



PUBLICATIONS 2011

Alekseev, V.A., P.I. Arseev, M.A. Vasiliev, A.V. Gurevich, O.V. Dolgov, Yu.M. Kagan, L.V. Keldysh, Yu.V. Kopaev, Yu.E. Lozovik, M.V. Sadovskii, Yu.A. Uspenskii, and V.E. Fortov. In memory of Evgenii Grigorievich Maksimov. Physics – Uspekhi **54**, 1195–1197 (2011).

Alexandrov, V., S. Piskunov, Y.F. Zhukovskii, E.A. Kotomin, and J. Maier. First-Principles Modeling of Oxygen Interaction with SrTiO₃(001) Surface: Comparative Density-Functional LCAO and Plane-Wave Study. Integrated Ferroelectrics **123**, 10–17 (2011).

Ali, N.Z., J. Nuss, and M. Jansen. Crystal Structure and Raman Spectroscopic Study of K₅[CuO₂][CO₃]. Zeitschrift für anorganische und allgemeine Chemie **637**, 183–185 (2011).

Ali, N.Z., J. Sirker, J. Nuss, P. Horsch, and M. Jansen. Spin exchange dominated by charge fluctuations of the Wigner lattice in the chain cuprate Na₅Cu₃O₆. Physical Review B **84**, 035113 (2011).

Ament, L.J.P., G. Khaliullin, and J. van den Brink. Theory of resonant inelastic x-ray scattering in iridium oxide compounds: Probing spin-orbit-entangled ground states and excitations. Physical Review B **84**, 020403 (2011).

Amsharov, K.Y., Y. Kramer, and M. Jansen. Direct Observation of the Transition from Static to Dynamic Jahn-Teller Effects in the [Cs(THF)₄]C₆₀ Fulleride. Angewandte Chemie International Edition **50**, 11640–11643 (2011).

Andersen, O.K. and L. Boeri. On the multi-orbital band structure and itinerant magnetism of iron-based superconductors. Annalen der Physik **523**, 8–50 (2011).

Andreev, I.V., V.M. Muravev, I.V. Kukushkin, S. Schmult, and W. Dietsche. High-frequency response of a two-dimensional electron system under microwave irradiation. Physical Review B **83**, 121308 (2011).

Andrievsky, B., K. Doll, G. Cakmak, M. Jansen, A. Niemer, and K. Betzler. DFT-based ab initio study of structural and electronic properties of lithium fluorooxoborate LiB₆O₉F and experimentally observed second harmonic generation. Physical Review B **84**, 125112 (2011).

Ante, F., D. Käblein, U. Zschieschang, T.W. Canzler, A. Werner, K. Takimiya, M. Ikeda, T. Sekitani, T. Someya, and H. Klauck. Contact Doping and Ultrathin Gate Dielectrics for Nanoscale Organic Thin-Film Transistors. Small **7**, 1186–1191 (2011).

Antonakos, A., E. Liarokapis, G.H. Aydogdu, and H.-U. Habermeier. Strain induced phase separation on La_{0.5}Ca_{0.5}MnO₃ thin films. Journal of Magnetism and Magnetic Materials **323**, 620–630 (2011).

Antonov, V.M., D.O. Kukusta, and O.M. Yaresko. Resonant Scattering of X-Rays in LaMnO₃: First-Principle Calculations. Metallofizika i Noveishie Tekhnologii **33**, 997–1009 (2011).

Antonov, V.N., L.V. Bekenov, and A.N. Yaresko. Electronic Structure of Strongly Correlated Systems. Advances in Condensed Matter Physics **2011**, 298928 (2011).

Atkinson, M.B.J., I. Halasz, D.K. Bucar, R.E. Dinnebier, S.V.S. Mariappan, A.N. Sokolov, and L.R. MacGillivray. A solid-state trimerisation of a diene diacid affords a bicyclobutyl: reactant structure from X-ray powder data and product separation and structure determination via co-crystallisation. Chemical Communications **47**, 236–238 (2011).

Aufrecht, J., A. Leineweber, V. Duppel, and E.J. Mittemeijer. Polytypic transformations of the HfCr₂ Laves phase – Part I: Structural evolution as a function of temperature, time and composition. Intermetallics **19**, 1428–1441 (2011).

Aydin-Cantürk, D. and H. Nuss. Synthesis, Structure Determination, and Magnetic Properties of the New Heterometallic Chain Compound CrCrNi(di-2,2'-pyridylamido)₄Cl₂·Et₂O. Zeitschrift für anorganische und allgemeine Chemie **637**, 543–546 (2011).

Babizhetskyy, V., Hj. Mattausch, A. Simon, R. Gautier, and J.F. Halet. New members of ternary rare-earth metal boride carbides containing finite boron-carbon chains: $\text{RE}_{25}\text{B}_{14}\text{C}_{26}$ ($\text{RE} = \text{Pr}, \text{Nd}$) and $\text{Nd}_{25}\text{B}_{12}\text{C}_{28}$. *Journal of Solid State Chemistry* **184**, 1671–1681 (2011).

Babizhetskyy, V., J. Köhler, Hj. Mattausch, and A. Simon. Synthesis, structure and properties of Nd_2BC containing the trans-dibora-(1,3)-butadiene $[\text{C}=\text{B}-\text{B}=\text{C}]^{8-}$ -unit. *Zeitschrift für Kristallographie* **226**, 93–98 (2011).

Babizhetskyy, V., S. Oryshchyn, O. Zhak, O. Lysyy, and A. Simon. Refinement of the crystal structure of neodymium palladium phosphide, NdPdP . *Zeitschrift für Kristallographie: New Crystal Structures* **226**, 1–2 (2011).

Bach, A., D. Fischer, X.K. Mu, W. Sigle, P.A. van Aken, and M. Jansen. Structural Evolution of Magnesium Difluoride: from an Amorphous Deposit to a New Polymorph. *Inorganic Chemistry* **50**, 1563–1569 (2011).

Bakradze, G., L.P.H. Jeurgens, T. Acartürk, U. Starke, and E.J. Mittemeijer. Atomic transport mechanisms in thin oxide films grown on zirconium by thermal oxidation, as-derived from ^{18}O -tracer experiments. *Acta Materialia* **59**, 7498–7507 (2011).

Balasubramanian, K. and M. Burghard. Chemie des Graphens: Dünntes Kohlenstoffblatt verspricht Revolution. *Chemie in unserer Zeit* **45**, 240–249 (2011).

Baledent, V., D. Haug, Y. Sidis, V. Hinkov, C.T. Lin, and P. Bourges. Evidence for competing magnetic instabilities in underdoped $\text{YBa}_2\text{Cu}_3\text{O}_{6+\chi}$. *Physical Review B* **83**, 104504 (2011).

Bareiß, M., A. Hochmeister, G. Jegert, U. Zschieschang, H. Klauk, R. Huber, D. Grundler, W. Porod, B. Fabel, G. Scarpa, and P. Lugli. Printed array of thin-dielectric metal-oxide-metal (MOM) tunneling diodes. *Journal of Applied Physics* **110**, 044316 (2011).

Bareiß, M., B.N. Tiwari, A. Hochmeister, G. Jegert, U. Zschieschang, H. Klauk, B. Fabel, G. Scarpa, G. Koblmüller, G.H. Bernstein, W. Porod, and P. Lugli. Nano Antenna Array for Terahertz Detection. *IEEE Transactions on Microwave Theory and Techniques* **59**, 2751–2757 (2011).

Baskoutas, S. and G. Bester. Transition in the Optical Emission Polarization of ZnO Nanorods. *The Journal of Physical Chemistry C* **115**, 15862–15867 (2011).

Bauer, J., J.E. Han, and O. Gunnarsson. Quantitative reliability study of the Migdal-Eliashberg theory for strong electron-phonon coupling in superconductors. *Physical Review B* **84**, 184531 (2011).

Bauer, J., P. Jakubczyk, and W. Metzner. Critical temperature and Ginzburg region near a quantum critical point in two-dimensional metals. *Physical Review B* **84**, 075122 (2011).

Bekenov, L.V., V.N. Antonov, S. Ostanin, A.N. Yaresko, I.V. Maznichenko, W. Hergert, I. Mertig, and A. Ernst. Electronic and magnetic properties of $(\text{Zn}_{1-x}\text{V}_x)\text{O}$ diluted magnetic semiconductors elucidated from x-ray magnetic circular dichroism at $\text{V L}_{2,3}$ edges and first-principles calculations. *Physical Review B* **84**, 134421 (2011).

Benckiser, E., M.W. Haverkort, S. Bruck, E. Goering, S. Macke, A. Frano, X.P. Yang, O.K. Andersen, G. Cristiani, H.-U. Habermeier, A.V. Boris, I. Zegkinoglou, P. Wochner, H.J. Kim, V. Hinkov, and B. Keimer. Orbital reflectometry of oxide heterostructures. *Nature Materials* **10**, 189–193 (2011).

Benfatto, L., E. Cappelluti, L. Ortenzi, and L. Boeri. Extended Drude model and role of interband transitions in the midinfrared spectra of pnictides. *Physical Review B* **83**, 224514 (2011).

Benia, H.M., C.T. Lin, K. Kern, and C.R. Ast. Reactive Chemical Doping of the Bi_2Se_3 Topological Insulator. *Physical Review Letters* **107**, 177602 (2011).

Benyoucef, M., J.B. Shim, J. Wiersig, and O.G. Schmidt. Quality-factor enhancement of supermodes in coupled microdisks. *Optics Letters* **36**, 1317–1319 (2011).

Bettis, J.L., M.H. Whangbo, J. Köhler, A. Bussmann-Holder, and A.R. Bishop. Lattice dynamical analogies and differences between SrTiO_3 and EuTiO_3 revealed by phonon-dispersion relations and double-well potentials. *Physical Review B* **84**, 184114 (2011).

- Beya-Wakata, A., P.-Y. Prodhomme, and G. Bester.* First- and second-order piezoelectricity in III-V semiconductors. *Physical Review B* **84**, 195207 (2011).
- Beyer, M., D. Städter, M. Beck, H. Schäfer, V.V. Kabanov, G. Logvenov, I. Bozovic, G. Koren, and J. Demsar.* Photoinduced melting of superconductivity in the high-T_c superconductor La_{2-x}Sr_xCuO₄ probed by time-resolved optical and terahertz techniques. *Physical Review B* **83**, 214515 (2011).
- Bin Hasan, S., R. Filter, A. Ahmed, R. Vogelgesang, R. Gordon, C. Rockstuhl, and F. Lederer.* Relating localized nanoparticle resonances to an associated antenna problem. *Physical Review B* **84**, 195405 (2011).
- Blokhin, E., D. Gryaznov, E. Kotomin, R. Evarestov, and J. Maier.* A Comparative Hybrid DFT Study of Phonons in Several SrTiO₃ Phases. *Integrated Ferroelectrics* **123**, 18–25 (2011).
- Bof Bufon, C.C., J.D. Arias Espinoza, D.J. Thurmer, M. Bauer, Ch. Deneke, U. Zschieschang, H. Klauk, and O.G. Schmidt.* Hybrid Organic/Inorganic Molecular Heterojunctions Based on Strained Nanomembranes. *Nano Letters* **11**, 3727–3733 (2011).
- Boioli, F., V.A. Zinovyev, R. Gatti, A. Marzegalli, F. Montalenti, M. Stoffel, T. Merdzhanova, L. Wang, F. Pezzoli, A. Rastelli, O.G. Schmidt, and L. Miglio.* Self-Ordering of Misfit Dislocation Segments in Epitaxial SiGe Islands on Si(001). *Journal of Applied Physics* **110**, 044310 (2011).
- Boris, A.V., Y. Matiks, E. Benckiser, A. Frano, P. Popovich, V. Hinkov, P. Wochner, M. Castro-Colin, E. Detemple, V.K. Malik, C. Bernhard, T. Prokscha, A. Suter, Z. Salman, E. Morenzoni, G. Cristiani, H.-U. Habermeier and B. Keimer.* Dimensionality Control of Electronic Phase Transitions in Nickel-Oxide Superlattices. *Science* **332**, 937–940 (2011).
- Borisenko, S.V., A.A. Kordyuk, V.B. Zabolotnyy, D.V. Evtushinsky, T.K. Kim, B. Buchner, A.N. Yaresko, V.D. Borisenko, and H. Berger.* Van Hove singularity as a possible origin of the bandwidth renormalization in layered superconductors. *Journal of Physics and Chemistry of Solids* **72**, 562–564 (2011).
- Bork, J., Y.H. Zhang, L. Diekhöner, L. Borda, P. Simon, J. Kroha, P. Wahl, and K. Kern.* A tunable two-impurity Kondo system in an atomic point contact. *Nature Physics* **7**, 901–906 (2011).
- Bornmann, L. and W. Marx.* The h index as a research performance indicator. *European Science Editing* **37**, 77–80 (2011).
- Bornmann, L., H. Schier, W. Marx, and H.D. Daniel.* Does the h index for assessing single publications really work? A case study on papers published in chemistry. *Scientometrics* **89**, 835–843 (2011).
- Bornmann, L., H. Schier, W. Marx, and H.D. Daniel.* Is Interactive Open Access Publishing Able to Identify High-Impact Submissions? A Study on the Predictive Validity of Atmospheric Chemistry and Physics by Using Percentile Rank Classes. *Journal of the American Society for Information Science and Technology* **62**, 61–71 (2011).
- Bornmann, L., R. Mutz, W. Marx, H. Schier, and H.D. Daniel.* A multilevel modelling approach to investigating the predictive validity of editorial decisions: do the editors of a high profile journal select manuscripts that are highly cited after publication? . *Journal of the Royal Statistical Society A* **174**, 857–879 (2011).
- Bräuniger, T., C.V. Chandran, U. Wedig, and M. Jansen.* NMR Chemical Shift and Quadrupolar Interaction Parameters of Carbon-Coordinated ²⁷Al in Aluminium Carbide, Al₄C₃. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 530–535 (2011).
- Brihuega, I., A.M. García-García, P. Ribeiro, M.M. Ugeda, C.H. Michaelis, S. Bose, and K. Kern.* Experimental observation of thermal fluctuations in single superconducting Pb nanoparticles through tunneling measurements. *Physical Review B* **84**, 104525 (2011).
- Brück, S., S. Treiber, S. Macke, P. Audehm, G. Christiani, S. Soltan, H.-U. Habermeier, E. Goering, and J. Albrecht.* The temperature-dependent magnetization profile across an epitaxial bilayer of ferromagnetic La_{2/3}Ca_{1/3}MnO₃ and superconducting YBa₂Cu₃O_{7-δ}. *New Journal of Physics* **13**, 033023 (2011).
- Brydon, P.M.R., A.P. Schnyder, and C. Timm.* Topologically protected flat zero-energy surface bands in non-centrosymmetric superconductors. *Physical Review B* **84**, 020501 (2011).

- Brzezicki, W. and A.M. Oleś.* Entangled spin-orbital phases in the bilayer Kugel-Khomskii model. *Physical Review B* **83**, 214408 (2011).
- Buschmann, H., J. Dölle, S. Berendts, A. Kuhn, P. Bottke, M. Wilkening, P. Heitjans, A. Senyshyn, H. Ehrenberg, A. Lotnyk, V. Duppel, L. Kienle, and J. Janek.* Structure and dynamics of the fast lithium ion conductor ‘ $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ ’. *Physical Chemistry Chemical Physics* **13**, 19378–19392 (2011).
- Bussmann-Holder, A. and H. Keller.* Polaron formation as origin of unconventional isotope effects in cuprate superconductors (Vol 44, pg 487, 2005). *European Physical Journal B* **80**, 407–407 (2011).
- Bussmann-Holder, A., A. Simon, and A.R. Bishop.* Ferroelectricity and superconductivity: competing or cooperating phenomena. *Zeitschrift für Kristallographie* **226**, 177–185 (2011).
- Bussmann-Holder, A., A. Simon, H. Keller, and A.R. Bishop.* Identifying the Pairing Mechanism in Fe-As Based Superconductors: Gaps and Isotope Effects. *Journal of Superconductivity and Novel Magnetism* **24**, 1099–1103 (2011).
- Bussmann-Holder, A., H. Keller, R. Khasanov, A. Simon, A. Bianconi, and A.R. Bishop.* Isotope and interband effects in a multi-band model of superconductivity. *New Journal of Physics* **13**, 093009 (2011).
- Bussmann-Holder, A., J. Köhler, R.K. Kremer, and J.M. Law.* Relation between structural instabilities in EuTiO_3 and SrTiO_3 . *Physical Review B* **83**, 212102 (2011).
- Cakmak, H. and M. Jansen.* Synthesis and Characterizaion of a New Silaborazine Derivative. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 25–28 (2011).
- Cakmak, H. and M. Jansen.* New Si/B/N/C Ceramics from a Silaborazine-Type Single Source Precursor. *Journal of Ceramic Science and Technology* **2**, 23–30 (2011).
- Cappelluti, E., L. Ortenzi, and L. Benfatto.* Fermi-surface Shrinking, Interband Coupling and Multiple Gaps in Iron-based Pnictides. *Journal of Superconductivity and Novel Magnetism* **24**, 229–233 (2011).
- Carbone, C., S. Gardonio, P. Moras, S. Lounis, M. Heide, G. Bihlmayer, N. Atodiresei, P.H. Dederichs, S. Blugel, S. Vlaic, A. Lehnert, S. Ouazi, S. Rusponi, H. Brune, J. Honolka, A. Enders, K. Kern, S. Stepanow, C. Krull, T. Balashov, A. Mugarza, and P. Gambardella.* Self-Assembled Nanometer-Scale Magnetic Networks on Surfaces: Fundamental Interactions and Functional Properties. *Advanced Functional Materials* **21**, 1212–1228 (2011).
- Cardona, M. and P.Y. Yu.* Optical properties of semiconductors. In: *Comprehensive Semiconductor Science and Technology* **1-6**, 125–195 (2011); P. Bhattacharya, R. Fornari, H. Kamimura (Eds.). ChemTec Publishing, Toronto, Canada.
- Cardona, M. and W. Marx.* On the value of author indices. *Physics Today* **64**, 9–10 (2011).
- Cardona, M., S. Nagel, R. Zallen, and K. Zaveta.* Jan Tauc obituary. *Physics Today* **64**, 64–64 (2011).
- Cardona, M.* My half-century long relations with physica status solidi. *physica status solidi (b)* **248**, 2759–2761 (2011).
- Chae, D.H., T. Utikal, S. Weisenburger, H. Giessen, K. von Klitzing, M. Lippitz, and J. Smet.* Excitonic Fano Resonance in Free-Standing Graphene. *Nano Letters* **11**, 1379–1382 (2011).
- Chakraborty, T. and K. von Klitzing.* Taking stock of the quantum Hall effects: Thirty years on. *Physics in Canada* **67**, 161–164 (2011).
- Chaloupka, J. and A.M. Oleś.* Spin-orbital resonating valence bond liquid on a triangular lattice: Evidence from finite-cluster diagonalization. *Physical Review B* **83**, 094406 (2011).
- Chandran, C.V., G. Hempel, and T. Bräuniger.* ^{19}F -decoupling of half-integer spin quadrupolar nuclei in solid-state NMR: Application of frequency-swept decoupling methods. *Solid State Nuclear Magnetic Resonance* **40**, 84–87 (2011).
- Charnukha, A., O.V. Dolgov, A.A. Golubov, Y. Matiks, D.L. Sun, C.T. Lin, B. Keimer, and A.V. Boris.* Eliashberg approach to infrared anomalies induced by the superconducting state of $\text{Ba}_{0.68}\text{K}_{0.32}\text{Fe}_2\text{As}_2$ single crystals. *Physical Review B* **84**, 174511 (2011).

- Charnukha, A., P. Popovich, Y. Matiks, D.L. Sun, C.T. Lin, A.N. Yaresko, B. Keimer, and A.V. Boris.* Superconductivity-induced optical anomaly in an iron arsenide. *Nature Communications* **2**, 219 (2011).
- Chen, J., X.Y. He, K.H. Wu, Z.Q. Ji, L. Lu, J.R. Shi, J.H. Smet, and Y.Q. Li.* Tunable surface conductivity in Bi_2Se_3 revealed in diffusive electron transport. *Physical Review B* **83**, 241304 (2011).
- Chen, S.A., S. Hoffmann, K. Weichert, J. Maier, Y. Prots, J.T. Zhao, and R. Kniep.* $\text{Li}(\text{H}_2\text{O})_{2-x}[\text{Zr}_2(\text{PO}_4)_3]$: A Li-Filled Langbeinite Variant ($x=0$) as a Precursor for a Metastable Dehydrated Phase ($x=2$). *Chemistry of Materials* **23**, 1601–1606 (2011).
- Chen, W., G. Khaliullin, and O.P. Sushkov.* Bulk and surface nanoscale hole density inhomogeneity in $\text{HgBa}_2\text{CuO}_{4+\delta}$ and $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ cuprates. *Physical Review B* **83**, 064514 (2011).
- Christensen, N.E., A. Svane, M. Cardona, A.N. Chantis, R. Laskowski, M. van Schilfgaarde, and T. Kotani.* Calculations of quasi-particle spectra of semiconductors under pressure. *physica status solidi (b)* **248**, 1096–1101 (2011).
- Coletti, C., K.V. Emtsev, A.A. Zakharov, T. Ouisse, D. Chaussende, and U. Starke.* Large area quasi-free standing monolayer graphene on 3C-SiC(111). *Applied Physics Letters* **99**, 081904 (2011).
- De La Pierre, M., R. Orlando, L. Maschio, K. Doll, P. Ugliengo, and R. Dovesi.* Performance of Six Functionals (LDA, PBE, PBESOL, B3LYP, PBE0, and WC1LYP) in the Simulation of Vibrational and Dielectric Properties of Crystalline Compounds. The Case of Forsterite Mg_2SiO_4 . *Journal of Computational Chemistry* **32**, 1775–1784 (2011).
- Deiseroth, H.J., J. Maier, K. Weichert, V. Nickel, S.T. Kong, and C. Reiner.* Li_7PS_6 and $\text{Li}_6\text{PS}_5\text{X}$ (X: Cl, Br, I): Possible Three-dimensional Diffusion Pathways for Lithium Ions and Temperature Dependence of the Ionic Conductivity by Impedance Measurements. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1287–1294 (2011).
- Detemple, E., Q.M. Ramasse, W. Sigle, G. Cristiani, H.-U. Habermeier, E. Benckiser, A.V. Boris, A. Frano, P. Wochner, M. Wu, B. Keimer, and P.A. van Aken.* Polarity-driven nickel oxide precipitation in LaNiO_3 - LaAlO_3 superlattices. *Applied Physics Letters* **99**, 211903 (2011).
- Dietrich, V. and M. Jansen.* AgScO_2 Revisited: Synthesis, Crystal Structure Refinement and Properties of the Single-phase 3R Polymorph. *Zeitschrift für Naturforschung B* **66**, 227–229 (2011).
- Dietrich, V., D. Pitzschke, and M. Jansen.* Crystal structure of silver thallium phosphate, $\text{Ag}_3\text{Tl}_2(\text{PO}_4)_3$. *Zeitschrift für Kristallographie: New Crystal Structures* **226**, 7–8 (2011).
- Diez, L.H., M. Konuma, E. Placidi, F. Arciprete, A.W. Rushforth, R.P. Campion, B.L. Gallagher, J. Honolka, and K. Kern.* Magnetism and carrier modulation in (Ga,Mn)As/organic-dye hybrid devices. *Applied Physics Letters* **98**, 022503 (2011).
- Diez, L.H., M. Konuma, R.K. Kremer, J. Honolka, K. Kern, E. Placidi, and F. Arciprete.* Magnetoelectric properties of oxygenated (Ga,Mn)As. *Physical Review B* **83**, 094420 (2011).
- Dinnebier, R. and I. Halasz.* Modern Rietveld Analysis Preface. *Zeitschrift für Kristallographie* **226**, III (2011).
- Dinnebier, R.E., I. Halasz, D. Freyer, and J.C. Hanson.* The Crystal Structures of two Anhydrous Magnesium Hydroxychloride Phases from in situ Synchrotron Powder Diffraction Data. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1458–1462 (2011).
- Doll, K. and M. Jansen.* Ab Initio Energy Landscape of GeF_2 : A System Featuring Lone Pair Structure Candidates. *Angewandte Chemie International Edition* **50**, 4627–4632 (2011).
- Dorfmüller, J., D. Dregely, M. Eßlinger, W. Khunzin, R. Vogelgesang, K. Kern, and H. Giessen.* Near-Field Dynamics of Optical Yagi-Uda Nanoantennas. *Nano Letters* **11**, 2819–2824 (2011).
- Dorozhkin, S.I., L. Pfeiffer, K. von Klitzing, and J.H. Smet.* Random telegraph photosignals in a microwave-exposed two-dimensional electron system. *Nature Physics* **7**, 336–341 (2011).
- Dregely, D., M. Hentschel, and H. Giessen.* Excitation and Tuning of Higher-Order Fano Resonances in Plasmonic Oligomer Clusters. *ACS Nano* **5**, 8202–8211 (2011).

Dregely, D., R. Taubert, J. Dorfmüller, R. Vogelgesang, K. Kern, and H. Giessen. 3D optical Yagi-Uda nanoantenna array. *Nature Communications* **2**, 267 (2011).

Dubroka, A., M. Rössle, K.W. Kim, V.K. Malik, D. Munzar, D.N. Basov, A.A. Schafgans, S.J. Moon, C.T. Lin, D. Haug, V. Hinkov, B. Keimer, T. Wolf, J.G. Storey, J.L. Tallon, and C. Bernhard. Evidence of a Precursor Superconducting Phase at Temperatures as High as 180 K in $\text{RBa}_2\text{Cu}_3\text{O}_{7-\delta}$ ($\text{R} = \text{Y}, \text{Gd}, \text{Eu}$) Superconducting Crystals from Infrared Spectroscopy. *Physical Review Letters* **106**, 047006 (2011).

Duris, K., R.K. Kremer, and M. Jansen. Synthesis, Crystal Structure, and Physical Properties of the New Chain Alkalioxocuprate $\text{K}_3\text{Cu}_2\text{O}_4$. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1101–1107 (2011).

Efremov, D.V., M.M. Korshunov, O.V. Dolgov, A.A. Golubov, and P.J. Hirschfeld. Disorder-induced transition between s_{\pm} and s_{++} states in two-band superconductors. *Physical Review B* **84**, 180512 (2011).

Emtsev, K.V., A.A. Zakharov, C. Coletti, S. Forti, and U. Starke. Ambipolar doping in quasifree epitaxial graphene on SiC(0001) controlled by Ge intercalation. *Physical Review B* **84**, 125423 (2011).

Enderle, M., B. Fåk, H.-J. Mikeska, and R.K. Kremer. Comment on: ‘Two-Spinon and Foer-Spinon Continuum in a Frustrated Ferromagnetic Spin-1/2 Chain’ Reply. *Physical Review Letters* **106**, 219702 (2011).

Erismis, H., D. Nemeć, M. Geiss, V. Skakalova, U. Ritter, I. Kolaric, and S. Roth. Penetration based CNT/Sol-Gel composite films and their remarkable electrical properties. *Microelectronic Engineering* **88**, 2513–2515 (2011).

Evarestov, R.A., E. Blokhin, D. Gryaznov, E.A. Kotomin, and J. Maier. Phonon calculations in cubic and tetragonal phases of SrTiO_3 : A comparative LCAO and plane-wave study. *Physical Review B* **83**, 134108 (2011).

Evtushinsky, D.V., A.A. Kordyuk, V.B. Zabolotnyy, D.S. Inosov, T.K. Kim, B. Buchner, H.Q. Luo, Z.S. Wang, H.H. Wen, G.L. Sun, C.T. Lin, and S.V. Borisenco. Propeller-Like Low Temperature Fermi Surface of $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$ from Magnetotransport and Photoemission Measurements. *Journal of the Physical Society of Japan* **80**, 023710 (2011).

Evtushinsky, D.V., A.A. Kordyuk, V.B. Zabolotnyy, D.S. Inosov, T.K. Kim, B. Buchner, H.Q. Luo, Z.S. Wang, H.H. Wen, G.L. Sun, C.T. Lin, and S.V. Borisenco. Propeller-Like Low Temperature Fermi Surface of $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$ from Magnetotransport and Photoemission Measurements. *Journal of the Physical Society of Japan* **80**, 023710 (2011).

Fabris, S., S. Stepanow, N. Lin, P. Gambardella, A. Dmitriev, J. Honolka, S. Baroni, and K. Kern. Oxygen Dissociation by Concerted Action of Di-Iron Centers in Metal-Organic Coordination Networks at Surfaces: Modeling Non-Heme Iron Enzymes. *Nano Letters* **11**, 5414–5420 (2011).

Felea, V., P. Lemmens, S. Yasin, S. Zherlitsyn, K.Y. Choi, C.T. Lin, and C. Payen. Magnetic phase diagram of multiferroic MnWO_4 probed by ultrasound. *Journal of Physics: Condensed Matter* **23**, 216001 (2011).

Fischer, A., K.H. Hoffmann, and J.C. Schön. Competitive trapping in complex state spaces. *Journal of Physics A* **44**, 075101 (2011).

Fischer, D. and M. Jansen. Mix it! *Laser Community* **02:11**, 24–25 (2011).

Forti, S., K.V. Emtsev, C. Coletti, A.A. Zakharov, C. Riedl, and U. Starke. Large-area homogeneous quasifree standing epitaxial graphene on SiC(0001): Electronic and structural characterization. *Physical Review B* **84**, 125449 (2011).

Frantzeskakis, E., S. Pons, A. Crepaldi, H. Brune, K. Kern, and M. Grioni. Ag-coverage-dependent symmetry of the electronic states of the Pt(111)-Ag-Bi interface: The ARPES view of a structural transition. *Physical Review B* **84**, 245443 (2011).

Friščić, T., I. Halasz, F.C. Strobridge, R.E. Dinnebier, R.S. Stein, L. Fabian, and C. Curfs. A rational approach to screen for hydrated forms of the pharmaceutical derivative magnesium naproxen using liquid-assisted grinding. *CrystEngComm* **13**, 3125–3129 (2011).

- Fritz, S., H. Schmidt, I. Paschke, O.V. Magdysyuk, R.E. Dinnebier, D. Freyer, and W. Voigt. $\text{CaSeO}_4 \cdot 0.625\text{H}_2\text{O}$ – water channel occupation in a bassanite related structure. *Acta Crystallographica B* **67**, 293–301 (2011).
- Fukuda, K., T. Sekitani, T. Yokota, K. Kuribara, T.C. Huang, T. Sakurai, U. Zschieschang, H. Klauk, M. Ikeda, H. Kuwabara, T. Yamamoto, K. Takimiya, K.T. Cheng, and T. Someya. Organic Pseudo-CMOS Circuits for Low-Voltage Large-Gain High-Speed Operation. *IEEE Electron Device Letters* **32**, 1448–1450 (2011).
- Fukuda, K., T. Sekitani, U. Zschieschang, H. Klauk, K. Kuribara, T. Yokota, T. Sugino, K. Asaka, M. Ikeda, H. Kuwabara, T. Yamamoto, K. Takimiya, T. Fukushima, T. Aida, M. Takamiya, T. Sakurai, and T. Someya. A 4 V Operation, Flexible Braille Display Using Organic Transistors, Carbon Nanotube Actuators, and Organic Static Random-Access Memory. *Advanced Functional Materials* **21**, 4019–4027 (2011).
- Gasparov, V.A., F. Wolff-Fabris, D.L. Sun, C.T. Lin, and J. Wosnitza. Electron transport and anisotropy of the upper critical magnetic field in $\text{Ba}_{0.68}\text{K}_{0.32}\text{Fe}_2\text{As}_2$ single crystals. *JETP Letters* **93**, 26–30 (2011).
- Gasparov, V.A., L. Drigo, A. Audouard, D.L. Sun, C.T. Lin, S.L. Bud'ko, P.C. Canfield, F.W. Fabris, and J. Wosnitza. Upper critical magnetic field in $\text{Ba}_{0.68}\text{K}_{0.32}\text{Fe}_2\text{As}_2$ and $\text{Ba}(\text{Fe}_{0.93}\text{Co}_{0.07})_2\text{As}_2$. *JETP Letters* **93**, 667–672 (2011).
- Ghassemzadeh, L., G. Pace, V. Di Noto, and K. Müller. Effect of SiO_2 on the dynamics of proton conducting [$\text{NaFion}/(\text{SiO}_2)_X$] composite membranes: a solid-state ^{19}F NMR study. *Physical Chemistry Chemical Physics* **13**, 9327–9334 (2011).
- Ghassemzadeh, L., K.D. Kreuer, J. Maier, and K. Müller. Evaluating chemical degradation of proton conducting perfluorosulfonic acid ionomers in a Fenton test by solid-state ^{19}F NMR spectroscopy. *Journal of Power Sources* **196**, 2490–2497 (2011).
- Giannici, F., M. Shirpour, A. Longo, A. Martorana, R. Merkle, and J. Maier. Long-Range and Short-Range Structure of Proton-Conducting Y: BaZrO_3 . *Chemistry of Materials* **23**, 2994–3002 (2011).
- Gierz, I., F. Meier, J.H. Dil, K. Kern, and C.R. Ast. Tuning the spin texture in binary and ternary surface alloys on Ag(111). *Physical Review B* **83**, 195122 (2011).
- Gierz, I., J. Henk, H. Hochst, C.R. Ast, and K. Kern. Illuminating the dark corridor in graphene: Polarization dependence of angle-resolved photoemission spectroscopy on graphene. *Physical Review B* **83**, 121408 (2011).
- Giovannetti, G., A. Stroppa, S. Picozzi, D. Baldomir, V. Pardo, S. Blanco-Canosa, F. Rivadulla, S. Jodlauk, D. Niermann, J. Rohrkamp, T. Lorenz, S. Streltsov, D.I. Khomskii, and J. Hemberger. Dielectric properties and magnetostriction of the collinear multiferroic spinel CdV_2O_4 . *Physical Review B* **83**, 060402 (2011).
- Glawion, S., J. Heidler, M.W. Haverkort, L.C. Duda, T. Schmitt, V.N. Strocov, C. Monney, K. Zhou, A. Ruff, M. Sing, and R. Claessen. Two-Spinon and Orbital Excitations of the Spin-Peierls System TiOCl . *Physical Review Letters* **107**, 107402 (2011).
- Göbel, A., F. Hemberger, H.P. Ebert, M. Jansen, and J. Wilfert. Thermophysical properties of an amorphous polymer-derived Si/B/N/C ceramic. *Thermochimica Acta* **520**, 20–24 (2011).
- Göbel, M.C., G. Gregori, and J. Maier. Mixed conductivity in nanocrystalline highly acceptor doped cerium oxide thin films under oxidizing conditions. *Physical Chemistry Chemical Physics* **13**, 10940–10945 (2011).
- Golubov, A.A., O.V. Dolgov, A.V. Boris, A. Charnukha, D.L. Sun, C.T. Lin, A.F. Shevchun, A.V. Korobenko, M.R. Trunin, and V.N. Zverev. Normal State Resistivity of $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$: Evidence for Multiband Strong-Coupling Behavior. *JETP Letters* **94**, 333–337 (2011).
- Grbic, M.S., M. Pozek, D. Paar, V. Hinkov, M. Raichle, D. Haug, B. Keimer, N. Barisic, and A. Dulcic. Temperature range of superconducting fluctuations above T_c in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ single crystals. *Physical Review B* **83**, 144508 (2011).
- Gregori, G., B. Rahmati, W. Sigle, P.A. van Aken, and J. Maier. Electric conduction properties of boron-doped ceria. *Solid State Ionics* **192**, 65–69 (2011).
- Gruber, F. and M. Jansen. Supramolecular Intercluster Compounds Consisting of 1D Arrays of Silver Alkynyl Clusters and Wells-Dawson Anions, Displaying Ligand-Free Interfaces. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1676–1679 (2011).

- Gruber, F. and M. Jansen.* Erratum: Salt-like Structures of Oligomeric Gold Complexes and Polyoxometalates (Vol 636, pg 2352, 2011). Zeitschrift für anorganische und allgemeine Chemie **637**, 1450–1450 (2011).
- Gschwind, F. and M. Jansen.* Poly[di- μ -glycinato-copper(II)]: a two-dimensional coordination polymer. Acta Crystallographica E **67**, M1218–U593 (2011).
- Gschwind, F. and M. Jansen.* Synthesis and Characterization of a New Infinite 1D Polyoxomolybdate Polymer Further Connected via Cu(I) Nicotinate Subunits. Zeitschrift für Naturforschung B **66**, 351–354 (2011).
- Gu, L., C.B. Zhu, H. Li, Y. Yu, C.L. Li, S. Tsukimoto, J. Maier, and Y. Ikuhara.* Direct Observation of Lithium Staging in Partially Delithiated LiFePO₄ at Atomic Resolution. Journal of the American Chemical Society **133**, 4661–4663 (2011).
- Gu, L., W. Sigle, C.T. Koch, B. Ogut, P.A. van Aken, N. Talebi, R. Vogelgesang, J.L. Mu, X.G. Wen, and J. Mao.* Resonant wedge-plasmon modes in single-crystalline gold nanoplatelets. Physical Review B **83**, 195433 (2011).
- Guo, L.R., J.W. Tong, X. Liang, J. Köhler, J. Nuss, Y.Z. Li, and L.M. Zheng.* Silver(I) pyrophosphonates: Structural, photoluminescent and thermal expansion studies. Dalton Transactions **40**, 6392–6400 (2011).
- Han, P. and G. Bester.* Interatomic potentials for the vibrational properties of III-V semiconductor nanostructures. Physical Review B **83**, 174304 (2011).
- Hasselmann, N. and F.L. Braghin.* Nonlocal effective-average-action approach to crystalline phantom membranes. Physical Review E **83**, 031137 (2011).
- He, X., L. Gu, C. Zhu, Y. Yu, C.L. Li, Y.-S. Hu, H. Li, S. Tsukimoto, J. Maier, Y. Ikuhara, and X. Duan.* Direct Imaging of Lithium Ions Using Aberration-Corrected Annular-Bright-Field Scanning Transmission Electron Microscopy and Associated Contrast Mechanisms. Materials Express **1**, 43–50 (2011).
- Heerwig, A., R. Merkle, J. Maier, and M. Ruck.* Cu₂₂Bi₁₂S₂₁Cl₁₆ – A mixed conductor with fast one-dimensional copper(I) ion transport. Journal of Solid State Chemistry **184**, 191–198 (2011).
- Heifets, E., E.A. Kotomin, Y.A. Mastrikov, S. Piskunov, and J. Maier.* Thermodynamics of ABO₃-type Perovskite Surfaces. In: Thermodynamics – Interaction Studies – Solids, Liquids and Gases, 491–518 (2011); J.C. Moreno-Pirajan (Ed.). InTech – Open Access Publisher, University Campus STEP Ri, Rijeka, Croatia.
- Hentschel, M., D. Dregely, R. Vogelgesang, H. Giessen, and N. Liu.* Plasmonic Oligomers: The Role of Individual Particles in Collective Behavior. ACS Nano **5**, 2042–2050 (2011).
- Hermes, W., S. Linsinger, S. Rayaprol, S. Tuncel, R.D. Hoffmann, R.K. Kremer, O. Jepsen, and R. Pöttgen.* Magnetic Anomalies and Electronic Structure of Ce₂Cu₂Mg and Ce₂Pd₂Mg. Journal of Superconductivity and Novel Magnetism **24**, 1585–1592 (2011).
- Herzog, A., P. Horsch, A.M. Oleś, and J. Sirker.* Dimerized ferromagnetic Heisenberg chain. Physical Review B **84**, 134428 (2011).
- Herzog, A., P. Horsch, A.M. Oleś, and J. Sirker.* Magnetic excitations in one-dimensional spin-orbital models. Physical Review B **83**, 245130 (2011).
- Hezareh, T., F.S. Razavi, R.K. Kremer, H.-U. Habermeier, O.I. Lebedev, D. Kirilenko, and G. Van Tendeloo.* Effect of PbZr_{0.52}Ti_{0.48}O₃ thin layer on structure, electronic and magnetic properties of La_{0.65}Sr_{0.35}MnO₃ and La_{0.65}Ca_{0.30}MnO₃ thin-films. Journal of Applied Physics **109**, 113707 (2011).
- Hiraoka, N., M. Suzuki, K.D. Tsuei, H. Ishii, Y.Q. Cai, M.W. Haverkort, C.C. Lee, and W. Ku.* dd excitations in three-dimensional q-space: A nonresonant inelastic X-ray scattering study on NiO. EPL **96**, 370077 (2011).
- Hirata, I., U. Zschieschang, F. Ante, T. Yokota, K. Kuribara, T. Yamamoto, K. Takimiya, M. Ikeda, H. Kuwabara, H. Klauk, T. Sekitani, and T. Someya.* Spatial control of the threshold voltage of low-voltage organic transistors by microcontact printing of alkyl- and fluoroalkyl-phosphonic acids. MRS Communications **1**, 33–36 (2011).

- Hoch, C., A. Simon, C. Lee, M.H. Whangbo, and J. Köhler.* Density functional analysis of the electronic structure of Cs₉InO₄: Evidence for the presence of a Cs⁻ anion. *Zeitschrift für Kristallographie* **226**, 553–556 (2011).
- Hollmann, N., M.W. Haverkort, M. Benomar, M. Cwik, M. Braden, and T. Lorenz.* Evidence for a temperature-induced spin-state transition of Co³⁺ in La_{2-x}Sr_xCoO₄. *Physical Review B* **83**, 174435 (2011).
- Horsch, P. and A.M. Oleš.* Defect states and spin-orbital physics in doped vanadates Y_{1-x}Ca_xVO₃. *Physical Review B* **84**, 064429 (2011).
- Hutanu, V., A. Sazonov, H. Murakawa, Y. Tokura, B. Náfrádi, and D. Chernyshov.* Symmetry and structure of multiferroic Ba₂CoGe₂O₇. *Physical Review B* **84**, 212101 (2011).
- Hyart, T. and B. Rosenow.* Quantitative description of Josephson-like tunneling in v(T)=1 quantum Hall bilayers. *Physical Review B* **83**, 155315 (2011).
- Inosov, D.S., J.T. Park, A. Charnukha, Y. Li, A.V. Boris, B. Keimer, and V. Hinkov.* Crossover from weak to strong pairing in unconventional superconductors. *Physical Review B* **83**, 214520 (2011).
- Inosov, D.S., P. Bourges, A. Ivanov, A. Prokofiev, E. Bauer, and B. Keimer.* Dispersion and damping of zone-boundary magnons in the noncentrosymmetric superconductor CePt₃Si. *Journal of Physics: Condensed Matter* **23**, 455704 (2011).
- Ishida, K., N. Masunaga, R. Takahashi, T. Sekitani, S. Shino, U. Zschieschang, H. Klauk, M. Takamiya, T. Someya, and T. Sakurai.* User Customizable Logic Paper (UCLP) With Sea-Of Transmission-Gates (SOTG) of 2-V Organic CMOS and Ink-Jet Printed Interconnects. *IEEE Journal of Solid-State Circuits* **46**, 285–292 (2011).
- Iwasaki, T., H.J. Park, M. Konuma, D.S. Lee, J.H. Smet, and U. Starke.* Long-Range Ordered Single-Crystal Graphene on High-Quality Heteroepitaxial Ni Thin Films Grown on MgO(111). *Nano Letters* **11**, 79–84 (2011).
- Jansen, M.* Deductive approach to chemistry and its implications for materials synthesis planning. *Abstracts of Papers of the American Chemical Society* **241**, 13-INOR (2011).
- Jansen, M.* Obituary – Hans Georg von Schnering 1931-2010. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 783–784 (2011).
- Jarosik, A., C. Pfaffenhuber, A. Bunde, and J. Maier.* Electrochemical Investigations of Polyethylene Glycol-Based ‘Soggy Sand’ Electrolytes – From the Local Mechanism to the Overall Conduction. *Advanced Functional Materials* **21**, 3961–3966 (2011).
- Jarosik, A., S. Hore, N. Kaskhedikar, C. Pfaffenhuber, and J. Maier.* Heterogeneously doped polyethylene glycol as nano-composite soft matter electrolyte. *Electrochimica Acta* **56**, 8115–8121 (2011).
- Jarosik, A., U. Traub, J. Maier, and A. Bunde.* Ion conducting particle networks in liquids: modeling of network percolation and stability. *Physical Chemistry Chemical Physics* **13**, 2663–2666 (2011).
- Jons, K.D., R. Hafenbrak, R. Singh, F. Ding, J.D. Plumhof, A. Rastelli, O.G. Schmidt, G. Bester, and P. Michler.* Dependence of the Redshifted and Blueshifted Photoluminescence Spectra of Single In_xGa_{1-x}As/GaAs Quantum Dots on the Applied Uniaxial Stress. *Physical Review Letters* **107**, 217402 (2011).
- Joo, J.H., R. Merkle, and J. Maier.* Effects of water on oxygen surface exchange and degradation of mixed conducting perovskites. *Journal of Power Sources* **196**, 7495–7499 (2011).
- Käblein, D., R.T. Weitz, H.J. Böttcher, F. Ante, U. Zschieschang, K. Kern, and H. Klauk.* Top-Gate ZnO Nanowire Transistors and Integrated Circuits with Ultrathin Self-Assembled Monolayer Gate Dielectric. *Nano Letters* **11**, 5309–5315 (2011).
- Kadri, A., E. Maiss, N. Amsharov, A.M. Bittner, S. Balci, K. Kern, H. Jeske, and C. Wege.* Engineered Tobacco mosaic virus mutants with distinct physical characteristics in planta and enhanced metallization properties. *Virus Research* **157**, 35–46 (2011).

- Kagan, M.Y., D.V. Efremov, M.S. Marienko, and V.V. Val'kov.* Triplet p-Wave Superconductivity in the Low-Density Extended Hubbard Model with Coulomb Repulsion. *JETP Letters* **93**, 725–730 (2011).
- Kaiser, A.B. and V. Skakalova.* Electronic conduction in polymers, carbon nanotubes and graphene. *Chemical Society Reviews* **40**, 3786–3801 (2011).
- Kallfaß, C., C. Hoch, H. Schier, C. Wituchowski, O. Gorke, and H. Schubert.* The ortho-phosphate arrojadite as a new material for cathodes in Li-ion batteries. *Ceramic Transactions* **224**, 183–192 (2011).
- Kaskhedikar, N., Y. Karatas, G. Cui, J. Maier, and H.D. Wiemhöfer.* Nanocomposites based on borate esters as improved lithium-ion electrolytes. *Journal of Materials Chemistry* **21**, 11838–11843 (2011).
- Kaskhedikar, N.A., G.L. Cui, J. Maier, V. Fedorov, V. Makotchenko, and A. Simon.* Superfine Expanded Graphite with Large Capacity for Lithium Storage. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 523–529 (2011).
- Kaur, K., S. Prakash, N. Goyal, R. Singh, and P. Entel.* Structure factor of amorphous TiO₂ nanoparticle; Molecular Dynamics Study. *Journal of Non-Crystalline Solids* **357**, 3399–3404 (2011).
- Khunsin, W., B. Brian, J. Dorfmüller, M. Eßlinger, R. Vogelgesang, C. Etrich, C. Rockstuhl, A. Dmitriev, and K. Kern.* Long-Distance Indirect Excitation of Nanoplasmonic Resonances. *Nano Letters* **11**, 2765–2769 (2011).
- Kienle, L., V. Duppel, B. Mogwitz, J. Janek, M. von Kreutzbruck, A. Leineweber, and A. Simon.* Synthesis-Real Structure-Property: The Showcase of Silver-Rich Ag₂Se. *Crystal Growth & Design* **11**, 2412–2421 (2011).
- Kim, J.H., M. Matsuda, H. Ueda, Y. Ueda, J.H. Chung, S. Tsutsui, A.Q.R. Baron, and S.H. Lee.* Synchrotron X-ray Study of Lattice Vibrations in CdCr₂O₄. *Journal of the Physical Society of Japan* **80**, 073603 (2011).
- Kim, J.H., M.A. van der Vegt, A. Scaramucci, S. Artyukhin, J.H. Chung, S. Park, S.W. Cheong, M. Mostovoy, and S.H. Lee.* Magnetic Excitations in the Low-Temperature Ferroelectric Phase of Multiferroic YMn₂O₅ Using Inelastic Neutron Scattering. *Physical Review Letters* **107**, 097401 (2011).
- Koga, A., J. Bauer, P. Werner, and T. Pruschke.* Polarized superfluid state in a three-dimensional fermionic optical lattice. *Physica E* **43**, 697–701 (2011).
- Koo, H.J., C. Lee, M.H. Whangbo, G.J. McIntyre, and R.K. Kremer.* On the Nature of the Spin Frustration in the CuO₂ Ribbon Chains of LiCuVO₄: Crystal Structure Determination at 1.6 K, Magnetic Susceptibility Analysis, and Density Functional Evaluation of the Spin Exchange Constants. *Inorganic Chemistry* **50**, 3582–3588 (2011).
- Kotomin, E.A., V. Alexandrov, D. Gryaznov, R.A. Evarestov, and J. Maier.* Confinement effects for ionic carriers in SrTiO₃ ultrathin films: first-principles calculations of oxygen vacancies. *Physical Chemistry Chemical Physics* **13**, 923–926 (2011).
- Kotomin, E.A., Yu.A. Mastrikov, M.M. Kuklja, R. Merkle, A. Roytburd, and J. Maier.* First principles calculations of oxygen vacancy formation and migration in mixed conducting Ba_{0.5}Sr_{0.5}Co_{1-y}Fe_yO_{3-δ} perovskites. *Solid State Ionics* **188**, 1–5 (2011).
- Kozhemyakina, N.V., K.Y. Amsharov, J. Nuss, and M. Jansen.* Synthesis and Structure Analysis of (K[DB₁₈C₆])₄(C₆₀)₅·12THF Containing C₆₀ in Three Different Bonding States. *Chemistry – A European Journal* **17**, 1798–1805 (2011).
- Kramer, R.B.G., V.S. Egorov, V.A. Gasparov, A.G.M. Jansen, and W. Joss.* Condon domain phase diagram for silver. *Low Temperature Physics* **37**, 39–44 (2011).
- Kreuer, K.-D., A. Wohlfarth, C.C. de Araujo, A. Fuchs, and J. Maier.* Single Alkaline-Ion (Li⁺, Na⁺) Conductors by Ion Exchange of Proton-Conducting Ionomers and Polyelectrolytes. *ChemPhysChem* **12**, 2558–2560 (2011).

- Kuklja, M.M., Yu.A. Mastrikov, S.N. Rashkeev, and E.A. Kotomin.* The Structural Disorder and Lattice Stability of (Ba,Sr) (Co,Fe)O₃ Complex Perovskites. *ECS Transactions* **35**, 2077–2084 (2011).
- Kukushkin, I.V., A.V. Rossokhaty, S. Schmult, and K. von Klitzing.* Binding energy of indirect excitons in asymmetric double quantum wells. *Semiconductor Science and Technology* **26**, 014023 (2011).
- Kukushkin, I.V., V. Umansky, K. von Klitzing, and J.H. Smet.* Collective Modes and the Periodicity of Quantum Hall Stripes. *Physical Review Letters* **106**, 206804 (2011).
- Kukusta, D.A., V.N. Antonov, and A.N. Yaresko.* X-ray magnetic circular dichroism in Co₂FeGa: First-principles calculations. *Low Temperature Physics* **37**, 684–689 (2011).
- Kulkarni, A., K. Doll, D.L.V.K. Prasad, J.C. Schön, and M. Jansen.* Alternative structure predicted for lithium at ambient pressure. *Physical Review B* **84**, 172101 (2011).
- Kulkarni, A., V.S.K. Chakravadhanula, V. Duppel, D. Meyners, V. Zaporojtchenko, T. Strunskus, L. Kienle, E. Quandt, and F. Faupel.* Morphological and magnetic properties of TiO₂/Fe₅₀Co₅₀ composite films. *Journal of Materials Science* **46**, 4638–4645 (2011).
- Kulkarni, A., V.S.K. Chakravadhanula, V. Duppel, D. Meyners, V. Zaporojtchenko, T. Strunskus, L. Kienle, E. Quandt, and F. Faupel.* Morphological and magnetic properties of TiO₂/Fe₅₀Co₅₀ composite films. *Journal of Materials Science* **46**, 4638–4645 (2011).
- Kurkina, T., A. Vlandas, A. Ahmad, K. Kern, and K. Balasubramanian.* Label-Free Detection of Few Copies of DNA with Carbon Nanotube Impedance Biosensors. *Angewandte Chemie International Edition* **50**, 3710–3714 (2011).
- Kuzovkov, V.N., E.A. Kotomin, and G. Zvejnieks.* Pattern Formation Kinetics for Charged Molecules on Surfaces: Microscopic Correlation Function Analysis. *The Journal of Physical Chemistry B* **115**, 14626–14633 (2011).
- Kuzovkov, V.N., E.A. Kotomin, and G. Zvejnieks.* Atomistic theory of mesoscopic pattern formation induced by bimolecular surface reactions between oppositely charged molecules. *The Journal of Chemical Physics* **135**, 224503 (2011).
- Law, J.M., C. Hoch, R. Glaum, I. Heinmaa, R. Stern, J. Kang, C. Lee, M.H. Whangbo, and R.K. Kremer.* Spin-Peierls transition in the S = 1/2 compound TiPO₄ featuring large intrachain coupling. *Physical Review B* **83**, 180414 (2011).
- Law, J.M., P. Reuvekamp, R. Glaum, C. Lee, J. Kang, M.H. Whangbo, and R.K. Kremer.* Quasi-one-dimensional antiferromagnetism and multiferroicity in CuCrO₄. *Physical Review B* **84**, 014426 (2011).
- Le Tacon, M., G. Ghiringhelli, J. Chaloupka, M.M. Sala, V. Hinkov, M.W. Haverkort, M. Minola, M. Bakr, K.J. Zhou, S. Blanco-Canosa, C. Monney, Y.T. Song, G.L. Sun, C.T. Lin, G.M. De Luca, M. Salluzzo, G. Khaliullin, T. Schmitt, L. Braicovich, and B. Keimer.* Intense paramagnon excitations in a large family of high-temperature superconductors. *Nature Physics* **7**, 725–730 (2011).
- Le Tacon, M., T.R. Forrest, C. Ruegg, A. Bosak, J. Noffsinger, A.C. Walters, P. Toulemonde, A. Palenzona, N.D. Zhigadlo, J. Karpinski, J.P. Hill, M. Krisch, and D.F. McMorrow.* Inelastic X-ray scattering investigations of lattice dynamics in SmFeAsO_{1-x}F_x superconductors. *Journal of Physics and Chemistry of Solids* **72**, 523–526 (2011).
- Lee, D.S., C. Riedl, T. Beringer, A.H. Castro Neto, K. von Klitzing, U. Starke, and J.H. Smet.* Quantum Hall Effect in Twisted Bilayer Graphene. *Physical Review Letters* **107**, 216602 (2011).
- Leininger, P., D. Chernyshov, A. Bosak, H. Berger, and D.S. Inosov.* Competing charge density waves and temperature-dependent nesting in 2H-TaSe₂. *Physical Review B* **83**, 233101 (2011).
- Leininger, P., V. Ilakovac, Y. Joly, E. Schierle, E. Weschke, O. Bunau, H. Berger, J.P. Pouget, and P. Fouryleylekian.* Ground State of the Quasi-1D Compound BaVS₃ Resolved by Resonant Magnetic X-Ray Scattering. *Physical Review Letters* **106**, 167203 (2011).

- Levi, M.D., S. Sigalov, G. Salitra, D. Aurbach, and J. Maier.* The Effect of Specific Adsorption of Cations and Their Size on the Charge-Compensation Mechanism in Carbon Micropores: The Role of Anion Desorption. *ChemPhysChem* **12**, 854–862 (2011).
- Li, C.L., L. Gu, J.W. Tong, and J. Maier.* Carbon Nanotube Wiring of Electrodes for High-Rate Lithium Batteries Using an Imidazolium-Based Ionic Liquid Precursor as Dispersant and Binder: A Case Study on Iron Fluoride Nanoparticles. *ACS Nano* **5**, 2930–2938 (2011).
- Li, C.L., L. Gu, J.W. Tong, S. Tsukimoto, and J. Maier.* A Mesoporous Iron-Based Fluoride Cathode of Tunnel Structure for Rechargeable Lithium Batteries. *Advanced Functional Materials* **21**, 1391–1397 (2011).
- Li, C.L., X.X. Guo, L. Gu, D. Samuelis, and J. Maier.* Ionic Space-Charge Depletion in Lithium Fluoride Thin Films on Sapphire (0001) Substrates. *Advanced Functional Materials* **21**, 2901–2905 (2011).
- Li, L., C. Richter, J. Mannhart, and R.C. Ashoori.* Coexistence of Magnetic Order and Two-dimensional Superconductivity at LaAlO₃/SrTiO₃ Interfaces. *Nature Physics* **7**, 762–766 (2011).
- Li, Y., N. Egetenmeyer, J.L. Gavilano, N. Barisic, and M. Greven.* Magnetic vortex lattice in HgBa₂CuO_{4+δ} observed by small-angle neutron scattering. *Physical Review B* **83**, 054507 (2011).
- Li, Y., V. Baledent, N. Barisic, Y.C. Cho, Y. Sidis, G. Yu, X. Zhao, P. Bourges, and M. Greven.* Magnetic order in the pseudogap phase of HgBa₂CuO_{4+δ} studied by spin-polarized neutron diffraction. *Physical Review B* **84**, 224508 (2011).
- Liu, G.Q.* Mott transition and magnetic anisotropy in Ca₃Ru₂O₇. *Physical Review B* **84**, 235137 (2011).
- Liu, G.Q.* Spin-orbit coupling induced Mott transition in Ca_{2-x}Sr_xRuO₄(0 ≤ x ≤ 0.2). *Physical Review B* **84**, 235136 (2011).
- Liu, J., B.J. Kirby, B. Gray, M. Kareev, H.-U. Habermeier, G. Cristiani, J.W. Freeland, and J. Chakhalian.* Interfacial electronic and magnetic properties of a Y_{0.6}Pr_{0.4}Ba₂Cu₃O₇/La_{2/3}Ca_{1/3}MnO₃ superlattice. *Physical Review B* **84**, 092506 (2011).
- Liu, Y. and C.T. Lin.* A Comparative Study of Fe_{1+δ}Te_{1-x}Se_x Single Crystals Grown by Bridgman and Self-flux Techniques. *Journal of Superconductivity and Novel Magnetism* **24**, 183–187 (2011).
- Liu, Y., R.K. Kremer, and C.T. Lin.* Doping evolution of the magnetic susceptibility and transport properties of Fe_{1+δ}Te_{1-x}Se_x single crystals. *Superconductor Science and Technology* **24**, 035012 (2011).
- Loa, I., K. Syassen, G. Monaco, G. Vanko, M. Krisch, and M. Hanfland.* Plasmons in Sodium under Pressure: Increasing Departure from Nearly Free-Electron Behavior. *Physical Review Letters* **107**, 086402 (2011).
- Locherer, T., D.L.V.K. Prasad, R. Dinnebier, U. Wedig, M. Jansen, G. Garbarino, and T. Hansen.* High-pressure structural evolution of HP-Bi₂O₃. *Physical Review B* **83**, 214102 (2011).
- Lukatskaya, M.R., L.A. Trusov, A.A. Eliseev, A.V. Lukashin, M. Jansen, P.E. Kazin, and K.S. Napolskii.* Controlled way to prepare quasi-1D nanostructures with complex chemical composition in porous anodic alumina. *Chemical Communications* **47**, 2396–2398 (2011).
- Lutz, T., A. Kabakchiev, T. Dufaux, C. Wolpert, Z. Wang, M. Burghard, K. Kuhnke, and K. Kern.* Scanning Tunneling Luminescence of Individual CdSe Nanowires. *Small* **7**, 2396–2400 (2011).
- Müller, A., K. Ziegler, K.Y. Amsharov, and M. Jansen.* Perchloropyracylene and its Fusion with C₆₀ by Chlorine-Assisted Radio-Frequency Furnace Synthesis. *Chemistry – A European Journal* **17**, 11797–11804 (2011).
- Müller, A., K. Ziegler, K.Y. Amsharov, and M. Jansen.* In Situ Synthesis of Chlorinated Fullerenes by the High-Frequency Furnace Method. *European Journal of Inorganic Chemistry* **2011**, 268–272 (2011).
- Müller, M., R.E. Dinnebier, and S. Schorr.* A case study of parameterized Rietveld refinement: The structural phase transition of CuInSe₂. *Zeitschrift für Kristallographie* **226**, 956–962 (2011).
- Macutkevic, J., J. Banys, A. Bussmann-Holder, and A.R. Bishop.* Origin of polar nanoregions in relaxor ferroelectrics: Nonlinearity, discrete breather formation, and charge transfer. *Physical Review B* **83**, 184301 (2011).

- Maier, J.* Concentration Polarization of Salt-Containing Liquid Electrolytes. *Advanced Functional Materials* **21**, 1448–1455 (2011).
- Marx, W. and D. Hoffmann.* Bibliometric analysis of fifty years of *physica status solidi*. *physica status solidi (b)* **248**, 2762–2771 (2011).
- Marx, W., M. Cardona, and D.J. Lockwood.* Rutherford's scientific impact from a bibliometric perspective. *Australian Physics* **48**, 78–83 (2011).
- Marx, W., M. Cardona, and D.J. Lockwood.* Rutherford's impact on science over the last 110 years: a bibliometric analysis. *Physics in Canada* **67**, 35–40 (2011).
- Marx, W.* Literaturflut – Informationslawine – Wissensexpllosion: Wächst der Wissenschaft das Wissen über den Kopf? *Forschung (Politik– Strategie–Management)* **4**, 96–104 (2011).
- Marx, W.* Special Features of Historical Papers from the Viewpoint of Bibliometrics. *Journal of the American Society for Information Science and Technology* **62**, 433–439 (2011).
- Marx, W.* Bibliometrie in der Forschungsbewertung. *Forschung & Lehre* **18**, 858–860 (2011).
- Matiks, Y., A.N. Yaresko, K. Myung-Whun, A. Maljuk, P. Horsch, B. Keimer, and A.V. Boris.* Anisotropic optical response of the mixed-valent Mott-Hubbard insulator NaCu₂O₂. *Physical Review B* **84**, 245116 (2011).
- Mattausch, Hj. and A. Simon.* Variations modulo 4–4₊, 4₊3–3₊4₋, 4–5₊, 5–4₊4–5₊4–4₊ with Rare Earth Carbide Halides. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1093–1100 (2011).
- Medina, H., Y.C. Lin, D. Obergfell, and P.W. Chiu.* Tuning of Charge Densities in Graphene by Molecule Doping. *Advanced Functional Materials* **21**, 2687–2692 (2011).
- Merkle, R., J.T.S. Irvine, P. Knauth, and S. Ramanathan.* Exploring Chemical and Structural Complexity of Novel Ion Conductors: Preface. *Solid State Ionics* **184**, 1–1 (2011).
- Meyer, J.C., S. Kurasch, H.J. Park, V. Skakalova, D. Kunzel, A. Gross, A. Chuvalin, G. Algara-Siller, S. Roth, T. Iwasaki, U. Starke, J.H. Smet, and U. Kaiser.* Experimental analysis of charge redistribution due to chemical bonding by high-resolution transmission electron microscopy. *Nature Materials* **10**, 209–215 (2011).
- Mogare, K.M., I. Landau, N. Guerin, B. Trusch, M. Wagner, T. Locherer, M. Jansen, and J. Hulliger.* Ceramic Tl-oxide based superconductors reinvestigated by magnetic separation technique and SQUID measurements. *Solid State Sciences* **13**, 1879–1884 (2011).
- Monge, A.A., N. Ferrer-Anglada, V. Lloveras, J. Vidal-Gancedo, and S. Roth.* Electron spin resonance study of single-walled carbon nanotubes. *physica status solidi (b)* **248**, 2564–2567 (2011).
- Morenzoni, E., B.M. Wojek, A. Suter, T. Prokscha, G. Logvenov, and I. Bozovic.* The Meissner effect in a strongly underdoped cuprate above its critical temperature. *Nature Communications* **2**, 272 (2011).
- Mourigal, M., M. Enderle, R.K. Kremer, J.M. Law, and B. Fak.* Ferroelectricity from spin supercurrents in LiCuVO₄. *Physical Review B* **83**, 100409 (2011).
- Muravev, V.M., I.V. Andreev, I.V. Kukushkin, S. Schmult, and W. Dietsche.* Observation of hybrid plasmon-photon modes in microwave transmission of coplanar microresonators. *Physical Review B* **83**, 075309 (2011).
- Myung-Whun, K., J.S. Kim, T. Katsufuji, and R.K. Kremer.* Magnetic susceptibility and specific heat of a spinel MnV₂O₄ single crystal. *Physical Review B* **83**, 024403 (2011).
- Nafradi, B., T. Keller, H. Manaka, A. Zheludev, and B. Keimer.* Low-Temperature Dynamics of Magnons in a Spin-1/2 Ladder Compound. *Physical Review Letters* **106**, 177202 (2011).
- Nefyodov, Y.A., A.V. Shchepetilnikov, I.V. Kukushkin, W. Dietsche, and S. Schmult.* Electron g-factor anisotropy in GaAs/Al_{1-x}Ga_xAs quantum wells of different symmetry. *Physical Review B* **84**, 233302 (2011).
- Nefyodov, Y.A., A.V. Shchepetilnikov, I.V. Kukushkin, W. Dietsche, and S. Schmult.* g-factor anisotropy in a GaAs/Al_xGa_{1-x}As quantum well probed by electron spin resonance. *Physical Review B* **83**, 041307 (2011).

Nicholson, A., W.H. Ge, X.T. Zhang, J. Riera, M. Daghofer, A.M. Oleś, G.B. Martins, A. Moreo, and E. Dagotto. Competing Pairing Symmetries in a Generalized Two-Orbital Model for the Pnictide Superconductors. *Physical Review Letters* **106**, 217002 (2011).

Nohara, Y., K. Nakamura, and R. Arita. Ab initio Derivation of Correlated Superatom Model for Potassium Loaded Zeolite A. *Journal of the Physical Society of Japan* **80**, 124705 (2011).

Nuss, J., U. Wedig, and M. Jansen. Geometric Variations and Electron Localizations in Intermetallics: The Case of La₂Sb Type Compounds. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1975–1981 (2011).

Nuss, J., U. Wedig, and M. Jansen. Structural ordering principles in quasi one-dimensional Wigner crystals of the series Na_{1+x}CuO₂ (0 ≤ x ≤ 1). *Zeitschrift für Kristallographie* **226**, 627–632 (2011).

Obert, B., S. Takei, and W. Metzner. Anomalous criticality near semimetal-to-superfluid quantum phase transition in a two-dimensional Dirac cone model. *Annalen der Physik* **523**, 621–628 (2011).

Oganov, A.R., J.C. Schön, M. Jansen, S.M. Woodley, W.W. Tipton, and R.G. Hennig. First test of inorganic structure prediction methods. In: *Modern methods of crystal structure prediction*, appendix, 223–231 (2011); A.R. Oganov (Ed.). Wiley VCH, Weinheim, Germany.

Ogut, B., R. Vogelgesang, W. Sigle, N. Talebi, C.T. Koch, and P.A. van Aken. Hybridized Metal Slit Eigenmodes as an Illustration of Babinet's Principle. *ACS Nano* **5**, 6701–6706 (2011).

Ohmann, R., G. Levita, L. Vitali, A. De Vita, and K. Kern. Influence of Subsurface Layers on the Adsorption of Large Organic Molecules on Close-Packed Metal Surfaces. *ACS Nano* **5**, 1360–1365 (2011).

Oleś, A.M. and G. Khaliullin. Dimensional crossover and the magnetic transition in electron-doped manganites. *Physical Review B* **84**, 214414 (2011).

Oliveros, A., C. Coletti, C. Frewin, C. Locke, U. Starke, and S.E. Sadow. Cellular Interactions on Epitaxial Graphene on SiC (0001) Substrates. *Materials Science Forum* **679-680**, 831–834 (2011).

Ortenzi, L., S. Biermann, O.K. Andersen, I.I. Mazin, and L. Boeri. Competition between electron-phonon coupling and spin fluctuations in superconducting hole-doped CuBiSO. *Physical Review B* **83**, 100505(R) (2011).

Oryshchyn, S., V. Babizhetsky, O. Zhak, S. Stoyko, R. Guerin, and A. Simon. Crystal structure of HT-Ni₅P₂ and reinvestigation of isotopic Ni₅As₂. *Intermetallics* **19**, 1041–1046 (2011).

Pacile, D., J.C. Meyer, A.F. Rodríguez, M. Papagno, C. Gómez-Navarro, R.S. Sundaram, M. Burghard, K. Kern, C. Carbone, and U. Kaiser. Electronic properties and atomic structure of graphene oxide membranes. *Carbon* **49**, 966–972 (2011).

Park, J.T., G. Friemel, Y. Li, J.H. Kim, V. Tsurkan, J. Deisenhofer, H.A.K. von Nidda, A. Loidl, A. Ivanov, B. Keimer, and D.S. Inosov. Magnetic Resonant Mode in the Low-Energy Spin-Excitation Spectrum of Superconducting Rb₂Fe₄Se₅ Single Crystals. *Physical Review Letters* **107**, 177005 (2011).

Park, S.R., A. Hamann, L. Pintschovius, D. Lamago, G. Khaliullin, M. Fujita, K. Yamada, G.D. Gu, J.M. Tranquada, and D. Reznik. Effects of charge inhomogeneities on elementary excitations in La_{2-x}Sr_xCuO₄. *Physical Review B* **84**, 214516 (2011).

Pascut, G.L., R. Coldea, P.G. Radaelli, A. Bombardi, G. Beutier, I.I. Mazin, M.D. Johannes, and M. Jansen. Direct Observation of Charge Order in Triangular Metallic AgNiO₂ by Single-Crystal Resonant X-Ray Scattering. *Physical Review Letters* **106**, 157206 (2011).

Paul, S., C.V. Chandran, T. Bräuniger, and P.K. Madhu. Sweep direction and efficiency of the sweep-frequency two pulse phase modulated scheme for heteronuclear dipolar-decoupling in solid-state NMR. *Journal of Magnetic Resonance* **209**, 261–268 (2011).

Peets, D.C., G. Eguchi, M. Kriener, S. Harada, S.M. Shamsuzzamen, Y. Inada, G.Q. Zheng, and Y. Maeno. Magnetic phase diagram of Li₂(Pd_{1-x}Pt_x)₃B by ac susceptometry. *Physical Review B* **84**, 054521 (2011).

Peng, J.B., G.L. Sun, and C.T. Lin. Investigation of thermal behavior and crystal growth of iron pnictides using Sn flux. *Journal of Crystal Growth* **316**, 85–89 (2011).

Pfaffenhuber, C., S. Sörgel, K. Weichert, M. Bele, T. Mundinger, M. Göbel, and J. Maier. In Situ Recording of Particle Network Formation in Liquids by Ion Conductivity Measurements. *Journal of the American Chemical Society* **133**, 14514–14517 (2011).

Phan, N.H., I. Halasz, I. Opahle, E. Alig, L. Fink, J.W. Bats, P.T. Cong, H.W. Lerner, B. Sarkar, B. Wolf, H.O. Jeschke, M. Lang, R. Valenti, R. Dinnebier, and M. Wagner. Thermally induced crystal-to-crystal transformations accompanied by changes in the magnetic properties of a Cu(II)-p-hydroquinonate polymer. *Crysgcomm* **13**, 391–395 (2011).

Pilz, T. and M. Jansen. Li₂B₆O₉F₂, a New Acentric Fluorooxoborate. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 2148–2152 (2011).

Pontius, N., T. Kachel, C. Schüller-Langeheine, W.F. Schlotter, M. Beyer, F. Sorgenfrei, C.F. Chang, A. Föhlisch, W. Wurth, P. Metcalf, I. Leonov, A. Yaresko, N. Stojanovic, M. Berglund, N. Guerassimova, S. Düsterer, H. Redlin, and H.A. Dürr. Time-resolved resonant soft x-ray diffraction with free-electron lasers: Femtosecond dynamics across the Verwey transition in magnetite. *Applied Physics Letters* **98**, 182504 (2011).

Qu, Q.T., L.J. Fu, X.Y. Zhan, D. Samuelis, J. Maier, L. Li, S. Tian, Z.H. Li, and Y.P. Wu. Porous LiMn₂O₄ as cathode material with high power and excellent cycling for aqueous rechargeable lithium batteries. *Energy & Environmental Science* **4**, 3985–3990 (2011).

Queisser, H.-J. Stimuli PREFACE. *Semiconductor Science and Technology* **26**, 010302 (2011).

Raichle, M., D. Reznik, D. Lamago, R. Heid, Y. Li, M. Bakr, C. Ulrich, V. Hinkov, K. Hradil, C.T. Lin, and B. Keimer. Highly Anisotropic Anomaly in the Dispersion of the Copper-Oxygen Bond-Bending Phonon in Superconducting YBa₂Cu₃O₇ from Inelastic Neutron Scattering. *Physical Review Letters* **107**, 177004 (2011).

Rajiv, P., R.E. Dinnebier, M. Jansen, and M. Joswig. Automated parametric Rietveld refinement: Applications in reaction kinetics and in the extraction of microstructural information. *Powder Diffraction* **26**, S26–S37 (2011).

Raymond, S., J. Bouchet, G.H. Lander, M. Le Tacon, G. Garbarino, M. Hoesch, J.P. Rueff, M. Krisch, J.C. Lashley, R.K. Schulze, and R.C. Albers. Understanding the Complex Phase Diagram of Uranium: The Role of Electron-Phonon Coupling. *Physical Review Letters* **107**, 136401 (2011).

Reckeweg, O., A. Schulz, and F.J. DiSalvo. Orthoborate Halides with the Formula (M^{+II})₅(BO₃)₃X: Syntheses, Crystal Structures and Raman Spectra of Eu₅(BO₃)₃Cl and Ba₅(BO₃)₃X (X=Cl, Br). *Zeitschrift für Naturforschung B* **66**, 359–365 (2011).

Reehuis, M., C. Ulrich, K. Prokes, S. Mat'as, J. Fujioka, S. Miyasaka, Y. Tokura, and B. Keimer. Structural and magnetic phase transitions of the orthovanadates RVO₃ (R=Dy, Ho, Er) as seen via neutron diffraction. *Physical Review B* **83**, 064404 (2011).

Ren, J.K., Y.F. Ren, Y. Tian, H.F. Yu, D.N. Zheng, S.P. Zhao, and C.T. Lin. Intrinsic tunneling study of under-doped Bi₂Sr_{2-x}La_xCuO_{6+δ} superconductors. *Chinese Physics B* **20**, 117401 (2011).

Rizzini, A.L., C. Krull, T. Balashov, J.J. Kavich, A. Mugarza, P.S. Miedema, P.K. Thakur, V. Sessi, S. Klyatskaya, M. Ruben, S. Stepanow, and P. Gambardella. Coupling Single Molecule Magnets to Ferromagnetic Substrates. *Physical Review Letters* **107**, 177205 (2011).

Rodolakis, F., J.P. Rueff, M. Sikora, I. Alliot, J.P. Itie, F. Baudelet, S. Ravy, P. Wzietek, P. Hansmann, A. Toschi, M.W. Haverkort, G. Sangiovanni, K. Held, P. Metcalf, and M. Marsi. Evolution of the electronic structure of a Mott system across its phase diagram: X-ray absorption spectroscopy study of (V_{1-x}Cr_x)₂O₃. *Physical Review B* **84**, 245113 (2011).

Romero, A.H., M. Cardona, R.K. Kremer, R. Lauck, G. Siegle, C. Hoch, and A. Muñoz. Electronic and phononic properties of the chalcopyrite CuGaS₂. *Physical Review B* **83**, 195208 (2011).

Romero, A.H., R.K. Kremer, and W. Marx. The scientific road of Manuel Cardona: a bibliometric analysis. *Annalen der Physik* **523**, 179–190 (2011).

- Rosciszewski, K. and A.M. Oleś.* Jahn-Teller mechanism of stripe formation in doped layered $\text{La}_{2-x}\text{Sr}_x\text{NiO}_4$ nickelates. *Journal of Physics: Condensed Matter* **23**, 265601 (2011).
- Ryu, H., D. Käblein, O.G. Schmidt, and H. Klauk.* Unipolar Sequential Circuits Based on Individual-Carbon-Nanotube Transistors and Thin-Film Carbon Resistors. *ACS Nano* **5**, 7525–7531 (2011).
- Sachdev, S. and B. Keimer.* Quantum criticality. *Physics Today* **64**, 29–35 (2011).
- Sagar, A., K. Balasubramanian, M. Burghard, K. Kern, and R. Sordan.* Polymer-electrolyte gated graphene transistors for analog and digital phase detection. *Applied Physics Letters* **99**, 043307 (2011).
- Saltykov, V., J. Nuss, and M. Jansen.* $\text{Cs}_{10}\text{Tl}_6\text{SiO}_4$, $\text{Cs}_{10}\text{Tl}_6\text{GeO}_4$, and $\text{Cs}_{10}\text{Tl}_6\text{SnO}_3$ – First Oxotetrelate Thallides, Double Salts Containing ‘Hypoelectronic’ $[\text{Tl}_6]^{6-}$ Clusters. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1163–1168 (2011).
- Saltykov, V., J. Nuss, U. Wedig, and M. Jansen.* Regular $[\text{Tl}_6]^{6-}$ Cluster in $\text{Cs}_4\text{Tl}_2\text{O}$ Exhibiting Closed-Shell Configuration and Energetic Stabilization due to Relativistic Spin-Orbit Coupling. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 357–361 (2011).
- Saltykov, V., J. Nuss, U. Wedig, D.L.V.K. Prasad, and M. Jansen.* First Isolated ‘Hypoelectronic’ $[\text{In}_6]^{6-}$ Cluster in Insulating $\text{Cs}_{22}\text{In}_6(\text{SiO}_4)_4$. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 834–839 (2011).
- Sangiovanni, G. and O. Gunnarsson.* Isotope effect in the pseudogap state of high-temperature copper oxide superconductors. *Physical Review B* **84**, 100505 (2011).
- Santamaria-Perez, D., A. Vegas, C. Mühle, and M. Jansen.* High-pressure experimental study on Rb_2S : anti-fluorite to Ni_2In -type phase transitions. *Acta Crystallographica B* **67**, 109–115 (2011).
- Santamaria-Perez, D., A. Vegas, C. Muehle, and M. Jansen.* Structural behaviour of alkaline sulfides under compression: High-pressure experimental study on Cs_2S . *Journal of Chemical Physics* **135**, 054511 (2011).
- Schön, J.C. and M. Jansen.* Predicting solid compounds using simulated annealing. In: *Modern methods of crystal structure prediction*, Chapter 4, 67–106 (2011); A.R. Oganov (Ed.). Wiley VCH, Weinheim, Germany.
- Schön, J.C., A. Hannemann, G. Sethi, I.V. Pentin, and M. Jansen.* Modelling structure and properties of amorphous silicon boron nitride ceramics. *Processing and Application of Ceramics* **5**, 49–61 (2011).
- Schürmann, U., V. Duppel, S. Boller, W. Bensch, and L. Kienle.* Precession Electron Diffraction – a versatile tool for the characterization of Phase Change Materials. *Crystal Research and Technology* **46**, 561–568 (2011).
- Schaloske, M.C., L. Kienle, Hj. Mattausch, V. Duppel, and A. Simon.* Disorder in Rare Earth Metal Halide Carbide Nitrides. *European Journal of Inorganic Chemistry* **2011**, 4049–4056 (2011).
- Schnyder, A.P. and S. Ryu.* Topological phases and surface flat bands in superconductors without inversion symmetry. *Physical Review B* **84**, 060504 (2011).
- Schnyder, A.P., D. Manske, and A. Avella.* Resonant generation of coherent phonons in a superconductor by ultrafast optical pump pulses. *Physical Review B* **84**, 214513 (2011).
- Schumacher, T., K. Kratzer, D. Molnar, M. Hentschel, H. Giessen, and M. Lippitz.* Nanoantenna-enhanced ultrafast nonlinear spectroscopy of a single gold nanoparticle. *Nature Communications* **2**, 333 (2011).
- Schurz, F. and M. Jansen.* Pyridine promoted cyclization of functionalized N-silylated boronnitrogen compounds. *Zeitschrift für Naturforschung B* **66**, 1225–1230 (2011).
- Seidel, R.W., R. Goddard, C. Hoch, J. Breidung, and I.M. Oppel.* On the structure of unsolvated free-base 5,10,15,20-tetra(3-pyridyl)porphyrin. *Journal of Molecular Structure* **985**, 307–315 (2011).
- Sen Gupta, S., J.A. Bradley, M.W. Haverkort, G.T. Seidler, A. Tanaka, and G.A. Sawatzky.* Coexistence of bound and virtual-bound states in shallow-core to valence x-ray spectroscopies. *Physical Review B* **84**, 075134 (2011).

- Serier-Brault, H. and M. Jansen.* Properties and high-pressure behavior of a ternary lead oxide Pb_2MnO_4 . Solid State Sciences **13**, 326–330 (2011).
- Shapoval, T., H. Stopfel, S. Haindl, J. Engelmann, D.S. Inosov, B. Holzapfel, V. Neu, and L. Schultz.* Quantitative assessment of pinning forces and magnetic penetration depth in NbN thin films from complementary magnetic force microscopy and transport measurements. Physical Review B **83**, 214517 (2011).
- Sharma, H. and R. Singh.* Spin-polarized density functional investigation into ferromagnetism in C-doped $(ZnO)_n$ clusters; $n = 1\text{--}12, 16$. Journal of Physics: Condensed Matter **23**, 106004 (2011).
- Shin, J.Y., D. Samuelis, and J. Maier.* Sustained Lithium-Storage Performance of Hierarchical, Nanoporous Anatase TiO_2 at High Rates: Emphasis on Interfacial Storage Phenomena. Advanced Functional Materials **21**, 3464–3472 (2011).
- Shirpour, M., G. Gregori, R. Merkle, and J. Maier.* On the proton conductivity in pure and gadolinium doped nanocrystalline cerium oxide. Physical Chemistry Chemical Physics **13**, 937–940 (2011).
- Shopova-Gospodinova, D., Z. Burghard, T. Dufaux, M. Burghard, and J. Bill.* Mechanical and electrical properties of polymer-derived Si-C-N ceramics reinforced by octadecylamine – Modified single-wall carbon nanotubes. Composites Science and Technology **71**, 931–937 (2011).
- Singh, R. and G. Bester.* Hydrofluorinated graphene: Two-dimensional analog of polyvinylidene fluoride. Physical Review B **84**, 155427 (2011).
- Singh, R. and G. Bester.* Effects of atomic ordering on the electronic and optical properties of self-assembled $In_xGa_{1-x}As/GaAs$ semiconductor quantum dots. Physical Review B **84**, 241402(R) (2011).
- Singh, R. and G. Bester.* Hydro-, Chloro- and Fluorographene Structures: A Density Functional Based Study. AIP Conference Proceedings **1393**, 81–82 (2011).
- Siouris, I.M., R.K. Kremer, and M. Hoelzel.* Antiferromagnetic order and spin glass behavior in Dy_2CuIn_3 . Journal of Magnetism and Magnetic Materials **323**, 2903–2911 (2011).
- Smadici, S., J.C.T. Lee, J. Morales, G. Logvenov, O. Pelleg, I. Bozovic, Y. Zhu, and P. Abbamonte.* Graded orbital occupation near interfaces in La_2NiO_4 – La_2CuO_4 superlattice. Physical Review B **84**, 155411 (2011).
- Sokolov, D.A., R. Ritz, C. Pfleiderer, T. Keller, and A.D. Huxley.* Neutron scattering studies of the lattice expansion in a ferromagnetic superconductor UGe_2 under pressure. Journal of Physics: Conference Series **273**, 012085 (2011).
- Solov'ev, V.V., I.V. Kukushkin, and S. Schmult.* Manifestation of collective effects in polarization-resolved recombination spectra of the completely filled zeroth Landau level of two-dimensional electrons. JETP Letters **92**, 600–606 (2011).
- Souliou, S.M., J. Arvanitidis, D. Christofilos, K. Papagelis, S. Ves, G.A. Kourouklis, K. Prassides, Y. Iwasa, and K. Syassen.* High-pressure Raman study of the $Sm_{2.75}C_{60}$ fulleride. High Pressure Research **31**, 13–17 (2011).
- Stephanos, C., T. Kopp, J. Mannhart, and P.J. Hirschfeld.* Interface-induced d-wave pairing. Physical Review B **84**, 100510 (2011).
- Stingaciu, M., R.K. Kremer, P. Lemmens, and M. Johnsson.* Magnetoresistivity in $CoFe_2O_4$ – $BaTiO_3$ composites produced by spark plasma sintering. Journal of Applied Physics **110**, 044903 (2011).
- Stoll, H. and K. Doll.* Extrapolating wavefunction-based ab initio results from finite clusters to the bulk solid – The case of group 1 and 11 metals (Li, Cu). Chemical Physics Letters **501**, 283–286 (2011).
- Strobel, S., R.A. Sperling, B. Fenk, W.J. Parak, and M. Tornow.* Dielectrophoretic trapping of DNA-coated gold nanoparticles on silicon based vertical nanogap devices. Physical Chemistry Chemical Physics **13**, 9973–9977 (2011).
- Subedi, A. and L. Boeri.* Vibrational spectrum and electron-phonon coupling of doped solid picene from first principles. Physical Review B **84**, 020508(R) (2011).

- Sun, D.L., J.Z. Xiao, and C.T. Lin.* Growth and annealing effect of Co-doped BaFe₂As₂ single crystals. *Journal of Crystal Growth* **321**, 55–59 (2011).
- Sun, G.L., D.L. Sun, M. Konuma, P. Popovich, A. Boris, J.B. Peng, K.Y. Choi, P. Lemmens, and C.T. Lin.* Single Crystal Growth and Effect of Doping on Structural, Transport and Magnetic Properties of A_{1-x}K_xFe₂As₂ (A = Ba, Sr). *Journal of Superconductivity and Novel Magnetism* **24**, 1773–1785 (2011).
- Sundaram, R.S., M. Steiner, H.Y. Chiu, M. Engel, A.A. Bol, R. Krupke, M. Burghard, K. Kern, and P. Avouris.* The Graphene-Gold Interface and Its Implications for Nanoelectronics. *Nano Letters* **11**, 3833–3837 (2011).
- Suraru, S.L., U. Zschieschang, H. Klauk, and F. Würthner.* A core-extended naphthalene diimide as a p-channel semiconductor. *Chemical Communications* **47**, 11504–11506 (2011).
- Suraru, S.L., U. Zschieschang, H. Klauk, and F. Würthner.* Diketopyrrolopyrrole as a p-channel organic semiconductor for high performance OTFTs. *Chemical Communications* **47**, 1767–1769 (2011).
- Suzuki, T., T. Lutz, G. Costantini, and K. Kern.* Terephthalic acid adsorption on Si(111)-(√3×√3)-Bi surfaces: Effect of Bi coverage. *Surface Science* **605**, 1994–1998 (2011).
- Svane, A., N.E. Christensen, M. Cardona, A.N. Chantis, M. van Schilfgaarde, and T. Kotani.* Quasiparticle band structures of β-HgS, HgSe, and HgTe. *Physical Review B* **84**, 205205 (2011).
- Sykula-Zajac, A., E. Lodyga-Chruscinska, B. Palecz, R.E. Dinnebier, U.J. Griesser, and V. Niederwanger.* Thermal and X-ray analysis of racemic bupivacaine hydrochloride. *Journal of Thermal Analysis and Calorimetry* **105**, 1031–1036 (2011).
- Takei, S., and B. Rosenow.* Neutral mode heat transport and fractional quantum Hall shot noise. *Physical Review B* **84**, 235316 (2011).
- Ternes, M., C. González, C.P. Lutz, P. Hapala, F.J. Giessibl, P. Jelínek, and A.J. Heinrich.* Interplay of Conductance, Force, and Structural Change in Metallic Point Contacts. *Physical Review Letters* **106**, 016802 (2011).
- Thayumanasundaram, S., M. Piga, S. Lavina, E. Negro, M. Jeyapandian, L. Ghassemzadeh, K. Müller, and V. Di Noto.* Corrigendum to ‘Hybrid inorganic-organic proton conducting membranes based on Nafion, SiO₂ and tri-ethylammonium trifluoromethanesulfonate ionic liquid’ [Electrochim. Acta 55(4)(2010)1355–1365]. *Electrochimica Acta* **56**, 1690 (2011).
- Thier, S.C. and W. Metzner.* Singular order parameter interaction at the nematic quantum critical point in two-dimensional electron systems. *Physical Review B* **84**, 155133 (2011).
- Todorova, V. and M. Jansen.* Synthesis, Structural Characterization and Physical Properties of a New Member of Ternary Lithium Layered Compounds – Li₂RhO₃. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 37–40 (2011).
- Todorova, V., A. Leineweber, L. Kienle, V. Duppel, and M. Jansen.* On AgRhO₂ and the new quaternary delafossites AgLi_{1/3}M_{2/3}O₂, syntheses and analyses of real structures. *Journal of Solid State Chemistry* **184**, 1112–1119 (2011).
- Tomforde, J., W. Bensch, L. Kienle, V. Duppel, P. Merkelbach, and M. Wuttig.* Thin Films of Ge-Sb-Te-Based Phase Change Materials: Microstructure and in Situ Transformation. *Chemistry of Materials* **23**, 3871–3878 (2011).
- Tong, J., F. Kraus, J. Köhler, A. Simon, J. Liu, and M.H. Whangbo.* Dimers of Ag²⁺ Ions – Synthesis and Characterization of the Quaternary Silver Fluoride Ag₂ZnZr₂F₁₄ with [Ag₂F₇]³⁻ Units. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1118–1121 (2011).
- Tong, J.W., C. Hoch, A. Simon, and J. Köhler.* Refinement of the crystal structure of α-silicon tetrabromide, α-SiBr₄, a room temperature modification. *Zeitschrift für Kristallographie: New Crystal Structures* **226**, 3–4 (2011).
- Tong, J.W., C. Hoch, A. Simon, and J. Köhler.* Refinement of the crystal structure of β-silicon tetrabromide, β-SiBr₄, at 271 K. *Zeitschrift für Kristallographie: New Crystal Structures* **226**, 5–6 (2011).

- Trousselet, F., G. Khaliullin, and P. Horsch.* Effects of spin vacancies on magnetic properties of the Kitaev-Heisenberg model. *Physical Review B* **84**, 054409 (2011).
- Tseng, T.C., N. Abdurakhmanova, S. Stepanow, and K. Kern.* Hierarchical Assembly and Reticulation of Two-Dimensional Mn- and Ni-TCNQ_x ($x=1, 2, 4$) Coordination Structures on a Metal Surface. *The Journal of Physical Chemistry C* **115**, 10211–10217 (2011).
- Uchida, M., K. Ishizaka, P. Hansmann, X. Yang, M. Sakano, J. Miyawaki, R. Arita, Y. Kaneko, Y. Takata, M. Oura, A. Toschi, K. Held, A. Chainani, O.K. Andersen, S. Shin, and Y. Tokura.* Orbital characters of three-dimensional Fermi surfaces in Eu_{2-x}Sr_xNiO₄ as probed by soft-x-ray angle-resolved photoemission spectroscopy. *Physical Review B* **84**, 241109 (2011).
- Uchida, M., K. Ishizaka, P. Hansmann, Y. Kaneko, Y. Ishida, X. Yang, R. Kumai, A. Toschi, Y. Onose, R. Arita, K. Held, O.K. Andersen, S. Shin, and Y. Tokura.* Pseudogap of Metallic Layered Nickelate R_{2-x}Sr_xNiO₄ (R=Nd, Eu) Crystals Measured Using Angle-Resolved Photoemission Spectroscopy. *Physical Review Letters* **106**, 027001 (2011).
- Unal, N., M.D.B. Charlton, Y.D. Wang, U. Waizmann, T. Reindl, and U. Hofmann.* Easy to adapt electron beam proximity effect correction parameter calibration based on visual inspection of a ‘Best Dose Sensor’. *Microelectronic Engineering* **88**, 2158–2162 (2011).
- Utikal, T., M. Hentschel, and H. Giessen.* Nonlinear photonics with metallic nanostructures on top of dielectrics and waveguides. *Applied Physics B* **105**, 51–65 (2011).
- Utikal, T., T. Zentgraf, S.G. Tikhodeev, M. Lippitz, and H. Giessen.* Tailoring the photonic band splitting in metallo-dielectric photonic crystal superlattices. *Physical Review B* **84**, 075101 (2011).
- Utikal, T., T. Zentgraf, T. Paul, C. Rockstuhl, F. Lederer, M. Lippitz, and H. Giessen.* Towards the Origin of the Nonlinear Response in Hybrid Plasmonic Systems. *Physical Review Letters* **106**, 133901 (2011).
- Vilcinskas, L. and K.-D. Kreuer.* Comment on: ‘Mixed Grothuss and Vehicle Transport Mechanism in Proton Conducting Polymers from Ab initio Molecular Dynamics Simulations’. *Chemistry of Materials* **23**, 3377–3378 (2011).
- Vinnikov, L.Y., A.V. Radaev, I.S. Veshchunov, A.G. Troshina, Y. Liu, C.T. Lin, and A.V. Boris.* Vortex structure in FeTeSe single crystals. *JETP Letters* **93**, 287–289 (2011).
- Vogelgesang, R.* Global Surface Parameterization by Smooth Facet Selection. *Journal of Computational and Theoretical Nanoscience* **8**, 1631–1638 (2011).
- von Schnering, H.G., J. Llanos, K. Peters, M. Baitinger, Y. Grin, and R. Nesper.* Refinement of the crystal structure of K₈Ge₄₄□₂, an intermetallic clathrate I. *Zeitschrift für Kristallographie: New Crystal Structures* **226**, 9–10 (2011).
- Wagner, T., S. Krotzky, A. Weiss, T. Sauerwald, C.D. Kohl, J. Roggenbuck, and M. Tiemann.* A High Temperature Capacitive Humidity Sensor Based on Mesoporous Silica. *Sensors* **11**, 3135–3144 (2011).
- Wahl, P., L. Diekhöner, M.A. Schneider, F. Treubel, C.T. Lin, and K. Kern.* Local spectroscopy of the Kondo lattice YbAl₃: Seeing beyond the surface with scanning tunneling microscopy and spectroscopy. *Physical Review B* **84**, 245131 (2011).
- Wang, X., K. Syassen, M. Johnsson, R. Moessner, K.Y. Choi, and P. Lemmens.* Weak first-order quantum phase transition in the spin-tetrahedron system Cu₂Te₂O₅Br₂ without lattice contributions. *Physical Review B* **83**, 134403 (2011).
- Wang, Y., L. Yu, and P.X. Zhang.* Transverse laser induced thermoelectric voltage effect in tilted La_{0.5}Sr_{0.5}CoO₃ thin films. *Optics and Laser Technology* **43**, 1462–1465 (2011).
- Wang, Y., L. Yu, B. Jiang, and P.X. Zhang.* Transverse thermoelectric response in tilted orientation La_{1-x}Sr_xCoO₃ (0.05 ≤ x ≤ 0.4) thin films. *Journal of Applied Physics* **110**, 123111 (2011).
- Wang, Y., Z.Y. Liu, C.T. Lin, and H.H. Wen.* Determination of the superconducting gap in near optimally doped Bi₂Sr_{2-x}La_xCuO_{6+δ} (x similar to 0.4) from low-temperature specific heat. *Physical Review B* **83**, 054509 (2011).

- Wedig, A., R. Merkle, B. Stuhlhofer, H.-U. Habermeier, J. Maier, and E. Heifets.* Fast oxygen exchange kinetics of pore-free $\text{Bi}_{1-x}\text{Sr}_x\text{FeO}_{3-\delta}$ thin films. *Physical Chemistry Chemical Physics* **13**, 16530–16533 (2011).
- Weis, J. and K. von Klitzing.* Metrology and microscopic picture of the integer quantum Hall effect. *Philosophical Transactions of the Royal Society of London. Series A: Mathematical and Physical Sciences* **369**, 3954–3974 (2011).
- Whangbo, M.H., C. Lee, and J. Köhler.* Metal Anions in Metal-Rich Compounds and Polar Intermetallics. *European Journal of Inorganic Chemistry* **2011**, 3841–3847 (2011).
- White, J.S., R.W. Heslop, A.T. Holmes, E.M. Forgan, V. Hinkov, N. Egetenmeyer, J.L. Gavilano, M. Laver, C.D. Dewhurst, R. Cubitt, and A. Erb.* Magnetic-field-induced nonlocal effects on the vortex interactions in twin-free $\text{YBa}_2\text{Cu}_3\text{O}_7$. *Physical Review B* **84**, 104519 (2011).
- White, S.C., U.R. Singh, and P. Wahl.* A stiff scanning tunneling microscopy head for measurement at low temperatures and in high magnetic fields. *Review of Scientific Instruments* **82**, 113708 (2011).
- Wied, M., J. Nuss, W. Höhne, and H.G. von Schnering.* Crystal structures of tetrastrontium dibismuthide oxide, $\text{Sr}_4\text{Bi}_2\text{O}$, and tetrabarium dibismuthide oxide, $\text{Ba}_4\text{Bi}_2\text{O}$. *Zeitschrift für Kristallographie: New Crystal Structures* **226**, 437–438 (2011).
- Wilfert, J. and M. Jansen.* Curing preceramic SiBNC polymers infusible by radical polymerization. *Journal of Materials Chemistry* **21**, 13422–13428 (2011).
- Winterhalder, M.J., A. Zumbusch, M. Lippitz, and M. Orrit.* Toward Far-field Vibrational Spectroscopy of Single Molecules at Room Temperature. *The Journal of Physical Chemistry B* **115**, 5425–5430 (2011).
- Wohlfeld, K., M. Daghofer, and A.M. Oleš.* Spin-orbital physics for p orbitals in alkali RO_2 hyperoxides-Generalization of the Goodenough-Kanamori rules. *EPL* **96**, 27001 (2011).
- Wohlfeld, K., M. Daghofer, S. Nishimoto, G. Khaliullin, and J. van den Brink.* Intrinsic Coupling of Orbital Excitations to Spin Fluctuations in Mott Insulators. *Physical Review Letters* **107**, 147201 (2011).
- Yamase, H. and R. Zeyher.* Raman scattering near a d-wave Pomeranchuk instability. *Physical Review B* **83**, 115116 (2011).
- Yamase, H., P. Jakubczyk, and W. Metzner.* Nematic quantum criticality without order. *Physical Review B* **83**, 125121 (2011).
- Yan, G.W., L. Yu, Y. Wang, H. Zhang, P.X. Zhang, and H.-U. Habermeier.* Thermoelectric conversion via laser-induced voltage in highly textured polycrystalline Na_xCoO_2 ceramic. *Journal of Applied Physics* **110**, 103102 (2011).
- Yeoh, W.K., B. Gault, X.Y. Cui, C. Zhu, M.P. Moody, L. Li, R.K. Zheng, W.X. Li, X.L. Wang, S.X. Dou, G.L. Sun, C.T. Lin, and S.P. Ringer.* Direct Observation of Local Potassium Variation and Its Correlation to Electronic Inhomogeneity in $(\text{Ba}_{1-x}\text{K}_x)\text{Fe}_2\text{As}_2$ Pnictide. *Physical Review Letters* **106**, 247002 (2011).
- Yokota, T., T. Nakagawa, T. Sekitani, Y. Noguchi, K. Fukuda, U. Zschieschang, H. Klauk, K. Takeuchi, M. Takamiya, T. Sakurai, and T. Someya.* Control of threshold voltage in low-voltage organic complementary inverter circuits with floating gate structures. *Applied Physics Letters* **98**, 193302 (2011).
- Yokota, T., T. Sekitani, Y. Kato, K. Kuribara, U. Zschieschang, H. Klauk, T. Yamamoto, K. Takamiya, H. Kuwabara, M. Ikeda, and T. Someya.* Low-voltage organic transistor with subfemtoliter inkjet source-drain contacts. *MRS Communications* **1**, 3–6 (2011).
- Yordanov, P., A.V. Boris, J.W. Freeland, J.J. Kavich, J. Chakhalian, H.N. Lee, and B. Keimer.* Far-infrared and dc magnetotransport of CaMnO_3 - CaRuO_3 superlattices. *Physical Review B* **84**, 045108 (2011).
- Yu, L., L. Gu, Y. Wang, P.X. Zhang, and H.-U. Habermeier.* Epitaxial layered cobaltite Na_xCoO_2 thin films grown on planar and vicinal cut substrates. *Journal of Crystal Growth* **328**, 34–38 (2011).

- Yu, L., Y. Wang, H.S. Li, X. Liu, and P.X. Zhang.* Post annealing effect on transport properties of La_{0.67}Ca_{0.33}MnO₃ films grown on vicinal cut substrates. *Journal of Alloys and Compounds* **509**, 8991–8993 (2011).
- Yu, L., Y. Wang, P.X. Zhang, and H.-U. Habermeier.* Epitaxial La_{0.9}Ca_{0.1}MnO₃ films grown on vicinal cut substrates for the investigation of resistivity and thermoelectric anisotropy. *Journal of Crystal Growth* **322**, 41–44 (2011).
- Yu, Y., L. Gu, X.Y. Lang, C.B. Zhu, T. Fujita, M.W. Chen, and J. Maier.* Li Storage in 3D Nanoporous Au-Supported Nanocrystalline Tin. *Advanced Materials* **23**, 2443–2447 (2011).
- Zagorac, D., J.C. Schön, I. Pentin, and M. Jansen.* Structure prediction and energy landscape exploration in the zinc oxide system. *Processing and Application of Ceramics* **5**, 73–78 (2011).
- Zagorac, D., J.C. Schön, K. Doll, and M. Jansen.* Structure Prediction for PbS and ZnO at Different Pressures and Visualization of the Energy Landscapes. *Acta Physica Polonica A* **120**, 215–220 (2011).
- Zagorac, D., K. Doll, J.C. Schön, and M. Jansen.* Ab initio structure prediction for lead sulfide at standard and elevated pressures. *Physical Review B* **84**, 045206 (2011).
- Zeyher, R. and A. Greco.* Fermi arcs and isotope effect of the magnetic penetration depth in underdoped cuprates. *EPL* **93**, 67002 (2011).
- Zhang, D., R.K. Kremer, P. Lemmens, K.Y. Choi, J. Liu, M.H. Whangbo, H. Berger, Y. Skourski, and M. Johnsson.* Crystal Structure and Magnetic Properties of Two New Antiferromagnetic Spin Dimer Compounds; FeTe₃O₇X (X = Cl, Br). *Inorganic Chemistry* **50**, 12877–12885 (2011).
- Zhang, Y.H., P. Wahl, and K. Kern.* Quantum Point Contact Microscopy. *Nano Letters* **11**, 3838–3843 (2011).
- Zhu, C.B., K. Weichert, and J. Maier.* Electronic Conductivity and Defect Chemistry of Heterosite FePO₄. *Advanced Functional Materials* **21**, 1917–1921 (2011).
- Zhu, C.B., Y. Yu, L. Gu, K. Weichert, and J. Maier.* Electrospinning of Highly Electroactive Carbon-Coated Single-Crystalline LiFePO₄ Nanowires. *Angewandte Chemie International Edition* **50**, 6278–6282 (2011).
- Ziegler, K., A. Müller, K.Y. Amsharov, and M. Jansen.* Capturing the Most-Stable C₅₆ Fullerene Cage by In Situ Chlorination. *Chemistry – An Asian Journal* **6**, 2412–2418 (2011).
- Ziegler, K., K.Y. Amsharov, I. Halasz, and M. Jansen.* Facile Separation and Crystal Structure Determination of C₂-C₈₂(3) Fullerene. *Zeitschrift für anorganische und allgemeine Chemie* **637**, 1463–1466 (2011).
- Zimmermann, I., R.K. Kremer, and M. Johnsson.* Synthesis, crystal structure and magnetic properties of the open framework compound Co₃Te₂O₂(PO₄)₂(OH)₄. *Journal of Solid State Chemistry* **184**, 3080–3084 (2011).
- Zschieschang, U., F. Ante, D. Kälblein, T. Yamamoto, K. Takimiya, H. Kuwabara, M. Ikeda, T. Sekitani, T. Someya, J. Blochwitz-Nimoth, and H. Klauk.* Dinaphtho[2,3-b:2',3'-f]thieno[3,2-b]thiophene (DNTT) thin-film transistors with improved performance and stability. *Organic Electronics* **12**, 1370–1375 (2011).
- Zschieschang, U., T. Yamamoto, K. Takimiya, H. Kuwabara, M. Ikeda, T. Sekitani, T. Someya, and H. Klauk.* Organic Electronics on Banknotes. *Advanced Materials* **23**, 654–658 (2011).
- Zuev, A., R. Dinnebier, and W. Depmeier.* Calculation of a line profile for the diffractometer with a primary monochromator. *Zeitschrift für Kristallographie, Proceedings* **1**, 105–110 (2011).
- Zverev, V.N., A.V. Korobenko, G.L.L. Sun, D.L.L. Sun, C.T. Lin, and A.V. Boris.* Anomalies in Transport and Superconducting Properties of Ba_{1-x}K_xFe₂As₂ Single Crystals. *Japanese Journal of Applied Physics* **50**, 05FD02 (2011).