical and asymmetrical grain boundaries in SrTiO_3 . *Acta Materialia* **53**, 5007–5015 (2005).
- Zhao, S.P., X.B. Zhu, Y.F. Wei, G.H. Chen, Q.S. Yang and C.T. Lin. $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ intrinsic Josephson junctions: Surface layer characterization and control. *Physical Review B* **72**, 184511 (2005).
- Zheng, C., Hj. Mattausch and S.J. Li. Fused stars and nano-stripes in the rare earth halide $\text{La}_7\text{Sb}_{11}\text{Br}_4$. *Zeitschrift für anorganische und allgemeine Chemie* **631**, 421–426 (2005).
- Zheng, C., Hj. Mattausch and A. Simon. Crystal structure of tricerium monogallium tribromide, Ce_3GaBr_3 . *Zeitschrift für Kristallographie: New Crystal Structures* **220**, 314–314 (2005).
- Zheng, C., Hj. Mattausch and A. Simon. $\text{La}_9\text{Sb}_{16}\text{Br}_3$ and $\text{Ce}_9\text{Sb}_{16}\text{Cl}_3$: Stars and stripes in rare earth halide and intermetallic compounds. *Inorganic Chemistry* **44**, 3684–3689 (2005).
- Zheng, C. see Mattausch, Hj.; Zeng, H.Y.
- Zheng, G.Q., P.L. Kuhns, A.P. Reyes, B. Liang and C.T. Lin. Critical Point and the Nature of the Pseudo-gap of Single-Layered Copper-Oxide $\text{Bi}_2\text{Sr}_{2-x}\text{La}_x\text{CuO}_{6+\delta}$ Superconductors. *Physical Review Letters* **94**, 047006 (2005).
- Zhong, Z., G. Katsaros, M. Stoffel, G. Costantini, K. Kern, O.G. Schmidt, N.Y. Jin-Phillipp and G. Bauer. Periodic pillar structures by Si etching of multilayer GeSi/Si islands. *Applied Physics Letters* **87**, 263102 (2005).
- Zhong, Z., O.G. Schmidt and G. Bauer. Increase of island density via formation of secondary ordered islands on pit-patterned Si (001) substrates. *Applied Physics Letters* **87**, 133111 (2005).
- Zhong, Z. see Vartanyants, I.A.
- Zhukovskii, Y.F., E.A. Kotomin, Y. Mastrikov and J. Maier. Ab initio simulations on $\text{AgCl}(111)$ surface and $\text{AgCl}(111)/\alpha\text{-Al}_2\text{O}_3(0001)$ interface. *Computational Materials Science* **33**, 276–281 (2005).
- Zurek, E., O. Jepsen and O.K. Andersen. Muffin-tin Orbital Wannier-Like Functions for Insulators and Metals. *ChemPhysChem* **6**, 1934–1942 (2005).

