



PUBLICATIONS

Acosta-Diaz, P. see Katsaros, G.

Adler, P. Comment on ‘Spin- and charge-ordering in oxygen-vacancy-ordered mixed-valence $\text{Sr}_4\text{Fe}_4\text{O}_{11}$ ’. *Physical Review B* **77**, 136401 (2008).

Alexandrov, V.E., R.A. Evarestov, E.A. Kotomin and J. Maier. *Ab initio* study of bulk and surface iron defects in SrTiO_3 . *Journal of Physics: Conference Series* **117**, 012001 (2008).

Alexandrov, V.E., E.A. Kotomin, J. Maier and R.A. Evarestov. *Ab initio* modeling of spin and charge ordering and lattice dynamics in CaFeO_3 crystals. *Journal of Chemical Physics* **129**, 0214704 (2008).

Alexandrov, V.E., J. Maier and R.A. Evarestov. *Ab initio* study of $\text{SrFe}_x\text{Ti}_{1-x}\text{O}_3$: Jahn-Teller distortion and electronic structure. *Physical Review B* **77**, 075111 (2008).

Amin, R., C.T. Lin and J. Maier. Aluminum-doped LiFePO_4 single crystals. Part I. Growth, characterization and total conductivity. *Physical Chemistry Chemical Physics* **20**, 3519–3523 (2008).

Amin, R., C.T. Lin and J. Maier. Aluminum-doped LiFePO_4 single crystals. Part II. Ionic conductivity, diffusivity and defect model. *Physical Chemistry Chemical Physics* **20**, 3524–3529 (2008).

Amin, R. and J. Maier. Effect of annealing on transport properties of LiFePO_4 : Towards a defect chemical model. *Solid State Ionics* **178**, 1831–1836 (2008).

Amin, R., J. Maier, P. Balaya, D.P. Chen and C.T. Lin. Ionic and electronic transport in single crystalline LiFePO_4 grown by optical floating zone technique. *Solid State Ionics* **179**, 1683–1687 (2008).

Amsharov, K.Y. and M. Jansen. A C_{78} fullerene precursor: Toward the direct synthesis of higher fullerenes. *Journal of Organic Chemistry* **73**, 2931–2934 (2008).

Amsharov, K. see Epple, L.; Simeonov, K.; Weitz, R.T.

Andergassen, S., T. Enss, C. Karrasch and V. Meden. A gentle introduction to the functional renormalization group: The Kondo effect in quantum dots. In: *Quantum Magnetism*; B. Barbara, Y. Imry, G. Sawatzky, P.C.E. Stamp (Eds.). NATO Science for Peace and Security Series B: Physics and Biophysics, 1–17 (2008). Springer Verlag, Berlin/Heidelberg, Germany.

Andersen, O.K. see Dolgov, O.V.; Held, K.; Kent, P.R.C.; Liu, G.Q.; Pillay, D.; Sushkov, O.P.

Andreev, I.V., V.M. Murav'ev, I.V. Kukushkin, J.H. Smet, K. von Klitzing and V. Umanskii. Contactless Measurement of the Conductivity of Two-Dimensional Electrons in the Regime of Microwave-Induced Giant Magnetoresistance Oscillations. *JETP Letters* **88**, 616–619 (2008).

Ansaldò, A., C. George, M.T. Parodi, E. Di Zitti, S. Roth and D. Ricci. Ex-situ synthesized nickel nanoparticles for multi-walled carbon nanotube growth on high aspect ratio substrates. *physica status solidi (b)* **245**, 1923–1926 (2008).

Ansaldò, A., D. Ricci, E. di Zitti and S. Roth. Direct transfer of CVD-grown transparent SWNT networks from growth substrate to polymer. *Physica E* **40**, 2430–2433 (2008).

Antonakos, A., D. Lampakis, E. Liarokapis, M. Filippi, W. Prellier, G.H. Aydogdu and H.-U. Habermeier. Phase separation in manganite thin films. *Journal of Physics: Condensed Matter* **20**, 434232 (2008).

Antonov, V.N., O.V. Andryushchenko, A.P. Shpak, A.N. Yaresko and O. Jepsen. Electronic structure, optical spectra, and x-ray magnetic circular dichroism in CoS_2 . *Physical Review B* **78**, 094409 (2008).

Antonov, V.N., D.A. Kukusta, A.P. Shpak and A.N. Yaresko. Electronic structure and x-ray magnetic circular dichroism in the Heusler alloy Co_2FeSi . *Condensed Matter Physics* **11**, 627–639 (2008).

Antonov, V.N., D.A. Kukusta and A.N. Yaresko. X-ray magnetic circular dichroism in CeFe_2 : First-principles calculations. *Physical Review B* **78**, 094401 (2008).

Antonov, V. see Liu, G.Q.

Ashino, M., D. Oberfell, M. Haluska, S. Yang, A.N. Khlobystov, S. Roth and R. Wiesendanger. Atomically resolved mechanical response of individual metallofullerene molecules confined inside carbon nanotubes. *Nature* **3**, 337–341 (2008).

Assig, M. see Ast, C.R.

Ast, C.R., M. Assig, A. Ast and K. Kern. Design criteria for scanning tunneling microscopes to reduce the response to external mechanical disturbances. *Review of Scientific Instruments* **79**, 093704 (2008).

Ast, C.R., D. Pacilé, L. Moreschini, M.C. Falub, M. Papagno, K. Kern, M. Grioni, J. Henk, A. Ernst, S. Ostanin and P. Bruno. Spin-orbit split two-dimensional electron gas with tunable Rashba and Fermi energy. *Physical Review B* **77**, 081407 (2008).

Ast, C.R. see Frantzeskakis, E.; Gierz, I.; Moreschini, L.

Atkinson, P., S. Kiravittaya, M. Benyoucef, A. Rastelli and O.G. Schmidt. Site-controlled growth and luminescence of InAs quantum dots using in situ Ga-assisted deoxidation of patterned substrates. *Applied Physics Letters* **93**, 101908 (2008).

Aydemir, U., A. Ormeci, H. Borrmann, B. Böhme, F. Zurcher, B. Uslu, T. Goebel, W. Schnelle, P. Simon, W. Carrillo-Cabrera, F. Haarmann, M. Baitinger, R. Nesper, H.G. von Schnering and Y. Grin. The metallic Zintl phase Ba_3Si_4 – Synthesis, crystal structure, chemical bonding, and physical properties. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1651–1661 (2008).

Aydogdu, G.H., Y. Kuru and H.-U. Habermeier. Novel electronic and magnetic properties of $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$ films deposited on (111) SrTiO_3 substrates. *Journal of Crystal Growth* **310**, 4521–4524 (2008).

Aynajian, P., T. Keller, L. Boeri, S.M. Shapiro, K. Habicht and B. Keimer. Energy Gaps and Kohn Anomalies in Elemental Superconductors. *Science* **319**, 1509–1512 (2008).

Babizhetskyy, V., Hj. Mattausch and A. Simon. Crystal Structure of the Terbium Borocarbide $\text{Tb}_2\text{B}_2\text{C}_3$. *Zeitschrift für Naturforschung B* **63**, 929–933 (2008).

Babizhetskyy, V., Hj. Mattausch, A. Simon, K. Hiebl, M.B. Yahia, R. Gautier and J.-F. Halet. New examples of ternary rare-earth metal boride carbides containing finite boron-carbon chains: The crystal and electronic structure of $\text{RE}_1\text{5B}_6\text{C}_{20}$ ($\text{RE} = \text{Pr}, \text{Nd}$). *Journal of Solid State Chemistry* **181**, 1882–1890 (2008).

Babizhetskyy, V. see Smetana, V.

Balasubramanian, K. and M. Burghard. Electrochemically functionalized carbon nanotubes for device applications. *Journal of Materials Chemistry* **18**, 3071–3083 (2008).

Balasubramanian, K., M. Burghard and K. Kern. Effect of the electronic structure of carbon nanotubes on the selectivity of electrochemical functionalization. *Physical Chemistry Chemical Physics* **10**, 2256–2262 (2008).

Balasubramanian, K., E.J.H. Lee, R.T. Weitz, M. Burghard and K. Kern. Carbon nanotube transistors – chemical functionalization and device characterization. *physica status solidi (a)* **205**, 633–646 (2008).

Balasubramanian, K. see Lee, E.J.H.; Scolari, M.; Sundaram, R.S.

Balci, S., D. Leinberger, M. Knez, A.M. Bittner, F. Boes, A. Kadri, C. Wege, H. Jeske, E. Maiß and K. Kern. Printing and aligning mesoscale patterns of tobacco mosaic viruses at surfaces. *Advanced Materials* **20**, 2195–2200 (2008).

Baldassarre, L., A. Perucchi, D. Nicoletti, A. Toschi, G. Sangiovanni, K. Held, M. Capone, M. Ortolani, L. Malavasi, M. Marsi, P. Metcalf, P. Postorino and S. Lupi. Quasiparticle evolution and pseudogap formation in V_2O_3 : An infrared spectroscopy study. *Physical Review B* **77**, 113107 (2008).

Barth, A. and W. Marx. Mapping high-temperature superconductors – A scientometric approach. *Journal of Superconductivity and Novel Magnetism* **21**, 113–128 (2008).

Baumann, F.S., J. Maier and J. Fleig. The polarization resistance of mixed conducting SOFC cathodes: A comparative study using thin film model electrodes. *Solid State Ionics* **179**, 1198–1204 (2008).

- Baumeier, B., P. Krüger, J. Pollmann and G.V. Vajenine.* Electronic structure of alkali-metal fluorides, oxides, and nitrides: Density-functional calculations including self-interaction corrections. *Physical Review B* **78**, 125111 (2008).
- Behrens, U., R.E. Dinnebier, S. Neander and F. Olbrich.* Solid-State Structures of Base-Free Rubidium and Cesium Pentamethylcyclopentadienides. Determination by High-Resolution Powder Diffraction. *Organometallics* **27**, 5398–5400 (2008).
- Benyoucef, M., S. Kiravittaya, Y.F. Mei, A. Rastelli and O.G. Schmidt.* Strongly coupled semiconductor microcavities: A route to couple artificial atoms over micrometric distances. *Physical Review B* **77**, 035108 (2008).
- Bernardi, A., S. Kiravittaya, A. Rastelli, R. Songmuang, D.J. Thurmer, M. Benyoucef and O.G. Schmidt.* On-chip Si/SiO_x microtube refractometer. *Applied Physics Letters* **93**, 094106 (2008).
- Bernhard, C., L. Yu, A. Dubroka, K.W. Kim, M. Rössle, D. Munzar, J. Chaloupka, C.T. Lin and T. Wolf.* Broadband infrared ellipsometry measurements of the c-axis response of underdoped YBa₂Cu₃O_{7-δ}: Spectroscopic distinction between the normal-state pseudogap and the superconducting gap. *Journal of Physics and Chemistry of Solids* **69**, 3064–3069 (2008).
- Bertoni, C., V. Skakalova and S. Roth.* Layer-by-layer deposition of ultra-thin films of carbon nanotubes. *Physica E* **40**, 2257–2262 (2008).
- Bester, G. see Franceschetti, A.
- Beyazyildirim, S., K.-D. Kreuer, M. Schuster, A.J. Bhattacharyya and J. Maier.* Heterogeneous doping of a weak covalent electrolyte: Proton conductivity enhancement of imidazole by admixture of oxide particles. *Advanced Materials* **20**, 1274–1278 (2008).
- Boeri, L., O.V. Dolgov and A.A. Golubov.* Is LaO_{1-x}F_xFeAs an electron-phonon superconductor? *Physical Review Letters* **101**, 026403 (2008).
- Boeri, L., J.S. Kim, M. Giantomassi, F.S. Razavi, S. Kuroiwa, J. Akimitsu and R.K. Kremer.* Pressure effects on the superconducting transition in *nH*-CaAlSi. *Physical Review B* **77**, 144502 (2008).
- Boeri, L. see Aynajian, P.; Marini, C.; Mazin, I.I.
- Bohnenbuck, B., I. Zegkinoglou, J. Stremper, C. Schüßler-Langeheine, C.S. Nelson, P. Leininger, H.-H. Wu, E. Schierle, J.C. Lang, G. Srajer, S.I. Ikeda, Y. Yoshida, K. Iwata, S. Katano, N. Kikugawa and B. Keimer.* Magnetic structure and orbital state of Ca₃Ru₂O₇ investigated by resonant x-ray diffraction. *Physical Review B* **77**, 224412 (2008).
- Bohnenbuck, B. see Nelson, C.S.; Stremper, J.
- Boris, A. see Yu, L.
- Bose, S. see Brihuega, I.
- Bouwman, W.G., J. Plomp, V.O. De Haan, W.H. Kraan, A.A. van Well, K. Habicht, T. Keller and M.T. Rekveldt.* Real-space neutron scattering methods. *Nuclear Instruments & Methods in Physics Research A* **586**, 9–14 (2008).
- Brihuega, I., P. Mallet, C. Bena, S. Bose, C. Michaelis, L. Vitali, F. Varchon, L. Magaud, K. Kern and J.Y. Veuillen.* Quasiparticle Chirality in Epitaxial Graphene Probed at the Nanometer Scale. *Physical Review Letters* **101**, 206802 (2008).
- Brihuega, I., C. Michaelis, J. Zhang, S. Bose, V. Sessi, J. Honolka, M.A. Schneider, A. Enders and K. Kern.* Electronic decoupling and templating of Co nanoclusters arrays on the boron nitride nanomesh. *Surface Science* **602**, L95–L99 (2008).
- Brihuega, I. see Vitali, L.; Zhang, J.
- Brydon, P.M.R.* Slave-boson theory of the extended Falicov-Kimball model. *Physical Review B* **77**, 045109 (2008).
- Brydon, P.M.R., B. Kastening, D.K. Morr and D. Manske.* Interplay of ferromagnetism and triplet superconductivity in a Josephson junction. *Physical Review B* **77**, 104504 (2008).

- Brydon, P.M.R. and D. Manske. Localized states in triplet superconductor-ferromagnet-triplet superconductor junctions. *Journal of Physics: Condensed Matter* **20**, 434225 (2008).
- Brydon, P.M.R., D. Manske and M. Sgrist. Origin and Control of Spin Currents in a Magnetic Triplet Josephson Junction. *Journal of the Physical Society of Japan* **77**, 103714 (2008).
- Brydon, P. see Manske, D.
- Brzezicki, W. and A.M. Oleś. Exact ground state of a spin ladder with a quantum phase transition. *European Physical Journal B* **66**, 361–368 (2008).
- Bulychev, N., K. Dirnberger, I. Arutunov, P. Kopold, T. Schauer, V. Zubov and C.D. Eisenbach. Effect of ultrasonic treatment on structure and properties of ethylhydroxyethylcellulose polymer adsorption layer on inorganic pigments in aqueous dispersion. *Progress in Organic Coatings* **62**, 299–306 (2008).
- Burghard, M. A Freight Train of Nanotubes for Cargo Transport on the Nanoscale. *Angewandte Chemie International Edition* **47**, 8565–8566 (2008).
- Burghard, M. see Balasubramanian, K.; Forment-Aliaga, A.; Gómez-Navarro, C.; Häffner, M.; Haffner, M.; Lee, E.J.H.; Li, Y.; Scolari, M.; Sundaram, R.S.; Weitz, R.T.
- Bussmann-Holder, A. and A.R. Bishop. Dimensional crossover and absence of quantum criticality in $\text{SrTi}^{16}\text{O}_{1-x}^{18}\text{O}_x$. *Physical Review B* **78**, 104117 (2008).
- Bussmann-Holder, A., H. Büttner and A.R. Bishop. Coexistence of Polar Order and Local Domain Dynamics in Ferroelectric Perovskites: The Case of $\text{SrTi}^{18}\text{O}_3$. *Ferroelectrics* **363**, 73–78 (2008).
- Bussmann-Holder, A. and H. Keller. Unconventional isotope effects, multi-component superconductivity and polaron formation in high temperature cuprate superconductors. *Journal of Physics: Conference Series* **108**, 012019 (2008).
- Bussmann-Holder, A., H. Keller, A. Bishop, A. Simon and K. Müller. Polaron Coherence as Origin of the Pseudogap Phase in High Temperature Superconducting Cuprates. *Journal of Superconductivity and Novel Magnetism* **21**, 353–357 (2008).
- Bussmann-Holder, A. see Keller, H.; Khasanov, R.
- Cakmak, G. see Pitzschke, D.
- Čančarević, Ž.P., J.C. Schön and M. Jansen. Stability of alkali metal halide polymorphs as a function of pressure. *Chemistry – An Asian Journal* **3**, 561–572 (2008).
- Cardona, M. and W. Marx. Max Born and his legacy to condensed matter physics. *Annalen der Physik* **17**, 497–518 (2008).
- Cardona, M. and W. Marx. Max Planck – A Conservative Revolutionary. *Il Nuovo Saggiatore* **24**, 39–54 (2008).
- Cardona, M. see Chantis, A.N.; Etchegoin, P.G.; Ramirez, R.; Romero, A.H.; Serrano, J.; Yang, A.
- Cavallo, F., W. Sigle and O.G. Schmidt. Controlled fabrication of Cr/Si and Cr/SiGe tubes tethered to insulator substrates. *Journal of Applied Physics* **103**, 116103 (2008).
- Cavallo, F., R. Songmuang and O.G. Schmidt. Fabrication and electrical characterization of Si-based rolled-up microtubes. *Applied Physics Letters* **93**, 143113 (2008).
- Chaloupka, J. and G. Khaliullin. Orbital Order and Possible Superconductivity in $\text{LaNiO}_3/\text{LaMO}_3$ Superlattices. *Physical Review Letters* **100**, 016404 (2008).
- Chaloupka, J. and G. Khaliullin. Unusual Electron Correlations in Na_xCoO_2 Due to the Spin-State Quasidegeneracy of Cobalt Ions. *Progress of Theoretical Physics, Supplement* **176**, 50–76 (2008).
- Chang, J.H., A. Zurn and H.G. von Schnering. Hyperbolic Cation Diffusion Paths in $\alpha\text{-RbAg}_4\text{I}_5$ Type Superionic Conductors. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 2156–2160 (2008).
- Chantis, A.N., M. Cardona, N.E. Christensen, D.L. Smith, M. van Schilfhaarde, T. Kotani, A. Svane and R.C. Albers. Strain-Induced Conduction-Band Spin Splitting in GaAs from First-Principles Calculations. *Physical Review B* **78**, 075208 (2008).

Chen, D.P., X.L. Wang, C.T. Lin and S.X. Dou. Magnetic anisotropy of Na_xCoO_2 single crystals. *Journal of Applied Physics* **103**, 07C702 (2008).

Chiu, P.W. Carbon nanotube T junctions: Formation and properties. *Journal of Nanoscience and Nanotechnology* **8**, 88–98 (2008).

Chiu, P.W. and S. Roth. Transition from direct tunneling to field emission in carbon nanotube intramolecular junctions. *Applied Physics Letters* **92**, 042107 (2008).

Christ, A., G. Leveque, O.J.F. Martin, T. Zentgraf, J. Kuhl, C. Bauer, H. Giessen and S.G. Tikhodeev. Near-field-induced tunability of surface plasmon polaritons in composite metallic nanostructures. *Journal of Microscopy* **229**, 344–353 (2008).

Cimalla, V., C.C. Röhlig, J. Pezoldt, M. Niebelschütz, O. Ambacher, K. Brückner, M. Hein, J. Weber, S. Milenkovic, A.J. Smith and A.W. Hassel. Nanomechanics of single crystalline tungsten nanowires. *Journal of Nanomaterials* **2008**, 638947 (2008).

Corzilius, B., K.P. Dinse, K. Hata, M. Haluska, V. Skakalova and S. Roth. SWNT probed by multi-frequency EPR and nonresonant microwave absorption. *physica status solidi (b)* **245**, 2251–2254 (2008).

Cui, G., L. Gu, L. Zhi, N. Kaskhedikar, P.A. van Aken, K. Müllen and J. Maier. A Germanium-Carbon Nanocomposite Material for Lithium Batteries. *Advanced Materials* **20**, 3079–3083 (2008).

Cui, G. see Demir-Cakan, R.

Daghofer, M., P. Horsch and G. Khaliullin. Spin structure and dynamical magnetic response of spin-orbital polarons in lightly doped cobaltates. In: *Proceedings of the NATO Advanced Study Institute on Quantum Magnetism*; 49–55 (2008); B. Barbara, Y. Imry, G. Sawatzky, P.C.E. Stamp (Eds.). Les Houches, France, 2006. Springer Verlag, Berlin/Heidelberg, Germany.

Daghofer, M., R.M. Noack and P. Horsch. Magnetism of one-dimensional Wigner lattices and its impact on charge order. *Physical Review B* **78**, 205115 (2008).

Daghofer, M., K. Wohlfeld, A.M. Oleś, E. Arrigoni and P. Horsch. Absence of hole confinement in transition-metal oxides with orbital degeneracy. *Physical Review Letters* **100**, 066403 (2008).

Das, H., T. Saha-Dasgupta, C. Gros and R. Valentí. Proposed low-energy model Hamiltonian for the spin-gapped system CuTe_2O_5 . *Physical Review B* **77**, 224437 (2008).

Delmer, O., P. Balaya, L. Kienle and J. Maier. Enhanced potential of amorphous electrode materials: Case study of RuO_2 . *Advanced Materials* **20**, 501–505 (2008).

Demir-Cakan, R., Y.-S. Hu, M. Antonietti, J. Maier and M.-M. Titirici. Facile one-pot synthesis of mesoporous SnO_2 microspheres via nanoparticles assembly and lithium storage properties. *Chemistry of Materials* **20**, 1227–1229 (2008).

Demir-Cakan, R., M.M. Titirici, M. Antonietti, G.L. Cui, J. Maier and Y.S. Hu. Hydrothermal carbon spheres containing silicon nanoparticles: synthesis and lithium storage performance. *Chemical Communications* **2008**, 3759–3761 (2008).

Deneke, C., J. Schumann, R. Engelhard, J. Thomas, W. Sigle, U. Zschieschang, H. Klauk, A. Chuvilin and O.G. Schmidt. Fabrication of radial superlattices based on different hybrid materials. *physica status solidi (c)* **5**, 2704–2708 (2008).

Deng, S., A. Simon and J. Köhler. Calcium d States: Chemical Bonding of CaC_6 . *Angewandte Chemie International Edition* **47**, 6703–6706 (2008).

Dietsche, W. see Muravev, V.M.; Stern, O.; Tiemann, L.

Dinnebier, R.E. and S.J.L. Billinge. Powder Diffraction: Theory and Practice. In: *Powder Diffraction Theory and Practice*, 574 (2008); R.E. Dinnebier, S.J.L. Billinge (Eds.). Royal Society of Chemistry Publishing, 1st Edition, Cambridge, UK.

Dinnebier, R.E. and M. Jansen. The Crystal Structure of $[\text{Mg}_2(\text{H}_2\text{O})_6(\text{HCO}_3)_3]^+\text{Cl}^-$, Containing a Magnesium-based Hetero-polycation. *Zeitschrift für Naturforschung B* **63**, 1347–1351 (2008).

- Dinnebier, R.E., Y.Liebold-Ribeiro and M.Jansen.* The low and high temperature crystal structures of $[\text{Mg}(\text{H}_2\text{O}_6)\text{XBr}_3]$ double salts ($\text{X} = \text{Rb}, \text{Cs}$). *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1857–1862 (2008).
- Dinnebier, R. see Behrens, U.; Hinrichsen, B.; Moustafa, A.M.; Schmidt, C.L.; Shopova, D.
- Dolgov, O.V., O.K.Andersen and I.I.Mazin.* Self-consistent theory of phonon renormalization and electron-phonon coupling near a two-dimensional Kohn singularity. *Physical Review B* **77**, 014517 (2008).
- Dolgov, O.V. and A.A.Golubov.* Magnetic structure and orbital state of $\text{Ca}_3\text{Ru}_2\text{O}_7$ investigated by resonant x-ray diffraction. *Physical Review B* **77**, 214526 (2008).
- Dolgov, O.V. and A.A.Golubov.* Strong electron-phonon interaction in multiband superconductors. *Physical Review B* **77**, 214526 (2008).
- Dolgov, O.V., A.A.Golubov, I.I.Mazin and E.G.Maksimov.* Critical temperature and the giant isotope effect in the presence of paramagnons. *Journal of Physics: Condensed Matter* **20**, 434226 (2008).
- Dolgov, O. see Boeri, L.; Parker, D.
- Doll, K.* Electronic structure of GdN, and the influence of exact exchange. *Journal of Physics: Condensed Matter* **20**, 075214 (2008).
- Doll, K., J.C.Schön and M.Jansen.* Structure prediction based on ab initio simulated annealing. *Journal of Physics: Conference Series* **117**, 12014 (2008).
- Doll, K., J.C.Schön and M.Jansen.* Structure prediction based on ab initio simulated annealing for boron nitride. *Physical Review B* **78**, 144110 (2008).
- Doll, K. see Judele, R.; Klein, M.; Schoenes, J.
- Donkov, A., M.M.Korshunov, I.Eremin, P.Lemmens, V.Gnezdilov, F.C.Chou and C.T.Lin.* Electron-phonon interaction in the lamellar cobaltate Na_xCoO_2 . *Physical Review B* **77**, 100504R (2008).
- Dorfmueller, J. see Esteban, R.; Vogelgesang, R.; Zentgraf, T.
- Drillet, J.F., H.Bueb, R.Dittmeyer, U.Dettlaff-Weglikowska and S.Roth.* The impact of purification and functional analyzing of carbon nanotubes on their catalytic properties in the Direct Methanol Fuel Cell-Anode. *Chemie Ingenieur Technik* **80**, 1711–1718 (2008).
- Epple, L., K.Amsharov, K.Simeonov, I.Dix and M.Jansen.* Crystallographic characterization and identification of a minor isomer of C_{84} fullerene. *Chemical Communications* **2008**, 5610–5612 (2008).
- Errandonea, D., D.Santamaría-Perez, A.Vegas, J.Nuss, M.Jansen, P.Rodríguez-Hernandez and A.Muñoz.* Structural stability of Fe_5Si_3 and Ni_2Si studied by high-pressure x-ray diffraction and ab initio total-energy calculations. *Physical Review B* **77**, 094113 (2008).
- Esteban, R., R.Vogelgesang, J.Dorfmueller, A.Dmitriev, C.Rockstuhl, C.Etrich and K.Kern.* Direct Near-Field Optical Imaging of Higher Order Plasmonic Resonances. *Nano Letters* **8**, 3155–3159 (2008).
- Etchegoin, P.G., M.Cardona, R.Lauck, R.J.H.Clark, J.Serrano and A.H.Romero.* Temperature-Dependent Raman Scattering of Natural and Isotopically Substituted PbS. *physica status solidi (b)* **245**, 1125–1132 (2008).
- Evarestov, R.A. see Alexandrov, V.E.
- Ferrari, A.C., V.Skakalova, C.Po-Wen, A.Bachtold and D.Golberg.* Science and technology of nanotubes, nanowires and graphene – Preface. *Physica E* **40**, VII–VIII (2008).
- Ferrer-Anglada, N., J.P.Puigdemont and S.Roth.* Impedance and quantitative TGA characterization of transparent carbon nanotube thin films. *physica status solidi (b)* **245**, 2276–2279 (2008).
- Fischer, D. see Liebold-Ribeiro, Y.; Pfeiffer, S.
- Fleig, J., H.-R.Kim, J.Jamnik and J.Maier.* Oxygen Reduction Kinetics of Lanthanum Manganite (LSM) Model Cathodes: Partial Pressure Dependence and Rate-Limiting Steps. *Fuel Cells* **8**, 330–337 (2008).

Forment-Aliaga, A., R.T. Weitz, A.S. Sagar, E.J.H. Lee, M. Konuma, M. Burghard and K. Kern. Strong p-Type Doping of Individual Carbon Nanotubes by Prussian Blue Functionalization. *Small* **4**, 1671–1675 (2008).

Fortunatov, A. see Muravev, V.M.

Franceschetti, A., S. Lany and G. Bester. Quantum-dot intermediate-band solar cells with inverted band alignment. *Physica E* **41**, 15–17 (2008).

Frantzeskakis, E., S. Pons, H. Mirhosseini, J. Henk, C.R. Ast and M. Grioni. Tunable Spin Gaps in a Quantum-Confined Geometry. *Physical Review Letters* **101**, 196805 (2008).

Freire, H., E. Correa and A. Ferraz. Breakdown of the Fermi-liquid regime in the two-dimensional Hubbard model from a two-loop field-theoretical renormalization group approach. *Physical Review B* **78**, 125114 (2008).

Gaston, N., B. Paulus, U. Wedig and M. Jansen. Multiple Minima on the Energy Landscape of Elemental Zinc – a Wave Function based Ab-Initio Study. *Physical Review Letters* **100**, 226404 (2008).

Gerhardts, R.R. The effect of screening on current distribution and conductance quantisation in narrow quantum Hall systems. *physica status solidi (b)* **245**, 378–392 (2008).

Gerhardts, R.R. see Nachtwei, G.

Gersch, R., C. Honerkamp and W. Metzner. Superconductivity in the attractive Hubbard model: functional renormalization group analysis. *New Journal of Physics* **10**, 045003 (2008).

Gierz, I., C. Riedl, U. Starke, C.R. Ast and K. Kern. Atomic Hole Doping of Graphene. *Nano Letters* **8**, 4603–4607 (2008).

Glinka, Y.D., D. Maryenko and J.H. Smet. Thickness-tunable terahertz plasma oscillations in a semiconductor slab excited by femtosecond optical pulses. *Physical Review B* **78**, 035328 (2008).

Glocke, S., A. Klümper and J. Sirker. Density-Matrix Renormalization Group for Transfer Matrices: Static and Dynamical Properties of 1D Quantum Systems at Finite Temperature. *Lecture Notes in Physics* **739**, 665–677 (2008).

Gnezdilov, V., P. Lemmens, A.A. Zvyagin, V.O. Chervanovskii, K. Lamonova, Y.G. Pashkevich, R.K. Kremer and H. Berger. Magnetic crossover and complex excitation spectrum of the ferromagnetic/antiferromagnetic spin-1/2 chain system α -TeVO₄. *Physical Review B* **78**, 184407 (2008).

Göktas, O., J. Weber, J. Weis and K. von Klitzing. Alloyed ohmic contacts to two-dimensional electron system in AlGaAs/GaAs heterostructures down to submicron length scale. *Physica E* **40**, 1579–1581 (2008).

Göktas, O. see Isik, N.

Gonnelli, R.S., D. Daghero, D. Delaude, M. Tortello, G.A. Ummarino, V.A. Stepanov, J.S. Kim, R.K. Kremer, A. Sanna, G. Profeta and S. Massidda. Evidence for gap anisotropy in CaC₆ from directional point-contact spectroscopy. *Physical Review Letters* **100**, 207004 (2008).

Grafe, H.J., F. Hammerath, A. Vyalikh, G. Urbanik, V. Kataev, T. Wolf, G. Khaliullin and B. Büchner. Contrasting spin dynamics in Zn- and Ni-doped NdBa₂Cu₃O_{6+y} single crystals from Cu nuclear quadrupole resonance: Evidence for correlations between antiferromagnetism and pseudogap effects. *Physical Review B* **77**, 014522 (2008).

Groma, G.I., J. Hebling, I.Z. Kozma, G. Váró, J. Hauer, J. Kuhl and E. Riedle. Terahertz radiation from bacteriorhodopsin reveals correlated primary electron and proton transfer processes. *Proceedings of the National Academy of Sciences of the United States of America* **105**, 6888–6893 (2008).

Gryaznov, D., J. Fleig and J. Maier. An improved procedure for determining grain boundary diffusion coefficients from averaged concentration profiles. *Journal of Applied Physics* **103**, 063717 (2008).

Gryaznov, D., J. Fleig and J. Maier. Finite element simulation of diffusion into polycrystalline materials. *Solid State Sciences* **10**, 754–760 (2008).

Gunnarsson, O. Fullerides – Competition fix. *Nature Materials* **7**, 176–177 (2008).

Gunnarsson, O. and O. Rösch. Interplay between electron-phonon and Coulomb interactions in cuprates. *Journal of Physics: Condensed Matter* **20**, 043201 (2008).

Gunnarsson, O. see Koch, E.; Reznik, D.; Sangiovanni, G.

Gómez-Navarro, C., M. Burghard and K. Kern. Elastic Properties of Chemically Derived Single Graphene Sheets. *Nano Letters* **8**, 2045–2049 (2008).

Habermeier, H.-U. Ferromagnet-superconductor interfaces: the length scales of interactions. *Journal of Physics: Conference Series* **108**, 012039 (2008).

Habermeier, H.-U. Strategies towards controlling strain-induced mesoscopic phase separation in manganite thin films. *Journal of Physics: Condensed Matter* **20**, 434228 (2008).

Habermeier, H.-U., G.Y. Zhang, X. Liu and P.X. Zhang. Atomic layer thermopile and its application. *International Conference on Thermoelectrics* 21–22 (2008).

Habermeier, H.-U. see Antonakos, A.; Aydogdu, G.H.; Hoppler, J.; Uthayakumar, S.; Uthayakumar, S.; Wang, L.; Wang, Z.H.; Zhang, P.X.

Häffner, M., A. Haug, R.T. Weitz, M. Fleischer, M. Burghard, H. Peisert, T. Chassé and D.P. Kern. E-beam lithography of catalyst patterns for carbon nanotube growth on insulating substrates. *Microelectronic Engineering* **85**, 768–773 (2008).

Häffner, M., A. Heeren, A. Haug, E. Schuster, A. Sagar, M. Fleischer, H. Peisert, M. Burghard, T. Chasse and D.P. Kern. Catalyst patterning for carbon nanotube growth on elevating posts by self-aligned double-layer electron beam lithography. *Journal of Vacuum Science & Technology B* **26**, 2447–2450 (2008).

Hannemann, A., C. Schön and M. Jansen. Thermodynamic stability of solid and fluid phases in the $\text{Si}_3\text{B}_3\text{N}_7$ system. *Philosophical Magazine* **88**, 1037–1057 (2008).

Haug, D. see Hinkov, V.

Haverkort, M. see Veenendaal van, M.

Heid, R., K.P. Bohnen, R. Zeyher and D. Manske. Momentum dependence of the electron-phonon coupling and self-energy effects in superconducting $\text{YBa}_2\text{Cu}_3\text{O}_7$ within the local density approximation. *Physical Review Letters* **100**, 137001 (2008).

Heifets, E. see Kotomin, E.A.; Piskunov, S.

Held, K., O.K. Andersen, M. Feldbacher, A. Yamasaki and Y.-F. Yang. Bandstructure meets many-body theory: The LDA+DMFT method. *Journal of Physics: Condensed Matter* **20**, 064202 (2008).

Held, K., A.A. Katanin and A. Toschi. Dynamical Vertex Approximation – An Introduction. *Progress of Theoretical Physics, Supplement* **2008**, 117–133 (2008).

Herrera Diez, L., R.K. Kremer, A. Enders, M. Rössle, E. Arac, J. Honolka, K. Kern, E. Placidi and F. Arciprete. Complex domain-wall dynamics in compressively strained $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ epilayers. *Physical Review B* **78**, 155310 (2008).

Herzog, A. see Sirker, J.

Hetzl, M. see Virojanadara, C.

Hinkov, V., D. Haug, B. Fauqué, P. Bourges, Y. Sidis, A. Ivanov, C. Bernhard, C.T. Lin and B. Keimer. Electronic Liquid Crystal State in the High-Temperature Superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{6.45}$. *Science* **319**, 597–600 (2008).

Hinkov, V. see White, J.S.

Hinrichsen, B., R.E. Dinnebier and M. Jansen. Two-dimensional Diffraction Using Area Detectors. In: *Powder Diffraction Theory and Practice*, 414–437 (2008); R.E. Dinnebier, S.J.L. Billing (Eds.). Royal Society of Chemistry Publishing, Cambridge, UK.

Hinrichsen, B., R.E. Dinnebier, H.Z. Liu and M. Jansen. The high pressure crystal structures of tin sulphate: a case study for maximal information recovery from 2D powder diffraction data. *Zeitschrift für Kristallographie* **223**, 195–203 (2008).

Hoch, C. and A. Simon. Cs₂Hg₂₇, the mercury-richest amalgam with close relationship to the Bergman phases. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 853–856 (2008).

Hoch, C. and A. Simon. Hexaaquadibromideeuropium(III) bromide, [EuBr₂(H₂O)₆]Br. *Acta Crystallographica E* **64**, i35 (2008).

Hoch, C. see Lefevre, C.; Mattausch, H.; Reckeweg, O.; Zheng, C.

Honolka, J. see Brihuega, I.; Herrera Diez, L.; Skomski, R.; Zhang, J.

Hoppler, J., J. Stahn, H. Bouyanfif, V.K. Malik, B.D. Patterson, P.R. Willmott, G. Cristiani, H.-U. Habermeyer and C. Bernhard. X-ray study of structural domains in the near-surface region of SrTiO₃ substrates with Y_{0.6}Pr_{0.4}Ba₂Cu₃O₇/La_{2/3}Ca_{1/3}MnO₃ superlattices grown on top. *Physical Review B* **78**, 134111 (2008).

Hore, S., G. Kaiser, Y.-S. Hu, A. Schulz, M. Konuma, G. Götz, W. Sigle, A. Verhoeven and J. Maier. Carbonization of polyethylene on gold oxide. *Journal of Materials Chemistry* **18**, 5589–5591 (2008).

Hornbostel, B., U. Leute, P. Pötschke, J. Kotz, D. Kornfeld, P.-W. Chiu and S. Roth. Attenuation of electromagnetic waves by carbon nanotube composites. *Physica E* **40**, 2425–2429 (2008).

Hornbostel, B., P. Pötschke, J. Kotz and S. Roth. Mechanical properties of triple composites of polycarbonate, single-walled carbon nanotubes and carbon fibres. *Physica E* **40**, 2434–2439 (2008).

Horsch, P., A.M. Oleś, L.F. Feiner and G. Khaliullin. Evolution of spin-orbital-lattice coupling in the RVO₃ perovskites. *Physical Review Letters* **100**, 167205 (2008).

Horsch, P. see Daghofer, M.; Sirker, J.; Wohlfeld, K.

Hu, Y.-S., R. Demir-Cakan, M.-M. Titirici, J.-O. Müller, R. Schlögl, M. Antonietti and J. Maier. Superior storage performance of a Si@SiO_x/C nanocomposite as anode material for lithium-ion batteries. *Angewandte Chemie International Edition* **47**, 1645–1649 (2008).

Huang, Z., W. Bensch, W. Sigle, P.A. van Aken, L. Kienle, T. Vitoya, H. Modrow and T. Ressler. The modification of MoO₃ nanoparticles supported on mesoporous SBA-15: characterization using X-ray scattering, N₂ physisorption, transmission electron microscopy, high-angle annular darkfield technique, Raman and XAFS spectroscopy. *Journal of Materials Science* **43**, 244–253 (2008).

Huang, Z.D., W. Bensch, L. Kienle, S. Fuentes, G. Alonso and C. Ornelas. SBA-15 as support for MoS₂ and Co-MoS₂ catalysts derived from thiomolybdate complexes in the reaction of HDS of DBT. *Catalysis Letters* **122**, 57–67 (2008).

Huang, Z.D., W. Bensch, L. Kienle, S. Fuentes, G. Alonso and C. Ornelas. Preparation and characterization of SBA-15 supported cobalt-molybdenum sulfide catalysts for HDS reaction: An all sulfide route to hydrodesulfurization catalysts. *Catalysis Letters* **124**, 24–33 (2008).

Hübel, A., K. Held, J. Weis and K. von Klitzing. Correlated Electron Tunneling through Two Separate Quantum Dot Systems with Strong Capacitive Interdot Coupling. *Physical Review Letters* **101**, 186804 (2008).

Hübel, A., J. Weis and K. von Klitzing. Precise experimental characterization of a double quantum dot system with strong capacitive interdot coupling. *Physica E* **40**, 1573–1575 (2008).

Hugonin, Z., M. Johnsson, S. Lidin, D. Wulferding, P. Lemmens and R.K. Kremer. Anomalous low-temperature behavior of the Co dimers in the oxo-halide CoSb₂O₃Br₂. *Journal of Solid State Chemistry* **181**, 2776–2782 (2008).

Hulman, M., M. Haluska, G. Scalia, D. Obergfell and S. Roth. Effects of Charge Impurities and Laser Energy on Raman Spectra of Graphene. *Nano Letters* **8**, 3594–3597 (2008).

Huppertz, H., P. Kroll and R. Merkle. *Festkörperchemie 2007. Nachrichten aus der Chemie* **56**, 258–268 (2008).

Ignatenko, A.N., A.A. Katanin and V.Y. Irkhin. Strong short-range magnetic order in a frustrated fcc lattice and its possible role in the iron structural transformation. *JETP Letters* **87**, 555–559 (2008).

Isik, N., M. Bichler, S.F. Roth, A.F.I. Morral, O. Göktas and M. Grayson. Shadow modulated two-dimensional heterostructures using vertical pillars. *Applied Physics Letters* **92**, 173505 (2008).

Jackeli, G. and G. Khaliullin. Spin, Orbital, and Charge Order at the Interface between Correlated Oxides. *Physical Review Letters* **101**, 216804 (2008).

Jackeli, G. and D.I. Khomskii. Classical Dimers and Dimerized Superstructure in an Orbitaly Degenerate Honeycomb Antiferromagnet. *Physical Review Letters* **100**, 147203 (2008).

Jakubczyk, P., P. Strack, A.A. Katanin and W. Metzner. Renormalization group for phases with broken discrete symmetry near quantum critical points. *Physical Review B* **77**, 195120 (2008).

Jamnik, J. see Fleig, J.

Jansen, M. The Deductive Approach to Chemistry, a Paradigm Shift. In: *Turning points in Solid-State, Materials and Surface Science*, 22–50 (2008); K.M. Harris, P.P. Edwards (Eds.). RSC Publishing, Cambridge, UK.

Jansen, M. The chemistry of gold as an anion. *Chemical Society Reviews* **37**, 1826–1835 (2008).

Jansen, M. and U. Wedig. A Piece of the Picture-Misunderstanding of Chemical Concepts. *Angewandte Chemie International Edition* **47**, 10026–10029 (2008).

Jansen, M. see Amsharov, K. Y.; Čančarević, Ž.P.; Dinnebier, R.E.; Doll, K.; Epple, L.; Errandonea, D.; Gaston, N.; Hannemann, A.; Hinrichsen, B.; Kandaiah, S.; Kazin, P.E.; Klein, W.; Lancaster, T.; Liebold-Ribeiro, Y.; Liu, X.-X.; Moustafa, A.M.; Mühle, C.; Müller, U.; Nuss, H.; Oberndorfer, C.P.M.; Pentin, I.V.; Pfeiffer, S.; Pitzschke, D.; Raichle, M.; Schmidt, C.L.; Schön, J.C.; Schulz-Dobrick, M.; Sehlleier, Y.H.; Sharma, S.; Shopova, D.; Simeonov, K.; Wawrzynska, E.; Weinmann, M.; Weitz, R.T.; Yoshida, H.

Jauch, W. and M. Reehuis. Electron density distribution in ferromagnetic nickel: A γ -ray diffraction study. *Physical Review B* **78**, 235113 (2008).

Jepsen, O. see Antonov, V.N.; Kent, P.R.C.; Liu, G.Q.; Sushkov, O.P.

Jochym, P.T., K. Parlinski and A.M. Oleś. Ab initio calculations of magnetic structure and lattice dynamics of Fe/Pt multilayers. *European Physical Journal B* **61**, 173–179 (2008).

Johnsson, M. see Hugonin, Z.

Judele, R., M.J. Dix, S. Laschat, A. Baro, M. Nimtz, D. Menzel, J. Schoenes, K. Doll, G. Zwicknagl and M. Niemeyer. Novel Azamacrocycles as potential precursors for metallomesogens: synthesis, conformational analysis and magnetic properties of their LnIII, CuII and FeIII complexes. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 299–310 (2008).

Julien, M.H., C. de Vaulx, H. Mayaffre, C. Berthier, M. Horvatić, V. Simonet, J. Wooldridge, G. Balakrishnan, M.R. Lees, D.P. Chen, C.T. Lin and P. Lejay. Electronic texture of the thermoelectric oxide $\text{Na}_{0.75}\text{CoO}_2$. *Physical Review Letters* **1**, 096405 (2008).

Kaempgen, M., M. Lebert, M. Haluska, N. Nicoloso and S. Roth. Sonochemical optimization of the conductivity of single wall carbon nanotube networks. *Advanced Materials* **20**, 616–620 (2008).

Kaempgen, M., M. Lebert, N. Nicoloso and S. Roth. Multifunctional carbon nanotube networks for fuel cells. *Applied Physics Letters* **92**, 094103 (2008).

Kaempgen, M., M. Lebert, S. Roth, M. Soehn and N. Nicoloso. Fuel cells based on multifunctional carbon nanotube networks. *Journal of Power Sources* **180**, 755–759 (2008).

Kaiser, A.B., V. Skakalova and S. Roth. Modelling conduction in carbon nanotube networks with different thickness, chemical treatment and irradiation. *Physica E* **40**, 2311–2318 (2008).

Kanchana, V., G. Vaitheeswaran and A. Svane. Calculated structural, elastic and electronic properties of SrCl_2 . *Journal of Alloys and Compounds* **455**, 480–484 (2008).

Kandaiah, S., E.-M. Peters and M. Jansen. Electrocrystallization of Tetra- and Hexa-coordinated Silver(II) Compounds Based on 4,4'-Dimethyl-2,2'-Bipyridine Ligand – Single Crystal Structures and Magnetic Studies. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 2483–2486 (2008).

Karachevtsev, V.A., G.O. Gladchenko, M.V. Karachevtsev, A.Y. Glamazda, V.S. Leontiev, O.S. Lytvyn and U. Dettlaff-Weglikowska. RNA-Wrapped Carbon Nanotubes Aggregation Induced by Polymer Hybridization. *Molecular Crystals and Liquid Crystals* **497**, 339–351 (2008).

Kaskhedikar, N. see Cui, G.

Kasper, N.V., P. Wochner, A. Vigliante, H. Dosch, G. Jakob, H.D. Carstanjen and R.K. Kremer. Epitaxial growth and properties of (001)-oriented TbBaCo₂O_{6-δ} films. *Journal of Applied Physics* **103**, 013907 (2008).

Katanin, A.A. and V.Y. Irkhin. Spectral functions of two-dimensional systems with coupling of electrons to collective or localized spin degrees of freedom. *Physical Review B* **77**, 115129 (2008).

Katanin, A. see Held, K.; Ignatenko, A.N.; Jakubczyk, P.; Yamase, H.

Katsaros, G., J. Tersoff, M. Stoffel, A. Rastelli, P. Acosta-Diaz, G.S. Kar, G. Costantini, O.G. Schmidt and K. Kern. Positioning of strained islands by interaction with surface nanogrooves. *Physical Review Letters* **101**, 096103 (2008).

Kazin, P.E., L.A. Trusov, D.D. Zaitsev, Y.D. Tretyakov and M. Jansen. Formation of submicron-sized SrFe_{12-x}Al_xO₁₉ with very high coercivity. *Journal of Magnetism and Magnetic Materials* **320**, 1068–1072 (2008).

Kazin, P.E., M.A. Zykina, Y.D. Tretyakov and M. Jansen. Synthesis and properties of colored copper-containing apatites of composition Ca₅(PO₄)₃Cu_yO_{y+δ}(OH)_{0.5-y-δ}X_{0.5} (X = OH, F, Cl). *Russian Journal of Inorganic Chemistry* **53**, 362–366 (2008).

Keimer, B. see Aynajian, P.; Bohnenbuck, B.; Hinkov, V.; Raichle, M.; Reehuis, M.; Ulrich, C.; Yu, L.

Keller, H., A. Bussmann-Holder and K.A. Müller. Jahn-Teller physics and high-T_c superconductivity. *Materials Today* **11**, 38–46 (2008).

Keller, T. see Aynajian, P.; Bouwman, W.G.

Kent, P.R.C., T. Saha-Dasgupta, O. Jepsen, O.K. Andersen, A. Macridin, T.A. Maier, M. Jarrell and T.C. Schulthess. Combined density-functional and dynamical cluster quantum Monte Carlo calculations for three-band Hubbard models for hole-doped cuprate superconductors. *Physical Review B* **78**, 035132 (2008).

Kern, K. see Ast, C.R.; Balasubramanian, K.; Balci, S.; Brihuega, I.; Esteban, R.; Forment-Aliaga, A.; Gierz, I.; Gómez-Navarro, C.; Herrera Diez, L.; Katsaros, G.; Klappenberger, F.; Langner, A.; Lee, E.J.H.; Negulyaev, N.N.; Rastelli, A.; Schlickum, U.; Scolari, M.; Singh, G.; Skomski, R.; Sundaram, R.S.; Tait, S.L.; Vitali, L.; Vogelgesang, R.; Wahl, P.; Weitz, R.T.; Yang, Y.A.; Zentgraf, T.; Zhang, J.; Zhu, M.; Zurek, E.

Khaliullin, G. and J. Chaloupka. Origin of strong correlations and superconductivity in Na_xCoO₂. *Physical Review B* **77**, 104532 (2008).

Khaliullin, G. see Chaloupka, J.; Daghofer, M.; Grafe, H.J.; Horsch, P.; Jackeli, G.; Mori, M.

Khasanov, R., A. Shengelaya, D. Di Castro, E. Morenzoni, A. Maisuradze, I.M. Savic, K. Conder, E. Pomjakushina, A. Bussmann-Holder and H. Keller. Oxygen isotope effects within the phase diagram of Y_{1-x}Pr_xBa₂Cu₃O_{7-δ}. *Physical Review Letters* **101**, 077001 (2008).

Khasanov, R., A. Shengelaya, J. Karpinski, A. Bussmann-Holder, H. Keller and K.A. Müller. s-Wave Symmetry Along the c-Axis and s + d In-plane Superconductivity in Bulk YBa₂Cu₄O₈. *Journal of Superconductivity and Novel Magnetism* **21**, 81–85 (2008).

Khasanov, R., S. Strässle, K. Conder, E. Pomjakushina, A. Bussmann-Holder and H. Keller. Universal correlations of isotope effects in Y_{1-x}Pr_xBa₂Cu₃O_{7-δ}. *Physical Review B* **77**, 104530 (2008).

Kienle, L., M.C. Schaloske, H. Mattausch, V. Duppel and A. Simon. Discoveries in real crystals of rare earth metal compounds by electron microscopy – Lamellar intergrowth and domains of phasoids. *Solid State Sciences* **10**, 401–407 (2008).

Kim, J.S. see Boeri, L.; Gonnelli, R.S.; Nagel, U.

Kiravittaya, S., M. Benyoucef, R. Zapf-Gottwick, A. Rastelli and O.G. Schmidt. Optical fine structure of single ordered GaAs quantum dots. *Physica E* **40**, 1909–1912 (2008).

Kiravittaya, S., A. Bernardi, A. Rastelli, R. Songmuang, D.J. Thurmer, M. Benyoucef and O.G. Schmidt. Numerical investigation of optical response from rolled-up microtube resonator and its application. In: Proceedings of the 10th Anniversary International Conference, 45–45 (2008); Athens, Greece, 2008. National Institute of Telecommunications, Warsaw; Athens Information Technology; IEEE/LEOS Poland Chapter.

Kiravittaya, S. and O.G. Schmidt. Quantum-dot crystal defects. *Applied Physics Letters* **93**, 173109 (2008).

Kircan, M. Impurity resonant state in *d*-wave superconductors: in favor of a Kondo-like response. *Physical Review B* **77**, 214508 (2008).

Klappenberger, F., M.E. Cañas-Ventura, S. Clair, S. Pons, U. Schlickum, Z.-R. Qu, T. Strunskus, A. Comisso, C. Wöll, H. Brune, K. Kern, A. De Vita, M. Ruben and J.V. Barth. Does the surface matter? Hydrogen bonded chain formation of an oxalic amide derivative in two and three dimensional environment. *ChemPhysChem* **9**, 2522–2530 (2008).

Klauk, H. Nanowires' display of potential. *Nature* **451**, 533–534 (2008).

Klauk, H. see Deneke, C.; Sekitani, T.; Weitz, R.T.; Zschieschang, U.

Klein, M., D. Zur, D. Menzel, J. Schoenes, K. Doll, J. Röder and F. Reinert. Evidence for Itineracy in the Anticipated Kondo Insulator FeSi: A Quantitative Determination of the Band Renormalization. *Physical Review Letters* **101**, 046406 (2008).

Klein, W. and M. Jansen. Synthesis and Crystal Structure of Silver Nesosilicate, Ag₄SiO₄. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1077–1081 (2008).

Klitzing von, K. see Andreev, I.V.; Göktas, O.; Hübel, A.; Lee, D.S.; Martin, J.; Muravev, V.M.; Ospald, F.; Stern, O.; Tiemann, L.; Weber, J.; Zhuravlev, A.S.

Ko, V., K.L. Teo, T. Liew, T.C. Chong, T. Liu, A.T.S. Wee, A.Y. Du, M. Stoffel and O.G. Schmidt. Correlation of structural and magnetic properties of ferromagnetic Mn-implanted Si_{1-x}Ge_x films. *Journal of Applied Physics* **103**, 053912 (2008).

Koch, E., G. Sangiovanni and O. Gunnarsson. Sum rules and bath parametrization for quantum cluster theories. *Physical Review B* **78**, 115102 (2008).

Köhler, J. Square-Planar Coordinated Iron in the Layered Oxoferrate(II) SrFeO₂. *Angewandte Chemie International Edition* **47**, 4470–4472 (2008).

Köhler, J. and M.-H. Whangbo. Late transition metal anions acting as p-metal elements. *Solid State Sciences* **10**, 444–449 (2008).

Köhler, J. and M.H. Whangbo. Electronic structure study of the [Ag-Ag]⁴⁻, [Au-Au]⁴⁻, and [Hg-Hg]²⁻ zintl anions in the intermetallic compounds Yb₃Ag₂, Ca₅Au₄, and Ca₃Hg₂: Transition metal anions as p-metal elements. *Chemistry of Materials* **20**, 2751–2756 (2008).

Köhler, J. see Deng, S.; Lee, C.; Mattausch, H.J.

Konuma, M. see Forment-Aliaga, A.; Hore, S.; Oberndorfer, C.P.M.; Rahmati, B.; Yang, A.; Zhu, M.

Kotomin, E.A., Y.A. Mastrikov, E. Heifets and J. Maier. Adsorption of atomic and molecular oxygen on the LaMnO₃(001) surface: *ab initio* supercell calculations and thermodynamics. *Physical Chemistry Chemical Physics* **10**, 4644–4649 (2008).

Kotomin, E.A., Y.A. Mastrikov, E. Heifets, R. Merkle, J. Fleig, J. Maier, A. Gordon and J. Felsteiner. First-Principles Modeling of LaMnO₃ SOFC Cathode Material. *ECS Transactions* **13**, 301–306 (2008).

Kotomin, E.A., S. Piskunov, Y.F. Zhukovskii, R.I. Eglitis, A. Gopejenko and D.E. Ellis. The electronic properties of an oxygen vacancy at ZrO₂-terminated (001) surfaces of a cubic PbZrO₃: computer simulations from the first principles. *Physical Chemistry Chemical Physics* **10**, 4258–4263 (2008).

Kotomin, E. see Alexandrov, V.E.; Piskunov, S.; Zhukovskii, Y.F.

Kozlova, S.G., S.P. Gabuda, G.A. Berezovskii, D.P. Pischur, Y.V. Mironov, A. Simon and V.E. Fedorov. Quantum chemical study and low-temperature calorimetry of phase transition $V_4S_9Br_4$. *Journal of Solid State Chemistry* **181**, 2877–2881 (2008).

Krauss, B. see Lee, D.S.

Kremer, R. see Boeri, L.; Gnezdilov, V.; Gonnelli, R.S.; Herrera Diez, L.; Hugonin, Z.; Kasper, N.V.; Lefevre, C.; Liu, X.; Nagel, U.; Romero, A.H.; Ryazanov, M.; Serrano, J.; Wontcheu, J.

Kreuer, K.-D., M. Schuster, B. Obliers, O. Diat, U. Traub, A. Fuchs, U. Klock, S.J. Paddison and J. Maier. Short-side-chain proton conducting perfluorosulfonic acid ionomers: Why they perform better in PEM fuel cells. *Journal of Power Sources* **178**, 499–509 (2008).

Kreuer, K.-D. see Beyazyildirim, S.; Schuster, M.; Weber, J.

Krokos, E. see Simeonov, K.

Krstic, V., D. Obergfell, S. Hensel, G.L.J.A. Rikken, J.H. Blokland, M.S. Ferreira and S. Roth. Graphene-Metal Interface: Two-Terminal Resistance of Low-Mobility Graphene in High Magnetic Fields. *Nano Letters* **8**, 1700–1703 (2008).

Kukushkin, I. see Andreev, I.V.; Muravev, V.M.; Zhuravlev, A.S.

Kunc, K., I. Loa and K. Syassen. High-pressure phases of lithia Li_2O : First-principles calculations. *Physical Review B* **77**, 094110 (2008).

Kunstmann, J. see Quandt, A.

Kuru, Y. see Aydogdu, G.H.

Lagerwall, J.P.F., J.T. McCann, E. Formo, G. Scalia and Y. Xia. Coaxial electrospinning of microfibres with liquid crystal in the core. *Chemical Communications* **2008**, 5420–5422 (2008).

Lagerwall, J.P.F. and G. Scalia. Carbon nanotubes in liquid crystals. *Journal of Materials Chemistry* **18**, 2890–2898 (2008).

Lancaster, T., S.J. Blundell, P.J. Baker, M.L. Brooks, W. Hayes, F.L. Pratt, R. Coldea, T. Sörgel and M. Jansen. Anomalous temperature evolution of the internal magnetic field distribution in the charge ordered triangular antiferromagnet $AgNiO_2$. *Physical Review Letters* **100**, 017206 (2008).

Langner, A., S.L. Tait, N. Lin, R. Chandrasekar, M. Ruben and K. Kern. Ordering and Stabilization of Metal-Organic Coordination Chains by Hierarchical Assembly through Hydrogen Bonding at a Surface. *Angewandte Chemie International Edition* **47**, 8835–8838 (2008).

Langner, A. see Tait, S.L.

Laroze, D., P. Vargas, C. Cortes and G. Gutierrez. Dynamics of two interacting dipoles. *Journal of Magnetism and Magnetic Materials* **320**, 1440–1448 (2008).

Lee, C., M.-H. Whangbo and J. Köhler. Analysis of Electronic structures and Chemical Bonding of Metal-Rich Compounds. I. Density Functional Study of Pt Metal, $LiPt_2$, $LiPt$ and Li_2Pt . *Journal of Computational Chemistry* **29**, 2154–2160 (2008).

Lee, D.S., C. Riedl, B. Krauss, K. von Klitzing, U. Starke and J.H. Smet. Raman Spectra of Epitaxial Graphene on SiC and of Epitaxial Graphene Transferred to SiO_2 . *Nano Letters* **8**, 4320–4325 (2008).

Lee, D.S. see Yu, H.Y.

Lee, E.J.H., K. Balasubramanian, R.T. Weitz, M. Burghard and K. Kern. Contact and edge effects in graphene devices. *Nature Nanotechnology* **3**, 486–490 (2008).

Lee, E. see Balasubramanian, K.; Forment-Aliaga, A.

Lee, S.H., M. Weinmann, P. Gerstel, G. Rixecker, S.C. Choi and F. Aldinger. Novel precursor-derived Al-C-N-(O)-based ceramic additive for the low-temperature pressureless sintering of silicon nitride. *Materials Research* **23**, 1713–1721 (2008).

Lefevre, C., C. Hoch, R.K. Kremer and A. Simon. Structures and magnetic properties of some layered iodides R_2Co_2I ($R = La, Y, Pr, Nd, Tb-Ho$). *Solid State Sciences* **10**, 1625–1633 (2008).

Leininger, P. see Bohnenbuck, B.

Leoni, S., A.N. Yaresko, N. Perkins, H. Rosner and L. Craco. Orbital-spin order and the origin of structural distortion in $MgTi_2O_4$. *Physical Review B* **78**, 125105 (2008).

Levi, M.D., D. Aurbach and J. Maier. Electrochemically driven first-order phase transitions caused by elastic responses of ion-insertion electrodes under external kinetic control. *Journal of Electroanalytical Chemistry* **624**, 251–261 (2008).

Li, Y., L. Fernandez-Recio, P. Gerstel, V. Srot, P.A. van Aken, G. Kaiser, M. Burghard and J. Bill. Chemical modification of single-walled carbon nanotubes for the reinforcement of precursor-derived ceramics. *Chemistry of Materials* **20**, 5593–5599 (2008).

Liang, C.W., W.Y. Lee, C.H. Tsai and S. Roth. In-situ observation on Raman spectra and transport properties of single-wall carbon nanotubes. *physica status solidi (b)* **245**, 2209–2211 (2008).

Liang, C.W. and S. Roth. Electrical and optical transport of GaAs/carbon nanotube heterojunctions. *Nano Letters* **8**, 1809–1812 (2008).

Liang, C.W., S. Sahakalkan and S. Roth. Electrical characterization of the mutual influences between gas molecules and single-walled carbon nanotubes. *Small* **4**, 432–436 (2008).

Liebold-Ribeiro, Y., D. Fischer and M. Jansen. Experimental substantiation of the ‘energy landscape concept’ for solids: Synthesis of a new modification of lithium bromide. *Angewandte Chemie International Edition* **47**, 4428–4431 (2008).

Lima, M.D., M.J. de Andrade, C.P. Bergmann and S. Roth. Thin, conductive, carbon nanotube networks over transparent substrates by electrophoretic deposition. *Journal of Materials Chemistry* **18**, 776–779 (2008).

Lin, C. see Amin, R.; Bernhard, C.; Chen, D.P.; Donkov, A.; Hinkov, V.; Julien, M.H.; Matano, K.; Rhyee, J.S.; Sun, G.L.; Yu, L.

Liu, G.Q., V.N. Antonov, O. Jepsen and O.K. Andersen. Coulomb-Enhanced Spin-Orbit Splitting: The Missing Piece in the Sr_2RhO_4 Puzzle. *Physical Review Letters* **101**, 026408 (2008).

Liu, X., R. Dronskowski, R.K. Kremer, M. Ahrens, C. Lee and M.-H. Whangbo. Characterization of the magnetic and structural properties of copper carbodiimide, $CuNCN$, by neutron diffraction and first-principles evaluations of its spin exchange interactions. *The Journal of Physical Chemistry* **112**, 11013 (2008).

Liu, X.-X., C.P.M. Oberndorfer and M. Jansen. Electrochemical De-/intercalation of Silver for Ag_2NiO_2 and $AgNiO_2$. *Journal of the Electrochemical Society* **155**, E1–E6 (2008).

Lohmann, T. see Martin, J.

Lukachuk, M., L. Kienle, C. Zheng, H.J. Mattausch and A. Simon. $Gd_7I_{12}Zn$: A Group 12 Atom in the Octahedral Gd_6 Cluster. *Inorganic Chemistry* **47**, 4656–4660 (2008).

Maier, J. Space charge effects in confined ceramic systems. *International Journal of Materials Research* **99**, 24–25 (2008).

Maier, J. Neue Wege der Batterieforschung. In: *Zukunft der Energie*, 282–294 (2008); P. Gruss, F. Schüth (Eds.). Verlag C.H. Beck, München, Germany.

Maier, J. and R. Amin. Defect chemistry of $LiFePO_4$. *Journal of The Electrochemical Society* **155**, A339–A344 (2008).

Maier, J. see Alexandrov, V.E.; Amin, R.; Baumann, F.S.; Beyazyildirim, S.; Cui, G.; Delmer, O.; Demir-Cakan, R.; Fleig, J.; Gryaznov, D.; Hore, S.; Hu, Y.-S.; Kotomin, E.A.; Kreuer, K.-D.; Levi, M.D.; Merkle, R.; Rahmati, B.; Riess, I.; Sahner, K.; Schuster, M.; Wang, L.; Weber, J.; Zhang, J.; Zhi, L.

Malachias, A., S. Kycia, R. Magalhaes-Paniago and G. Medeiros-Ribeiro. X-ray analysis of strain, composition and elastic energy in Ge islands on $Si(001)$. *International Journal of Nanotechnology* **5**, 1340–1370 (2008).

Malachias, A., Y.F. Mei, R.K. Annabattula, C. Deneke, P.R. Onck and O.G. Schmidt. Wrinkled-up nanochannel networks: Long-range ordering, scalability, and X-ray investigation. *ACS Nano* **2**, 1715–1721 (2008).

Malinowski, N. see Singh, G.; Zurek, E.

Manske, D. and P.M.R. Brydon. Green's function analysis in triplet superconductor-ferromagnet-triplet superconductor Josephson junctions. *Journal of Physics: Conference Series* **108**, 012042 (2008).

Manske, D. see Brydon, P.M.R.; Heid, R.; Unterhinninghofen, J.

Marini, C., E. Arcangeletti, D. Di Castro, L. Baldassare, A. Perucchi, S. Lupi, L. Malavasi, L. Boeri, E. Pomjakushina, K. Conder and P. Postorino. Optical properties of $V_{1-x}Cr_xO_2$ compounds under high pressure. *Physical Review B* **77**, 235111 (2008).

Martin, J., N. Akerman, G. Ulbricht, T. Lohmann, J.H. Smet, K. von Klitzing and A. Yacoby. Observation of electron-hole puddles in graphene using a scanning single-electron transistor. *Nature Physics* **4**, 144–148 (2008).

Marx, W. and A. Barth. Carbon nanotubes – A scientometric study. *physica status solidi (b)* **245**, 2347–2351 (2008).

Marx, W. see Barth, A.; Cardona, M.

Maryenko, D. see Glinka, Y.D.; Ospald, F.

Matano, K., C.T. Lin and G.-q. Zheng. Hydration-induced anisotropic spin fluctuations in $Na_xCoO_2 \cdot 1.3H_2O$ superconductor. *Europhysics Letters* **84**, 57010 (2008).

Mattausch, Hj., C. Hoch and A. Simon. The lanthanumiodideethanide $o-La_5I_9(C_2)$ – The orthorhombic high temperature modification. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 641–645 (2008).

Mattausch, Hj., O. Oeckler and A. Simon. Rare earth halides Ln_4X_5Z . Part 3: The chloride $La_4Cl_5B_4$ – Preparation, structure, and relation to $La_4Br_5B_4$, $La_4I_5B_4$. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 503–506 (2008).

Mattausch, Hj., M.C. Schaloske, C. Hoch and A. Simon. Rare earth halides Ln_4X_5Z . Part 2: An orthorhombic variant of Ln_4X_5Z structure. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 498–502 (2008).

Mattausch, Hj., M.C. Schaloske, C. Hoch, C. Zheng and A. Simon. Rare earth halides Ln_4X_5Z . Part 1: C and/or C_2 in Ln_4X_5Z . *Zeitschrift für anorganische und allgemeine Chemie* **634**, 491–497 (2008).

Mattausch, Hj. and A. Simon. Crystal structure of trilanthanum-triiodide-monoethanide, $C_2I_3La_3$. *Zeitschrift für Kristallographie: New Crystal Structures* **223**, 107–108 (2008).

Mattausch, Hj., A. Simon, L. Kienle, J. Köhler, C. Hoch and J. Nuss. Sheets of La_6C_2 Octahedra in Lanthanum Carbide Chlorides – undulated and plane. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 2765–2776 (2008).

Mattausch, Hj. see Babizhetskyy, V.; Kienle, L.; Lukachuk, M.; Schaloske, M.C.; Weber, T.; Zheng, C.

Mazin, I.I., M.D. Johannes, L. Boeri, K. Koepf and D.J. Singh. Problems with reconciling density functional theory calculations with experiment in ferropnictides. *Physical Review B* **78**, 085104 (2008).

Mei, Y.F., G.S. Huang, A.A. Solovev, E.B. Urena, I. Moench, F. Ding, T. Reindl, R.K.Y. Fu, P.K. Chu and O.G. Schmidt. Versatile Approach for Integrative and Functionalized Tubes by Strain Engineering of Nanomembranes on Polymers. *Advanced Materials* **20**, 4085–4090 (2008).

Mendach, S., S. Kiravittaya, A. Rastelli, M. Benyoucef, R. Songmuang and O.G. Schmidt. Bidirectional wavelength tuning of individual semiconductor quantum dots in a flexible rolled-up microtube. *Physical Review B* **78**, 035317 (2008).

Merkle, R. and J. Maier. Wie wird Sauerstoff in Oxide eingebaut? Kinetische Studie einer “simplen” Feststoffreaktion am Modellmaterial $SrTiO_3$. *Angewandte Chemie* **120**, 3936–3958 (2008).

Merkle, R. and J. Maier. How is Oxygen Incorporated into Oxides? A Comprehensive Kinetic Study of a Simple Solid-State Reaction with $SrTiO_3$ as a Model Material. *Angewandte Chemie International Edition* **47**, 3874–3894 (2008).

- Merkle, R.E. see Huppertz, H.; Kotomin, E.A.; Sahner, K.; Wang, L.
- Metzner, W. and L. Dell'Anna. Non-Fermi Liquid Behavior from Critical Fermi Surface Fluctuations. *Progress of Theoretical Physics, Supplement* **2008**, 22–43 (2008).
- Metzner, W. see Gersch, R.; Jakubczyk, P.; Strack, P.
- Michaelis, C. see Brihuega, I.; Zhang, J.
- Mitzkus, C., W. Wegscheider, V. Umanski, K. Eberl and D. Weiss. Interaction-induced temperature-dependent switching of the phase of commensurability oscillations in a one-dimensional lateral superlattice. *physica status solidi (b)* **245**, 303–308 (2008).
- Moreschini, L., A. Bendounan, C.R. Ast, F. Reinert, M. Falub and M. Grioni. Effect of rare-gas adsorption on the spin-orbit split bands of a surface alloy: Xe on Ag(111)-(($\sqrt{3} \times \sqrt{3}$)R30°)-Bi. *Physical Review B* **77**, 115407 (2008).
- Mori, M., G. Khaliullin, T. Tohyama and S. Maekawa. Origin of the Spatial Variation of the Pairing Gap in Bi-Based High Temperature Cuprate Superconductors. *Physical Review Letters* **101**, 247003 (2008).
- Moustafa, A.M., R.E. Dinnebier, S.T. Nasser and M. Jansen. Synthesis and crystal structure determination of two dispiro compounds from laboratory x-ray powder diffraction data. *Crystal Research and Technology* **43**, 205–213 (2008).
- Mühle, C. and M. Jansen. Zur Löslichkeit von Cobalt(IV) in Li_8SiO_6 . *Zeitschrift für anorganische und allgemeine Chemie* **634**, 37–38 (2008).
- Mühle, C. and M. Jansen. On the solubility of Cobalt(IV) in Li_8SiO_6 . *Zeitschrift für anorganische und allgemeine Chemie* **634**, 37–38 (2008).
- Müller, U., M. Weinmann and M. Jansen. $\text{Cl}_2\text{MeSi-NH-BCl}_2$ and $\text{ClMe}_2\text{Si-NH-BCl}_2$. Novel processable single source precursors of amorphous Si/C/B/N ceramics. *Journal of Materials Chemistry* **18**, 3671–3679 (2008).
- Muravev, V.M., I.V. Andreev, I.V. Kukushkin, J.H. Smet and K. von Klitzing. Experimental determination of the mean free path of screened edge magnetoplasmons in a two-dimensional electron gas. *JETP Letters* **87**, 577–580 (2008).
- Muravev, V.M., A.A. Fortunatov, I.V. Kukushkin, J.H. Smet, W. Dietsche and K. von Klitzing. Tunable Plasmonic Crystals for Edge Magnetoplasmons of a Two-Dimensional Electron System. *Physical Review Letters* **101**, 216801 (2008).
- Nachtwei, G., F. Gouider, C. Stellmach, G. Vasile, Y.B. Vasilyev, G. Hein and R.R. Gerhardt. Double-peak structure of the nonresonant photoresponse of terahertz quantum Hall detectors. *Physical Review B* **78**, 174305 (2008).
- Nagel, U., D. Hivonen, E. Joon, J.S. Kim, R.K. Kremer and T. Rööm. Far-infrared signature of the superconducting gap in intercalated graphite CaC_6 . *Physical Review B* **78**, 041404R (2008).
- Negulyaev, N.N., V.S. Stepanyuk, P. Bruno, L. Diekhöner, P. Wahl and K. Kern. Bilayer growth of nanoscale Co islands on Cu(111). *Physical Review B* **77**, 125437 (2008).
- Nelson, C.S., H. Mo, B. Bohnenbuck, J. Stempfer, N. Kikugawa, S.I. Ikeda and Y. Yoshida. Field-induced structural changes in $\text{Ca}_3\text{Ru}_2\text{O}_7$. *Physica B* **403**, 1577–1578 (2008).
- Nikolic, P.M., D. Lukovic, W. König, M.V. Nikolic, V. Blagojevic, S.S. Vujatovic, S. Savic and B. Stamenovic. Far infrared properties of iron doped single crystal PbTe. *Journal of Optoelectronics and Advanced Materials* **10**, 145–148 (2008).
- Nikolic, P.M., D. Lukovic, S.S. Vujatovic, K.M. Paraskevopoulos, M.V. Nikolic, V. Blagojevic, T.T. Zorba, B. Stamenovic and W. König. Far infrared reflectivity spectra of lead-telluride doped with Ytterbium. *Journal of Alloys and Compounds* **466**, 319–322 (2008).
- Nikolic, P.M., K.M. Paraskevopoulos, S.S. Vujatovic, M.V. Nikolic, A. Bojicic, T.T. Zorba, B. Stamenovic, V. Blagojevic, M. Jovic, M. Dasic and W. König. Far infrared study of local impurity modes of Gd doped PbTe. *Materials Chemistry and Physics* **112**, 496–499 (2008).

Nikolic, P.M., S.S. Vujatovic, D.L. Golic, N.J. Labus, K.M. Paraskevopoulos, K.T. Zorbas, M.V. Nikolic, A. Bojicic, V. Blagojevic and W. König. Far infrared spectroscopy of $\text{Pb}_{0.85}\text{Sn}_{0.15}\text{Te}$ alloy doped with Ni. *International Journal of Materials Research* **99**, 1393–1396 (2008).

Normand, B. and A.M. Oleś. Frustration and entanglement in the t_{2g} spin-orbital model on a triangular lattice: Valence-bond and generalized liquid states. *Physical Review B* **78**, 094427 (2008).

Nuss, H., J. Nuss and M. Jansen. Dimensions of the Ozonide Anion in $\text{M}([\text{18}]_{\text{crown-6}}\text{O}_3)_x \cdot x \text{NH}_3$ with $\text{M} = \text{K}$ ($x = 2$), Rb ($x = 1$) and Cs ($x = 8$). *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1291–1295 (2008).

Nuss, J. see Errandonea, D.; Mattausch, H.; Nuss, H.; Weinmann, M.

Obergfell, D. see Ashino, M.; Hulman, M.; Krstic, V.

Oberndorfer, C.P.M., M. Konuma and M. Jansen. Electrochemical synthesis of perovskites in the system K/Ba/Pr/Bi/O . *Zeitschrift für anorganische und allgemeine Chemie* **634**, 579–586 (2008).

Ohmann, R. see Vitali, L.

Oleś, A. see Brzezicki, W.; Daghofer, M.; Horsch, P.; Jochym, P.T.; Normand, B.; Rosciszewski, K.; Sirker, J.; Wohlfeld, K.

Ospald, F., D. Maryenko, K. von Klitzing, D.C. Driscoll, M.P. Hanson, H. Lu, A.C. Gossard and J.H. Smet. $1.55 \mu\text{m}$ ultrafast photoconductive switches based on ErAs:InGaAs . *Applied Physics Letters* **92**, 131117 (2008).

Park, Y.W. see Yu, H.Y.

Parker, D., O.V. Dolgov, M.M. Korshunov, A.A. Golubov and I.I. Mazin. Extended s_{\pm} scenario for the nuclear spin-lattice relaxation rate in superconducting pnictides. *Physical Review B* **78**, 134524 (2008).

Peng, J. see Rhyee, J.S.

Pentin, I.V., J.C. Schön and M. Jansen. Ab initio prediction of the low-temperature phase diagrams in the systems CsX-LiX ($\text{X} = \text{F}, \text{Cl}, \text{Br}, \text{I}$). *Solid State Sciences* **10**, 804–813 (2008).

Pentin, I. see Schön, J.C.

Pfeiffer, S., D. Fischer and M. Jansen. Synthesis and properties of $\text{Rb}_6\text{Mn}_2\text{O}_6$. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1673–1676 (2008).

Pillay, D., M.D. Johannes, I.I. Mazin and O.K. Andersen. Origin of a_{1g} and e'_g orderings in Na_xCoO_2 . *Physical Review B* **78**, 012501 (2008).

Piskunov, S., E. Heifets, T. Jacob, E.A. Kotomin, D.E. Ellis and E. Spohr. Electronic structure and thermodynamic stability of LaMnO_3 and $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ (001) surfaces: Ab initio calculations. *Physical Review B* **78**, 121406 (2008).

Pitzschke, D., J. Curda, G. Cakmak and M. Jansen. $\text{Ag}_4\text{I}_2\text{SeO}_4$ and Ag_3ITeO_4 – Two New Silver Solid Electrolytes. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1071–1076 (2008).

Pitzschke, D., J. Curda, G. Cakmak and M. Jansen. $\text{Ag}_9\text{I}_3(\text{SeO}_4)_2(\text{IO}_3)_2$ – Synthesis, crystal structure, and ionic conductivity. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1907–1910 (2008).

Ponou, S., T.E. Fässler and L. Kienle. Structural complexity in intermetallic alloys: Long-periodic order beyond 10 nm in the system $\text{BaSn}_3/\text{BaBi}_3$. *Angewandte Chemie International Edition* **47**, 3999–4004 (2008).

Quandt, A., C. Özdogan, J. Kunstmann and H. Fehske. Functionalizing graphene by embedded boron clusters. *Nanotechnology* **19**, 335707 (2008).

Quandt, A., C. Özdogan, J. Kunstmann and H. Fehske. Boron doped graphene nanostructures. *physica status solidi (b)* **245**, 2077–2081 (2008).

Queisser, H.-J. Solidity is an imperfect state. *Journal of Physics and Chemistry of Solids* **69**, 256–258 (2008).

- Rafailov, P.M., C. Thomsen, U. Dettlaff-Weglikowska and S. Roth. High levels of electrochemical doping of carbon nanotubes: Evidence for a transition from double-layer charging to intercalation and functionalization. *Journal of Physical Chemistry B* **112**, 5368–5373 (2008).
- Rafailov, P.M., C. Thomsen, M. Money, U. Dettlaff-Weglikowska and S. Roth. Electrochemical functionalization of SWNT bundles in acid and salt media as observed by Raman and X-ray photoelectron spectroscopy. *physica status solidi (b)* **245**, 1967–1970 (2008).
- Rahmati, B., W. Sigle, J. Fleig, M. Konuma, U. Eigenthaler, C. Koch, P.A. van Aken, J. Maier and M. Rühle. Effect of surface orientation on intrinsic island formation on SrTiO₃ surfaces. *Journal of Physics: Conference Series* **94**, 012013 (2008).
- Raichle, M., M. Reehuis, G. André, L. Capogna, M. Sofin, M. Jansen and B. Keimer. Incommensurate Spin-Density Modulation in a Copper Oxide Chain Compound with Commensurate Charge Order. *Physical Review Letters* **101**, 047202 (2008).
- Ramírez, R., C.P. Herrero, E.R. Hernández and M. Cardona. Path-Integral Molecular Dynamics Simulation of 3C-SiC. *Physical Review B* **77**, 045210 (2008).
- Rastelli, A., M. Stoffel, A. Malachias, T. Merdzhanova, G. Katsaros, K. Kern, T.H. Metzger and O.G. Schmidt. Three-dimensional composition profiles of single quantum dots determined by scanning-probe-microscopy-based nanotomography. *Nano Letters* **8**, 1404–1409 (2008).
- Rastelli, A., M. Stoffel, T. Merdzhanova and O.G. Schmidt. Intermixing and composition profiles of strained SiGe islands on Si(001). *Journal of Physics: Condensed Matter* **20**, 454214 (2008).
- Rauschenbach, S. see Weitz, R.T.
- Razavi, F. see Boeri, L.
- Reckeweg, O., J.C. Molstad, S. Levy, C. Hoch and F.J. DiSalvo. Syntheses and crystal structures of Sr₇H₁₂X₂ (X = Cl, Br). *Zeitschrift für Naturforschung B* **63**, 513–518 (2008).
- Reckeweg, O., J. Reiherzer, A. Schulz and F.J. DiSalvo. The last missing member of the AE₂[BN₂]Cl series – Synthesis, structural and spectroscopic characterization of Ba₂[BN₂]Cl. *Zeitschrift für Naturforschung B* **63**, 525–529 (2008).
- Reehuis, M., C. Ulrich, P. Pattison, M. Miyasaka, Y. Tokura and B. Keimer. Crystal and magnetic structure of CeVO₃. *European Physical Journal B* **64**, 27–34 (2008).
- Reehuis, M. see Jauch, W.; Raichle, M.
- Reznik, D., G. Sangiovanni, O. Gunnarsson and T.P. Devereaux. Photoemission kinks and phonons in cuprates. *Nature* **455**, E6–E7 (2008).
- Rhyee, J.S., J.B. Peng, C.T. Lin and S.M. Lee. Anisotropic magnetization and dynamic susceptibility sign change in single-crystal Na_{0.85}CoO₂. *Physical Review B* **77**, 205108 (2008).
- Rhyee, J.S., J.B. Peng, C.T. Lin and S.M. Lee. Anisotropic Magnetization and Charge Density Wave in a Na_{0.78}CoO₂ Single Crystal. *Journal of the Korean Physical Society* **52**, 391–395 (2008).
- Riedl, C., A.A. Zakharov and U. Starke. Precise in situ thickness analysis of epitaxial graphene layers on SiC(0001) using low-energy electron diffraction and angle resolved ultraviolet photoelectron spectroscopy. *Applied Physics Letters* **93**, 033106 (2008).
- Riedl, C. see Gierz, I.; Lee, D.S.; Virojanadara, C.; Vitali, L.
- Riess, I. and J. Maier. Symmetrized general hopping current equation. *Physical Review Letters* **100**, 205901 (2008).
- Robertson, J., G. Zhong, H. Telg, C. Thomsen, J.H. Warner, G.A.D. Briggs, U. Dettlaff-Weglikowska and S. Roth. Growth and characterization of high-density mats of single-walled carbon nanotubes for interconnects. *Applied Physics Letters* **93**, 163111 (2008).
- Robertson, J., G. Zhong, H. Telg, C. Thomsen, J.M. Warner, G.A.D. Briggs, U. Dettlaff, S. Roth and J. Dijon. Carbon nanotubes for interconnects in VLSI integrated circuits. *physica status solidi (b)* **245**, 2303–2307 (2008).

Rockstuhl, C., T. Zentgraf, T.P. Meyrath, H. Giessen and F. Lederer. Resonances in complementary metamaterials and nanoapertures. *Optics Express* **16**, 2080–2090 (2008).

Roling, B., S. Murugavel, A. Heuer, L. Lühning, R. Friedrich and S. Rothel. Field-dependent ion transport in disordered solid electrolytes. *Physical Chemistry Chemical Physics* **10**, 4211–4226 (2008).

Romero, A.H., M. Cardona, R.K. Kremer, R. Lauck, G. Siegle, J. Serrano and X.C. Gonze. Lattice properties of PbX (X = S, Se, Te): Experimental studies and ab initio calculations including spin-orbit effects. *Physical Review B* **78**, 224302 (2008).

Rosciszewski, K. and A.M. Oleś. Electron correlations – the origin of the CE phase in bilayer $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ manganites. *Journal of Physics: Condensed Matter* **20**, 365212 (2008).

Roth, S. see Ansaldo, A.; Ashino, M.; Bertoni, C.; Chiu, P.W.; Corzilius, B.; Drillet, J.F.; Ferrer-Anglada, N.; Hornbostel, B.; Hulman, M.; Isik, N.; Kaempgen, M.; Kaiser, A.B.; Krstic, V.; Liang, C.W.; Lima, M.D.; Rafailov, P.M.; Robertson, J.; Scalia, G.; Skakalova, V.; Yu, H.Y.

Ryazanov, M., A. Simon and R.K. Kremer. Magnetic freezing and spin frustration in the triangular lattice magnets GdI_2H_x ($0 \leq x < 1$). *Physical Review B* **77**, 104423 (2008).

Sagar, A. see Forment-Aliaga, A.; Haffner, M.

Saha, S., M. De Raychaudhury and T. Saha-Dasgupta. Ab initio study of optical properties and magneto-optical Kerr effect in the pyrite compound CoS_2 . *Physical Review B* **77**, 155428 (2008).

Sahakalkan, S. see Liang, C.W.

Sahner, K., A. Schulz, J. Kita, R. Merkle, J. Maier and R. Moos. CO_2 Selective Potentiometric Sensor in Thick-film Technology. *Sensors* **8**, 4774–4785 (2008).

Sangiovanni, G. and O. Gunnarsson. Electron-phonon interaction in strongly correlated electron systems: relevance of antiferromagnetic correlations. *Journal of Physics: Conference Series* **108**, 012012 (2008).

Sangiovanni, G. see Baldassarre, L.; Koch, E.; Reznik, D.

Scalia, G., C. von Bühler, C. Hägele, S. Roth, F. Giesselmann and J.P.F. Lagerwall. Spontaneous macroscopic carbon nanotube alignment via colloidal suspension in hexagonal columnar lyotropic liquid crystals. *Soft Matter* **4**, 570–576 (2008).

Scalia, G. see Hulman, M.; Lagerwall, J.P.F.

Schaloske, M.C., Hj. Mattausch, L. Kienle and A. Simon. Pr_6C_2 -Doppeltetraeder in $\text{Pr}_6\text{C}_2\text{Cl}_{10}$ und $\text{Pr}_6\text{C}_2\text{Cl}_5\text{Br}_5$; [Pr_6C_2 -Bitetrahedra in $\text{Pr}_6\text{C}_2\text{Cl}_{10}$ and $\text{Pr}_6\text{C}_2\text{Cl}_5\text{Br}_5$]. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1493–1500 (2008).

Schaloske, M.C., Hj. Mattausch, L. Kienle and A. Simon. $\text{Pr}_{10}(\text{C}_2)_2\text{Br}_{16}$: A New Structure with Discrete Octahedra Doubles. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 2246–2254 (2008).

Schaloske, M.C., Hj. Mattausch and A. Simon. Crystal structure of hexacerium decachloride dicarbide, $\text{Ce}_6\text{Cl}_{10}\text{C}_2$. *Zeitschrift für Kristallographie: New Crystal Structures* **223**, 189–190 (2008).

Schaloske, M. see Kienle, L.; Mattausch, Hj.

Schlickum, U., R. Decker, F. Klappenberger, G. Zoppellaro, S. Klyatskaya, W. Auwärter, K. Kern, H. Brune, M. Ruben and J.V. Barth. Chiral Kagomé Lattice from Simple Ditopic Molecular Bricks. *Journal of the American Chemical Society* **130**, 11778–11782 (2008).

Schmidt, C.L., U. Wedig, R.E. Dinnebier and M. Jansen. Synthesis, Crystal Structure, Bonding, and Properties of $(\text{Ba}_6\text{O})(\text{OsN}_3)_2$. *Chemistry – An Asian Journal* **3**, 1983–1990 (2008).

Schnering von, H.G. see Aydemir, U.; Chang, J.H.; Chang, J.H.

Schön, C. see Hannemann, A.

Schön, J.C., I.V. Pentin and M. Jansen. Ab initio prediction of the low-temperature phase diagrams in the systems MBr-MCl (M = Li, Na, K). *Solid State Sciences* **10**, 455–460 (2008).

- Schön, J.C., Ž.P. Čančarević, A. Hannemann and M. Jansen. Free enthalpy landscape of SrO. *Journal of Chemical Physics* **128**, 194712 (2008).
- Schoenes, J., A.M. Racu, K. Doll, Z. Bukowski and J. Karpinski. Phonons and crystal structures of the β -pyrochlore superconductors KOs_2O_6 and RbOs_2O_6 from micro-Raman spectroscopy. *Physical Review B* **77**, 134515 (2008).
- Schulz-Dobrick, M. and M. Jansen. Crystal structure and disorder phenomena of the adduct of neutral C_{60} and the ionic gold complex $(\text{Ptol}_3)_2\text{AuNO}_3$. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 817–819 (2008).
- Schulz-Dobrick, M. and M. Jansen. Intercluster compounds consisting of gold clusters and fullerenes: $[\text{Au}_7(\text{PPh}_3)_7] \text{C}_{60} \cdot \text{THF}$ and $[\text{Au}_8(\text{PPh}_3)_8](\text{C}_{60})_2$. *Angewandte Chemie International Edition* **47**, 2256–2259 (2008).
- Schulz-Dobrick, M. and M. Jansen. Intermolecular forces in intercluster compounds consisting of gold clusters and fullerenes and in a series of model compounds $\text{C}_{60} 2(\text{PR}_3)\text{AuCl}$. *CrystEngComm* **10**, 661–664 (2008).
- Schulz-Dobrick, M. and M. Jansen. Synthesis and Characterization of Intercluster Compounds Consisting of Various Gold Clusters and Differently Charged Keggin Anions. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 2880–2884 (2008).
- Schuster, M., K.-D. Kreuer, H. Steininger and J. Maier. Proton conductivity and diffusion study of molten phosphonic acid H_3PO_3 . *Solid State Ionics* **179**, 523–528 (2008).
- Scolari, M., A. Mews, N. Fu, A. Myalitsin, T. Assmus, K. Balasubramanian, M. Burghard and K. Kern. Surface enhanced Raman scattering of carbon nanotubes by individual fluorescent gold particles. *Journal of Physical Chemistry C* **112**, 391–396 (2008).
- Sehlikeier, Y.H., Y. Akdogan, A. Verhoeven, E. Roduner and M. Jansen. EPR Studies of SiBNC Pre-ceramic Polymers and Ceramic Employing Isotope Labeling. *Chemistry of Materials* **20**, 7563–7569 (2008).
- Sehlikeier, Y.H., A. Verhoeven and M. Jansen. Observation of direct bonds between carbon and nitrogen in Si-B-N-C ceramic after pyrolysis at 1400°C. *Angewandte Chemie International Edition* **47**, 3600–3602 (2008).
- Sekitani, T., Y. Noguchi, U. Zschieschang, H. Klauk and T. Someya. Organic transistors manufactured using inkjet technology with subfemtoliter accuracy. *Proceedings of the National Academy of Sciences of the United States of America* **105**, 4976–4980 (2008).
- Sellner, S., A. Gerlach, S. Kowarik, F. Schreiber, H. Dosch, S. Meyer, J. Pflaum and G. Ulbricht. Comparative study of the growth of sputtered aluminum oxide films on organic and inorganic substrates. *Thin Solid Films* **516**, 6377–6381 (2008).
- Serrano, J., R.K. Kremer, M. Cardona, G. Siegle, L.E. Díaz-Sánchez and A.H. Romero. Specific heat of Sb: Isotopic and spin-orbit effects from measurements and ab initio calculations. *Physical Review B* **77**, 054303 (2008).
- Sessi, V. see Brihuega, I.; Skomski, R.; Zhang, J.
- Sharma, S. and M. Jansen. Hydrothermal synthesis of brucite type copper hydroxide squarate $[\text{Cu}_3(\text{OH})_2(\text{C}_4\text{O}_4)] \cdot 4\text{H}_2\text{O}$. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 1911–1914 (2008).
- Shopova, D., R.E. Dinnebier and M. Jansen. Preparation and crystal structure determination of sulphur dioxide solvate crystals with cetyl- and dodecyltrimethylammonium bromide. *Zeitschrift für Naturforschung B* **63**, 1087–1092 (2008).
- Simeonov, K., K.Y. Amsharov, E. Krokos and M. Jansen. An Epilogue on the C_{78} -Fullerene Family: The Discovery and Characterization of an Elusive Isomer. *Angewandte Chemie* **120**, 6379–6381 (2008).
- Simeonov, K.S., K.Y. Amsharov and M. Jansen. Chlorinated Derivatives of C_{78} -Fullerene Isomers with Unusually Short Intermolecular Halogen-Halogen Contacts. *Chemistry – A European Journal* **14**, 9585–9590 (2008).

Simeonov, K. see Epple, L.

Simon, A. see Babizhetskyy, V.; Busmann-Holder, A.; Deng, S.; Hoch, C.; Kienle, L.; Kozlova, S.G.; Lefevre, C.; Lukachuk, M.; Mattausch, H.J.; Ryazanov, M.; Schaloske, M.C.; Smetana, V.; Tragl, S.; Weber, T.; Zheng, C.

Singh, G., A.M. Bittner, S. Loscher, N. Malinowski and K. Kern. Electrospinning of Diphenylalanine Nanotubes. *Advanced Materials* **20**, 2332–2336 (2008).

Sirker, J., J. Damerau and A. Klumper. Hole doping of a Mott insulator with orbital degrees of freedom. *Physical Review B* **78**, 235125 (2008).

Sirker, J., S. Fujimoto, N. Laflorencie, S. Eggert and I. Affleck. Thermodynamics of impurities in the anisotropic Heisenberg spin-1/2 chain. *Journal of Statistical Mechanics* **2008**, P02015 (2008).

Sirker, J., A. Herzog, A.M. Oleś and P. Horsch. Thermally Activated Peierls Dimerization in Ferromagnetic Spin Chains. *Physical Review Letters* **101**, 157204 (2008).

Sirker, J., R.G. Pereira, J.S. Caux, R. Hagemans, J.M. Maillet, S.R. White and I. Affleck. Boson decay and the dynamical structure factor for the XXZ chain at finite magnetic field. *Physica B* **403**, 1520–1522 (2008).

Sirker, J. see Glocke, S.

Skakalova, V., A.B. Kaiser, U. Dettlaff, K. Arstila, A.V. Krasheninnikov, J. Keinonen and S. Roth. Electrical properties of C⁴⁺ irradiated single-walled carbon nanotube paper. *physica status solidi (b)* **245**, 2280–2283 (2008).

Skakalova, V., A.B. Kaiser, Z. Osvath, G. Vertesy, L.P. Biro and S. Roth. Ion irradiation effects on conduction in single-wall carbon nanotube networks. *Applied Physics A* **90**, 597–602 (2008).

Skakalova, V., A.B. Kaiser and S. Roth. Raman mode shifts correlated with conductivity and Young's modulus changes in modified carbon nanotube networks. *physica status solidi (RRL)* **2**, 62–64 (2008).

Skomski, R., J. Zhang, V. Sessi, J. Honolka, K. Kern and A. Enders. Substrate-controlled growth and magnetism of nanosize Fe clusters on Pt. *Journal of Applied Physics* **103**, 07D519 (2008).

Smet, J. see Andreev, I.V.; Glinka, Y.D.; Lee, D.S.; Martin, J.; Muravev, V.M.; Ospald, F.; Zhuravlev, A.S.

Smetana, V., V. Babizhetskyy and A. Simon. Li_xNa_yBa₁₄LiN₆: New representatives of the subnitride family. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 629–632 (2008).

Smetana, V., V. Babizhetskyy, G.V. Vajenine and A. Simon. Preparation and crystal structures of Li₂₆Na₅₈Ba₃₈E_x phases (E = N, H; x = 0-1). *Zeitschrift für anorganische und allgemeine Chemie* **634**, 849–852 (2008).

Soehn, M., M. Lebert, T. Wirth, S. Hofmann and N. Nicoloso. Design of gas diffusion electrodes using nano-carbon. *Journal of Power Sources* **176**, 494–498 (2008).

Starke, U. see Gierz, I.; Lee, D.S.; Riedl, C.; Virojanadara, C.; Vitali, L.; Zhu, M.

Stepanow, S., N. Lin and J.V. Barth. Modular assembly of low-dimensional coordination architectures on metal surfaces. *Journal of Physics: Condensed Matter* **20**, 184002 (2008).

Stepanow, S. see Vitali, L.

Stern, O., D. Dini, N. Freytag, W. Dietsche, K. von Klitzing and W. Wegscheider. A study of the domain structure at the spin transition of the fractional quantum Hall effect. *physica status solidi (b)* **245**, 428–438 (2008).

Stoffel, M., A. Malachias, T. Merdzhanova, F. Cavallo, G. Isella, D. Chrastina, H. von Kanel, A. Rastelli and O.G. Schmidt. SiGe wet chemical etchants with high compositional selectivity and low strain sensitivity. *Semiconductor Science and Technology* **23**, 085021 (2008).

Strack, P., R. Gersch and W. Metzner. Renormalization group flow for fermionic superfluids at zero temperature. *Physical Review B* **78**, 014522 (2008).

Strack, P. see Jakubczyk, P.

Strempper, J., B. Bohnenbuck, I. Zegkinoglou, N. Aliouane, S. Landsgesell, M. v. Zimmermann and D.N. Argyriou. Magnetic-field-induced transitions in multiferroic TbMnO₃ probed by resonant and nonresonant x-ray diffraction. *Physical Review B* **78**, 024429 (2008).

Sun, G.L., Y.T. Song and C.T. Lin. Investigation of YBa₂Cu₄O₈ single crystal growth by KOH flux. *Superconductor Science and Technology* **21**, 125001 (2008).

Sundaram, R.S., C. Gómez-Navarro, K. Balasubramanian, M. Burghard and K. Kern. Electrochemical Modification of Graphene. *Advanced Materials* **20**, 3050–3053 (2008).

Sushkov, O.P., W. Xie, O. Jepsen, O.K. Andersen and G.A. Sawatzky. Anisotropies in insulating La_{2-x}Sr_xCuO₄: Angle-resolved photoemission and optical absorption. *Physical Review B* **77**, 035124 (2008).

Syassen, K. Ruby under pressure. *High Pressure Research* **28**, 75–126 (2008).

Syassen, K. see Kunc, K.

Tait, S.L. Function follows form: Exploring two-dimensional supramolecular assembly at surfaces. *ACS Nano* **2**, 617–621 (2008).

Tait, S.L., A. Langner, N. Lin, R. Chandrasekar, O. Fuhr, M. Ruben and K. Kern. Assembling Isostructural Metal-Organic Coordination Architectures on Cu(100), Ag(100) and Ag(111) Substrates. *ChemPhysChem* **9**, 2495–2499 (2008).

Tait, S.L., Y. Wang, G. Costantini, N. Lin, A. Baraldi, F. Esch, L. Petaccia, S. Lizzit and K. Kern. Metal-organic coordination interactions in Fe-Terephthalic acid networks on Cu(100). *Journal of the American Chemical Society* **130**, 2108–2113 (2008).

Tait, S. see Langner, A.

Taraphder, A., M.S. Laad, L. Craco and A.N. Yaresko. GdI₂: A new ferromagnetic excitonic solid? *Physical Review Letters* **101**, 136410 (2008).

Tiemann, L., W. Dietsche, M. Hauser and K. von Klitzing. Critical tunneling currents in the regime of bilayer excitons. *New Journal of Physics* **10**, 045018 (2008).

Tiemann, L., J.G.S. Lok, W. Dietsche, K. von Klitzing, K. Muraki, D. Schuh and W. Wegscheider. Investigating the transport properties of the excitonic state in quasi-Corbino electron bilayers. *Physica E* **40**, 1034–1037 (2008).

Tiemann, L., J.G.S. Lok, W. Dietsche, K. von Klitzing, K. Muraki, D. Schuh and W. Wegscheider. Exciton condensate at a total filling factor of one in Corbino two-dimensional electron bilayers. *Physical Review B* **77**, 033306 (2008).

Tikhodeev, S.G. see Christ, A.

Toschi, A. and M. Capone. Optical sum rule anomalies in the cuprates: interplay between strong correlation and electronic bandstructure. *Physical Review B* **77**, 014518 (2008).

Toschi, A. see Baldassarre, L.; Held, K.

Tragl, S., K. Gibson, J. Glasera, G. Heydenrych, G. Frenking, V. Duppel, A. Simon and H.J. Meyer. Crystalline Intermediates during Polycondensation Reactions in the C-N-Cl System – The Paddle-Wheel Molecule N(C₆N₇C₁₂)₃. *Zeitschrift für anorganische und allgemeine Chemie* **634**, 2754–2760 (2008).

Ulbricht, G. see Martin, J.; Sellner, S.

Ulrich, C., G. Ghiringhelli, A. Piazzalunga, L. Braicovich, N.B. Brookes, H. Roth, T. Lorenz and B. Keimer. Orbital excitations in YTiO₃ and LaTiO₃ probed by resonant inelastic soft x-ray scattering. *Physical Review B* **77**, 113102 (2008).

Ulrich, C. see Reehuis, M.

Unterhinninghofen, J., D. Manske and A. Knorr. Theory of ultrafast nonequilibrium dynamics in *d*-wave superconductors. *Physical Review B* **77**, 180509R (2008).

Uthayakumar, S., R. Fittipaldi, A. Guarino, A. Vecchione, A. Romano, A. Nigro, H.-U. Habermeier and S. Pace. Thermal treatments and evolution of bulk $\text{Nd}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$ morphology. *Physica C* **468**, 2271–2274 (2008).

Uthayakumar, S., G.H. Aydogdu and H.-U. Habermeier. Thickness dependence of substrate-induced strain in $\text{La}_{0.9}\text{Ca}_{0.1}\text{MnO}_3$ thin films. *Journal of Crystal Growth* **310**, 2480–2484 (2008).

Vajenine, G.V. On reactions between alkali metals and active nitrogen. *Solid State Sciences* **10**, 450–454 (2008).

Vajenine, G. see Baumeier, B.; Smetana, V.

Vargas, P. see Laroze, D.

van Veenendaal, M. and M.W. Haverkort. Effective operator for d - d transitions in nonresonant inelastic x-ray scattering. *Physical Review B* **77**, 224107 (2008).

Virojanadara, C., M. Hetzel, L.I. Johansson, W.J. Choyke and U. Starke. Electronic and atomic structure of the 4H-SiC(1-102)- $c(2 \times 2)$ surface. *Surface Science* **602**, 525–533 (2008).

Virojanadara, C., M. Hetzel, C. Riedl, L.I. Johansson, W.J. Choyke and U. Starke. Silicon adatom chains and one-dimensionally confined electrons on 4H-SiC(1-102): The (2×1) reconstruction. *Surface Science* **602**, 3506–3509 (2008).

Virojanadara, C., M. Hetzel and U. Starke. A diagonal cut through the SiC bulk unit cell: Structure and composition of the 4H-SiC(1-102) surface. *Applied Physics Letters* **92**, 061902 (2008).

Vitali, L., S. Fabris, A.M. Conte, S. Brink, M. Ruben, S. Baroni and K. Kern. Electronic Structure of Surface-supported Bis(phthalocyaninato) terbium(III) Single Molecular Magnets. *Nano Letters* **8**, 3364–3368 (2008).

Vitali, L., R. Ohmann, S. Stepanow, P. Gambardella, K. Tao, R. Huang, V.S. Stepanyuk, P. Bruno and K. Kern. Kondo Effect in Single Atom Contacts: The Importance of the Atomic Geometry. *Physical Review Letters* **101**, 216802 (2008).

Vitali, L., C. Riedl, R. Ohmann, I. Brihuega, U. Starke and K. Kern. Spatial modulation of the Dirac gap in epitaxial graphene. *Surface Science* **602**, L127–L130 (2008).

Vitali, L. see Brihuega, I.

Vogelgesang, R., J. Dorfmueller, R. Esteban, R.T. Weitz, A. Dmitriev and K. Kern. Plasmonic nanostructures in aperture-less scanning near-field optical microscopy (aSNOM). *physica status solidi (b)* **245**, 2255–2260 (2008).

Vogelgesang, R., R. Esteban and K. Kern. Beyond lock-in analysis for volumetric imaging in apertureless scanning near-field optical microscopy. *Journal of Microscopy* **229**, 365–370 (2008).

Vogelgesang, R. see Esteban, R.; Zentgraf, T.

Voinescu, A.E., M. Kellermeier, B. Bartel, A.M. Carnerup, A.K. Larsson, D. Touraud, W. Kunz, L. Kienle, A. Pfitzner and S.T. Hyde. Inorganic self-organized silica aragonite biomorphic composites. *Crystal Growth & Design* **8**, 1515–1521 (2008).

Voinescu, A.E., D. Touraud, A. Lecker, A. Pfitzner, L. Kienle and W. Kunz. Initiation of Vaterite-Aragonite CaCO_3 Particles from Silicate-Casein Sols. *Journal of Physical Chemistry C* **112**, 17499–17506 (2008).

Wahl, P., L. Diekhöner, M.A. Schneider and K. Kern. Background removal in scanning tunneling spectroscopy of single atoms and molecules on metal surfaces. *Review of Scientific Instruments* **79**, 043104 (2008).

Wahl, P. see Negulyaev, N.N.

Wang, L., R. Merkle, G. Cristiani, B. Stuhlhofer, H.-U. Habermeier and J. Maier. PLD-deposited $(\text{Ba}_x\text{Sr}_{1-x})(\text{Co}_y\text{Fe}_{1-y})\text{O}_{3-\delta}$ Thin-Film Microelectrodes: Structure Aspects and Oxygen Incorporation Kinetics. *ECS Transactions* **18**, 85–95 (2008).

- Wang, L., A. Rastelli, S. Kiravittaya, P. Atkinson, F. Ding, C.C.B. Bufon, C. Hermannstadter, M. Witzany, G.J. Beirne, P. Michler and O.G. Schmidt. Towards deterministically controlled InGaAs/GaAs lateral quantum dot molecules. *New Journal of Physics* **10**, 045010 (2008).
- Wang, X. see Chen, D.P.; Zhi, L.
- Wang, Y. see Tait, S.L.
- Wang, Z.-H., H.-U. Habermeier, G. Cristiani, J.-R. Sun and B.-G. Shen. Asymmetric Magnetization Reversal Probed by Recoil Loop Measurements in an Exchange Biased $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3/\text{La}_{0.33}\text{Ca}_{0.67}\text{MnO}_3$ Bilayer Film. *Chinese Physics Letters* **25**, 278–281 (2008).
- Wang, Z.H., O.I. Lebedev, G. Van Tendeloo, G. Cristiani and H.-U. Habermeier. Crosshatching on $\text{La}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$ ultrathin films epitaxially grown on $\text{SrTiO}_3(100)$. *Physical Review B* **77**, 115330 (2008).
- Wasniowska, M., W. Wulfhekel, M. Przybylski and J. Kirschner. Submonolayer regime of Co epitaxy on Pd(111): Morphology and electronic structure. *Physical Review B* **78**, 035405 (2008).
- Wawrzynska, E., R. Coldea, E.M. Wheeler, T. Sörgel, M. Jansen, R.M. Ibberson, P.G. Radaelli and M.M. Koza. Charge disproportionation and collinear magnetic order in the frustrated triangular antiferromagnet AgNiO_2 . *Physical Review B* **77**, 094439 (2008).
- Weber, J., K.-D. Kreuer, J. Maier and A. Thomas. Proton conductivity enhancement by nanostructural control of poly(benzimidazole)-phosphoric acid adducts. *Advanced Materials* **20**, 2595–2598 (2008).
- Weber, J., J. Weis, M. Hauser and K. von Klitzing. Fabrication of an array of single-electron transistors for a scanning probe microscope sensor. *Nanotechnology* **19**, 375301 (2008).
- Weber, J. see Cimalla, V.; Göktas, O.
- Weber, T., A. Simon, Hj. Mattausch, L. Kienle and O. Oeckler. Reliability of Monte Carlo simulations of disordered structures optimized with evolutionary algorithms exemplified with diffuse scattering from $\text{La}_{0.70(1)}(\text{Al}_{0.14(1)}\text{I}_{0.86(1)})$. *Acta Crystallographica A* **64**, 641–653 (2008).
- Weinmann, M., M. Kroschel, T. Jäschke, J. Nuss, M. Jansen, G. Kolios, A. Morillo, C. Tellaèche and U. Nieken. Towards continuous processes for the synthesis of precursors of amorphous Si/B/N/C ceramics. *Journal of Materials Chemistry* **18**, 1810–1818 (2008).
- Weinmann, M., J. Nuss and M. Jansen. Dichloridobis(methylamine-N)boron(III) chloride. *Acta Crystallographica E* **64**, O583–U1050 (2008).
- Weis, J. see Göktas, O.; Hübel, A.; Weber, J.
- Weitz, R.T., K. Amsharov, U. Zschieschang, E.B. Villas, D.K. Goswami, M. Burghard, H. Dosch, M. Jansen, K. Kern and H. Klauk. Organic n-channel transistors based on core-cyanated perylene carboxylic diimide derivatives. *Journal of the American Chemical Society* **130**, 4637–4645 (2008).
- Weitz, R.T., L. Harnau, S. Rauschenbach, M. Burghard and K. Kern. Polymer nanofibers via nozzle-free centrifugal spinning. *Nano Letters* **8**, 1187–1191 (2008).
- Whangbo, M. see Köhler, J.; Lee, C.; Liu, X.
- White, J.S., S.P. Brown, E.M. Forgan, M. Laver, C.J. Bowell, R.J. Lycett, D. Charalambous, V. Hinkov, A. Erb and J. Kohlbrecher. Observations of the configuration of the high-field vortex lattice in $\text{YBa}_2\text{Cu}_3\text{O}_7$: Dependence upon temperature and angle of applied field. *Physical Review B* **78**, 174513 (2008).
- Wohlfeld, K., M. Daghofer, A.M. Oleś and P. Horsch. Spectral properties of orbital polarons in Mott insulators. *Physical Review B* **78**, 214423 (2008).
- Wohlfeld, K. see Daghofer, M.
- Wontcheu, J., W. Bensch, S. Mankovsky, S. Polesya, H. Ebert, R.K. Kremer and E. Brücher. Anion substitution effects on structure and magnetism of the chromium chalcogenide Cr_5Te_8 Part III: Structures and magnetism of the high-temperature modification $\text{Cr}_{1+x}\text{Q}_2$ and the low-temperature modification $\text{Cr}_{5+x}\text{Q}_8$ (Q = Te, Se; Te:Se = 5:3). *Journal of Solid State Chemistry* **181**, 1492–1505 (2008).

- Yamase, H.* Cuprate superconductors in the vicinity of a Pomeranchuk instability. *Journal of Physics and Chemistry of Solids* **69**, 3297–3300 (2008).
- Yamase, H. and A.A. Katanin.* Theory of spontaneous Fermi surface symmetry breaking for $\text{Sr}_3\text{RU}_2\text{O}_7$. *Physica B* **403**, 1262–1264 (2008).
- Yang, A., M. Steger, H.J. Lian, M.L.W. Thewalt, M. Uemura, A. Sagara, K.M. Itoh, E.E. Haller, J.W. Ager, S.A. Lyon, M. Konuma and M. Cardona.* High-resolution photoluminescence measurement of the isotopic-mass dependence of the lattice parameter of silicon. *Physical Review B* **77**, 113203 (2008).
- Yang, Y.A., A.M. Bittner, S. Baldelli and K. Kern.* Study of self-assembled triethoxysilane thin films made by casting neat reagents in ambient atmosphere. *Thin Solid Films* **516**, 3948–3956 (2008).
- Yaresko, A. see Antonov, V.N.; Leoni, S.; Taraphder, A.
- Yel'kin, F.S., V.A. Sidorov, A. Waśkowska, L. Gerward, J.S. Olsen, G. Vaitheeswaran and V. Kanchana.* Phase transitions in Cd_3P_2 at high pressures and high temperatures. *Journal of Alloys and Compounds* **450**, 79–85 (2008).
- Yordanov, P. see Yu, L.
- Yoshida, H., S. Ahlert, M. Jansen, Y. Okamoto, J. Yamaura and Z. Hiroi.* Unique phase transition on spin-2 triangular lattice of Ag_2MnO_2 . *Journal of the Physical Society of Japan* **77**, 074719 (2008).
- Yu, H.Y., D.S. Lee, U. Dettlaff-Weglikowska, S. Roth and Y.W. Park.* Electrical evidence for the encapsulation of C_{60} inside a carbon nanotube: Random telegraph signal and hysteric current-voltage characteristics. *Physical Review B* **78**, 155415 (2008).
- Yu, L., D. Munzar, A.V. Boris, P. Yordanov, J. Chaloupka, T. Wolf, C.T. Lin, B. Keimer and C. Bernhard.* Evidence for Two Separate Energy Gaps in Underdoped High-Temperature Cuprate Superconductors from Broadband Infrared Ellipsometry. *Physical Review Letters* **100**, 177004 (2008).
- Yu, L. see Bernhard, C.
- Zegkinoglou, I. see Bohnenbuck, B.; Stempffer, J.
- Zentgraf, T., J. Dorfmueller, C. Rockstuhl, C. Etrich, R. Vogelgesang, K. Kern, T. Pertsch, F. Lederer and H. Giessen.* Amplitude- and phase-resolved optical near fields of split-ring-resonator-based metamaterials. *Optics Letters* **33**, 848–850 (2008).
- Zhang, J., Y.-S. Hu, J.-P. Tessonnier, G. Weinberg, J. Maier, R. Schlögl and D.S. Su.* CNFs@CNTs: Superior carbon for electrochemical energy storage. *Advanced Materials* **20**, 1450–1455 (2008).
- Zhang, J., V. Sessi, C.H. Michaelis, I. Brihuega, J. Honolka, K. Kern, R. Skomski, X. Chen, G. Rojas and A. Enders.* Ordered layers of Co clusters on BN template layers. *Physical Review B* **78**, 165430 (2008).
- Zhang, J. see Brihuega, I.; Skomski, R.
- Zhang, P.X. and H.-U. Habermeier.* Atomic Layer Thermopile Materials: Physics and Application. *Journal of Nanomaterials* **2008**, 329601 (2008).
- Zhang, P.X., C. Wang, S.L. Tan, H. Zhang and H.-U. Habermeier.* Improving the performance of thermoelectric devices by doping Ag in LaPbMnO_3 thin films. *Journal of Crystal Growth* **310**, 2732–2737 (2008).
- Zheng, C., Hj. Mattausch, C. Hoch and A. Simon.* $\text{La}_6\text{Br}_{10}\text{Fe}$: A La_6Fe octahedron with a mixed $\text{My}_6\text{X}_{12}/\text{M}_6\text{X}_8$ type environment. *Inorganic Chemistry* **47**, 2356–2361 (2008).
- Zheng, C., Hj. Mattausch, C. Hoch and A. Simon.* $\text{La}_8\text{Br}_7\text{Ni}_4$: Ribbons of Ni Hexagons in Condensed La_6 Trigonal Prisms. *Inorganic Chemistry* **47**, 10753–10757 (2008).
- Zheng, C. see Lukachuk, M.; Mattausch, Hj.
- Zhi, L., Y.-S. Hu, B. El Hamaoui, X. Wang, I. Lieberwirth, U. Kolb, J. Maier and K. Müllen.* Precursor-Controlled Formation of Novel Carbon/Metal and Carbon/Metal Oxide Nanocomposites. *Advanced Materials* **20**, 1727–1731 (2008).

Zhu, M., C.J. Weber, Y. Yang, M. Konuma, U. Starke, K. Kern and A.M. Bittner. Chemical and electrochemical ageing of carbon materials used in supercapacitor electrodes. *Carbon* **46**, 1829–1840 (2008).

Zhukovskii, Y.F., E.A. Kotomin, P. Balaya and M. Maier. Enhanced interfacial lithium storage in nanocomposites of transition metals with LiF and Li₂O: Comparison of DFT calculations and experimental studies. *Solid State Sciences* **10**, 491–495 (2008).

Zhukovskii, Y.F., E.A. Kotomin and D.E. Ellis. A comparative *ab initio* study of Cu overlayers on BaTiO₃ (001) and MgO(001) substrates. *physica status solidi (b)* **245**, 980–985 (2008).

Zhuravlev, A.S., A.B. Van'kov, L.V. Kulik, I.V. Kukushkin, V.E. Kirpichev, J.H. Smet, K. von Klitzing, V. Umansky and W. Wegscheider. Inelastic light scattering study of the $\nu=1$ quantum Hall ferromagnet. *Physical Review B* **77**, 155404 (2008).

Zschiechang, U., M. Halik and H. Klauk. Microcontact-printed self-assembled monolayers as ultrathin gate dielectrics in organic thin-film transistors and complementary circuits. *Langmuir* **24**, 1665–1669 (2008).

Zschiechang, U. see Deneke, C.; Sekitani, T.; Weitz, R.T.

Zürn, A. and H.G. von Schnering. Topological Analysis of Mesoporous Solids and Their Ordered Pore Structures by Periodic Nodal Surfaces, *PNS. Zeitschrift für anorganische und allgemeine Chemie* **634**, 2761–2764 (2008).

Zurek, E., J. Autschbach, N. Malinowski, A. Enders and K. Kern. Experimental and Theoretical Investigations of the Thermodynamic Stability of Ba-C₆₀ and K-C₆₀ Compound Clusters. *ACS Nano* **2**, 1000–1014 (2008).

Zurek, E., C.J. Pickard and J. Autschbach. Density-Functional Study of the ¹³C NMR Chemical Shifts in Single-Walled Carbon Nanotubes with Stone-Wales Defects. *Journal of Physical Chemistry C* **112**, 11744–11750 (2008).

Zurek, E., C.J. Pickard and J. Autschbach. Determining the diameter of functionalized single-walled carbon nanotubes with ¹³C NMR: A theoretical study. *Journal of Physical Chemistry C* **112**, 9267–9271 (2008).