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Liste der Veröffentlichungen 2013

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ISI zitierte Publikationen

Programm EE

de Respinis, M.; De Temmerman, G.; Tanyeli, I.; van de Sanden, M.C.M.; Doerner, R.P.; Baldwin, M.J.; van de Krol, R., *Efficient Plasma Route to Nanostructure Materials: Case Study on the Use of m-WO₃ for Solar Water Splitting*, ACS Appl. Mater. Interfaces **5**, 7621-7625, (2013), 10.1021/am401936q

Emin, S.; Fanetti, M.; Abdi, F.F.; Lisjak, D.; Valant, M.; van de Krol, R.; Dam, B., *Photoelectrochemical Properties of Cadmium Chalcogenide-Sensitized Textured Porous Zinc Oxide Plate Electrodes*, ACS Appl. Mater. Interfaces **5**, 1113-1121, (2013), 10.1021/am3027986

Zhang, X.; Tretjakov, A.; Hovestaedt, M.; Sun, G.; Syritski, V.; Reut, J.; Volkmer, R.; Hinrichs, K.; Rappich, J., *Electrochemical functionalization of gold and silicon surfaces by a maleimide group as a biosensor for immunological application*, ACTA BIOMATER **9**, 5838-5844, (2013), 10.1016/j.actbio.2012.10.022

Gabdulkhakov, A.G.; Fufina, T.Y.; Vasilieva, L.G.; Mueller, U.; Shuvalov, V.A., *Expression, purification, crystallization and preliminary X-ray structure analysis of wild-type and L(M196)H-mutant Rhodobacter sphaeroides reaction centres*, Acta Crystallogr. F **69**, 506-509, (2013), 10.1107/S1744309113006398

Rodriguez-Alvarez, H.; Barreau, N.; Kaufmann, C.A.; Weber, A.; Klaus, M.; Painchaud, T.; Schock, H.-W.; Mainz, R., *Recrystallization of Cu(In,Ga)Se₂ thin films studied by X-ray diffraction*, Acta Mater. **61**, 4347-4353, (2013), 10.1016/j.actamat.2013.04.006

Rodriguez-Alvarez, H.; Weber, A.; Lauche, J.; Kaufmann, Ch.A.; Rissom, T.; Greiner, D.; Klaus, M.; Unold, Th.; Genzel, C.; Schock, H.-W.; Mainz, R., *Formation of CuInSe₂ and CuGaSe₂ thin films deposited by three-stage thermal co-evaporation: a real-time x-ray diffraction and fluorescence study*, Adv. Energy Mater. **3**, 1381-1387, (2013), 10.1002/aenm.201300339

Bär, M.; Klaer, J.; Weinhardt, L.; Wilks, R.G.; Krause, S.; Blum, M.; Yang, W.; Heske, C.; Schock, H.-W., *Cu₂-xS Surface Phases and Their Impact on the Electronic Structure of CuInS₂ Thin Films - A Hidden Parameter in Solar Cell Optimization*, Adv. Eng. Mater. **3**, 777-781, (2013), 10.1002/aenm.201200946

Chiang, M.-L.; Chen, H.-Y.; Lai, L.-J.; Guttman, P.; Hsieh, C.-C., *Three-dimensional ultrastructural analysis of mast cell degranulation*, Allergy **0**, 7, (2013),

Joya, K.S.; Joya, Y.F.; Ocakoglu, K.; van de Krol, R., *Katalytische Wasserspaltung und Solarbrennstoffzellen: künstliche Blätter auf dem Vormarsch*, Angew. Chem. **52**, 42036, (2013), 10.1002/ange.201300136

Singh, Ajay; Singh, Shalini; Levchenko, Sergiu; Unold, Thomas; Laffir, Fathima; Ryan, Kevin M., *Compositionally Tunable Photoluminescence Emission in Cu₂ZnSn(S_{1-x}Se_x)₄ Nanocrystals*, Angew. Chem. Int. Ed. **52**, 9120-9124, (2013), 10.1002/anie.201302867

- Joya, K.S.; Joya, Y.F.; Ocaoglu, K.; van de Krol, R., *Water-Splitting Catalysis and Solar Fuel Devices: Artificial Leaves on the Move*, *Angew. Chem. Int. Ed.* **52**, 10426-10437, (2013), 10.1002/anie.201300136
- Mendez, H.; Heimel, G.; Opitz, A.; Sauer, K.; Barkowski, P.; Oehzelt, M.; Soeda, J.; Okamoto, T.; Takeya, J.; Arlin, J.-B.; Balandier, J.-Y.; Geerts, Y.; Koch, N.; Salzmann, I., *Doping of Organic Semiconductors: Impact of Dopant Strength and Electronic Coupling*, *Angew. Chem. Int. Ed.* **52**, 7751-7755, (2013), 10.1002/anie.201302396
- Schönau, S.; Ruske, F.; Neubert, S.; Rech, B., *Analysis of Urbach-like absorption tails in thermally treated ZnOAl thin films*, *Appl. Phys. Lett.* **103**, 192108/1-4, (2013), 10.1063/1.4829999
- Eckner, S.; Kämmer, H.; Steinbach, T.; Gnauck, M.; Johannes, A.; Stephan, C.; Schorr, S.; Schnohr, C.S., *Atomic-scale structure, cation distribution, and bandgap bowing in Cu(In,Ga)S₂ and Cu(In,Ga)Se₂*, *Appl. Phys. Lett.* **103**, 081905/1-4, (2013), 10.1063/1.4819225
- Witte, W.; Abou-Ras, D.; Hariskos, D., *Chemical bath deposition of Zn(O,S) and CdS buffers: Influence of Cu(In,Ga)Se₂ grain orientation*, *Appl. Phys. Lett.* **102**, 51607, (2013), 10.1063/1.4788717
- Brammertz, G.; Poortmans, J.; Buffière, M.; Mevel, Y.; Ren, Y.; Zaghi, A.E.; Lenaers, N.; Mols, Y.; Koeble, C.; Vleugels, J.; Meuris, M., *Correlation between physical, electrical, and optical properties of Cu₂ZnSnSe₄ solar cells*, *Appl. Phys. Lett.* **102**, 013902/1-3, (2013), 10.1063/1.4775366
- Lin, X.Z.; Dittrich, Th.; Fengler, S.; Lux-Steiner, M.Ch.; Ennaoui, A., *Correlation between processing conditions of Cu₂ZnSn(S_xSe_{1-x})₄ and modulated surface photovoltage*, *Appl. Phys. Lett.* **102**, 143903/1-4, (2013), 10.1063/1.4801463
- Welzel, T.; Kellermeier, M.; Harbauer, K.; Ellmer, K., *Development of a compact combined plasma sensor for plasma surface engineering processes*, *Appl. Phys. Lett.* **102**, 211605/1-4, (2013), 10.1063/1.4807892
- Gluba, M.A.; Amkreutz, D.; Troppenz, G.V.; Rappich, J.; Nickel, N.H., *Embedded graphene for large-area silicon-based devices*, *Appl. Phys. Lett.* **103**, 073102/1-5, (2013), 10.1063/1.4818461
- Streeck, C.; Brunken, S.; Gerlach, M.; Herzog, C.; Hönicke, P.; Kaufmann, C.A.; Lubeck, J.; Pollakowski, B.; Unterumsberger, R.; Weber, A.; Beckhoff, B.; Kanngießer, B.; Schock, H.-W.; Mainz, R., *Grazing-incidence x-ray fluorescence analysis for non-destructive determination of In and Ga depth profiles in \$Cu(In,Ga)Se_2\$ absorber films*, *Appl. Phys. Lett.* **103**, 113904/1-5, (2013), 10.1063/1.4821267
- Mews, M.; Schulze, T.F.; Mingirulli, N.; Korte, L., *Hydrogen plasma treatments for passivation of amorphous-crystalline silicon-heterojunctions on surfaces promoting epitaxy*, *Appl. Phys. Lett.* **102**, 122106/1-4, (2013), 10.1063/1.4798292
- Barrigon, E.; Brückner, S.; Supplie, O.; Kleinschmidt, P.; Rey-Stolle, I.; Hannappel, T., *Optical in situ monitoring of hydrogen desorption from Ge(100) surfaces*, *Appl. Phys. Lett.* **102**, 111608/1-4, (2013), 10.1063/1.4798248
- Käbisch, S.; Gluba, M.A.; Klimm, C.; Krause, S.; Koch, N.; Nickel, N.H., *Polarity driven morphology of zinc oxide nanostructures*, *Appl. Phys. Lett.* **103**, 103106/1-4, (2013), 10.1063/1.4820410

- Merdes, S.; Dittrich, T.; Osterloh, F.; Sáez-Araoz, R.; Klaer, J.; Klenk, R., *Surface photovoltage analyses of Cu(In,Ga)S₂/CdS and Cu(In,Ga)S₂/In₂S₃ photovoltaic junctions*, Appl. Phys. Lett. **102**, 213902/1-3, (2013), 10.1063/1.4807889
- Kirner, S.; Gabriel, O.; Stannowski, B.; Rech, B.; Schlatmann, R., *The growth of microcrystalline silicon oxide thin films studied by in situ plasma diagnostics*, Appl. Phys. Lett. **102**, 051906/1-4, (2013), 10.1063/1.4790279
- Bikowski, A.; Welzel, T.; Ellmer, K., *The impact of negative oxygen ion bombardment on electronic and structural properties of magnetron sputtered ZnO:Al films*, Appl. Phys. Lett. **102**, 242106/1-4, (2013), 10.1063/1.4811647
- Gerlach, D.; Wilks, R.G.; Wippler, D.; Wimmer, M.; Lozac'h, M.; Félix, R.; Mück, A.; Meier, M.; Ueda, S.; Yoshikawa, H.; Gorgoi, M.; Lips, K.; Rech, B.; Sumiya, M.; Hüpkes, J.; Kobayashi, K.; Bär, M., *The silicon/zinc oxide interface in amorphous silicon-based thin-film solar cells: Understanding an empirically optimized contact*, Appl. Phys. Lett. **103**, 023903/1-5, (2013), 10.1063/1.4813448
- Heinrich, G.; Wollgarten, M.; Bähr, M.; Lawerenz, A., *Ultra-short pulsed laser ablation of silicon nitride layers: Investigation near threshold fluence*, Appl. Surf. Sci. **278**, 265-267, (2013), 10.1016/j.apsusc.2012.10.122
- Singh, A.; Hocking, R.K.; Chang, S.L.-Y.; George, B.M.; Fehr, M.; Lips, K.; Schnegg, A.; Spiccia, L., *Water Oxidation Catalysis by Nanoparticulate MnOx Thin Films: Probing the Effect of the Manganese Precursors*, Chem. Mater. **25**, 1098-1108, (2013), 10.1021/cm3041345
- Tsapatsaris, N.; Landsgesell, S.; Koza, M.M.; Frick, B.; Boldyreva, E.V.; Bordallo, H.N., *Polymorphic drugs examined with neutron spectroscopy: Is making more stable forms really that simple?*, Chem. Phys. **427**, 124-128, (2013), 10.1016/j.chemphys.2013.04.016
- Beye, M.; Foehlich, A., *Soft X-ray probes of ultrafast dynamics for heterogeneous catalysis*, Chem. Phys. **414**, 130-138, (2013), 10.1016/j.chemphys.2012.03.023
- Ramirez, A.; Friedrich, D.; Kunst, M.; Fiechter, S., *Charge carrier kinetics in MnOx, Mn₂O₃ and Mn₃O₄ films for water oxidation*, Chem. Phys. Lett **568**, 157-160, (2013), 10.1016/j.cplett.2013.03.054
- Moser, A.; Salzmann, I.; Oehzelt, M.; Neuhold, A.; Flesch, H.-G.; Ivanco, J.; Pop, S.; Toader, T.; Zahn, D.R.T.; Smilgies, D.-M.; Resel, R., *A disordered layered phase in thin films of sexithiophene*, Chem. Phys. Lett **574**, 51-55, (2013), 10.1016/j.cplett.2013.04.053
- van de Krol, R.; Liang, Y., *An n-Si/n-Fe₂O₃ Heterojunction Tandem Photoanode for Solar Water Splitting*, Chimia **67**, 168-171, (2013), 10.2533/chimia.2013.168
- Vogtt, K.; Goerigk, G.; Ballauff, M.; Gläser, R.; Dingenouts, N., *Anomalous small-angle x-ray scattering from mesoporous noble metal catalysts*, Colloid Polym. Sci. **291**, 2163-2171, (2013), 10.1007/s00396-013-2951-8
- Wu, S.; Schell, A.W.; Lublow, M.; Kaiser, J.; Aichele, T.; Schietinger, S.; Polzer, F.; Kühn, S.; Guo, X.; Benson, O.; Ballauff, M.; Yan, L., *Silica-coated Au/Ag nanorods with tunable surface plasmon bands for nanoplasmonics with single particles*, Colloid Polym. Sci. **291**, 585-594, (2013), 10.1007/s00396-012-2760-5

- Werzer, O.; Kunert, B.; Roblegg, E.; Zimmer, A.; Oehzelt, M.; Resel, R., *Surface Induced Order of Solution Processed Caffeine Needles on Silica and Muscovite Mica*, *CRYST GROWTH DES* **13**, 1322-1328, (2013), 10.1021/cg301812m
- Klossek, A.; Krause, C.; Arguirov, T.; Krause, H.-M.; Seifert, W.; Friedrich, F.; Calnan, S.; Gabriel, O.; Stannowski, B.; Kittler, M., *Characterization of thin-film α -Si:H/ μ c-Si:H tandem solar cells on glass substrates*, *Cryst Res Tech.* **48**, 279-286, (2013), doi10.1002/crat.201200489
- Korzun, B.V.; Gavrilenko, A.N.; Fadzeyeva, A.A.; Ignatenko, O.V.; Maroz, I.I.; Sobol, V.R.; Rusu, M.; Klenk, R.; Merschjann, C.; Schedel-Niedrig, Th.; Lux-Steiner, M.Ch., *T(x) phase diagram of the CuSbS₂-CuInS₂ system and solubility limit of Sb in CuInS₂*, *Cryst Res Tech.* **48**, 641-648, (2013), 10.1002/crat.201300229
- Szilagyi, P.A.; Lutz, M.; Gascon, J.; Juan-Alcaniz, J.; van Esch, J.; Kapteijn, F.; Geerlings, H.; Dam, B.; van de Krol, R., *MOF@MOF core-shell vs. Janus particles and the effect of strain: potential for guest sorption, separation and sequestration*, *CRYSTENGCOMM* **15**, 6003-6008, (2013), 10.1039/c3ce40653a
- Martinez Moreno, E.; Friedrich, D.; Klein, D.; Kunst, M., *Microwave conductance and electrochemical characterization of Si/a-SiNx:H heterojunctions in contact to aqueous electrolyte*, *ELECTROCHIM ACTA* **98**, 157-166, (2013), 10.1016/j.electacta.2013.02.135
- Crevenna, Alvaro H.; Naredi-Rainer, Nikolaus; Schoenichen, Andre; Dzubiella, Joachim; Barber, Diane L.; Lamb, Don C.; Wedlich-Soeldner, Roland, *Electrostatics Control Actin Filament Nucleation and Elongation Kinetics*, *J BIOL CHEM* **288**, 12102-12113, (2013), 10.1074/jbc.M113.456327
- Meier, C.; Behrends, J.; Teutloff, C.; Astakhov, O.; Schnegg, A.; Lips, K.; Bittl, R., *Multi-frequency EDMR applied to microcrystalline thin-film silicon solar cells*, *J MAGN RESON* **234**, 1-9, (2013), 10.1016/j.jmr.2013.06.002
- Fu, Yanpeng; Sáez Araoz, R.; Koehler, Tristan; Krueger, Martin; Abou-Ras, Daniel; Steigert, A; Lauermann, Iver; Bloeck, Ulrike; Lux-Steiner, Martha C.; Fischer, Christian-Herbert, *Self-Assembled, Stabilizer-Free ZnS Nanodot Films using Spray-based Approaches*, *J PHYS CHEM C* **117**, 24632–24639, (2013), 10.1021/jp409054a
- Welzel, T.; Ellmer, K., *Comparison of ion energies and fluxes at the substrate during magnetron sputtering of ZnO:Al for dc and rf discharges*, *J PHYS D APPL PHYS* **46**, 315202/1-9, (2013), 10.1088/0022-3727/46/31/315202
- Lisunov, K.G.; Guc, M.; Levchenko, S.; Dumcenco, D; Huang, Y.S.; Gurieva, G.; Schorr, S.; Arushanov, E., *Energy spectrum of near-edge holes and conduction mechanisms in Cu₂ZnSiSe₄ single crystals*, *J. Alloy. Compd.* **580**, 481-486, (2013), 10.1016/j.jallcom.2013.06.156
- Karpinsky, D.V.; Troyanchuk, I.O.; Tovar, M.; Sikolenko, V.; Efimov, V.; Kholkin, A.L., *Evolution of crystal structure and ferroic properties of La-doped BiFeO₃ ceramics near the rhombohedral-orthorhombic phase boundary*, *J. Alloy. Compd.* **555**, 101-107, (2013), 10.1016/j.jallcom.2012.12.055
- Kamimura, Jumpei; Bogdanoff, Peter; Lahnemann, Jonas; Hauswald, Christian; Geelhaar, Lutz; Fiechter, Sebastian; Richert, Henning, *Photoelectrochemical Properties of (In,Ga)N Nanowires for*

Water Splitting Investigated by in Situ Electrochemical Mass Spectroscopy, J. Am. Chem. Soc. **135**, 10242 -10245, (2013), 10.1021/ja404043k

Bikowski, A.; Ellmer, K., *A comparative study of electronic and structural properties of polycrystalline and epitaxial magnetron-sputtered ZnO:Al and Zn_{1-x}Mg_xO:Al Films – Origin of the grain barrier traps*, J. Appl. Phys. **114**, 063709/1-10, (2013), 10.1063/1.4817376

Becker, C.; Pagels, M.; Zachäus, C.; Pollakowski, B.; Beckhoff, B.; Kanngießner, B.; Rech, B., *Chemical speciation at buried interfaces in high-temperature processed polycrystalline silicon thin-film solar cells on ZnO:Al*, J. Appl. Phys. **113**, 044519/1-7, (2013), 10.1063/1.4789599

Sontheimer, T.; Preidel, V.; Lockau, D.; Back, F.; Rudigier-Voigt, E.; Löchel, B.; Erko, A.; Schmidt, F.; Schnegg, A.; Lips, K.; Becker, C.; Rech, B., *Correlation between structural and opto-electronic characteristics of crystalline Si microhole arrays for photonic light management*, J. Appl. Phys. **114**, 173513/1-5, (2013), 10.1063/1.4829008

Bikowski, A.; Ellmer, K., *Electrical transport in hydrogen-aluminium Co-doped ZnO and Zn_{1-x}Mg_xO films: Relation to film structure and composition*, J. Appl. Phys. **113**, 053710/1-6, (2013), 10.1063/1.4790314

Karpinsky, D. V.; Troyanchuk, I. O.; Sikolenko, V.; Efimov, V.; Kholkin, A. L., *Electromechanical and magnetic properties of BiFeO₃-LaFeO₃-CaTiO₃ ceramics near the rhombohedral-orthorhombic phase boundary*, J. Appl. Phys. **113**, 187218, (2013), 10.1063/1.4801960

Nichterwitz, M.; Caballero, R.; Kaufmann, C.A.; Schock, H.-W.; Unold, T., *Generation-dependent charge carrier transport in Cu(In,Ga)Se₂/CdS/ZnO thin-film solar-cells*, J. Appl. Phys. **113**, 044515/1 - 16, (2013), 10.1063/1.4788827

Rößler, R.; Leendertz, C.; Korte, L.; Mingirulli, N.; Rech, B., *Impact of the transparent conductive oxide work function on injection-dependent a-Si:H/c-Si band bending and solar cell parameters*, J. Appl. Phys. **113**, 144513/1-8, (2013), 10.1063/1.4799042

Gluba, M.A.; Nickel, N.H.; Hinrichs, K.; Rappich, J., *Improved passivation of the ZnO/Si interface by pulsed laser deposition*, J. Appl. Phys. **113**, 043502/1-4, (2013), 10.1063/1.4788675

Bär, M.; Theisen, J.-P.; Wilks, R.G.; Erfurth, F.; Felix, R.; Gerlach, D.; Haas, S.; Tati Bismaths, L.; Reinert, F.; Kronast, F.; Niesen, T.P.; Palm, J.; Visbeck, S.; Weinhardt, L., *Lateral inhomogeneity of the Mg/(Zn+Mg) composition at the (Zn,Mg)O/CuIn(S,Se)₂ thin-film solar cell interface revealed by photoemission electron microscopy*, J. Appl. Phys. **113**, 193709/1-5, (2013), 10.1063/1.4804413

Nichterwitz, M.; Unold, T., *Numerical simulation of cross section electron-beam induced current in thin-film solar-cells for low and high injection conditions*, J. Appl. Phys. **114**, 134504/1-11, (2013), 10.1063/1.4823519

Guc, M.; Levchenko, S.; Izquiero-Roca, V.; Fontane, X.; Valakh, M.Y.; Arushanov, E.; Perez-Rodriguez, A., *Polarized Raman scattering analysis of \$Cu_{2}ZnSiS_{4}\$ and \$Cu_{2}ZnSiSe_{4}\$ single crystals*, J. Appl. Phys. **114**, 173507/1-9, (2013), 10.1063/1.4828885

- Juma, A.O.; Azarpira, A.; Steigert, A.; Pomaska, M.; Fischer, Ch.-H.; Lauermann, I.; Dittrich, Th., *Role of chlorine in In_2S_3 for band alignment at nanoporous- $\text{TiO}_2/\text{In}_2\text{S}_3$ interfaces*, *J. Appl. Phys.* **114**, 053711/1-5, (2013), 10.1063/1.4817766
- Troppeuz, G.V.; Gluba, M.A.; Kraft, M.; Rappich, J.; Nickel, N.H., *Strain relaxation in graphene grown by chemical vapor deposition*, *J. Appl. Phys.* **114**, 214312/1-5, (2013), 10.1063/1.4834538
- Bikowski, A.; Welzel, T.; Ellmer, K., *The correlation between the radial distribution of high-energetic ions and the structural as well as electrical properties of magnetron sputtered ZnO:Al films*, *J. Appl. Phys.* **114**, 223716/1-10, (2013), 10.1063/1.4840975
- Yin, G.; Merschjann, C.; Schmid, M., *The effect of surface roughness on the determination of optical constants of CuInSe_2 and CuGaSe_2 thin films*, *J. Appl. Phys.* **113**, 213510/1-6, (2013), 10.1063/1.4809550
- Leendertz, C.; Teodoreanu, A.-M.; Korte, L.; Rech, B., *The influence of space charge regions on effective charge carrier lifetime in thin films and resulting opportunities for materials characterization*, *J. Appl. Phys.* **113**, 044510/1-10, (2013), 10.1063/1.4788716
- Troyanchuk, I. O.; Bushinsky, M. V.; Nikitin, A. V.; Lobanovsky, L. S.; Balagurov, A. M.; Sikolenko, V.; Efimov, V.; Sheptyakov, D. V., *Very large magnetoresistance and spin state transition in Ba-doped cobaltites*, *J. Appl. Phys.* **113**, 53909, (2013), 10.1063/1.4790316
- Meyer, F.; Weinhardt, L.; Blum, M.; Bär, M.; Wilks, R.G.; Yang, W.; Heske, C.; Reinert, F., *Non-equivalent carbon atoms in the resonant inelastic soft X-ray scattering map of cysteine*, *J. Chem. Phys.* **138**, ARTN 034306, (2013), 10.1063/1.4774059
- Brunken, S.; Krause, J.; Ellmer, K., *An energy-dispersive X-ray diffraction study of the nickel-sulfide assisted growth of RuS_2 thin films by reactive magnetron sputtering*, *J. Cryst. Growth* **363**, 277-281, (2013), 10.1016/j.jcrysgro.2012.11.004
- Merkel, J.J.; Sontheimer, T.; Rech, B.; Becker, C., *Directional growth and crystallization of silicon thin films prepared by electron-beam evaporation on oblique and textured surfaces*, *J. Cryst. Growth* **367**, 126-130, (2013), 10.1016/j.jcrysgro.2012.12.037
- Barrigon, E.; Brückner, S.; Supplie, O.; Döscher, H.; Rey-Stolle, I.; Hannappel, T., *In situ study of $\text{Ge}(100)$ surfaces with tertiarybutylphosphine supply in vapor phase epitaxy ambient*, *J. Cryst. Growth* **370**, 173-176, (2013), 10.1016/j.jcrysgro.2012.07.046
- Schulte, J.; Brunken, S.; Ellmer, K., *Nucleation and phase formation during reactive magnetron co-sputtering of $\text{Cu}(\text{In,Ga})\text{S}_2$ films, investigated by in situ EDXRD*, *J. Cryst. Growth* **384**, 114-121, (2013), 10.1016/j.jcrysgro.2013.09.006
- Wimmer, M.; Gerlach, D.; Wilks, R.-G.; Scherf, S.; Félix, R.; Lupulescu, C.; Ruske, F.; Schondelmaier, G.; Lips, K.; Hüpkes, J.; Gorgoi, M.; Eberhardt, W.; Rech, B.; Bär, M., *Chemical interaction at the buried silicon/zinc oxide thin-film solar cell interface as revealed by hard x-ray photoelectron spectroscopy*, *J. Electr. Spectr.* **190**, 309-313, (2013),

Johnson, B.; Klaer, J.; Merdes, S.; Gorgoi, M.; Höpfner, B.; Vollmer, A.; Lauer mann, I., *Limitations of Near Edge X-Ray Absorption Fine Structure as a tool for observing conduction bands in chalcopyrite solar cell heterojunctions*, *J. Electr. Spectr.* **190**, 42-46, (2013), 10.1016/j.elspec.2013.01.007

Weinhardt, L.; Blum, M.; Fuchs, O.; Benkert, A.; Meyer, F.; Bär, M.; Denlinger, J.D.; Yang, W.; Reinert, F.; Heske, C., *RIXS investigations of liquids, solutions, and liquid/solid interfaces*, *J. Electr. Spectr.* **188**, 111-120, (2013), 10.1016/j.elspec.2012.10.006

Weinhardt, L.; Blum, M.; Fuchs, O.; Pookpanratana, S.; George, K.; Cole, B.; Marsen, B.; Gaillard, N.; Miller, E.; Ahn, K.-S.; Shet, S.; Yan, Y.; Al-Jassim, M.-M.; Denlinger, J.-D.; Yang, W.; Bär, M.; Heske, C., *Soft X-ray and electron spectroscopy to determine the electronic structure of materials for photoelectrochemical hydrogen production*, *J. Electr. Spectr.* **190**, 106-112, (2013),

Bär, M.; Pookpanratana, S.; Weinhardt, L.; Wilks, R.-G.; Schubert, B.-A.; Marsen, B.; Unold, T.; Blum, M.; Krause, S.; Zhang, Y.; Ranasinghe, A.; Ramanathan, K.; Repins, I.; Contreras, M.-A.; Nishiwaki, S.; Liu, X.; Paudel, N.-R.; Fuchs, O.; Niesen, T.-P., *Soft X-rays shedding light on thin-film solar cell surfaces and interfaces*, *J. Electr. Spectr.* **190**, 47-53, (2013),

Katayama, T.; Anniyev, T.; Beye, M.; Coffee, R.; Dell'Angela, M.; Foehlich, A.; Gladh, J.; Kaya, S.; Krupin, O.; Nilsson, A.; Nordlund, D.; Schlotter, W. F.; Sellberg, J. A.; Sorgenfrei, F.; Turner, J. J.; Wurth, W.; Ostrom, H.; Ogasawara, H., *Ultrafast soft X-ray emission spectroscopy of surface adsorbates using an X-ray free electron laser*, *J. Electr. Spectr.* **187**, 41883, (2013), 10.1016/j.elspec.2013.03.006

Yang, F.; Kuznietsov, V.; Lublow, M.; Merschjann, C.; Steigert, A.; Klaer, J.; Thomas, A.; Schedel-Niedrig, Th., *Solar Hydrogen Evolution Using Metal-Free Photocatalytic Polymeric Carbon Nitride/CuInS₂ Composite as Photocathodes*, *J. Mater. Chem. A* **1**, 6407 - 6415, (2013), 10.1039/c3ta10360a

Khomchenko, V. A.; Troyanchuk, I. O.; Sikolenko, V.; Paixao, J. A., *Weak ferromagnetic polar phase in the BiFe_{1-x}Ti_xO₃ multiferroics*, *J. Mater. Sci.* **48**, 3852-3856, (2013), 10.1007/s10853-013-7186-z

Schmid, M.; Grandidier, J.; Atwater, H., *Scanning near-field optical microscopy on dense random assemblies of metal nanoparticles*, *J. Opt.* **15**, 125001/1-9, (2013), 10.1088/2040-8978/15/12/125001

Hinrichs, K.; Furchner, A.; Rappich, J.; Oates, T.W.H., *Polarization-dependent and ellipsometric infrared microscopy for analysis of anisotropic thin films*, *J. Phys. Chem. C* **117**, 13557-13563, (2013), 10.1021/jp401576r

Hofmann, T.; Yu, T.H.; Folse, M.; Weinhardt, L.; Bär, M.; Zhang, Y.; Merinov, B.V.; Myers, D.J.; Goddard, W.A.; Heske, C., *Reply to Comment on 'Using Photoelectron Spectroscopy and Quantum Mechanics to Determine d-Band Energies of Metals for Catalytic Applications''''*, *J. Phys. Chem. C* **117**, 6916-6917, (2013), 10.1021/jp401620e

Papaefthimiou, V.; Florea, I.; Baaziz, W.; Janowska, I.; Doh, W.H.; Begin, D.; Blume, R.; Knop-Gericke, A.; Ersen, O.; Pham-Huu, C.; Zafeiratos, S., *Effect of the Specific Surface Sites on the Reducibility of alpha-Fe₂O₃/Graphene Composites by Hydrogen*, *J. Phys. Chem. C* **117**, 20313-20319, (2013), 10.1021/jp4067718

Letilly, M.; Skorupska, K.; Lewerenz, H.-J., *Initial Phase of Photoelectrochemical Conditioning of Silicon in Alkaline Media: Surface Chemistry and Topography*, *J. Phys. Chem. C* **117**, 16381-16391, (2013), 10.1021/jp401853p

Nattestad, A.; Cheng, Y.-Y.; MacQueen, R.W.; Schulze, T.F.; Thompson, F.W.; Mozer, A.J.; Fückel, B.; Khoury, T.; Crossley, M.J.; Lips, K.; Wallace, G.G.; Schmidt, T.W., *Dye-Sensitized Solar Cell with Integrated Triplet-Triplet Annihilation Upconversion System*, *J. Phys. Chem. Lett.* **4**, 2073-2078, (2013), 10.1021/jz401050u

Abdi, F.F.; Savenije, T.J.; May, M.M.; Dam, B.; van de Krol, R., *The Origin of Slow Carrier Transport in BiVO₄ Thin Film Photoanodes: A Time-Resolved Microwave Conductivity Study*, *J. Phys. Chem. Lett.* **4**, 2752-2757, (2013), 10.1021/jz4013257

Tyborski, T.; Merschjann, C.; Orthmann, S.; Yang, F.; Lux-Steiner, M.-Ch.; Schedel-Niedrig, Th., *Crystal Structure of Polymeric Carbon Nitride and Determination of its Process Temperature Induced Modifications*, *J. Phys.: Condens. Matter* **25**, 395402/1-7, (2013), 10.1088/0953-8984/25/39/395402

Karpinsky, D. V.; Troyanchuk, I. O.; Lobanovsky, L. S.; Chobot, A. N.; Ritter, C.; Efimov, V.; Sikolenko, V.; Kholkin, A. L., *Magnetic and structural phase transitions in La_{0.5}Sr_{0.5}CoO_{3-d} (0 ≤ d < 0.3) cobaltites*, *J. Phys.: Condens. Matter* **25**, ARTN 316004, (2013), 10.1088/0953-8984/25/31/316004

Granata, V.; Capogna, L.; Reehuis, M.; Fittipaldi, R.; Ouladdiaf, B.; Pace, S.; Cuoco, M.; Vecchione, A., *Neutron diffraction study of triple-layered Sr₄Ru₃O₁₀*, *J. Phys.: Condens. Matter* **25**, 056004/1-6, (2013), 10.1088/0953-8984/25/5/056004

Brzhezinskaya, Maria; Firsov, Alexander; Holldack, Karsten; Kachel, Torsten; Mitzner, Rolf; Pontius, Niko; Schmidt, Jan-Simon; Sperling, Mike; Stamm, Christian; Foehlich, Alexander; Erko, Alexei, *A novel monochromator for experiments with ultrashort X-ray pulses*, *J. Synchrot. Radiat.* **20**, 522-530, (2013), 10.1107/S0909049513008613

Valakh, M.Ya.; Dzhagan, V.M.; Babichuk, I. S.; Fontane, X.; Perez-Rodriguez, A.; Schorr, S., *Optically Induced Structural Transformation in Disordered Kesterite Cu₂ZnSnS₄*, *JETP Lett.* **98**, 255-258, (2013), 10.1134/S0021364013180136

Abou-Ras, D.; Kavalakkatt, J.; Nichterwitz, M.; Schäfer, N.; Harndt, S.; Wilkinson, A.J.; Tsyruilin, K.; Schulz, H.; Bauer, F., *Electron Backscatter Diffraction: An Important Tool for Analyses of Structure-Property Relationships in Thin-Film Solar Cells*, *JOM* **65**, 41821, (2013), 10.1007/s11837-013-0685-1

Schwabegger, G.; Oehzelt, M.; Salzmann, I.; Quochi, F.; Saba, M.; Mura, A.; Bongiovanni, G.; Vollmer, A.; Koch, N.; Sitter, H.; Simbrunner, C., *Interface Properties of Organic para-Hexaphenyl/alpha-Sexithiophene Heterostructures Deposited on Highly Oriented Pyrolytic Graphite*, *Langmuir* **29**, 14444-14450, (2013), 10.1021/la402242b

Lages, S.; Goerigk, G.; Huber, K., *SAXS and ASAXS on Dilute Sodium Polyacrylate Chains Decorated with Lead Ions*, *Macromolecules* **46**, 3570-3580, (2013), 10.1021/ma400427d

Leon, M.; Levchenko, S.; Serna, R.; Nateprov, A.; Gurieva, G.; Merino, J.M.; Schorr, S.; Arushanov, E., *Spectroscopic ellipsometry study of Cu₂ZnGeSe₄ and Cu₂ZnSiSe₄ poly-crystals*, *Mater. Chem. Phys.* **141**, 58-62, (2013), 10.1016/matchemphys.2013.04.024

Steffens, S.; Becker, C.; Zollondz, J.-H.; Chowdhury, A.; Slaoui, A.; Lindekugel, S.; Schubert, U.; Evans, R.; Rech, B., *Defect annealing processes for polycrystalline silicon thin-film solar cells*, Mater. Sci. Eng. B **178**, 670-675, (2013), 10.1016/j.mseb.2012.11.002

Varache, R.; Kleider, J.P.; Gueunier-Farret, M.E.; Korte, L., *Silicon heterojunction solar cells: Optimization of emitter and contact properties from analytical calculation and numerical simulation*, Mater. Sci. Eng. B **178**, 593-598, (2013),

Dikarov, E.; Fehr, M.; Schnegg, A.; Lips, K.; Blank, A., *Selective electron spin resonance measurements of micrometer-scale thin samples on a substrate*, Meas. Sci. Tech. **24**, 115009/1-7, (2013), 10.1088/0957-0233/24/11/115009

Vinod Kumar, G.S.; Mukherjee, M.; Garcia-Moreno, F.; Banhart, J., *Reduced-Pressure Foaming of Aluminum Alloys*, Metall. Mater. Trans. A **44**, 419-426, (2013), 10.1007/s11661-012-1398-8

Mitchell, D.G.; Tseitlin, M.; Quine, R.W.; Meyer, V.; Newton, M.E.; Schnegg, A.; George, B.; Eaton, S.S.; Eaton, G.R., *X-band rapid-scan EPR of samples with long electron spin relaxation times: a comparison of continuous wave, pulse and rapid-scan EPR*, MOL PHYS **111**, 2664-2673, (2013), 10.1080/00268976.2013.792959

Nehrkorn, J.; Martins, B.M.; Holldack, K.; Stoll, S.; Dobbek, H.; Bittl, R.; Schnegg, A., *Zero-field splittings in metHb and metMb with aquo and fluoro ligands: a FD-FT THz-EPR study*, MOL PHYS **111**, 2696-2707, (2013), 10.1080/00268976.2013.809806

Weatherup, R.S.; Baehtz, C.; Dlubak, B.; Bayer, B.C.; Kidambi, P.R.; Blume, R.; Schloegl, R.; Hofmann, S., *Introducing Carbon Diffusion Barriers for Uniform, High-Quality Graphene Growth from Solid Sources*, NANO LETT **13**, 4624-4631, (2013), 10.1021/nl401601x

Abdi, F.F.; Han, L.; Smets, A.H.M.; Zeman, M.; Dam, B.; van de Krol, R., *Efficient solar water splitting by enhanced charge separation in a bismuth vanadate-silicon tandem photoelectrode*, Nat. Commun. **4**, 107755, (2013), 10.1038/ncomms3195

Lu, G.; Blakesley, J.; Himmelberger, S.; Pingel, P.; Frisch, J.; Lieberwirth, I.; Salzmann, I.; Oehzelt, M.; Di Pietro, R.; Salleo, A.; Koch, N.; Neher, D., *Moderate doping leads to high performance of semiconductor/insulator polymer blend transistors*, Nat. Commun. **4**, 1588/1-8, (2013), 10.1038/ncomms2587

Behrends, J.; Samuel, I.D.W.; Schnegg, A.; Keeble, D.J., *Persistent spin coherence and bipolarons*, Nat. Nanotechnol. **8**, 884-885, (2013), 10.1038/nnano.2013.269

Brueckner, Sebastian; Kleinschmidt, Peter; Supplie, Oliver; Doescher, Henning; Hannappel, Thomas, *Domain-sensitive in situ observation of layer-by-layer removal at Si(100) in H₂ ambient*, New J. Phys. **15**, 113049, (2013), 10.1088/1367-2630/15/11/113049

May, M.M.; Supplie, O.; Höhn, Ch.; van de Krol, R.; Lewerenz, H.-J.; Hannappel, T., *The interface of GaP(100) and H₂O studied by photoemission and reflection anisotropy spectroscopy*, New J. Phys. **15**, 103003/1-17, (2013), 10.1088/1367-2630/15/10/103003

Viefhaus, J.; Scholz, F.; Deinert, S.; Glaser, L.; Ilchen, M.; Seltmann, J.; Walter, P.; Siewert, F., *The Variable Polarization XUV Beamline P04 at PETRA III: Optics, mechanics and their performance*, Nucl. Instrum. & Methods Phys. Res. Sect. A **710**, 151-154, (2013), 10.1016/j.nima.2012.10.110

Baum, M.; Alexeev, I.; Latzel, M.; Christiansen, S.H.; Schmidt, M., *Determination of the effective refractive index of nanoparticulate ITO layers*, Optic. Express **21**, 22754-22761, (2013), 10.1364/OE.21.022754

Lockau, D.; Sontheimer, T.; Becker, C.; Rudigier-Voigt, E.; Schmidt, F.; Rech, B., *Nanophotonic light trapping in 3-dimensional thin-film silicon architectures*, Optic. Express **21**, A42-A52, (2013), 10.1364/OE.21.000A42

Scenev, V.; Cosseddu, P.; Bonfiglio, A.; Salzmann, I.; Severin, N.; Oehzelt, M.; Koch, N.; Rabe, J.P., *Origin of mechanical strain sensitivity of pentacene thin-film transistors*, ORG ELECTRON **14**, 1323-1329, (2013), 10.1016/j.orgel.2013.02.030

Brus, V.V.; Zellmeier, M.; Zhang, X.; Greil, S.M.; Gluba, M.; Töfflinger, A.J.; Rappich, J.; Nickel, N.H., *Electrical and photoelectrical properties of P3HT/n-Si hybrid organic-inorganic heterojunction solar cells*, Organic Electronics **14**, 3109-3116, (2013), 10.1016/j.orgel.2013.07.021

Mainz, R.; Walker, B.C.; Schmidt, S.S.; Zander, O.; Weber, A.; Rodriguez-Alvarez, H.; Just, J.; Klaus, M.; Agrawal, R.; Unold, T., *Real-time observation of $\text{Cu}_2\text{ZnSn(S,Se)}_4$ solar cell absorber layer formation from nanoparticle precursors*, Phys. Chem. Chem. Phys. **15**, 18281-18289, (2013), 10.1039/C3CP53373E

Herrmann-Geppert, I.; Bogdanoff, P.; Radnik, J.; Fengler, S.; Dittrich, T.; Fiechter, S., *Surface aspects of sol-gel derived hematite films for the photoelectrochemical oxidation of water*, Phys. Chem. Chem. Phys. **15**, 1389-1398, (2013), 10.1039/c2cp42651j

Bogdanoff, P.; Zachäus, C.; Brunken, S.; Kratzig, A.; Ellmer, K.; Fiechter, S., *Ruthenium sulphide thin layers as catalysts for the electrooxidation of water*, Phys. Chem. Chem. Phys. **15**, 1452-1459, (2013), 10.1039/c2cp42348k

Paul, A.; Paul, N.; Jutimoosik, J.; Yimnirun, R.; Rujirawat, S.; Höpfner, B.; Lauermann, I.; Lux-Steiner, M.; Mattauch, S.; Böni, P., *Change in interface magnetism of an exchange-coupled system due to the presence of nonmagnetic spacers*, Phys. Rev. B **87**, 014431/1-18, (2013), 10.1103/PhysRevB.87.014431

Schmidt, M.; Wang, Z.; Kant, Ch.; Mayr, F.; Toth, S.; Islam, A.T.M.N.; Lake, B.; Tsurkan, V.; Loidl, A.; Deisenhofer, J., *Exciton-magnon transitions in the frustrated chromium antiferromagnets CuCrO_2 , $\alpha\text{-CaCr}_2\text{O}_4$, CdCr_2O_4 , and ZnCr_2O_4* , Phys. Rev. B **87**, 224424/1-13, (2013), 10.1103/PhysRevB.87.224424

Ritter, C.; Yusuf, S.M.; Bera, A.K.; Goto, Y.; Tassel, C.; Kageyama, H.; Arevalo-Lopez, A.M.; Attfield, J.P., *Field-induced evolution of magnetic ordering in the quantum spin system $\text{CuBrSr}_2\text{Nb}_3\text{O}_{10}$ with a $1/3$ magnetization plateau*, Phys. Rev. B **88**, 104401/1-7, (2013), 10.1103/PhysRevB.88.104401

- Li, S.; Morasch, J.; Klein, A.; Chirila, C.; Pintilie, L.; Jia, L.; Ellmer, K.; Naderer, M.; Reichmann, K.; Gröting, M.; Albe, K., *Influence of orbital contributions to the valence band alignment of Bi₂O₃, Fe₂O₃, BiFeO₃, and Bi_{0.5}Na_{0.5}TiO₃*, Phys. Rev. B **88**, 45428/1-11, (2013), 10.1103/PhysRevB.88.045428
- Gluba, M.A.; Nickel, N.H.; Karpensky, N., *Interstitial zinc clusters in zinc oxide*, Phys. Rev. B **88**, 245201/1-8, (2013), 10.1103/PhysRevB.88.245201
- Merschjann, C.; Tyborski, T.; Orthmann, S.; Yang, F.; Schwarzburg, K.; Lublow, M.; Lux-Steiner, M.-Ch.; Schedel-Niedrig, Th., *Photophysics of polymeric carbon nitride: An optical quasimonomer*, Phys. Rev. B **87**, 205204/1-8, (2013), 10.1103/PhysRevB.87.205204
- Gluba, M. A.; Nickel, N. H., *Transition-metal acceptor complexes in zinc oxide*, Phys. Rev. B **87**, 085204/1-6, (2013), 10.1103/PhysRevB.87.085204
- Schwarz, C.; Tscheuschner, S.; Frisch, J.; Winkler, S.; Koch, N.; Bäessler, H.; Köhler, A., *Role of the effective mass and interfacial dipoles on exciton dissociation in organic donor-acceptor solar cells*, Phys. Rev. B **87**, 155205/1-13, (2013), 10.1103/PhysRevB.87.155205
- George, B.M.; Behrends, J.; Schnegg, A.; Schulze, T.F.; Fehr, M.; Korte, L.; Rech, B.; Lips, K.; Rohrmüller, M.; Rauls, E.; Schmidt, W.G.; Gerstmann, U., *Atomic Structure of Interface States in Silicon Heterojunction Solar Cells*, Phys. Rev. Lett. **110**, 136803/1-5, (2013), 10.1103/PhysRevLett.110.136803
- Beye, M.; Anniyev, T.; Coffee, R.; Dell'Angela, M.; Foehlich, A.; Gladh, J.; Katayama, T.; Kaya, S.; Krupin, O.; Mogelhoj, A.; Nilsson, A.; Nordlund, D.; Norskov, J. K.; Oberg, H.; Ogasawara, H.; Pettersson, L. G. M.; Schlotter, W. F.; Sellberg, J. A.; S., *Selective Ultrafast Probing of Transient Hot Chemisorbed and Precursor States of CO on Ru(0001)*, Phys. Rev. Lett. **110**, 186101, (2013), 10.1103/PhysRevLett.110.186101
- Sun, Y. -P.; Miao, Q.; Pietzsch, A.; Hennies, F.; Schmitt, T.; Strocov, V.N.; Andersson, J.; Kennedy, B.; Schlappa, J.; Foehlich, A.; Gel'mukhanov, F.; Rubensson, J.-E., *Interference between Resonant and Nonresonant Inelastic X-Ray Scattering*, Phys. Rev. Lett. **110**, 223001, (2013), 10.1103/PhysRevLett.110.223001
- Solovan, M.N.; Brus, V.V.; Maryanchuk, P.D.; Kovalyuk, T.T.; Rappich, J.; Gluba, M., *Kinetic Properties of TiN Thin Films Prepared by Reactive Magnetron Sputtering*, Phys. Solid State **55**, 2234–2238, (2013), 10.1134/S1063783413110255
- Töfflinger, J.A.; Pedrueza, E.; Chirvony, V.; Leendertz, C.; Garcia-Calzada, R.; Abargues, R.; Gref, O.; Roczen, M.; Korte, L.; Martinez-Pastor, J.P.; Rech, B., *Photoconductivity and optical properties of silicon coated by thin TiO₂ film in situ doped by Au nanoparticles*, Phys. Status Solidi A **210**, 687-694, (2013), 10.1002/pssa.201200804
- Schönau, S.; Rappich, J.; Weizman, M.; Amkreutz, D.; Rech, B., *Photoluminescence study of polycrystalline silicon thin films prepared by liquid and solid phase crystallization*, Phys. Status Solidi A **210**, 1652-1656, (2013), 10.1002/pssa.201228809

Roczen, M.; Laades, A.; Schade, M.; Barthel, T.; Ordeñez, J.; Töfflinger, J.A.; Malguth, E.; Ruske, F.; Leendertz, C.; Korte, L.; Leipner, H.S.; Rech, B., *Structural properties of Si/SiO₂ nanostructures grown by decomposition of substoichiometric SiO_xNy layers for photovoltaic applications*, Phys. Status Solidi A **210**, 676-691, (2013), 10.1002/pssa.201200803

Kate, S.P.; Pop, S.; Esser, N.; Rappich, J.; Zhang, X.; Hinrichs, K., *Aging-induced optical anisotropy in thermally grown thin ZnTPP films on Si*, Phys. Status Solidi B **250**, 1791-1794, (2013), 10.1002/pssb.201248538

Sauer, M.; Shiozawa, H.; Ayala, P.; Ruiz-Soria, G.; Liu, XJ.; Yanagi, K.; Kataura, H.; Krause, S.; Pichler, T., *Environmental stability of ferrocene filled in purely metallic single-walled carbon nanotubes*, Phys. Status Solidi B **250**, 2599-2604, (2013), 10.1002/pssb.201300124

Abou-Ras, D.; Dittrich, H.; Schorr, S., *Preface: Ternary and Multinary Compounds, 18th International Conference on Ternary and Multinary Compounds (ICTMC-18)*, Phys. Status Solidi C **10**, 987-988, (2013), 10.1002/pssc.201370012

Guc, M.; Izquierdo-Roca, V.; Perez-Rodriguez, A.; Gurieva, G.; Levchenko, S.; Schorr, S.; Arushanov, E., *Raman spectra of wurtzstannite quaternary compounds*, Phys. Status Solidi C **10**, 1075-1078, (2013), 10.1002/pssc.201200831

Kaigawa, R.; Hirata, S.; Sasaki, M.; Klenk, R., *Rapid direct preparation of Cu₂ZnSn(S_{1-x}Se_x)₄ films using microwave irradiation*, Phys. Status Solidi C **10**, 1012-1014, (2013), 10.1002/pssc.201200842

Gurieva, G.; Guc, M.; Bruk, L.I.; Izquierdo-Roca, V.; Perez-Rodriguez, A.; Schorr, S.; Arushanov, E., *Cu₂ZnSnS₄ thin films grown by spray pyrolysis: characterization by Raman spectroscopy and X-ray diffraction*, Phys. Status Solidi C **10**, 1082-1085, (2013), 10.1002/pssc.201200856

Levchenko, S.; Guc, M.; Merschjann, C.; Gurieva, G.; Schorr, S.; Lux-Steiner, M.; Arushanov, E., *Photoluminescence characterization of $\text{Cu}_{2}\text{ZnGeS}_{4}$ single crystals*, Phys. Status Solidi C **7**, 1079-1081, (2013), 10.1002/pssc.201200843

Ring, S.; Stannowski, B.; Fink, F.; Schlatmann, R., *Micro gratings written in ZnO:Al thin films using picosecond UV-laser interference patterning*, Phys. Status Solidi Rapid Res. Lett. **7**, 635-638, (2013), 10.1002/pssr.201307254

Sontheimer, T.; Schnegg, A.; Steffens, S.; Ruske, F.; Amkreutz, D.; Lips, K.; Rech, B., *Identification of intra-grain and grain boundary defects in polycrystalline Si thin films by electron paramagnetic resonance*, Phys. Status Solidi Rapid Res. Lett. **7**, 959-962, (2013), 10.1002/pssr.201308061

Sikolenko, V.; Efimov, V.V.; Többens, D.; Schorr, S.; Ritter, C.; Bushinsky, M.V.; Troyanchuk, I.O., *Pressure effects on oxygen-deficient Ba-substituted cobaltites*, Powder Diffr. **0**, S126-S132, (2013), 10.1017/S0885715613001097

Emmler, Thomas; Gutzmann, Henning; Hillebrand, Philipp; Schieda, Mauricio; Rust, Regina; Gärtner, Frank; Bogdanoff, Peter; Herrmann-Geppert, Iris; Klassen, Thomas, *Cold gas spraying of semiconductor coatings for the photooxidation of water*, Proc. SPIE **8822**, 88220C1 -88220C12, (2013), 10.1117/12.2026391

Preidel, V.; Amkreutz, D.; Sontheimer, T.; Back, F.; Rudigier-Voigt, E.; Rech, B.; Becker, C., *A novel light trapping concept for liquid phase crystallized poly-Si thin-film solar cells on periodically nanoimprinted glass substrates*, Proc. SPIE **8823**, 882307/1-5, (2013), 10.1117/12.2023989

Ruske, F.; Rößler, R.; Wimmer, M.; Schönau, S.; Kämpfer, S.; Hendrichs, M.; Neubert, S.; Korte, L.; Rech, B., *ZnO:Al with tuned properties for photovoltaic applications: thin layers and high mobility material*, Proc. SPIE **8626**, 86260Y/1-9, (2013), 10.1117/12.2001290

Schwabegger, G.; Quochi, F.; Hernandez-Sosa, G.; Djuric, T.; Bongiovanni, G.; Vollmer, A.; Oehzelt, M.; Salzmann, I.; Resel, R.; Koch, N.; Sitter, H.; Simbrunner, C., *White fluorescent nano-fibers prepared by periodic organic hetero-epitaxy*, Proc. SPIE **8827**, 882707/1-7, (2013), 10.1117/12.2023033

Merdes, S.; Abou-Ras, D.; Mainz, R.; Klenk, R.; Lux-Steiner, M.Ch.; Meeder, A.; Schock, H.W.; Klaer, J., *CdS/Cu(In,Ga)SS₂ based solar cells with efficiencies reaching 12.9% prepared by a rapid thermal process*, Prog. Photovolt. **21**, 88-93, (2013), 10.1002/pip.2165

Caballero, R.; Kaufmann, C.A.; Efimova, V.; Rissom, T.; Hoffmann, V.; Schock, H.W., *Investigation of Cu(In,Ga)Se₂ thin-film formation during the multi-stage co-evaporation process*, Prog. Photovolt. **21**, 30-46, (2013), 10.1002/pip.1233

Merdes, S.; Abou-Ras, D.; Mainz, R.; Klenk, R.; Lux-Steiner, M.C.; Meeder, A.; Schock, H. W.; Klaer, J., *CdS/Cu(In,Ga)SS₂ based solar cells with efficiencies reaching 12.9% prepared by a rapid thermal process*, Progress in Photovoltaics **21**, 88-93, (2013), 10.1002/pip.2165

Janocha, E.; Hofmann, A.; Pettenkofer, C., *Interface formation of CuInSe₂ (112) and ZnO deposited by atomic layer deposition*, Radiat. Phys. Chem. **93**, 72-76, (2013), 10.1016/j.radphyschem.2013.01.017

Ennaoui, A., *Recent progress in scaling up highly efficient Zn(S,O)/Cu-chalcopyrite thin film solar cells and modules at HZB*, Ren. Energ. **49**, 68-71, (2013), 10.1016/j.renene.2012.01.064

Kornhuber, K.; Kavalakkatt, J.; Lin, X.; Ennaoui, Ahmed; Lux-Steiner, M.Ch., *In Situ Monitoring of Electrophoretic Deposition of Cu₂ZnSnS₄ Nanocrystals*, RSC Adv. **3**, 5845-5850, (2013), 10.1039/c3ra23093g

Dell'Angela, M.; Anniyev, T.; Beye, M.; Coffee, R.; Foehlich, A.; Gladh, J.; Katayama, T.; Kaya, S.; Krupin, O.; LaRue, J.; Mogelhoj, A.; Nordlund, D.; Norskov, J. K.; Oberg, H.; Ogasawara, H.; Ostrom, H.; Pettersson, L. G. M.; Schlotter, W. F.; Sellberg, *Real-Time Observation of Surface Bond Breaking with an X-ray Laser*, Science **339**, 1302-1305, (2013), 10.1126/science.1231711

Paul, N.; Müller, M.; Paul, A.; Guenther, E.; Lauermann, I.; Müller-Buschbaum, P.; Lux-Steiner, M.Ch., *Molecularly imprinted conductive polymers for controlled trafficking of neurotransmitters at solid-liquid interfaces*, Soft Matter **9**, 1364-1371, (2013), 10.1039/C2SM26896E

Barrett, M.A.; Zheng, S.; Topozini, L.A.; Alsop, R.J.; Dies, H.; Wang, A.; Jago, N.; Moore, M.; Rheinstaedter, M.C., *Solubility of cholesterol in lipid membranes and the formation of immiscible cholesterol plaques at high cholesterol concentrations*, Soft Matter **9**, 9342-9351, (2013), 10.1039/c3sm50700a

Stannowski, B.; Gabriel, O.; Calnan, S.; Frijnts, T.; Heidelberg, A.; Neubert, S.; Kirner, S.; Ring, S.; Zelt, M.; Rau, B.; Zollondz, J.-H.; Bloess, H.; Schlatmann, R.; Rech, B., *Achievements and challenges in thin film silicon module production*, SOL ENERG MAT SOL C **119**, 196-203, (2013), 10.1016/j.solmat.2013.06.043i

Teodoreanu, A.-M.; Leendertz, C.; Sontheimer, T.; Korte, L.; Rech, B., *An effective medium approach for modeling polycrystalline silicon thin film solar cells*, SOL ENERG MAT SOL C **117**, 152-160, (2013), 10.1016/j.solmat.2013.05.003

Haarstrich, J.; Teichmann, M.; Metzner, H.; Gnauck, M.; Ronning, C.; Wesch, W.; Rissom, T.; Kaufmann, Christian A.; Schock, Hans-Werner; Scheumann, V.; Mannstadt, W., *Buffer-free Cu(In,Ga)Se₂-solar cells by near-surface ion implantation*, SOL ENERG MAT SOL C **116**, 43-48, (2013), 10.1016/j.solmat.2013.04.009

Lange, A.; Schindler, W.; Wegener, M.; Fostiropoulos, K.; Janietz, S., *Inkjet printed solar cell active layers prepared from chlorine-free solvent systems*, SOL ENERG MAT SOL C **109**, 104-110, (2013), 10.1016/j.solmat.2012.10.011

Haschke, J.; Jogschies, L.; Amkreutz, D.; Korte, L.; Rech, B., *Polycrystalline silicon heterojunction thin-film solar cells on glass exhibiting 582mV open-circuit voltage*, SOL ENERG MAT SOL C **115**, 41919, (2013), 10.1016/j.solmat.2013.03.013

Becker, C.; Amkreutz, D.; Sontheimer, T.; Preidel, V.; Lockau, D.; Haschke, J.; Jogschies, L.; Klimm, C.; Merkel, J.J.; Plocica, P.; Steffens, S.; Rech, B., *Polycrystalline silicon thin-film solar cells: Status and perspectives*, SOL ENERG MAT SOL C **119**, 112-123, (2013), 10.1016/j.solmat.2013.05.043

Rodriguez-Alvarez, H.; Mainz, R.; Caballero, R.; Abou-Ras, D.; Klaus, M.; Gledhill, S.; Weber, A.; Kaufmann, C.A.; Schock, H.-W., *Real-time study of Ga diffusion processes during the formation of Cu(In,Ga)Se₂: The role of Cu and Na content*, SOL ENERG MAT SOL C **116**, 102-109, (2013), 10.1016/j.solmat.2013.04.008

Fu, Y.; Saez-Araoz, R.; Köhler, T.; Krueger, M.; Steigert, A.; Lauermann, I.; Lux-Steiner, M.Ch; Fischer, Ch.-H., *Spray-ILGAR ZnS nanodots/\$In_{2S_3}\$ as defect passivation/point contact bilayer buffer for Cu(In,Ga)(S,Se)\$_{2S}\$ solar cells*, SOL ENERG MAT SOL C **117**, 293-299, (2013), 10.1016/j.solmat.2013.06.007

Gall, S.; Rech, B., *Technological status of polycrystalline silicon thin-film solar cells on glass*, SOL ENERG MAT SOL C **119**, 306-308, (2013),

Puttnins, S.; Levcenco, S.; Schwarzburg, K.; Benndorf, G.; Daume, F.; Rahm, A.; Braun, A.; Grundmann, M.; Unold, Thomas, *Effect of sodium on material and device quality in low temperature deposited Cu(In,Ga)Se₂*, SOL ENERG MAT SOL C **119**, 281-286, (2013), 10.1016/j.solmat.2013.08.029

Angermann, H.; Wolke, K.; Gottschalk, Ch.; Moldavan, A.; Roczen, M.; Fittkau, J.; Zimmer, M.; Rentsch, J., *Surface charge and interface state density on Silicon substrates after Ozone based wet-chemical oxidation and Hydrogen-termination*, Solid State Phenom. **195**, 314-317, (2013), 10.4028/www.scientific.net/SSP.195.314

Laades, A.; Angermann, H.; Sperlich, H.-P.; Stürzebecher, U.; Álvarez, C.; Bähr, M.; Lawerenz, A., *Wet chemical oxidation of silicon surfaces prior to the deposition of all-PECVD AlOx/a-SiNx passivation stacks for silicon solar cells*, Solid State Phenom. **195**, 310-313, (2013), 10.4028/www.scientific.net/SSP.195.301

Angermann, H.; Stürzebecher, U.; Kegel, J.; Gottschalk, C.; Wolke, K.; Laades, A.; Conrad, E.; Klimm, C.; Stegemann, B., *Wet-chemical conditioning of H-terminated silicon solar cell substrates investigated by surface photovoltage measurements*, Solid State Phenom. **195**, 301-304, (2013), 10.4028/www.scientific.net/SSP.195.301

Nateprov, A.; Kravtsov, V.Ch.; Gurieva, G.; Schorr, S., *Single Crystal X Ray Structure Investigation of Cu₂ZnSnSe₄*, Surf. Eng. Appl. Electrochem. **49**, 423-426, (2013), 10.3103/S1068375513050098

Vatavu, S.; Rotaru, C.; Fedorov, V.; Stein, T.A.; Caraman, M.; Evtodiev, I.; Kelch, C.; Kirsch, M.; Chetrus, P.; Gasin, P.; Lux-Steiner, M.Ch.; Rusu, M., *A comparative study of (ZnO, In₂O₃: SnO₂)/CdS/CdTe/(Cu)/Ni heterojunctions*, Thin Solid Films **535**, 244-248, (2013), 10.1016/j.tsf.2012.11.105

Gurieva, G.; Levchenko, S.; Schorr, S.; León, M.; Serna, R.; Nateprov, A.; Arushanov, E., *Characterization of Cu₂SnSe₃ by spectroscopic ellipsometry*, Thin Solid Films **535**, 384-386, (2013), 10.1016/j.tsf.2012.11.104

Rotaru, C.; Vatavu, S.; Fedorov, V.; Kirsch, M.; Chetrus, P.; Gasin, P.; Lux-Steiner, M.Ch.; Rusu, M., *Charge carrier transport in ZnO/CdS/CdTe/(Cu)/Ni heterojunctions.*, Thin Solid Films **535**, 241-243, (2013), 10.1016/j.tsf.2012.11.123

Kavalakkatt, J.; Lin, X.; Kornhuber, K.; Kusch, P.; Ennaoui, A.; Reich, S.; Lux-Steiner, M.Ch., *Cu₂ZnSn(S,Se)₄ from CuxSnSy nanoparticle precursors on ZnO nanorod arrays*, Thin Solid Films **535**, 380-383, (2013), 10.1016/j.tsf.2012.10.124

Brammertz, G.; Ren, Y.; Buffière, M.; Mertens, S.; Hendrickx, J.; Marko, H.; Zaghia, A.E.; Lenaers, N.; Köble, C.; Vleugels, J.; Meuris, M.; Poortmans, J., *Electrical characterization of Cu₂ZnSnSe₄ solar cells from selenization of sputtered metal layers*, Thin Solid Films **535**, 348-352, (2013), 10.1016/j.tsf.2012.10.037

Nie, M.; Ellmer, K., *Growth and morphology of thin Cu(In,Ga)S₂ films during reactive magnetron co-sputtering*, Thin Solid Films **536**, 172-178, (2013), 10.1016/j.tsf.2013.03.118

Kempa, Heiko; Rissom, Thorsten; Hlawatsch, Uwe; Gaudig, Maria; Obereigner, Florian; Kaufmann, Christian A.; Scheer, Roland, *Metastability of solar cells based on evaporated chalcopyrite absorber layers prepared with varying selenium flux*, Thin Solid Films **535**, 340-342, (2013), 10.1016/j.tsf.2012.10.036

Schmid, M.; Klaer, J.; Klenk, R.; Topic, M.; Krc, J., *Stability of plasmonic metal nanoparticles integrated in the back contact of ultra-thin Cu(In,Ga)S₂ solar cells*, Thin Solid Films **527**, 308-313, (2013), 10.1016/j.tsf.2012.12.023

Kavalakkatt, J.; Kornhuber, K.; Levchenko, S.; Lux-Steiner, M.Ch.; Ennaoui, A.; Lin, X., *Structural and optical properties of Cu₂ZnSnS₄ thin film absorbers from ZnS and Cu₃SnS₄ nanoparticle precursors*, Thin Solid Films **535**, 10, (2013), 10.1016/j.tsf.2012.10.034

Brunken, S.; Kratzig, A.; Bogdanoff, P.; Fiechter, S.; Ellmer, K., *Structural, Optical and Electrical Properties of RuS_{2+x} Films Prepared by Reactive Magnetron Sputtering*, Thin Solid Films **527**, 16-20, (2013), 10.1016/j.tsf.2012.12.037

Ott, T.; Walter, T.; Unold, T., *Phototransistor effects in Cu(In,Ga)Se₂ solar cells*, Thin Solid Films **535**, 275-278, (2013), 10.1016/j.tsf.2012.11.084

Szilágyi, P.A.; Westerwaal, R.J.; van de Krol, R.; Geerlings, H.; Dam, B., *Metal-organic framework thin films for protective coating of Pd-based optical hydrogen sensors*, **1**, 8146-8155, (2013), 10.1039/c3tc31749h

Programm PNI

Stangner, T.; Wagner, C.; Singer, D.; Angioletti-Uberti, S.; Gutsche, C.; Dzubiella, J.; Hoffmann, R.; Kremer, F., *Determining the specificity of monoclonal antibody HPT-101 to tau-peptides with optical tweezers*, ACS NANO **7**, 11388-11396, (2013), 10.1021/nn405303u

Tuaev, X.; Rudi, S.; Petkov, V.; Hoell, A.; Strasser, P., *In Situ Study of Atomic Structure Transformations of Pt-Ni Nanoparticle Catalysts during Electrochemical Potential Cycling*, ACS NANO **7**, 5666-5674, (2013), 10.1021/nn402406k

Yashina, L.V.; Sánchez-Barriga, J.; Scholz, M.R.; Volykhov, A.A.; Sirotnina, A.P.; Neudachina, V.S.; Tamm, M.E.; Varykhalov, A.; Marchenko, D.; Springholz, G.; Bauer, G.; Knop-Gericke, A.; Rader, O., *Negligible Surface Reactivity of Topological Insulators Bi₂Se₃ and Bi₂Te₃ towards Oxygen and Water*, ACS NANO **7**, 5181-5191, (2013), 10.1021/nn400908b

Raitman, E.; Gavrilov, V.; Mjasishchev, D.; Hoser, A.; Seidel, O.; Stanh, J., *Propagation of neutron spherical waves through a thick, vibrating Ge single crystal*, Acta Crystallogr. A **69**, 189-196, (2013), 10.1107/S0108767312043905

Degtjarik, O.; Dopitova, R.; Puehringer, S.; Nejedla, E.; Kutý, M.; Weiss, M.S.; Hejatko, J.; Janda, L.; Smatanova, I.K., *Cloning, expression, purification, crystallization and preliminary X-ray diffraction analysis of AHP2, a signal transmitter protein from Arabidopsis thaliana*, Acta Crystallogr. F **69**, 158-161, (2013), 10.1107/S174430911205186X

Pradeep, K.G.; Wanderka, N.; Choi, P.; Banhart, J.; Murty, B.S.; Raabe, D., *Atomic-scale compositional characterization of a nanocrystalline AlCrCuFeNiZn high-entropy alloy using atom probe tomography*, Acta Mater. **61**, 4696-4706, (2013), 10.1016/j.actamat.2013.04.059

Zabler, S.; Erhov, A.; Rack, A.; Garcia-Moreno, F.; Baumbach, T.; Banhart, J., *Particle and liquid motion in semi-solid aluminium alloys: A quantitative in situ microradioscopy study*, Acta Mater. **61**, 1244-1253, (2013), 10.1016/j.actamat.2012.10.047

Wei, J.; Frankel, P.; Polatidis, E.; Blat, M.; Ambard, A.; Comstock, R.J.; Hallstadius, L.; Hudson, D.; Smith, G D.W.; Grovenor, C.R M.; Klaus, M.; Cottis, R.A.; Lyon, S.; Preuss, M., *The effect of Sn on autoclave corrosion performance and corrosion mechanisms in Zr-Sn-Nb alloys*, Acta Mater. **61**, 4200-4214, (2013), 10.1016/j.actamat.2013.03.046

Baran, S.; Duraj, R.; Hoser, A.; Penc, B.; Szytula, A., *Crystal Structure and Magnetic Properties of Tb₁₁O₂₀*, Acta Phys. Pol. A **123**, 98-100, (2013), 10.12693/APhysPolA.123.98

Trattnig, R.; Pevzner, L.; Jäger, M.; Schlesinger, R.; Nardi, M.; Ligorio, G.; Christodoulou, C.; Koch, N.; Baumgarten, M.; Müllen, K.; List, E.J.W., *Bright Blue Solution Processed Triple-Layer Polymer Light-Emitting Diodes Realized by Thermal Layer Stabilization and Orthogonal Solvents*, ADV FUNCT MATER **23**, 4897-4905, (2013), 10.1002/adfm.201300360

Paris, A.; Verbitskiy, N.; Nefedov, A.; Wang, Y.; Fedorov, A.; Haberer, D.; Oehzelt, M.; Petaccia, L.; Usachov, D.; Vyalikh, D.; Sachdev, H.; Wöll, C.; Knupfer, M.; Büchner, B.; Calliari, L.; Yashina, L.; Irle,

S.; Grüneis, A., *Kinetic Isotope Effect in the Hydrogenation and Deuteration of Graphene*, *ADV FUNCT MATER* **23**, 1628-1635, (2013), 10.1002/adfm.201202355

Papaefthimiou, Vasiliki; Shishkin, Maxim; Niakolas, Dimitris K; Athanasiou, Michalis; Law, Yeuk Ting; Arrigo, Rosa; Teschner, Detre; Haevecker, Michael; Knop-Gericke, Axel; Schloegl, Robert; Ziegler, Tom; Neophytides, Stylianos G; Zafeiratos, Spyridon, *On the Active Surface State of Nickel-Ceria Solid Oxide Fuel Cell Anodes During Methane Electrooxidation*, *Adv. Energy Mater.* **3**, 762-769, (2013), 10.1002/aenm.201200727

Carrado, A.; Brokmeier, H.-G.; Pirling, T.; Wimpory, R.C.; Schell, N.; Palkowski, H., *Development of Residual Stresses and Texture in Drawn Copper Tubes*, *Adv. Eng. Mater.* **15**, 469-475, (2013), 10.1002/adem.201200161

Vinod Kumar, G.S.; Heim, K.; Garcia-Moreno, F.; Banhart, J.; Kennedy, A.R., *Foaming of aluminium alloys derived from scrap*, *Adv. Eng. Mater.* **15**, 129-133, (2013), 10.1002/adem.201200122

Banhart, J., *Light-Metal Foams - History of Innovation and Technological Challenges*, *Adv. Eng. Mater.* **15**, 82-111, (2013), 10.1002/adem.201200217

Jiménez, C.; García-Moreno, F.; Pfretzschner, B.; Kamm, P.H.; Neu, T.R.; Klaus, M.; Genzel, C.; Hilger, A.; Manke, I.; Banhart, J., *Metal foaming studied in situ by energy dispersive X-ray diffraction of synchrotron radiation, X-ray radioscopy and optical expandometry*, *Adv. Eng. Mater.* **15**, 141-148, (2013), 10.1002/adem.201200183

Kojitani, H.; Töbrens, D.M.; Akaogi, M., *High-pressure Raman spectroscopy, vibrational mode calculation, and heat capacity calculation of calcium ferrite-type MgAl₂O₄ and CaAl₂O₄*, *AM MINERAL* **98**, 197 - 206, (2013), 10.2138/am.2013.4095

Suljoti, E.; Garcia-Diez, R.; Bokarev, S.I.; Lange, K.M.; Schoch, R.; Dierker, B.; Dantz, M.; Yamamoto, K.; Engel, N.; Atak, K.; Kühn, O.; Bauer, M.; Rubensson, J.-E.; Aziz, E.F., *Direkte Untersuchung von Orbitalwechselwirkungen in gelösten metallorganischen Komplexen*, *Angew. Chem.* **125**, 41760, (2013), 10.1002/ange.201303310

Suljoti, E.; Garcia-Diez, R.; Bokarev, S.I.; Lange, K.M.; Schoch, R.; Dierker, B.; Dantz, M.; Yamamoto, K.; Engel, N.; Atak, K.; Kühn, O.; Bauer, M.; Rubensson, J.-E.; Aziz, E.F., *Direct Observation of Molecular Orbital Mixing in a Solvated Organometallic Complex*, *Angew. Chem. Int. Ed.* **52**, 41760, (2013), 10.1002/anie.201303310

Amakawa, K.; Sun, L.; Guo, C.; Haevecker, M.; Kube, P.; Wachs, I.E.; Lwin, S.; Frenkel, A.I.; Patlolla, A.; Hermann, K.; Schloegl, R.; Trunschke, A., *How Strain Affects the Reactivity of Surface Metal Oxide Catalysts*, *Angew. Chem. Int. Ed.* **52**, 13553-13557, (2013), 10.1002/anie.201306620

Seiffert, S., *Small but Smart: Sensitive Microgel Capsules*, *Angew. Chem. Int. Ed.* **52**, 11462-11468, (2013), 10.1002/anie.201303055

Tötze, C.; Miranda, T.; Konrad, W.; Gout, J.; Kardjilov, N.; Dawson, M.; Manke, I.; Roth-Nebelsick, A., *Visualization of embolism formation in the xylem of liana stems using neutron radiography*, *ANN BOT-LONDON* **111**, 723-730, (2013), 10.1093/aob/mct014

Rack, A.; Garcia-Moreno, F.; Helfen, L.; Mukherjee, M.; Jiménez, C.; Rack, T.; Cloetens, P.; Banhart, J., *Hierarchical radioscopy using polychromatic and partially coherent hard synchrotron radiation*, *APPL OPTICS* **52**, 8122-8127, (2013), 10.1364/AO.52.008122

Pauly, Ch.; Liebmann, M.; Giussani, A.; Kellner, J.; Just, S.; Sánchez-Barriga, J.; Rienks, E.; Rader, O.; Calarco, R.; Bihlmayer, G.; Morgenstern, M., *Evidence for topological band inversion of the phase change material $\text{Ge}_{2}\text{Sb}_{2}\text{Te}_{5}$* , *Appl. Phys. Lett.* **103**, 243109/1-4, (2013), 10.1063/1.4847715

Simonov, K. A.; Vinogradov, A. S.; Brzhezinskaya, M. M.; Preobrajenski, A. B.; Generalov, A. V.; Klyushin, A. Yu., *Features of metal atom 2p excitations and electronic structure of 3d-metal phthalocyanines studied by X-ray absorption and resonant photoemission*, *Appl. Surf. Sci.* **267**, 132-135, (2013), 10.1016/j.apsusc.2012.08.095

Schlegel, M.C.; Mueller, U.; Malaga, K.; Panne, U.; Emmerling, F., *Spatially resolved investigation of complex multi-phase systems using μ XRF, SEM-EDX and high resolution SyXRD*, *Cem. Conc. Comp.* **37**, 241-245, (2013), 10.1016/j.cemconcomp.2012.08.018

Lange, K.; Aziz, E.F., *The Hydrogen Bond of Water from the Perspective of Soft X-Ray Spectroscopy*, *Chem Asian J* **8**, 318 - 327, (2013), 10.1002/asia.201200533

Lange, Kathrin M; Golnak, Ronny; Bonhommeau, Sebastien; Aziz, Emad F, *Ligand discrimination of myoglobin in solution: an iron L-edge X-ray absorption study of the active centre*, *Chem. Comm.* **49**, 4163-4165, (2013), 10.1039/c3cc37973f

Schäfer, B.; Rajnak, C.; Salitros, I.; Fuhr, O.; Klar, D.; Schmitz-Antoniak, C.; Weschke, E.; Wende, H.; Ruben, M., *Room temperature switching of a neutral molecular iron(II) complex*, *Chem. Comm.* **49**, 10986-10988, (2013), 10.1039/c3cc46624h

Philippe, Bertrand; Dedryvere, Remi; Gorgoi, Mihaela; Rensmo, Hakan; Gonbeau, Danielle; Edstrom, Kristina, *Role of the LiPF₆ Salt for the Long-Term Stability of Silicon Electrodes in Li-Ion Batteries - A Photoelectron Spectroscopy Study*, *Chem. Mater.* **25**, 394-404, (2013), 10.1021/cm303399v

Bittencourt, C.; Ke, X.; Van Tendeloo, G.; Tagmatarchis, N.; Guttman, P., *NEXAFS spectromicroscopy of suspended carbon nanohorns*, *Chem. Phys. Lett* **587**, 85-87, (2013), 10.1016/j.cplett.2013.09.034

Trovaslet, M.; Trapp, M.; Weik, M.; Nachon, F.; Masson, P.; Tehei, M.; Peters, J., *Relation between dynamics, activity and thermal stability within the cholinesterase family*, *Chem-Biol Interactions* **203**, 14-18, (2013), 10.1016/j.cbi.2012.08.004

Eichelbaum, M; Glaum, R; Haevecker, M; Wittich, K; Heine, C; Schwarz, H; Dobner, C-K; Welker-Nieuwoudt, C; Trunschke, A; Schloegl, R, *Towards Physical Descriptors of Active and Selective Catalysts for the Oxidation of n-Butane to Maleic Anhydride*, *CHEMCATCHEM* **5**, 2318-2329, (2013), 10.1002/cctc.201200953

Di Lorenzo, F.; Seiffert, S., *Particulate and continuum mechanics of microgel pastes: effect and non-effect of compositional heterogeneity*, *Colloid Polym. Sci.* **291**, 2927-2933, (2013), 10.1007/s00396-013-3032-8

- Polzer, F.; Holub-Krappe, E.; Rossner, H.; Erko, A.; Kirmse, H.; Plamper, F.; Schmalz, Alexander; Mueller, A.H E.; Ballauff, M., *Structural analysis of colloidal MnOx composites*, Colloid Polym. Sci. **291**, 469-481, (2013), 10.1007/s00396-012-2725-8
- Wu, S.; Kaiser, J.; Drechsler, M.; Ballauff, M.; Lu, Y., *Thermosensitive Au-PNIPA yolk-shell particles as nanoreactors" with tunable optical properties"*, Colloid Polym. Sci. **291**, 231-237, (2013), 10.1007/s00396-012-2736-5
- Heim, K.; Vinod Kumar, G.S.; Garcia-Moreno, F.; Manke, I.; Banhart, J., *Drainage of particle-stabilised aluminium composites through single films and Plateau borders*, Colloids Surf A: Physicochem Eng. Aspects **438**, 85-92, (2013), 10.1016/j.colsurfa.2013.02.019
- Duarte, I; Oliveira, M; Garcia-Moreno, F; Mukherjee, M; Banhart, J, *Foaming of AA 6061 using multiple pieces of foamable precursor*, Colloids Surf A: Physicochem Eng. Aspects **438**, 47-55, (2013), 10.1016/j.colsurfa.2013.02.061
- Caha, O.; Dubroka, A.; Humlíček, J.; Holý, V.; Steiner, H.; Ul-Hassan, M.; Sánchez-Barriga, J.; Rader, O.; Stanislavchuk, T.N.; Sirenko, A.A.; Bauer, G.; Springholz, G., *Growth, Structure, and Electronic Properties of Epitaxial Bismuth Telluride Topological Insulator Films on $\text{BaF}_2(111)$ Substrates*, CRYST GROWTH DES **13**, 3365-3373, (2013), 10.1021/cg400048g
- Bon, V.; Senkowska, I.; Weiss, M.S.; Kaskel, S., *Tailoring of network dimensionality and porosity adjustment in Zr- and Hf-based MOFs*, CRYSTENGCOMM **15**, 9572-9577, (2013), 10.1039/c3ce41121d
- G., A.; Heine, C.; Lublow, M.; W., H.; Szabo, N.; Hannappel, T., *Photoelectrochemical Conditioning of MOVPE p-InP Films for Light-Induced Hydrogen Evolution: Chemical, Electronic and Optical Properties*, ECS J. Sol. St. Science and Techn. **2**, Q51-Q58, (2013), 10.1149/2.016304jss
- Markötter, H.; Haußmann, J.; Alink, R.; Tötze, C.; Arlt, T.; Klages, M.; Riesemeier, H.; Scholta, J.; Gerteisen, D.; Banhart, J.; Manke, I., *Influence of cracks in the microporous layer on the water distribution in a PEM fuel cell investigated by synchrotron radiography*, Electrochem. Commun. **34**, 22-24, (2013), 10.1016/j.elecom.2013.04.006
- Malmgren, S.; Ciosek, K.; Hahlin, M.; Gustafsson, T.; Gorgoi, M.; Rensmo, H.; Edstrom, K., *Comparing anode and cathode electrode/electrolyte interface composition and morphology using soft and hard X-ray photoelectron spectroscopy*, ELECTROCHIM ACTA **97**, 23-32, (2013), 10.1016/j.electacta.2013.03.010
- Rother, G.; Ilton, E.S.; Wallacher, D.; Hauß, T.; Schaef, H.T.; Qafoku, O.; Rosso, K.M.; Felmy, A.R.; Krukowski, E.G.; Stack, A.G.; Grimm, N.; Bodnar, R.J., *CO₂ Sorption to Subsingle Hydration Layer Montmorillonite Clay Studied by Excess Sorption and Neutron Diffraction Measurements*, ENVIRON SCI TECHNOL **47**, 205-211, (2013), 10.1021/es301382y
- Rienks, E.D.L.; Wolf, T.; Koepf, K.; Avigo, I.; Hlawenka, P.; Lupulescu, C.; Arion, T.; Roth, F.; Eberhardt, W.; Bovensiepen, U.; Fink, J., *Electronic structure and quantum criticality in $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x\text{Mn}_y)(2)\text{As}_2$, an ARPES study*, EPL **103**, 47004/1-6, (2013), 10.1209/0295-5075/103/47004

Troyanchuk, I.O.; Bushinsky, M.V.; Sikolenko, V.; Efimov, V.; Ritter, C.; Hansen, T.; Töbrens, D.M., *Pressure induced antiferromagnet-ferromagnet transition in La_{0.5}Ba_{0.5}CoO_{2.8} cobaltite*, Eur. Phys. J. B **86**, 435/1-7, (2013), 10.1140/epjb/e2013-40617-x

Brüning, B.; Stehle, R.; Falus, P.; Farago, B., *Influence of charge density on bilayer bending rigidity in lipid vesicles: A combined dynamic light scattering and neutron spin-echo study*

, Eur. Phys. J. E **36**, 77/1-8, (2013), 10.1140/epje/i2013-13077-0

Kaiser, J.; Szczerba, W.; Riesemeier, H.; Reinholz, U.; Radtke, M.; Albrecht, M.; Lu, Y.; Ballauff, M., *The structure of AuPd nanoalloys anchored on spherical polyelectrolyte brushes determined by X-ray absorption spectroscopy*, Faraday Discuss. **162**, 45-55, (2013), 10.1039/c3fd20132e

Nagata, T.; Fukada, Y.; Kawai, M.; Kano, J.; Kambe, T.; Dudzik, E.; Feyerherm, R.; Janolin, P.E.; Kiat, J.M.; Ikeda, N., *Nonlinear Electric Conductivity of Charge Ordered System RFe₂O₄ (R = Lu, Yb)*, Ferroelectrics **442**, 45-49, (2013), 10.1080/00150193.2013.773874

Forshaw, A.P.; Smith, J.M.; Ozarowski, A.; Krzystek, J.; Smirnov, D.; Zvyagin, S.A.; Harris, T.D.; Karunadasa, H.I.; Zadrozny, J.M.; Schnegg, A.; Holldack, K.; Jackson, T.A.; Alamiri, A.; Barnes, D.M.; Telsler, J., *Low-Spin Hexa-Coordinate Mn(III): Synthesis and Spectroscopic Investigation of Homoleptic Tris(pyrazolyl)borate and Tris(carbene)borate Complexes*, Inorg. Chem. **52**, 144-159, (2013), 10.1021/ic301630d

Seeger, J.; Ivanova, M.E.; Meulenbergh, W.A.; Sebold, D.; Stöver, D.; Scherb, T.; Schumacher, G.; Escolastico, S.; Solis, C.; Serra, J.M., *Synthesis and Characterization of Nonsubstituted and Substituted Proton-Conducting $\text{La}_{1-x}\text{WO}_{12-y}$* , Inorg. Chem. **52**, 10375-10386, (2013), 10.1021/ic401104m

Vela, S.; Jornet-Somoza, J.; Turnbull, M.M.; Feyerherm, R.; Novoa, J.J.; Deumal, M., *Dividing the Spoils: Role of Pyrazine Ligands and Perchlorate Counterions in the Magnetic Properties of Bis(pyrazine)diperchloratecopper(II), [Cu(pz)₂](ClO₄)₂*, Inorg. Chem. **52**, 12923-12932, (2013), 10.1021/ic400712s

Paul, A.K.; Jansen, M.; Yan, B.; Felser, C.; Reehuis, M.; Abdala, P.M., *Synthesis, Crystal Structure, and Physical Properties of Sr₂FeOsO₆*, Inorg. Chem. **52**, 6713-6719, (2013), 10.1021/ic400740f

Schröder, A.; Wippermann, K.; Arlt, T.; Sanders, T.; Baumhöfer, T.; Kardjilov, N.; Mergel, J.; Lehnert, W.; Stolten, D.; Banhart, J.; Manke, I., *In-plane neutron radiography for studying the influence of surface treatment and design of cathode flow fields in direct methanol fuel cells*, Int. J. Hydrogen Energ. **38**, 2443-2454, (2013), org/10.1016/j.ijhydene.2012.11.098

Gaiselmann, G.; Froning, D.; Tötze, Ch.; Quick, Ch.; Manke, I.; Lehnert, W.; Schmidt, V., *Stochastic 3D modeling of non-woven materials with wet-proofing agent*, Int. J. Hydrogen Energ. **38**, 8448-8460, (2013), 10.1016/j.ijhydene.2013.04.144

Gondek, L.; Kozlak, K.; Czub, J.; Rusinek, D.; Szytula, A.; Hoser, A., *On the verge of short D-D distances in RNiIn deuterides*, Intermetallics **34**, 23-28, (2013), 10.1016/j.intermet.2012.11.002

Longstaff, C.; Varju, I.; Sötönyi, P.; Szabó, L.; Krumrey, M.; Hoell, A.; Bóta, A.; Varga, Z.; Komorowicz, E.; Kolev, K., *Mechanical Stability and Fibrinolytic Resistance of Clots Containing Fibrin, DNA, and Histones*, J BIOL CHEM **288**, 6946 - 6956, (2013), 10.1074/jbc.M112.404301

- Gabani, S; Gazo, E; Pristas, G; Takacova, I; Flachbart, K; Shitsevalova, N; Siemensmeyer, K; Sluchanko, N, *Magnetic properties of Ho_{1-x}Lu_xB₁₂ solid solutions*, J KOREAN PHYS SOC **62**, 1514-1516, (2013), 10.3938/jkps.62.1514
- Campbell, S.J.; Hofmann, M.; Mole, R.A.; Prokes, K.; Wallacher, D.; Wang, J.L., *Mn-Sublattice of YbMn₂Si₂ - Neutron Scattering Investigation*, J KOREAN PHYS SOC **63**, 314-319, (2013), 10.3938/jkps.63.314
- Wostmann, M.; Mitzner, R.; Noll, T.; Roling, S.; Siemer, B.; Siewert, F.; Eppenhoff, S.; Wahlert, F.; Zacharias, H., *The XUV split-and-delay unit at beamline BL2 at FLASH*, J PHYS B-AT MOL OPT **46**, 164005/1-9, (2013), 10.1088/0953-4075/46/16/164005
- Lebedev, M.V.; Kunitsyna, E.V.; Calvet, W.; Mayer, T.; Jaegermann, W., *Sulfur Passivation of GaSb(100) Surfaces: Comparison of Aqueous and Alcoholic Sulfide Solutions Using Synchrotron Radiation Photoemission Spectroscopy*, J PHYS CHEM C **117**, 15996-16004, (2013), 10.1021/jp401942p
- Marty, V.; Jasnin, M.; Fabiani, E.; Vauclare, P.; Gabel, F.; Trapp, M.; Peters, J.; Zaccai, G.; Franzetti, B., *Neutron scattering: a tool to detect in vivo thermal stress effects at the molecular dynamics level in micro-organisms*, J R SOC INTERFACE **10**, 20130003/1-6, (2013), 10.1098/rsif.2013.0003
- Weiner, A.; Kapishnikov, S.; Shimoni, E.; Cordes, S.; Guttman, P.; Schneider, G.; Elbaum, M., *Vitrification of thick samples for soft X-ray cryo-tomography by high pressure freezing*, J STRUCT BIOL **181**, 77-81, (2013), 10.1016/j.jsb.2012.10.005
- Paulisch, M.C.; Wanderka, N.; Mieke, G.; Mukherji, D.; Rösler, J.; Banhart, J., *Characterization of borides in Co-Re-Cr-based high-temperature alloys*, J. Alloy. Compd. **569**, 82-87, (2013), 10.1016/j.jallcom.2013.03.086
- Timpel, M.; Wanderka, N.; Grothausmann, R.; Banhart, J., *Distribution of Fe-rich phases in eutectic grains of Sr-modified Al-10 wt.% Si-0.1 wt.% Fe casting alloy*, J. Alloy. Compd. **558**, 18-25, (2013), 10.1016/j.jallcom.2012.12.009
- Jackson, M.D.; Moon, J.; Gotti, E.; Taylor, R.; Chae, S.R.; Kunz, M.; Emwas, A.-H.; Meral, C.; Guttman, P.; Levitz, P.; Wenk, H.-R.; Monteiro, P.J.M., *Material and Elastic Properties of Al-Tobermorite in Ancient Roman Seawater Concrete*, J. Am. Ceram. Soc. **96**, 2598-2606, (2013), 10.1111/jace.12407
- Philippe, Bertrand; Dedryvere, Remi; Gorgoi, Mihaela; Rensmo, Hakan; Gonbeau, Danielle; Edstrom, Kristina, *Improved Performances of Nanosilicon Electrodes Using the Salt LiFSI: A Photoelectron Spectroscopy Study*, J. Am. Chem. Soc. **135**, 9829-9842, (2013), 10.1021/ja403082s
- Guda, A.A.; Smolentsev, N.; Rovezzi, M.; Kaidashev, E.M.; Kaydashev, V.E.; Kravtsova, A.N.; Mazalova, V.L.; Chaynikov, A.P.; Weschke, E.; Glatzel, P.; Soldatov, A.V., *Spin-polarized electronic structure of the core-shell ZnO/ZnO:Mn nanowires probed by X-ray absorption and emission spectroscopy*, J. Anal. At. Spectrom. **28**, 1629-1637, (2013), 10.1039/c3ja50153a
- Meixner, M.; Klaus, M.; Genzel, Ch.; Reimers, W., *Residual stress analysis of diamond-coated WC-Co cutting tools: separation of film and substrate information by grazing X-ray diffraction*, J. Appl. Crystallogr. **46**, 1323-1330, (2013), 10.1107/S0021889813020451

- Klaus, M.; Genzel, Ch., *X-ray residual stress analysis on multilayer systems: an approach for depth-resolved data evaluation*, *J. Appl. Crystallogr.* **46**, 1266-1276, (2013), 10.1107/S0021889813018517
- Meixner, M.; Klaus, M.; Genzel, Ch., *$\sin^2\psi$ -based residual stress gradient analysis by energy-dispersive synchrotron diffraction constrained by small gauge volumes. I. Theoretical concept*, *J. Appl. Crystallogr.* **46**, 610 - 618, (2013), 10.1107/S0021889813008340
- Meixner, M.; Klaus, M.; Genzel, Ch., *$\sin^2\psi$ -based residual stress gradient analysis by energy-dispersive synchrotron diffraction constrained by small gauge volumes. II. Experimental implementation*, *J. Appl. Crystallogr.* **46**, 619 - 627, (2013), 10.1107/S0021889813008364
- Garad, H.; Ortega, L.; Ramos, A. Y.; Joly, Y.; Fettar, F.; Auffret, S.; Rodmacq, B.; Dieny, B.; Proux, O.; Erko, A. I., *Competition between CoO_x and CoPt phases in Pt/Co/AlO_x semi tunnel junctions*, *J. Appl. Phys.* **114**, 053508/1-10, (2013), 10.1063/1.4816620
- Babu, V.H.; Govind, R.K.; Schindler, K.-M.; Welke, M.; Denecke, R., *Epitaxial growth and magnetic properties of ultrathin iron oxide films on $\text{BaTiO}_3(001)$* , *J. Appl. Phys.* **114**, 113901/1-5, (2013), 10.1063/1.4821259
- Sessi, V.; Hertenberger, S.; Zhang, J.; Schmitz, D.; Gsell, S.; Schreck, M.; Morel, R.; Brenac, A.; Honolka, J.; Kern, K., *Exchange bias in reduced dimensions: Cobalt nanocluster arrays under the influence of nanometer thin MnPt capping layers*, *J. Appl. Phys.* **113**, 123903/1-10, (2013), 10.1063/1.4795274
- Ivanovski, V.N.; Cekic, B.; Umicevic, A.; Belosevic-Cavor, J.; Schumacher, G.; Koteski, V.; Barudzija, T., *Hf dopands in gamma-prime Ni_3Al alloy*, *J. Appl. Phys.* **114**, 063712/1-5, (2013), 10.1063/1.4818317
- Alsmadi, A.M.; Bsoul, I.; Mahmood, H.S.; Alnawashi, G.; Prokeš, K.; Siemensmeyer, K.; Klemke, B.; Nakotte, H., *Magnetic study of M-type doped barium hexaferrite nanocrystalline particles*, *J. Appl. Phys.* **114**, 243910/1-8, (2013), <http://dx.doi.org/10.1063/1.4858383>
- Caspers, C.; Flade, S.; Gorgoi, M.; Gloskovskii, A.; Drube, W.; Schneider, C. M.; Mueller, M., *Ultrathin magnetic oxide EuO films on $\text{Si}(001)$ using SiO_x passivation-Controlled by hard x-ray photoemission spectroscopy*, *J. Appl. Phys.* **113**, 17C505, (2013), 10.1063/1.4795010
- Filatova, E. O.; Sokolov, A. A.; Egorova, Yu. V.; Konashuk, A. S.; Vilkov, O. Yu.; Gorgoi, M.; Pavlychev, A. A., *X-ray spectroscopic study of SrTiO_x films with different interlayers*, *J. Appl. Phys.* **113**, 224301, (2013), 10.1063/1.4809978
- Roshchupkin, Dmitry; Ortega, Luc; Plotitsyna, Olga; Erko, Alexei; Zizak, Ivo; Irzhak, Dmitry, *X-ray diffraction study of surface acoustic waves and pseudo-surface acoustic waves propagation in $\text{La}_3\text{Ga}_5.5\text{Ta}_0.5\text{O}_{14}$ crystal*, *J. Appl. Phys.* **113**, 144909, (2013), 10.1063/1.4801527
- Zhang, Y.; Tuerkmen, I. R.; Wassermann, B.; Erko, A.; Ruehl, E., *Structural motifs of pre-nucleation clusters*, *J. Chem. Phys.* **139**, 134506/1-8, (2013), 10.1063/1.4823497

- Knut, Ronny; Lindblad, Rebecka; Gorgoi, Mihaela; Rensmo, Hakan; Karis, Olof, *High energy photoelectron spectroscopy in basic and applied science: Bulk and interface electronic structure*, *J. Electr. Spectr.* **190**, 278-288, (2013), 10.1016/j.elspec.2013.08.007
- Lupulescu, C.; Arion, T.; Hergenhan, U.; Ovsyannikov, R.; Förstel, M.; Gavrilă, G.; Eberhardt, W., *iDEEAA: a novel, versatile apparatus for electron spectroscopy*, *J. Electr. Spectr.* **191**, 104-111, (2013), 10.1016/j.elspec.2013.09.002
- Gorgoi, M.; Schäfers, F.; Svensson, S.; Mårtensson, N., *Relative sub-shell photoionization cross-sections of nickel metal determined by hard X-ray high kinetic energy photoemission*, *J. Electr. Spectr.* **190**, 153-155, (2013), 10.1016/j.elspec.2013.01.004
- Lange, K.M.; Suljoti, E.; Aziz, E.F., *Resonant inelastic X-ray scattering as a probe of molecular structure and electron dynamics in solutions*, *J. Electr. Spectr.* **188**, 101-110, (2013), 10.1016/j.elspec.2012.09.010
- Könnecke, R.; Follath, R.; Pontius, N.; Schlappa, J.; Eggenstein, F.; Zeschke, T.; Bischoff, P.; Schmidt, J.-S.; Noll, T.; Trabant, C.; Schreck, S.; Wernet, Ph.; Eisebitt, S.; Senf, F.; Schüßler-Langeheine, C.; Erko, A.; Föhlisch, A., *The confocal plane grating spectrometer at BESSY II*, *J. Electr. Spectr.* **188**, 133-139, (2013), 10.1016/j.elspec.2012.11.003
- Beye, M.; Wernet, Ph.; Schüßler-Langeheine, C.; Föhlisch, A., *Time resolved resonant inelastic X-ray scattering: A supreme tool to understand dynamics in solids and molecules*, *J. Electr. Spectr.* **188**, 172-182, (2013), 10.1016/j.elspec.2013.04.013
- Kim, F.H.; Penumadu, D.; Gregor, J.; Kardjilov, N.; Manke, I., *High-Resolution Neutron and X-Ray Imaging of Granular Materials*, *J. Geotech. Geoenviron. Eng.* **139**, 715-723, (2013), 10.1061/(ASCE)GT.1943-5606.0000809
- Ozerov, M.; Wosnitzer, J.; Cizmár, E.; Feyerherm, R.; Manmana, S.R.; Mila, F.; Zvyagin, S.A., *Field-Induced Gap in the Spin-1/2 Heisenberg Chain Compound Cu-Pyrimidine Dinitrate: ESR Studies in Magnetic Fields up to 63 T*, *J. Low Temp. Phys.* **170**, 268-273, (2013), 10.1007/s10909-012-0757-6
- Baran, S.; Hoser, A.; Szytula, A., *Antiferromagnetic order in TmRhGa*, *J. Magn. Magn. Mater.* **335**, 97-100, (2013), 10.1016/j.jmmm.2013.01.039
- Gil, A.; Hoser, A.; Penc, B.; Szytula, A., *Crystal and magnetic structure of TbFe_{0.25}Ge₂ compound*, *J. Magn. Magn. Mater.* **344**, 167-170, (2013), 10.1016/j.jmmm.2013.05.055
- Baran, S.; Dyakonov, V.; Hofmann, T.; Hoser, A.; Penc, B.; Kravchenko, Z.; Szytula, A., *Neutron diffraction studies of nanoparticle RMnO₃ compounds (R=Pr, Nd)*, *J. Magn. Magn. Mater.* **344**, 68-71, (2013), 10.1016/j.jmmm.2013.05.014
- Kobler, U.; Hoser, A., *Single domain behaviour of bulk RbMnF₃*, *J. Magn. Magn. Mater.* **325**, 87-93, (2013), 10.1016/j.jmmm.2012.08.014
- Tolinski, T.; Synoradzki, K.; Hoser, A.; Rols, S., *Crystal field manifestation in inelastic neutron scattering, magnetic susceptibility and specific heat of the antiferromagnetic CeCoAl₄*, *J. Magn. Magn. Mater.* **345**, 243-248, (2013), 10.1016/j.jmmm.2013.06.022

Men, Y.; Siebenbürger, M.; Qui, X.; Antonietti, M.; Yuan, J., *Low fractions of ionic liquid or poly(ionic liquid) can activate polysaccharide biomass into shaped, flexible and fire-retardant porous carbons*, *J. Mater. Chem. A* **1**, 11887-11893, (2013), 10.1039/c3ta12302b

Brandt, A.; Winter, F.; Klamor, S.; Berkemeier, F.; Rana, J.; Pöttgen, R.; Balducci, A., *An investigation of the electrochemical delithiation process of carbon coated alpha-Fe₂O₃ nanoparticles*, *J. Mater. Chem. A* **1**, 11229-11236, (2013), 10.1039/c3ta11821e

Kamm, P.H.; Garcia-Moreno, F.; Jimenez, C.; Banhart, J., *Suitability of various complex hydrides for foaming aluminum alloys*, *J. Mater. Res.* **28**, 2436-2443, (2013), 10.1557/jmr.2013.110

Köppen, M.; Oberkofler, M.; Riesch, J.; Vollmer, A.; Linsmeier, Ch., *Quantitative analysis of the interaction of energetic oxygen ions with the beryllium–tungsten alloy Be₂W*, *J. Nuclear Mater.* **438**, S766-S770, (2013), 10.1016/j.jnucmat.2013.01.164

Polatidis, E.; Frankel, P.; Wei, J.; Klaus, M.; Comstock, R.J.; Ambard, A.; Lyon, S.; Cottis, R.A.; Preuss, M., *Residual stresses and tetragonal phase fraction characterization of corrosion tested Zircaloy-4 using energy dispersive synchrotron X-Ray diffraction*, *J. Nuclear Mater.* **432**, 102-112, (2013), 10.1016/j.jnucmat.2012.07.025

Linsmeier, Ch.; Fu, C.–C.; Kaprolat, A.; Nielsen, S.F.; Mergia, K.; Schäublin, R.; Lindau, R.; Bolt, H.; Buffière, J.–Y.; Caturla, M.J.; Décamps, B.; Ferrero, C.; Greuner, H.; Hébert, C.; Höschen, T.; Hofmann, M.; Hugenschmidt, C.; Jourdan, T.; Koeppen, M., *Advanced materials characterization and modelling using synchrotron, neutron, TEM, and novel micro-mechanical techniques — A European effort to accelerate fusion materials development*, *J. Nuclear Mater.* **442**, S834-S845, (2013), 10.1016/j.jnucmat.2013.04.042

Barbosa, Roland L.; Papaefthimiou, Vasiliki; Law, Yeuk T.; Teschner, Detre; Haevecker, Michael; Knop-Gericke, Axel; Zapf, Ralf; Kolb, Gunther; Schloegl, Robert; Zafeiratos, Spyridon, *Methanol Steam Reforming over Indium-Promoted Pt/Al₂O₃ Catalyst: Nature of the Active Surface*, *J. Phys. Chem. C* **117**, 6143-6150, (2013), 10.1021/jp309401q

Jalarvo, N.; Casolo, S.; Aliouane, N.; Wallacher, D.; Lovvik, O.M.; Norby, T., *On the Complex Structural Picture of the Ionic Conductor Sr₆Ta₂O₁₁*, *J. Phys. Chem. C* **117**, 9543-9549, (2013), 10.1021/jp311308g

Winkler, S.; Frisch, J.; Schlesinger, R.; Oehzelt, M.; Rieger, R.; Räder, J.; Rabe, J.P.; Müllen, K.; Koch, N., *The Impact of Local Work Function Variations on Fermi Level Pinning of Organic Semiconductors*, *J. Phys. Chem. C* **117**, 22285-22289, (2013), 10.1021/jp401919z

Heine, C.; Haevecker, M.; Sanchez-Sanchez, M.; Trunschke, A.; Schloegl, R.; Eichelbaum, M., *Work Function, Band Bending, and Microwave Conductivity Studies on the Selective Alkane Oxidation Catalyst MoVTeNb Oxide (Orthorhombic M1 Phase) under Operation Conditions*, *J. Phys. Chem. C* **117**, 26988-26997, (2013), 10.1021/jp409601h

Peterson, V.K.; Corr, C.S.; Boswell, R.W.; Izaola, Z.; Kearley, G.J., *Superfast Proton Diffusion Achieved in a Plasma-Polymerized Fuel-Cell Membrane*, *J. Phys. Chem. C* **117**, 4351-4357, (2013), 10.1021/jp309259k

Mitzner, R.; Rehanek, J.; Kern, J.; Gul, S.; Hattne, J.; Taguchi, T.; Alonso-Mori, R.; Tran, R.; Weniger, C.; Schroeder, H.; Quevedo, W.; Laksmono, H.; Sierra, R.G.; Han, G.; Lassalle-Kaiser, B.; Koroidov, S.; Kubicek, K.; Schreck, S.; Kunnus, K.; Brzhezi, *L-Edge X-ray Absorption Spectroscopy of Dilute Systems Relevant to Metalloproteins Using an X-ray Free-Electron Laser*, *J. Phys. Chem. Lett.* **4**, 3641-3647, (2013), 10.1021/jz401837f

Dzubiella, J., *Tightening and Untying the Knot in Human Carbonic Anhydrase III*, *J. Phys. Chem. Lett.* **4**, 1829-1833, (2013), 10.1021/jz400748b

van Schooneveld, M.M.; Suljoti, E.; Campos-Cuerva, C.; Gosselink, R.W.; van der Eerden, A.M.J.; Schlappa, J.; Zhou, K.J.; Monney, C.; Schmitt, T.; de Groot, F.M.F., *Transition-Metal Nanoparticle Oxidation in a Chemically Nonhomogenous Environment Revealed by 2p3d Resonant X-ray Emission*, *J. Phys. Chem. Lett.* **4**, 1161-1166, (2013), 10.1021/jz4002696

Pluharova, E.; Schroeder, C.; Seidel, R.; Bradforth, S.E.; Winter, B.; Faubel, M.; Slavicek, P.; Jungwirth, P., *Unexpectedly Small Effect of the DNA Environment on Vertical Ionization Energies of Aqueous Nucleobases*, *J. Phys. Chem. Lett.* **4**, 3766-3769, (2013), 10.1021/jz402106h

Rehanek, J.; Schäfers, F.; Löchel, H.; Firsov, A.; Grünert, J.; Freund, W.; Ozkan, C.; Molodtsov, S.; Erko, A., *A case study of novel X-ray Optics for FEL sources*, *J. Phys. Conf.* **425**, 052013/1-4, (2013), 10.1088/1742-6596/425/5/052013

Legall, H.; Stiel, H.; Blobel, G.; Seim, C.; Baumann, J.; Yulin, S.; Esser, D.; Hoefer, M.; Wiesemann, U.; Wirtz, M.; Schneider, G.; Rehbein, S.; Hertz, H. M., *A compact Laboratory Transmission X-ray Microscope for the water window*, *J. Phys. Conf.* **463**, 12013, (2013), 10.1088/1742-6596/463/1/012013

Brzhezinskaya, M.; Generalov, A.; Vinogradov, A.; Eliseev, A., *Characterization of CuHal-intercalated carbon nanotubes with x-ray absorption spectroscopy combined with x-ray photoelectron and resonant photoemission spectroscopies*, *J. Phys. Conf.* **430**, 12133, (2013), 10.1088/1742-6596/430/1/012133

Jenichen, B.; Hentschel, T.; Herfort, J.; Kong, X.; Trampert, A.; Zizak, I., *Characterization of L2(1) order in Co₂FeSi thin films on GaAs*, *J. Phys. Conf.* **471**, 12022, (2013), 10.1088/1742-6596/471/1/012022

Firsov, A.; Brzhezinskaya, M.; Firsov, A.; Svintsov, A.; Erko, A., *Dedicated software for diffractive optics design and simulation*, *J. Phys. Conf.* **425**, 162004/1-4, (2013), 10.1088/1742-6596/425/16/162004

Brzhezinskaya, M.; Yalovega, G.; Shmatko, V.; Klyushin, A.; Bogoslavskaya, E.; Krestinin, A.; Bashkin, I., *Hydrogenated carbon nanotubes: x-ray absorption spectroscopy and ab initio simulation analysis*, *J. Phys. Conf.* **430**, 12025, (2013), 10.1088/1742-6596/430/1/012025

Loechel, B.; Erko, A.; Lemke, St.; Nelles, B.; Schmidt, M.; Senf, F., *Installation of a technological center for highly efficient optical gratings at Helmholtz-Zentrum Berlin (HZB)*, *J. Phys. Conf.* **425**, 212012/1-4, (2013), 10.1088/1742-6596/425/21/212012

- Guttman, P.; Rehbein, S.; Werner, S.; Henzler, K.; Tarek, B.; Schneider, G., *Nanoscale spectroscopy and tomography with the HZB X-ray microscope: Applications in materials and life sciences*, J. Phys. Conf. **463**, 012032/1-6, (2013), 10.1088/1742-6596/463/1/012032
- Firsov, A.; Erko, A.; Senf, F.; Rehanek, J.; Brzhezinskaya, M.; Mitzner, R.; Wernet, Ph.; Föhlisch, A., *Novel wavelength-dispersive X-ray fluorescence spectrometer*, J. Phys. Conf. **425**, 152013, (2013), 10.1088/1742-6596/425/15/152013
- Loechel, H.; Brzhezinskaya, M.; Firsov, A.; Rehanek, J.; Erko, A., *Reflection zone plates for 2D focusing and spectroscopy of hard X-rays*, J. Phys. Conf. **425**, 52025, (2013), 10.1088/1742-6596/425/5/052025
- Siewert, F., *Metrology, Mirrors and Gratings - Advances and Challenges in Synchrotron Optics*, J. Phys. Conf. **425**, 152001/1-6, (2013), 10.1088/1742-6596/425/15/152001
- Follath, R.; Hävecker, M.; Reichardt, G.; Lips, K.; Bahrtdt, J.; Schäfers, F.; Schmid, P., *The Energy Materials in-Situ Laboratory Berlin (EMIL) at BESSY II*, J. Phys. Conf. **425**, 212003/1-4, (2013), 10.1088/1742-6596/425/21/212003
- Follath, Rolf; Bischoff, Peter; Eggenstein, Frank; Noll, Tino; Koennecke, Rene; Schlappa, Justine; Zeschke, Thomas, *A soft x-ray fluorescence spectrometer at BESSY II*, J. Phys. Conf. **425**, 212002/1-4, (2013), 10.1088/1742-6596/425/21/212002
- Bahrtdt, J.; Ivanyushenkov, Y., *Short Period Undulators for Storage Rings and Free Electron Lasers*, J. Phys. Conf. **425**, 032001/1-6, (2013), 10.1088/1742-6596/425/3/032001
- Doering, S.; Schoenbohm, F.; Berges, U.; Buegler, D. E.; Schneider, C. M.; Gorgoi, M.; Schaefer, F.; Westphal, C., *Hard x-ray photoemission spectroscopy on the trilayer system MgO/Au/Fe using standing-wave excitation*, J. Phys. D. Appl. Phys. **46**, 375001, (2013), 10.1088/0022-3727/46/37/375001
- Gubkin, A.F.; Sherstobitova, E.A.; Terentyev, P.B.; Hoser, A.; Baranov, N.V., *A cluster-glass magnetic state in R5Pd2 (R = Ho, Tb) compounds evidenced by AC-susceptibility and neutron scattering measurements*, J. Phys.: Condens. Matter **25**, 236003/1-12, (2013), 10.1088/0953-8984/25/23/236003
- Khomchenko, V.A.; Troyanchuk, I.O.; Többens, D.M.; Sikolenko, V.; Paixao, J.A., *Composition- and temperature-driven structural transitions in Bi_{1-x}CaxFeO₃ multiferroics: a neutron diffraction study*, J. Phys.: Condens. Matter **25**, 135902/1-7, (2013), 10.1088/0953-8984/25/13/135902
- Landsgeßell, S.; Blumenröther, E.; Prokes, K., *Magnetic structure of La₂O₃FeMnSe₂: neutron diffraction and physical property measurements*, J. Phys.: Condens. Matter **25**, 086004/1-6, (2013), 10.1088/0953-8984/25/8/086004
- Baran, S.; Kaczorowski, D.; Szytula, A.; Gil, A.; Hoser, A., *Magnetic structures and physical properties of Tm₃Cu₄Ge₄ and Tm₃Cu₄Sn₄*, J. Phys.: Condens. Matter **25**, 066012/1-9, (2013), 10.1088/0953-8984/25/6/066012

- Wang, J.L.; Campbell, S.J.; Hofmann, M.; Kennedy, S.J.; Zeng, R.; Din, M.F.M.; Dou, S.X.; Arulraj, A.; Stußer, N., *Magnetism and magnetic structures of PrMn₂Ge₂Six*, J. Phys.: Condens. Matter **25**, 386003/1-13, (2013),
- Tsyrlin, N.; Batista, C.D.; Zapf, V.S.; Jaime, M.; Hansen, B.R.; Niedermayer, C.; Rule, K.C.; Habicht, K.; Prokes, K.; Kiefer, K.; Ressouche, E.; Paduan-Filho, A.; Kenzelmann, M., *Neutron study of the magnetism in NiCl₂ center dot SC(NH₂)₂*, J. Phys.: Condens. Matter **25**, 216008/1-12, (2013), 10.1088/0953-8984/25/21/216008
- Ward, S.; Bouillot, P.; Ryll, H.; Kiefer, K.; Krämer, K.W.; Rüegg, Ch.; Kollath, C.; Giamarchi, T., *Spin ladders and quantum simulators for Tomonaga-Luttinger liquids*, J. Phys.: Condens. Matter **25**, 014004/1-7, (2013), 10.1088/0953-8984/25/1/014004
- Seidenberger, K.; Wilhelm, F.; Haußmann, J.; Markötter, H.; Manke, I.; Scholta, J., *Grand canonical Monte Carlo study on water agglomerations within a polymer electrolyte membrane fuel cell gas diffusion layer*, J. Power Sourc. **239**, 628-641, (2013), 10.1016/j.jpowsour.2013.02.006
- Arlt, T.; Manke, I.; Wippermann, K.; Riesenmeier, H.; Mergel, J.; Banhart, J., *Investigation of the local catalyst distribution in an aged direct methanol fuel cell MEA by means of differential synchrotron X-ray absorption edge imaging with high energy resolution*, J. Power Sourc. **221**, 210-216, (2013), 10.1016/j.jpowsour.2012.08.038
- Klages, M.; Enz, S.; Markötter, H.; Manke, I.; Kardjilov, N.; Scholta, J., *Investigations on dynamic water transport characteristics in flow field channels using neutron imaging techniques*, J. Power Sourc. **239**, 596-603, (2013), 10.1016/j.jpowsour.2013.01.196
- Haußmann, J.; Markötter, H.; Alink, R.; Bauder, A.; Dittman, K.; Manke, I.; Scholta, J., *Synchrotron radiography and tomography of the water transport in perforated Gas Diffusion Media*, J. Power Sourc. **239**, 611-622, (2013), 10.1016/j.jpowsour.2013.02.014
- Alink, R.; Haußmann, J.; Markötter, M.; Schwager, M.; Manke, I.; Gerteisen, D., *The Influence of Porous Transport Layer Modifications on the Water Management in PEM Fuel Cells*, J. Power Sourc. **233**, 358-368, (2013), 10.1016/j.jpowsour.2013.01.085
- Schröder, A.; Wippermann, K.; Arlt, T.; Sanders, T.; Baumhöfer, T.; Markötter, H.; Mergel, J.; Lehnert, W.; Stolten, D.; Manke, I.; Banhart, J., *Water Evolution in Direct Methanol Fuel Cell Cathodes Studied by Synchrotron X-Ray Radiography*, J. Power Sourc. **13**, 371-379, (2013), 10.1002/fuce.201300041
- Amann, C.P.; Siebenbürger, M.; Krüger, M.; Weysser, F.; Ballauff, M.; Fuchs, M., *Overshoots in stress-strain curves: Colloid experiments and schematic mode coupling theory*, J. RHEOL. **57**, 149-175, (2013), 10.1122/1.4764000
- Stein, W.-D.R., *Quantized Magnetic Flux in the Bohr-Sommerfeld Model*, J. Russ. Laser Res. **34**, 553-564, (2013), 1071-2836/13/3406-0553
- Stöber, S.; Redhammer, G.; Schorr, S.; Prokhnenko, O.; Pöllmann, H., *Structure refinements of members in the brownmillerite solid solution series Ca₂Al_x(Fe_{0.5}Mn_{0.5})_{2-x}O_{5+delta} with 1/2 < x < 4/3*, J. Solid State Chem. **197**, 420-428, (2013), 10.1016/j.jssc.2012.08.032

Wierzbicka-Wieczorek, M.; Többens, D.M.; Kolitsch, U.; Tillmanns, E., *Simultaneous presence of (Si₃O₁₀)₈ and (Si₂O₇)₆ groups in new synthetic mixed sorosilicates: BaY₄(Si₂O₇)(Si₃O₁₀) and isotypic compounds, studied by single-crystal X-ray diffraction, Raman spectroscopy and DFT calculations*, *J. Solid State Chem.* **207**, 94-104, (2013), dx.doi.org/10.1016/j.jssc.2013.09.007

Nicoletti, D.; Calvani, P.; Di Pietro, P.; Limaj, O.; Schade, U.; Ono, S.; Ando, Y.; Lupi, S., *Optical Properties of the Cu-O Plane in the Bi₂Sr_{2-x}LaxCuO₆ Family*, *J. Supercond. Nov. Magn.* **26**, 969-977, (2013), 10.1007/s10948-012-2055-6

Garcia-Moreno, F.; Jimenez, C.; Kamm, P.H.; Klaus, M.; Wagener, G.; Banhart, J.; Genzel, Ch., *White-beam X-ray radioscopy and tomography with simultaneous diffraction at the EDDI beamline*, *J. Synchrot. Radiat.* **20**, 809-810, (2013), 10.1107/S0909049513018670

Sobierajski, R.; Loch, R.A.; van de Kruijs, R.W. E.; Louis, E.; von Blanckenhagen, G.; Gullikson, E.M.; Siewert, F.; Wowro, A.; Bijkerk, F., *Mo/Si multilayer-coated amplitude-division beam splitters for XUV radiation sources*, *J. Synchrot. Radiat.* **20**, 249-257, (2013), 10.1107/S0909049512049990

Koteski, Vasil; Belosevic-Cavor, Jelena; Fochuk, Petro; Mahnke, Heinz-Eberhard, *Local and electronic structure around Ga in CdTe: evidence of DX- and A-centers*, *J. Synchrot. Radiat.* **20**, 166-171, (2013), 10.1107/S0909049512042197

Daoud, H.M.; Manzoni, A.; Völkl, R.; Wanderka, N.; Glatzel, U., *Microstructure and Tensile Behavior of Al₈Co₁₇Cr₁₇Cu₈Fe₁₇Ni₃₃ (at.%) High-Entropy Alloy*, *JOM* **65**, 1805-1814, (2013), 10.1007/s11837-013-0756-3

Goerigk, G., *The Impact of the Turing Number on Quantitative ASAXS Measurements of Ternary Alloys*, *JOM* **65**, 44-53, (2013), 10.1007/s11837-012-0451-9

Krüger, M.; Schliephake, D.; Jain, P.; Kumar, K.S.; Schumacher, G.; Heilmaier, M., *Effects of Zr Additions on the Microstructure and the Mechanical Behavior of PM Mo-Si-B Alloys*, *JOM* **65**, 301-306, (2013), 10.1007/s11837-012-0475-1

Stehle, Ralf; Goerigk, Günter; Wallacher, Dirk; Ballauff, Matthias; Seiffert, Sebastian, *Small-angle X-ray scattering in droplet-based microfluidics*, *Lab on a Chip* **13**, 1529-1537, (2013), 10.1039/c3lc41291a

Stehle, R.; Goerigk, G.; Wallacher, D.; Ballauff, M.; Seiffert, S., *Small-angle X-ray scattering in droplet-based microfluidics*, *Lab on a Chip* **13**, 1529-1537, (2013), 10.1039/C3LC41291A

Kapishnikov, S; Weiner, A; Shimoni, E; Schneider, G; Elbaum, M; Leiserowitz, L, *Digestive Vacuole Membrane in Plasmodium falciparum-Infected Erythrocytes: Relevance to Templated Nucleation of Hemozoin*, *Langmuir* **29**, 14595–14602, (2013), 10.1021/la402545c

Aubery, C; Solans, C; Prevost, S; Gradzielski, M; Sanchez-Dominguez, M, *Microemulsions as Reaction Media for the Synthesis of Mixed Oxide Nanoparticles: Relationships between Microemulsion Structure, Reactivity, and Nanoparticle Characteristics*, *Langmuir* **29**, 1779-1789, (2013), 10.1021/la303817w

Rojas, O.; Tiersch, B.; Rabe, C.; Stehle, R.; Hoell, A.; Arlt, B.; Koetz, J., *Nonaqueous Microemulsions Based on N,N'-Alkylimidazolium Alkylsulfate Ionic Liquids*, *Langmuir* **29**, 6833-6839, (2013), 10.1021/la401080q

Koo, J.; Erlkamp, M.; Grobelny, S.; Steitz, R.; Czeslik, C., *Pressure-Induced Protein Adsorption at Aqueous-Solid Interfaces*, *Langmuir* **29**, 8025-8030, (2013), 10.1021/la401296f

Rossow, T.; Bayer, S.; Albrecht, R.; Tzschucke, C.C.; Seiffert, S., *Supramolecular Hydrogel Capsules Based on PEG: A Step towards Degradable Biomaterials with Rational Design*, *MACROMOL RAPID COMM* **34**, 1401-1407, (2013), 10.1002/marc.201300353

Hackelbusch, S.; Rossow, T.; van Assenbergh, P.; Seiffert, S., *Chain Dynamics in Supramolecular Polymer Networks*, *Macromolecules* **46**, 6273-6286, (2013), 10.1021/ma4003648

Reinhardt, M.; Dzubiella, J.; Trapp, M.; Gutfreund, P.; Kreuzer, M.; Gröschel, A.H.; Müller, A.H.E.; Ballauff, M.; Steitz, R., *Fine-Tuning the Structure of Stimuli-Responsive Polymer Films by Hydrostatic Pressure and Temperature*, *Macromolecules* **46**, 6541-6547, (2013), 10.1021/ma400962p

Di Lorenzo, F.; Seiffert, S., *Macro- and Microrheology of Heterogeneous Microgel Packings*, *Macromolecules* **46**, 1962-1972, (2013), 10.1021/ma302255x

Schneider, M.; Michels, R.; Pipich, V.; Goerigk, G.; Sauer, V.; Heim, H.-P.; Huber, K., *Morphology of Blends with Cross-Linked PMMA Microgels and Linear PMMA Chains*, *Macromolecules* **46**, 9091-9103, (2013), 10.1021/ma401889k

Heyda, J.; Muzdalo, A.; Dzubiella, J., *Rationalizing Polymer Swelling and Collapse under Attractive Cosolvent Conditions*, *Macromolecules* **46**, 1231-1238, (2013), 10.1021/ma302320y

Lentz, M.; Klaus, M.; Reimers, W.; Clausen, B., *Effect of high temperature heat treatments on the deformation behavior of Mg-2%Mn-0.7%Ce extrusions investigated by in-situ energy-dispersive synchrotron X-ray diffraction and elasto-plastic self-consistent modeling*, *Mater. Sci. Eng. A* **586**, 178-189, (2013), 10.1016/j.msea.2013.08.020

Markötter, H.; Arlt, T.; Banhart, J.; Manke, I.; Riesemeier, H.; Krüger, P.; Haußmann, J.; Klages, M.; Scholta, J., *Synchrotron-Radiographie und -Tomographie einer PEM-Brennstoffzelle*, *Mater. Testing* **55**, 355-360, (2013), 10.3139/120.110445

Arlt, T.; Grothausmann, R.; Manke, I.; Markötter, H.; Hilger, A.; Kardjilov, N.; Tötze, C.; Banhart, J.; Kupsch, A.; Hentschel, M.P.; Lange, A.; Krüger, P.; Haussmann, J.; Hartnig, C.; Wippermann, K., *Tomografische Methoden für die Brennstoffzellenforschung*, *Mater. Testing* **55**, 207-213, (2013),

Arlt, T.; Grothausmann, R.; Manke, I.; Markoetter, H.; Hilger, A.; Kardjilov, N.; Toetzke, C.; Banhart, J.; Kupsch, A.; Hentschel, M.P.; Krueger, P.; Haussmann, J.; Hartnig, C.; Wippermann, K., *Tomografische Methoden für die Brennstoffzellenforschung*, *Mater. Testing* **55**, 207-213, (2013), 10.3139/120.110429

Filatova, E. O.; Kozhevnikov, I. V.; Sokolov, A. A.; Yegorova, Yu V.; Konashuk, A. S.; Vilkov, O. Yu.; Schaefer, F.; Gorgoi, M.; Shulakov, A. S., *X-ray and photoelectron spectroscopic nondestructive methods for thin films and interfaces study. Application to SrTiO₃ based heterostructures*, *Microelec. Engin.* **109**, 13-16, (2013), 10.1016/j.mee.2013.03.095

Lautensack, J.; Rack, A.; Redenbach, C.; Zabler, S.; Fischer, H.; Gräber, H.-G., *In situ demineralisation of human enamel studied by synchrotron-based X-ray microtomography - A descriptive pilot-study*, MICRON **44**, 404-409, (2013), 10.1016/j.micron.2012.09.006

Stenzel, O; Westhoff, D; Manke, I; Kasper, M; Kroese, D P.; Schmidt, V, *Graph-based simulated annealing: a hybrid approach to stochastic modeling of complex microstructures*, Modelling Simul. Mater. Sci. Eng. **21**, 055004/1-18, (2013), 10.1088/0965-0393/21/5/055004

Dzubiella, Joachim; Hansen, Jean-Pierre, *Effects of salt on the 'drying' transition and hydrophobic interaction between nano-sized spherical solutes*, MOL PHYS **111**, 3404-3409, (2013), 10.1080/00268976.2013.816445

Henzler, K.; Guttman, P.; Lu, Y.; Polzer, F.; Schneider, G.; Ballauff, M., *Electronic Structure of Individual Hybrid Colloid Particles Studied by Near-Edge X-ray Absorption Fine Structure (NEXAFS) Spectroscopy in the X-ray Microscope*, NANO LETT **13**, 824-828, (2013), 10.1021/nl3046798

Brown, MA; Redondo, AB; Sterrer, M; Winter, B; Pacchioni, G; Abbas, Z; van Bokhoven, JA, *Measure of Surface Potential at the Aqueous-Oxide Nanoparticle Interface by XPS from a Liquid Microjet*, NANO LETT **13**, 5403-5407, (2013), 10.1021/nl402957y

Kidambi, PR; Bayer, BC; Blume, R; Wang, ZJ; Baetz, C; Weatherup, RS; Willinger, MG; Schloegl, R; Hofmann, S, *Observing Graphene Growth: Catalyst-Graphene Interactions during Scalable Graphene Growth on Polycrystalline Copper*, NANO LETT **13**, 4769-4778, (2013), 10.1021/nl4023572

Chaika, A.N.; Molodtsova, O.V.; Zakharov, A.A.; Marchenko, D.; Sánchez-Barriga, J.; Varykhalov, A.; Shvets, I.V.; Aristov, V.Y., *Continuous wafer-scale graphene on cubic-SiC(001)*, Nano Res **6**, 562-570, (2013), 10.1007/s12274-013-0331-9

Zabaleta, J.; Valencia, S.; Kronast, F.; Moreno, C.; Abellan, P.; Gazquez, J.; Sepehri-Amin, H.; Sandiumenge, F.; Puig, T.; Mestresa, N.; Obradors, X., *Photoemission electron microscopy study of sub-200 nm self-assembled La_{0.7}Sr_{0.3}MnO₃ epitaxial islands*, NANOSCALE **5**, 2990-2998, (2013), 10.1039/c3nr33346a

Drescher, D.; Guttman, P.; Büchner, T.; Werner, S.; Laube, G.; Hornemann, A.; Tarek, B.; Schneider, G.; Kneipp, J., *Specific biomolecule corona is associated with ring-shaped organization of silver nanoparticles in cells*, NANOSCALE **5**, 9193-9198, (2013), 10.1039/c3nr02129g

El Mel, A.A.; Buffiere, M.; Bouts, N.; Gautron, E.; Tessier, P.Y.; Henzler, K.; Guttman, P.; Konstantinidis, S.; Bittencourt, C.; Snyders, R., *Growth control, structure, chemical state, and photoresponse of CuO-CdS core-shell heterostructure nanowires*, Nanotechnology **24**, 265603/1-11, (2013), 10.1088/0957-4484/24/26/265603

Rybkina, A. A.; Rybkin, A.G.; Adamchuk, V.K.; Marchenko, D.; Varykhalov, A.; Sánchez-Barriga, J.; Shikin, A.M., *The graphene/Au/Ni interface and its application in the construction of a graphene spin filter*, Nanotechnology **24**, 295201/1-9, (2013), 10.1088/0957-4484/24/29/295201

Heimel, G.; Duhm, S.; Salzmann, I.; Gerlach, A.; Strozecka, A.; Niederhausen, J.; Bürker, C.; Hosokai, T.; Fernandez-Torrente, I.; Schulze, G.; Winkler, S.; Wilke, A.; Schlesinger, R.; Frisch, J.; Bröker, B.;

Vollmer, A.; Detlefs, B.; Pflaum, J.; Kera, S., *Charged and metallic molecular monolayers through surface-induced aromatic stabilization*, *NAT CHEM* **5**, 187-194, (2013), 10.1038/NCHEM.1572

Thürmer, S.; Oncak, M.; Ottosson, N.; Seidel, R.; Hergenhan, U.; Bradforth, S.E.; Slavíček, P.; Winter, B., *On the nature and origin of dicationic, charge-separated species formed in liquid water on X-ray irradiation*, *NAT CHEM* **5**, 590-596, (2013), 10.1038/nchem.1680

Bisig, A; Staerk, M; Mawass, M; Moutafis, C; Rhensius, J; Heidler, J; Buettner, F; Noske, M; Weigand, M; Eisebitt, S; Tyliszczak, T; Van Waeyenberge, B; Stoll, H; Schuetz, G; Kläuel, M, *Correlation between spin structure oscillations and domain wall velocities*, *Nat. Commun.* **4**, 156332, (2013), 10.1038/ncomms3328

Schmitz-Antoniak, C.; Schmitz, D.; Borisov, P.; de Groot, F.M.F.; Stienen, S.; Warland, A.; Krumme, B.; Feyerherm, R.; Dudzik, E.; Kleemann, W.; Wende, H., *Electric in-plane polarisation in multiferroic CoFe₂O₄/BaTiO₃ nanocomposite tuned by magnetic fields*, *Nat. Commun.* **4**, 55161, (2013), 10.1038/ncomms3051

Vogel, F.; Wanderka, N.; Balogh, Z.; Ibrahim, M.; Stender, P.; Schmitz, G.; Banhart, J., *Mapping the evolution of hierarchical microstructures in a Ni-base superalloy*, *Nat. Commun.* **4**, 41821, (2013), 10.1038/ncomms3955

de Jong, S; Kukreja, R; Trabant, C; Pontius, N; Chang, C. F.; Kachel, T; Beye, M; Sorgenfrei, F; Back, H. C.; Bräuer, B; Schlotter, W. F.; Turner, J. J.; Krupin, O; Doehler, M; Zhu, D; Hossain, M. A.; Scherz, A. O.; Fausti, D; Novelli, F; Esposito, M; Lee, *Speed limit of the insulator?metal transition in magnetite*, *Nat. Mater.* **12**, 882, (2013), 10.1038/NMAT3718

Eschenlohr, A.; Battiato, M.; Maldonado, P.; Pontius, N.; Kachel, T.; Holldack, K.; Mitzner, R.; Föhlisch, A.; Oppeneer, P.M.; Stamm, C., *Ultrafast spin transport as key to femtosecond demagnetization*, *Nat. Mater.* **12**, 332-336, (2013), 10.1038/NMAT3546

Beye, M.; Schreck, S.; Sorgenfrei, F.; Trabant, C.; Pontius, N.; Schüßler-Langeheine, C.; Wurth, W.; Föhlisch, A., *Stimulated X-ray emission for materials science*, *Nature* **501**, 191-196, (2013), 10.1038/nature12449

Sánchez-Barriga, J.; Bihlmayer, G.; Wortmann, D.; Marchenko, D.; Rader, O.; Varykhalov, A., *Effect of structural modulation and thickness of a graphene overlayer on the binding energy of the Rashba-type surface state of Ir(111)*, *New J. Phys.* **15**, 115009/1-18, (2013), 10.1088/1367-2630/15/11/115009

Allan, M.P.; Tamai, A.; Rozbicki, E.; Fischer, M.H.; Voss, J.; King, P.D.C.; Meevasana, W.; Thirupathaiyah, S.; Rienks, E.; Fink, J.; Tennant, D.A.; Perry, R.S.; Mercure, J.F.; Wang, M.A.; Lee, J.; Fennie, C.J.; Kim, E.-A.; Lawler, M.J.; Shen, K.M.; Macken, *Formation of heavy d-electron quasiparticles in Sr₃Ru₂O₇*, *New J. Phys.* **15**, 063029/1-10, (2013), 10.1088/1367-2630/15/6/063029

Shikin, A.M.; Rybkina, A.A.; Korshunov, A.S.; Kudasov, Yu.B.; Frolova, N.V.; Rybkin, A.G.; Marchenko, D.; Sánchez-Barriga, J.; Varykhalov, A.; Rader, O., *Induced Rashba splitting of electronic states in monolayers of Au, Cu on a W(110) substrate*, *New J. Phys.* **15**, 095005/1-22, (2013), 10.1088/1367-2630/15/9/095005

- Shikin, A.M.; Rybkin, A.G.; Marchenko, D.; Rybkina, A.A.; Scholz, M.R.; Rader, O.; Varykhalov, A., *Induced spin-orbit splitting in graphene: the role of atomic number of the intercalated metal and pi-d hybridization*, *New J. Phys.* **15**, 013016/1-18, (2013), 10.1088/1367-2630/15/1/013016
- Schaffert, S.; Pfau, B.; Geilhufe, J.; Guenther, C.M.; Schneider, M.; Korff Schmising, C. von; Eisebitt, S., *High-resolution magnetic-domain imaging by Fourier transform holography at 21 nm wavelength*, *New J. Phys.* **15**, 093042/1-8, (2013), 10.1088/1367-2630/15/9/093042
- Dierker, B.; Suljoti, E.; Atak, K.; Lange, K.M.; Engel, N.; Golnak, R.; Dantz, M.; Hodeck, K.; Khan, M.; Kosugi, N.; Aziz, E.F., *Probing orbital symmetry in solution: polarization-dependent resonant inelastic soft x-ray scattering on liquid micro-jet*, *New J. Phys.* **15**, 093025/1-10, (2013), 10.1088/1367-2630/15/9/093025
- Eggenstein, F.; Schäfers, F.; Erko, A.; Follath, R.; Gaupp, A.; Löchel, B.; Senf, F.; Zeschke, T., *A reflectometer for at-wavelength characterization of gratings*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **710**, 166–171, (2013), 10.1016/j.nima.2012.10.132
- Nekrassov, D.; Zender, C.; Lieutenant, K., *Design of a wavelength frame multiplication system using acceptance diagrams*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **716**, 71-77, (2013), 10.1016/j.nima.2013.03.001
- Assoufid, L.; Brown, N.; Crews, D.; Sullivan, J.; Erdmann, M.; Qian, J.; Jemian, P.; Yashchuk, V.V.; Takacs, P.Z.; Artemiev, N.A.; Merthe, D.J.; McKinney, W.R.; Siewert, F.; Zeschke, T., *Development of a high-performance gantry system for a new generation of optical slope measuring profilers*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **710**, 31-36, (2013), 10.1016/j.nima.2012.11.063
- Le, D.; Quintero Castro, D.L.; Toft-Petersen, R.; Groitl, F.; Skoulatos, M.; Rule, K.; Habicht, K., *Gains from the upgrade of the cold neutron triple-axis spectrometer FLEXX at the BERII reactor*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **729**, 220-226, (2013), 10.1016/j.nima.2013.07.007
- Krist, T.; Rucker, F.; Brandl, G.; Georgii, R., *High performance, large cross-section S-bender for neutron polarization*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **698**, 94-97, (2013), 10.1016/j.nima.2012.09.042
- Siewert, F.; Buchheim, J.; Hoeft, T.; Zeschke, T.; Schindler, A.; Arnold, T., *Investigations on the spatial resolution of autocollimator-based slope measuring profilers*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **710**, 42-47, (2013), 10.1016/j.nima.2012.10.130
- Rühm, A.; Kozhevnikov, S.V.; Ott, F.; Radu, F.; Major, J., *Magnetic planar waveguides as combined polarizers and spin-flippers for neutron microbeams*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **708**, 83-87, (2013), 10.1016/j.nima.2012.12.116
- Schulz, J.; Ott, F.; Hülsen, Ch.; Krist, Th., *Neutron energy analysis by silicon prisms*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **729**, 334-337, (2013), 10.1016/j.nima.2013.07.030
- Stüßer, N.; Hofmann, T., *On the form invariant volume transformation in phase space by focusing neutron guides: An analytic treatment*, *Nucl. Instrum. & Methods Phys. Res. Sect. A* **727**, 84-89, (2013),

Uschakow, S.; Gaupp, A.; Gerhard, M.; MacDonald, M.; Schäfers, F., *Polarization properties of Mo/Si multilayers in the EUV range*, Nucl. Instrum. & Methods Phys. Res. Sect. A **710**, 120-124, (2013), 10.1016/j.nima.2012.10.133

Strobl, M.; Bulat, M.; Habicht, K., *The wavelength frame multiplication chopper system for the ESS test beamline at the BER II reactor-A concept study of a fundamental ESS instrument principle*, Nucl. Instrum. & Methods Phys. Res. Sect. A **705**, 74-84, (2013), 10.1016/j.nima.2012.11.190

Zendler, C.; Lieutenant, K.; Nekrassov, D.; Cussen, L.D.; Strobl, M., *Bi-spectral beam extraction in combination with a focusing feeder*, Nucl. Instrum. & Methods Phys. Res. Sect. A **704**, 68-75, (2013), 10.1016/j.nima.2012.11.180

Jacobsen, H.; Lieutenant, K.; Zendler, C.; Lefmann, K., *Bi-spectral extraction through elliptic neutron guides*, Nucl. Instrum. & Methods Phys. Res. Sect. A **717**, 69-76, (2013),

Cussen, L.D.; Nekrassov, D.; Zendler, C.; Lieutenant, K., *Multiple reflections in elliptic neutron guide tubes*, Nucl. Instrum. & Methods Phys. Res. Sect. A **705**, 121-131, (2013), 10.1016/j.nima.2012.11.183

Schiwietz, G.; Beye, M.; Czernski, K.; Föhlisch, A.; Könnecke, R.; Roth, M.; Schlappa, J.; Staufienbiel, F.; Suljoti, E.; Kuusik, I.; Grande, P.L., *Ultrafast electronic processes in an insulator:*

The Be and O sites in BeO, Nucl. Instrum. & Methods Phys. Res. Sect. B **317**, 48-55, (2013), 10.1016/j.nimb.2012.12.099

Büttner, F.; Schneider, M.; Günther, C.M.; Vaz, C.A.F.; Lägler, B.; Berger, D.; Selve, S.; Kläui, M.; Eisebitt, S., *Automatable sample fabrication process for pump-probe X-ray holographic imaging*, Optic. Express **21**, 30563-30572, (2013), 10.1364/OE.21.030563

Keskinbora, K.; Grevent, C.; Bechtel, M.; Weigand, M.; Goering, E.; Nadzeyka, A.; Peto, L.; Rehbein, S.; Schneider, G.; Follath, R.; Vila-Comamala, J.; Yan, H.; Schütz, G., *Ion beam lithography for Fresnel zone plates in X-ray microscopy*, Optic. Express **21**, 11747-11756, (2013), 10.1364/OE.21.011747

Mönch, T.; Guttman, P.; Murawski, J.; Elschner, C.; Riede, M.; Müller-Meskamp, L.; Leo, K., *Investigating local (photo-)current and structure of ZnPc:C₆₀ bulk-heterojunctions*, ORG ELECTRON **14**, 2777-2788, (2013), 10.1016/j.orgel.2013.07.031

Nakayama, Y.; Niederhausen, J.; Machida, S.; Uragami, Y.; Kinjo, H.; Vollmer, A.; Rabe, J.P.; Koch, N.; Ishii, H., *Valence band structure of rubrene single crystals in contact with an organic gate dielectric*, ORG ELECTRON **14**, 1825-1832, (2013), 10.1016/j.orgel.2013.04.019

Setny, P.; Baron, R.; Kekenus-Huskey, P.M.; McCammon, J.A.; Dzubiella, J., *Solvent fluctuations in hydrophobic cavity-ligand binding kinetics*, P. Nat. Acad. Sci. USA **110**, 1197-1202, (2013), 10.1073/pnas.1221231110

Barday, R.; Burrill, A.; Jankowiak, A.; Kamps, T.; Knobloch, J.; Kugeler, O.; Matveenko, A.; Neumann, A.; Schmeißer, M.; Völker, J.; Kneisel, P.; Nietubyc, R.; Schubert, S.; Smedley, J.; Sekutowicz, J.; Will, I., *Characterization of a Superconducting Pb Photocathode in a Superconducting RF Photoinjector Cavity*, PHYS REV SPEC TOP-AC **16**, 123402/1-7, (2013), 10.1103/PhysRevSTAB.16.123402

Frantzeskakis, E.; de Jong, N.; Zwartsenberg, B.; Huang, Y.K.; Pan, Y.; Zhang, X.; Zhang, J.X.; Zhang, F.X.; Bao, L.H.; Tegus, O.; Varykhalov, A.; de Visser, A.; Golden, M.S., *Kondo Hybridization and the Origin of Metallic States at the (001) Surface of SmB₆*, *Phys Rev X* **3**, 041024/1-11, (2013), 10.1103/PhysRevX.3.041024

Maganas, Dimitrios; Roemelt, Michael; Haevecker, Michael; Trunschke, Annette; Knop-Gericke, Axel; Schloegl, Robert; Neese, Frank, *First principles calculations of the structure and V L-edge X-ray absorption spectra of V₂O₅ using local pair natural orbital coupled cluster theory and spin-orbit coupled configuration interaction approaches*, *Phys. Chem. Chem. Phys.* **15**, 7260-7276, (2013), 10.1039/c3cp50709b

Gajda-Schrantz, K.; Tymen, S.; Boudoire, F.; Toth, R.; Bora, D.K.; Calvet, W.; Gratzel, M.; Constable, E.C.; Braun, A., *Formation of an electron hole doped film in the alpha-Fe₂O₃ photoanode upon electrochemical oxidation*, *Phys. Chem. Chem. Phys.* **15**, 1443-1451, (2013), 10.1039/c2cp42597a

Golnak, R.; Atak, K.; Suljoti, E.; Hodeck, K.F.; Lange, K.M.; Soldatov, M.A.; Engel, N.; Aziz, E.F., *Local electronic structure of aqueous zinc acetate: oxygen K-edge X-ray absorption and emission spectroscopy on micro-jets*, *Phys. Chem. Chem. Phys.* **15**, 8046-8049, (2013), 10.1039/c3cp50686j

Jerliu, B.; Dörrer, L.; Hüger, E.; Borchardt, G.; Steitz, R.; Geckle, U.; Oberst, V.; Bruns, M.; Schneider, O.; Schmidt, H., *Neutron reflectometry studies on the lithiation of amorphous silicon electrodes in lithium-ion batteries*, *Phys. Chem. Chem. Phys.* **15**, 7777-7784, (2013), 10.1039/c3cp44438d

Peters, S; Peredkov, S; Neeb, M; Eberhardt, W; Al-Hada, M, *Size-dependent Auger spectra and two-hole Coulomb interaction of small supported Cu-clusters*, *Phys. Chem. Chem. Phys.* **15**, 9575-9580, (2013), 10.1039/c3cp00109a

Behrens, Malte; Lolli, Giulio; Muratova, Nelli; Kasatkin, Igor; Haevecker, Michael; d'Alnoncourt, Raoul Naumann; Storcheva, Oksana; Koehler, Klaus; Muhler, Martin; Schloegl, Robert, *The effect of Al-doping on ZnO nanoparticles applied as catalyst support*, *Phys. Chem. Chem. Phys.* **15**, 1374-1381, (2013), 10.1039/c2cp41680h

Mitsuhara, K.; Matsuda, T.; Tominaga, K.; Grande, P.L.; Schiwietz, G.; Kido, Y., *Skimming-trajectory effect for energy loss of medium-energy He ions passing along major crystal axes of KI(001) and RbI(001)*, *Phys. Rev. A* **87**, 042901/1-8, (2013), 10.1103/PhysRevA.87.042901

Tanaka, A.; Chang, C.F.; Buchholz, M.; Trabant, C.; Schierle, E.; Schlappa, J.; Schmitz, D.; Ott, H.; Metcalf, P.; Tjeng, L.H.; Schüßler-Langeheine, C., *Analysis of charge and orbital order in Fe₃O₄ by Fe L_{2,3} resonant x-ray diffraction*, *Phys. Rev. B* **88**, 195110/1-15, (2013), 10.1103/PhysRevB.88.195110

Prokes, K.; Mydosh, J.A.; Prokhnenko, O.; Stein, W.-D.; Landsgesell, S.; Hermes, W.; Feyerherm, R.; Pöttgen, R., *Antiferromagnetic ordering in a mixed-valent cerium compound CeRuSn*, *Phys. Rev. B* **87**, 094421/1-9, (2013), 10.1103/PhysRevB.87.094421

Koitzsch, A.; Kim, T.K.; Treske, U.; Knupfer, M.; Buchner, B.; Richter, M.; Opahle, I.; Follath, R.; Bauer, E.D.; Sarrao, J.L., *Band-dependent emergence of heavy quasiparticles in CeCoIn₅*, *Phys. Rev. B* **88**, 035124/1-5, (2013), 10.1103/PhysRevB.88.035124

Schlesinger, R.; Xu, Y.; Hofmann, O.T.; Winkler, S.; Frisch, J.; Niederhausen, J.; Vollmer, A.; Blumstengel, S.; Henneberger, F.; Rinke, P.; Scheffler, M.; Koch, N., *Controlling the work function of ZnO and the energy-level alignment at the interface to organic semiconductors with a molecular electron acceptor*, Phys. Rev. B **87**, 155311/1-5, (2013), 10.1103/PhysRevB.87.155311

Zamudio-Bayer, V.; Leppert, L.; Hirsch, K.; Langenberg, A.; Rittmann, J.; Kossick, M.; Vogel, M.; Richter, R.; Terasaki, A.; Möller, T.; Issendorff, B. v.; Kümmel, S.; Lau, J.T., *Coordination-driven magnetic-to-nonmagnetic transition in manganese-doped silicon clusters*, Phys. Rev. B **88**, 115425/1-6, (2013), 10.1103/PhysRevB.88.115425

Strigari, F.; Willers, T.; Muro, Y.; Yutani, K.; Takabatake, T.; Hu, Z.; Agrestini, S.; Kuo, C.-Y.; Chin, Y.-Y.; Lin, H.-J.; Pi, T.W.; Chen, C.T.; Weschke, E.; Schierle, E.; Tanaka, A.; Haverkort, M.W.; Tjeng, L.H.; Severing, A., *Crystal field ground state of the orthorhombic Kondo semiconductors CeOs₂Al₁₀ and CeFe₂Al₁₀*, Phys. Rev. B **87**, 125119/1-6, (2013), 10.1103/PhysRevB.87.125119

Shayduk, R.; Herzog, M.; Bojahr, A.; Schick, D.; Gaal, P.; Leitenberger, W.; Navirian, H.; Sander, M.; Goldshteyn, J.; Vrejoiu, I.; Bargheer, M., *Direct time-domain sampling of subterahertz coherent acoustic phonon spectra in SrTiO₃ using ultrafast x-ray diffraction*, Phys. Rev. B **87**, 184301/1-7, (2013), 10.1103/PhysRevB.87.184301

Evtushinsky, D.V.; Zabolotnyy, V.B.; Harnagea, L.; Yaresko, A.N.; Thirupathiah, S.; Kordyuk, A.A.; Maletz, J.; Aswartham, S.; Wurmehl, S.; Rienks, E.; Follath, R.; Buechner, B.; Borisenko, S.V., *Electronic band structure and momentum dependence of the superconducting gap in Ca_{1-x}NaxFe₂As₂ from angle-resolved photoemission spectroscopy*, Phys. Rev. B **87**, 094501/1-5, (2013), 10.1103/PhysRevB.87.094501

Lavchiev, V. M.; Schade, U.; Hesser, G.; Chen, G.; Jantsch, W., *Ellipsometry and spectroscopy on 1.55 μ m emitting Ge islands in Si for photonic applications*, Phys. Rev. B **87**, ARTN 199907, (2013), 10.1103/PhysRevB.87.199907

Bera, A.K.; Lake, B.; Islam, A.T.M.N.; Klemke, B.; Faulhaber, E.; Law, J.M., *Field-induced magnetic ordering and single-ion anisotropy in the quasi-one-dimensional Haldane chain compound $\text{\$SrNi}_2\text{V}_2\text{O}_8\text{\$}$: A single-crystal investigation*, Phys. Rev. B **87**, 224423/1-10, (2013), 10.1103/PhysRevB.87.224423

Slooten, E.; Zhong, Zhicheng; Molegraaf, H. J. A.; Eerkes, P. D.; de Jong, S.; Masee, F.; van Heumen, E.; Kruize, M. K.; Wenderich, S.; Kleibeuker, J. E.; Gorgoi, M.; Hilgenkamp, H.; Brinkman, A.; Huijben, M.; Rijnders, G.; Blank, D. H. A.; Koster, G.; K, *Hard x-ray photoemission and density functional theory study of the internal electric field in SrTiO₃/LaAlO₃ oxide heterostructures*, Phys. Rev. B **87**, 085128/1-11, (2013), 10.1103/PhysRevB.87.085128

Hermanns, C.F.; Bernien, M.; Krüger, A.; Walter, W.; Chang, Y.-M.; Weschke, E.; Kuch, W., *Huge magnetically coupled orbital moments of Co porphyrin molecules and their control by CO adsorption*, Phys. Rev. B **88**, 104420/1-6, (2013), 10.1103/PhysRevB.88.104420

Knut, Ronny; Svedlindh, Peter; Mryasov, Oleg; Gunnarsson, Klas; Warnicke, Peter; Arena, D. A.; Bjoerck, Matts; Dennison, Andrew J. C.; Sahoo, Anindita; Mukherjee, Sumanta; Sarma, D. D.; Granroth, Sari; Gorgoi, Mihaela; Karis, Olof, *Interface characterization of Co₂MnGe/Rh₂CuSn Heusler multilayers*, Phys. Rev. B **88**, 134407, (2013), 10.1103/PhysRevB.88.134407

- Schubert, C.; Hebler, B.; Schletter, H.; Liebig, A.; Daniel, M.; Abrudan, R.; Radu, F.; Albrecht, M., *Interfacial exchange coupling in Fe-Tb/[Co/Pt] heterostructures*, Phys. Rev. B **87**, 054415/1-9, (2013), 10.1103/PhysRevB.87.054415
- Herper, H.C.; Bernien, M.; Bhandary, S.; Hermanns, C.F.; Krüger, A.; Miguel, J.; Weis, C.; Schmitz-Antoniak, C.; Krumme, B.; Bovenschen, D.; Tieg, C.; Sanyal, B.; Weschke, E.; Czekelius, C.; Kuch, W.; Wende, H.; Eriksson, O., *Iron porphyrin molecules on Cu(001): Influence of adlayers and ligands on the magnetic properties*, Phys. Rev. B **87**, 174425/1-15, (2013), 10.1103/PhysRevB.87.174425
- Weber, F.; Argyriou, D.N.; Prokhnenko, O.; Reznik, D., *Large lattice distortions associated with the magnetic transition in $\text{\$La}_{0.7}\text{\$Sr}_{0.3}\text{\$MnO}_3\text{\$}$* , Phys. Rev. B **88**, 241106(R)/1-5, (2013), 10.1103/PhysRevB.88.241106
- Beleanu, A.; Kiss, J.; Kreiner, G.; Kohler, C.; Muchler, L.; Schnelle, W.; Burkhardt, U.; Chadov, S.; Medvediev, S.; Ebke, D.; Felser, C.; Cordier, G.; Albert, B.; Hoser, A.; Bernardi, F.; Larkin, T.I.; Propper, D.; Boris, A.V.; Keimer, B., *Large resistivity change and phase transition in the antiferromagnetic semiconductors LiMnAs and LaOMnAs*, Phys. Rev. B **88**, 184429/1-12, (2013), 10.1103/PhysRevB.88.184429
- Wang, Z.; Schmidt, M.; Bera, A.K.; Islam, A.T.M.N.; Lake, B.; Loidl, A.; Deisenhofer, J., *Low-energy magnetic excitations in the quasi-one-dimensional spin-1 chain compound SrNi₂V₂O₈*, Phys. Rev. B **87**, 104405/1-4, (2013), 10.1103/PhysRevB.87.104405
- Reehuis, M.; Senaris-Rodriguez, M.A.; Hoser, A.; Keimer, B.; Jansen, M., *Magnetic neutron diffraction study of the charge-ordered chain compounds Rb₁₁Mn₈O₁₆ and Cs₃Mn₂O₄*, Phys. Rev. B **87**, 014426/1-7, (2013), 10.1103/PhysRevB.87.014426
- Peets, D.C.; Kim, J.-H.; Dosanjh, P.; Reehuis, M.; Maljuk, A.; Aliouane, N.; Ulrich, C.; Keimer, B., *Magnetic phase diagram of Sr₃Fe₂O_{7-x}*, Phys. Rev. B **87**, 214410/1-8, (2013), 10.1103/PhysRevB.87.214410
- Büttner, F.; Moutafis, C.; Bisig, A.; Wohlhüter, P.; Günther, C.M.; Mohanty, J.; Geilhufe, J.; Schneider, M.; v. Korff Schmising, C.; Schaffert, S.; Pfau, B.; Hantschmann, M.; Riemeier, M.; Emmel, M.; Finizio, S.; Jakob, G.; Weigand, M.; Rhensius, J.; Fra, *Magnetic states in low-pinning high-anisotropy material nanostructures suitable for dynamic imaging*, Phys. Rev. B **87**, 134422/1-6, (2013), 10.1103/PhysRevB.87.134422
- Briones-Leon, A.; Ayala, P.; Liu, X.; Yanagi, K.; Weschke, E.; Eisterer, M.; Jiang, H.; Kataura, H.; Pichler, T.; Shiozawa, H., *Orbital and spin magnetic moments of transforming one-dimensional iron inside metallic and semiconducting carbon nanotubes*, Phys. Rev. B **87**, 195435/1-7, (2013), 10.1103/PhysRevB.87.195435
- Piatek, J.O.; Dalla Piazza, B.; Nikseresht, N.; Tsyulin, N.; Zivkovic, I.; Krämer, K.W.; Laver, M.; Prokes, K.; Matas, S.; Christensen, N.B.; Ronnow, H.M., *Phase diagram with an enhanced spin-glass region of the mixed Ising-XY magnet $\text{\$LiHo}_x\text{\$Er}_{1-x}\text{\$F}_4\text{\$}$* , Phys. Rev. B **88**, 014408/1-11, (2013), 10.1103/PhysRevB.88.014408

Bruno, F.Y.; Rushchanskii, K.Z.; Valencia, S.; Dumont, Y.; Carretero, C.; Jacquet, E.; Abrudan, R.; Bluegel, S.; Lezaic, M.; Bibes, M.; Barthelemy, A., *Rationalizing strain engineering effects in rare-earth nickelates*, Phys. Rev. B **88**, 195108/1-7, (2013), 10.1103/PhysRevB.88.195108

Amsalem, P.; Niederhausen, J.; Wilke, A.; Heimel, G.; Schlesinger, R.; Winkler, S.; Vollmer, A.; Rabe, J.P.; Koch, N., *Role of charge transfer, dipole-dipole interactions, and electrostatics in Fermi-level pinning at a molecular heterojunction on a metal surface*, Phys. Rev. B **87**, 035440/1-13, (2013), 10.1103/PhysRevB.87.035440

Lopez-Flores, V; Bergeard, N; Halte, V; Stamm, C; Pontius, N; Hehn, M; Otero, E; Beaupair, E; Boeglin, C, *Role of critical spin fluctuations in ultrafast demagnetization of transition-metal rare-earth alloys*, Phys. Rev. B **87**, 214412/1-7, (2013), 10.1103/PhysRevB.87.214412

Tarasenko, R.; Orendacova, A.; Cizmar, E.; Matas, S.; Orendac, M.; Potocnak, I.; Siemensmeyer, K.; Zvyagin, S.; Wosnitza, J.; Feher, A., *Spin anisotropy in Cu(en)(H₂O)₂SO₄: A quasi-two-dimensional S = 1/2 spatially anisotropic triangular-lattice antiferromagnet*, Phys. Rev. B **87**, 174401/1-8, (2013), 10.1103/PhysrevB.87.174401

Marchenko, D.; Sanchez-Barriga, J.; Scholz, M.R.; Rader, O.; Varykhalov, A., *Spin splitting of Dirac fermions in aligned and rotated graphene on Ir(111)*, Phys. Rev. B **87**, 115426/1-8, (2013), 10.1103/PhysRevB.87.115426

Marchenko, D.; Varykhalov, A.; Scholz, M.R.; Sánchez-Barriga, J.; Rader, O.; Rybkina, A.; Shikin, A.M.; Seyller, Th.; Bihlmayer, G., *Spin-resolved photoemission and ab initio theory of graphene/SiC*, Phys. Rev. B **88**, 075422/1-5, (2013), 10.1103/PhysRevB.88.075422

Glavic, A.; Becher, C.; Voigt, J.; Schierle, E.; Weschke, E.; Fiebig, M.; Brückel, T., *Stability of spin-driven ferroelectricity in the thin-film limit: Coupling of magnetic and electric order in multiferroic STbMnO_3 films*, Phys. Rev. B **88**, 054401/1-5, (2013), 10.1103/PhysRevB.88.054401

Wu, M.; Benckiser, E.; Haverkort, M.W.; Frano, A.; Lu, Y.; Nwankwo, U.; Brück, S.; Audehm, P.; Goering, E.; Macke, S.; Hinkov, V.; Wochner, P.; Christiani, G.; Heinze, S.; Logvenov, G.; Habermeyer, H.-U.; Keimer, B., *Strain and composition dependence of the orbital polarization in nickel oxide superlattices*, Phys. Rev. B **88**, 125124/1-9, (2013), 10.1103/PhysRevB.88.125124

Schäpers, M.; Wolter, A.U.B.; Drechsler, S.-L.; Nishimoto, S.; Müller, K.-H.; Abdel-Hafiez, M.; Schottenhamel, W.; Büchner, B.; Richter, J.; Ouladdiaf, B.; Uhlarz, M.; Beyer, R.; Skourski, Y.; Wosnitza, J.; Rule, K.C.; Ryll, H.; Klemke, B.; Kiefer, K.; Re, *Thermodynamic properties of the anisotropic frustrated spin-chain compound linarite $\text{PbCuSO}_4(\text{OH})_2$* , Phys. Rev. B **88**, 184410/1-17, (2013), 10.1103/PhysRevB.88.184410

Maletz, J.; Zabolotnyy, V.B.; Evtushinsky, D.V.; Yaresko, A.N.; Kordyuk, A.A.; Shermadini, Z.; Luetkens, H.; Sedlak, K.; Khasanov, R.; Amato, A.; Krzton-Maziopa, A.; Conder, K.; Pomjakushina, E.; Klaus, H.H.; Rienks, E.D.L.; Buchner, B.; Borisenko, S.V., *Photoemission and muon spin relaxation spectroscopy of the iron-based $\text{Rb}_0.77\text{Fe}_{1.61}\text{Se}_2$ superconductor: Crucial role of the cigar-shaped Fermi surface*, Phys. Rev. B **88**, 134501/1-7, (2013), 10.1103/PhysRevB.88.134501

Xu, N.; Richard, P.; Shi, X.; van Roekeghem, A.; Qian, T.; Razzoli, E.; Rienks, E.; Chen, G.F.; Ieki, E.; Nakayama, K.; Sato, T.; Takahashi, T.; Shi, M.; Ding, H., *Possible nodal superconducting gap and*

- Lifshitz transition in heavily hole-doped $Ba_{0.1}K_{0.9}Fe_2As_2$, *Phys. Rev. B* **88**, 220508/1-5, (2013), 10.1103/PhysRevB.88.220508
- Kalcher, I.; Dzubiella, J., *NaCl crystallization in apolar nanometer-sized confinement studied by atomistic simulations*, *Phys. Rev. E* **88**, 062312/1-10, (2013), 10.1103/PhysRevE.88.062312
- Müller, L.; Gutt, C.; Pfau, B.; Schaffert, S.; Geilhufe, J.; Büttner, F.; Mohanty, J.; Flewett, S.; Treusch, R.; Düsterer, S.; Redlin, H.; Al-Shemmary, A.; Hille, M.; Kobs, A.; Frömter, R.; Oepen, H. P.; Ziaja, B.; Medvedev, N.; Son, S.-K.; Thiele, R.; Sa, *Breakdown of the X-Ray Resonant Magnetic Scattering Signal during Intense Pulses of Extreme Ultraviolet Free-Electron-Laser Radiation*, *Phys. Rev. Lett.* **110**, 234801/1-6, (2013), 10.1103/PhysRevLett.110.234801
- Rössle, M.; Kim, K.W.; Dubroka, A.; Marsik, P.; Wang, C.N.; Jany, R.; Richter, C.; Mannhart, J.; Schneider, C.W.; Frano, A.; Wochner, P.; Lu, Y.; Keimer, B.; Shukla, D.K.; Stremper, J.; Bernhard, C., *Electric-Field- Induced Polar Order and Localization of the Confined Electrons in $LaAlO_3/SrTiO_3$ Heterostructures*, *Phys. Rev. Lett.* **110**, 136805/1-5, (2013), 10.1103/PhysRevLett.110.136805
- Hofmann, T.; Kumar, P.; Enderle, M.; Wallacher, D., *Growth of Highly Oriented Deuterium Crystals in Silicon Nanochannels*, *Phys. Rev. Lett.* **110**, 065505/1-5, (2013), 10.1103/PhysRevLett.110.065505
- Hermanns, C.F.; Bernien, M.; Krüger, A.; Schmidt, C.; Waßerroth, S.T.; Ahmadi, G.; Heinrich, B.W.; Schneider, M.; Brouwer, P.W.; Franke, K.J.; Weschke, E.; Kuch, W., *Magnetic Coupling of $\$Gd_{3N}@C_{\{80\}}\$$ Endohedral Fullerenes to a Substrate*, *Phys. Rev. Lett.* **111**, 167203/1-5, (2013), 10.1103/PhysRevLett.111.167203
- Blanco-Canosa, S.; Frano, A.; Loew, T.; Lu, Y.; Porras, J.; Ghiringhelli, G.; Minola, M.; Mazzoli, C.; Braicovich, L.; Schierle, E.; Weschke, E.; Le Tacon, M.; Keimer, B., *Momentum-Dependent Charge Correlations in $YBa_2Cu_3O_{6+\delta}$ Superconductors Probed by Resonant X-Ray Scattering: Evidence for Three Competing Phases*, *Phys. Rev. Lett.* **110**, 187001/1-5, (2013), 10.1103/PhysRevLett.110.187001
- Lake, B.; Tennant, D.A.; Caux, J.-S.; Barthel, T.; Schollwöck, U.; Nagler, S.E.; Frost, C.D., *Multispinon Continua at Zero and Finite Temperature in a Near-Ideal Heisenberg Chain*, *Phys. Rev. Lett.* **111**, 137205/1-5, (2013),
- Frano, A.; Schierle, E.; Haverkort, M.W.; Lu, Y.; Wu, M.; Blanco-Canosa, S.; Nwankwo, U.; Boris, A.V.; Wochner, P.; Cristiani, G.; Habermeier, H.U.; Logvenov, G.; Hinkov, V.; Benckiser, E.; Weschke, E.; Keimer, B., *Orbital Control of Noncollinear Magnetic Order in Nickel Oxide Heterostructures*, *Phys. Rev. Lett.* **111**, 106804/1-5, (2013), 10.1103/PhysRevLett.111.106804
- Ballauff, M.; Brader, J.M.; Egelhaaf, S.U.; Fuchs, M.; Horbach, J.; Koumakis, N.; Krüger, M.; Laurati, M.; Mutch, K.J.; Petekidis, G.; Siebenbürger, M.; Voigtmann, Th.; Zausch, J., *Residual Stresses in Glasses*, *Phys. Rev. Lett.* **110**, 215701/1-5, (2013), 10.1103/PhysRevLett.110.215701
- Scholz, M.R.; Sánchez-Barriga, J.; Braun, J.; Marchenko, D.; Varykhalov, A.; Lindroos, M.; Wang, Yung Jui; Lin, Hsin; Bansil, A.; Minár, J.; Ebert, H.; Volykhov, A.; Yashina, L.V.; Rader, O., *Reversal of the Circular Dichroism in Angle-Resolved Photoemission from Bi_2Te_3* , *Phys. Rev. Lett.* **110**, 216801, (2013), 10.1103/PhysRevLett.110.216801

- Xu, Y.; Hofmann, O.T.; Schlesinger, R.; Winkler, S.; Frisch, J.; Niederhausen, J.; Vollmer, A.; Blumstengel, S.; Henneberger, F.; Koch, N.; Rinke, P.; Scheffler, M., *Space-Charge Transfer in Hybrid Inorganic-Organic Systems*, Phys. Rev. Lett. **111**, 226802/1-5, (2013), 10.1103/PhysRevLett.111.226802
- Bahrtdt, J.; Holldack, K.; Kuske, P.; Mueller, R.; Scheer, M.; Schmid, P., *First Observation of Photons Carrying Orbital Angular Momentum in Undulator Radiation*, Phys. Rev. Lett. **111**, 034801/1-5, (2013), 10.1103/PhysRevLett.111.034801
- Paul, A.K.; Reehuis, M.; Ksenofontov, V.; Yan, B.; Hoser, A.; Többens, D.M.; Abdala, P.M.; Adler, P.; Jansen, M.; Felser, C., *Lattice Instability and Competing Spin Structures in the Double Perovskite Insulator Sr₂FeOsO₆*, Phys. Rev. Lett. **111**, 167205/1-5, (2013), 10.1103/PhysRevLett.111.167205
- Thuermer, S.; Seidel, R.; Faubel, M.; Eberhardt, W.; Hemminger, J.C.; Bradforth, S.E.; Winter, B., *Photoelectron Angular Distributions from Liquid Water: Effects of Electron Scattering*, Phys. Rev. Lett. **111**, 173005/1-5, (2013), 10.1103/PhysRevLett.111.173005
- Bokarev, S.; Dantz, M.; Suljoti, E.; Kuehn, O.; Aziz, E., *State-Dependent Electron Delocalization Dynamics at the Solute-Solvent Interface: Soft-X-Ray Absorption Spectroscopy and Ab Initio Calculations*, Phys. Rev. Lett. **111**, 083002/1-5, (2013), 10.1103/PhysRevLett.111.083002
- Brzhezinskaya, M. M.; Baitinger, E. M.; Belenkov, E. A.; Svirskaya, L. M., *Defect Electron States in Carbon Nanotubes and Graphite from the NEXAFS Spectroscopy Data*, Phys. Solid State **55**, 850-854, (2013), 10.1134/S1063783413040057
- Soloviev, S.M.; Potekhina, N.D.; Pettenkofer, C.; Pronin, I.I., *Specific Features of Photoelectron Emission from Palladium Clusters on Graphite*, Phys. Solid State **55**, 1510-1518, (2013), 10.1134/S1063783413070329
- Kharlamova, MV; Sauer, M; Saito, T; Krause, S; Liu, XJ; Yanagi, K; Pichler, T; Shiozawa, H, *Inner tube growth properties and electronic structure of ferrocene-filled large diameter single-walled carbon nanotubes*, Phys. Status Solidi B **250**, 2575-2580, (2013), 10.1002/pssb.201300089
- Hannaske, A; Stockert, O; Klingner, C; Krellner, C; Matas, S; Pedrero, L; Brando, M; Geibel, C; Steglich, F, *Magnetic properties of Yb(Rh_{0.42}Co_{0.58})₂Si₂*, Phys. Status Solidi B **250**, 476-481, (2013), 10.1002/pssb.201200932
- Scholz, M.R.; Sánchez-Barriga, J.; Marchenko, D.; Varykhalov, A.; Volykhov, A.; Yashina, L.V.; Rader, O., *Intact Dirac cone of Bi₂Te₃ covered with a monolayer Fe*, Phys. Status Solidi Rapid Res. Lett. **7**, 139-141, (2013), 10.1002/pssr.201206469
- Carabajal, A.P.; Sterli, J.; Müller, J.; Hilger, A., *Neuroanatomy of the Marine Jurassic Turtle Plesiochelys etalloni (Testudinata, Plesiochelyidae)*, PLOS One **8**, 41974, (2013), 10.1371/journal.pone.0069264
- Wenger, J.; Klinglmayr, E.; Frohlich, C.; Eibl, C.; Gimeno, A.; Hessenberger, M.; Puehringer, S.; Daumke, O.; Goettig, P., *Functional Mapping of Human Dynamin-1-Like GTPase Domain Based on X-ray Structure Analyses*, PLOS One **8**, e71835/1-16, (2013), 10.1371/journal.pone.0071835

Schmoltner, K.; Schlütter, F.; Kivala, M.; Baumgarten, M.; Winkler, S.; Trattinig, R.; Koch, N.; Klug, A.; List, E.J.W.; Müllen, K., *A heterotriangulene polymer for air-stable organic field-effect transistors*, *Polym. Chem.* **4**, 5337-5344, (2013), 10.1039/c3py00089c

Rosow, T.; Hackelbusch, S.; van Assenbergh, P.; Seiffert, S., *A modular construction kit for supramolecular polymer gels*, *Polym. Chem.* **4**, 2515-2527, (2013), 10.1039/C3PY00104K

Welsch, N.; Lu, Y.; Dzubiella, J.; Ballauff, M., *Adsorption of proteins to functional polymeric nanoparticles*, *Polymer* **54**, 2835-2849, (2013), 10.1016/j.polymer.2013.03.027

Goswami, S; Bhattacharya, D; Iles, GN; Ghosh, B; Prytuliak, AA; Malard, B; Das, GC; Ouladdiaf, B; Chatterji, T, *Anomaly in structural noncentrosymmetry around T-N in bulk and nanoscale BiFeO₃*, *Powder Diffr.* **28**, S94-S105, (2013), 10.1017/S0885715613001115

Brzhezinskaya, M.; Firsov, A.; Holldack, K.; Kachel, T.; Mitzner, R.; Pontius, N.; Stamm, C.; Schmidt, J.-S.; Foehlich, A.; Erko, A., *A Novel monochromator for ultrashort soft X-ray pulses*, *Proc. SPIE* **8777**, 87771J/1-8, (2013), 10.1117/12.2021599

Firsov, A.; Brzhezinskaya, M.; Loechel, H.; Siewert, F.; Erko, A., *The impact of novel 3D diffraction optics development*, *Proc. SPIE* **8777**, 877713/1-6, (2013), 10.1117/12.2021517

Roling, Sebastian; Braun, Stefan; Gawlitza, Peter; Samoylova, Liubov; Siemer, Bjoern; Sinn, Harald; Siewert, Frank; Wahlert, Frank; Woestmann, Michael; Zacharias, Helmut, *A split- and delay-unit for the European XFEL*, *Proc. SPIE* **8778**, , (2013), 10.1117/12.2027029

Vannoni, Maurizio; La Civita, Daniele; Follath, Rolf; Samoylova, Liubov; Siewert, Frank; Sinn, Harald, *Design of soft x-ray gratings for free electron lasers: from specification to characterization*, *Proc. SPIE* **8789**, , (2013), 10.1117/12.2020520

Roling, Sebastian; Samoylova, Liubov; Siemer, Bjorn; Sinn, Harald; Siewert, Frank; Wahlert, Frank; Wostmann, Michael, *Design of an x-ray split- and delay-unit for the European XFEL*, *Proceedings of SPIE* **8504**, 850407, (2013), 10.1117/12.965547

Ott, K.; Helmecke, M.; Luszik-Bhadra, M.; Martin, M.; Weber, A., *DEAD-TIME EFFECTS OF NEUTRON DETECTORS DUE TO PULSED RADIATION*, *Rad. Protec. Dosi* **155**, 125-140, (2013), 10.1093/rpd/ncs326

Fink, J.; Schierle, E.; Weschke, E.; Geck, J., *Resonant elastic soft x-ray scattering*, *Rep. Prog. Phys.* **76**, 056502/1-59, (2013), 10.1088/0034-4885/76/5/056502

Frietsch, B.; Carley, R.; Döbrich, K.; Gahl, C.; Teichmann, M.; Schwarzkopf, O.; Wernet, Ph.; Weinelt, M., *A high-order harmonic generation apparatus for time- and angle-resolved photoelectron spectroscopy*, *Rev. Sci. Instrum.* **84**, 75106, (2013), 10.1063/1.4812992

Müller, L.; Gutt, C.; Streit-Nierobisch, S.; Walther, M.; Schaffert, S.; Pfau, B.; Geilhufe, J.; Büttner, F.; Flewett, S.; Günther, C. M.; Eisebitt, S.; Kobs, A.; Hille, M.; Stickler, D.; Frömter, R.; Oepen, H. P.; Lüning, J.; Grübel, G., *Endstation for ultrafast magnetic scattering experiments at the free-electron laser in Hamburg*, *Rev. Sci. Instrum.* **84**, 013906/1-9, (2013), 10.1063/1.4773543

- Ibek, M.; Leitner, T.; Erko, A.; Firsov, A.; Wernet, P., *Monochromatizing and focussing femtosecond high-order harmonic radiation with one optical element*, Rev. Sci. Instrum. **84**, 103102/1-9, (2013), 10.1063/1.4822114
- Kothe, A.; Metje, J.; Wilke, M.; Mogueilevski, A.; Engel, N.; Al-Obaidi, R.; Richter, C.; Golnak, R.; Kiyan, I.Y.; Aziz, E.F., *Time-of-flight electron spectrometer for a broad range of kinetic energies*, Rev. Sci. Instrum. **84**, 023106/1-7, (2013), 10.1063/1.4791792
- Strobl, M.; Steitz, R.; Kreuzer, M.; Rose, M.; Herrlich, H.; Mezei, F.; Grunze, M.; Dahint, R, *BioRef: A versatile time-of-flight reflectometer for soft matter applications at Helmholtz-Zentrum Berlin (vol 82, 055101, 2011)*, Rev. Sci. Instrum. **84**, 079901/1, (2013), 10.1063/1.4815865
- Lefmann, K.; Kleno, K.H.; Birk, J.O.; Hansen, B.R.; Holm, S.L.; Knudsen, E.; Lieutenant, K.; von Moos, L.; Sales, M.; Willendrup, P.K.; Andersen, K.H., *Simulation of a suite of generic long-pulse neutron instruments to optimize the time structure of the European Spallation Source*, Rev. Sci. Instrum. **84**, 055106/1-9, (2013), 10.1063/1.4803167
- Bayer, B.C.; Castellarin-Cudia, C.; Blume, R.; Steiner, S.A.; Ducati, C.; Chu, D.; Goldoni, A.; Knop-Gericke, A.; Schlögl, R.; Cepek, C.; Robertson, J.; Hofmann, S., *Tantalum-oxide catalysed chemical vapour deposition of single- and multi-walled carbon nanotubes*, RSC Adv. **3**, 4086-4092, (2013), 10.1039/c3ra23304a
- Flak, D.; Braun, A.; Vollmer, A.; Rekas, M., *Effect of the titania substitution on the electronic structure and transport properties of FSS-made Fe₂O₃ nanoparticles for hydrogen sensing*, Sens. Act. B **187**, 347-355, (2013), 10.1016/j.snb.2012.12.038
- Königer, A.; Plack, N.; Köhler, W.; Siebenbürger, M.; Ballauff, M., *Thermophoresis of thermoresponsive polystyrene-poly(N-isopropylacrylamide) core-shell particles*, Soft Matter **9**, 1418-1421, (2013), 10.1039/C2SM27417E
- Gang, O.; Checco, A.; Hofmann, T.; Ryu, D.Y.; Russell, T.P.; Ocko, B.M., *Liquid adsorption at surfaces patterned with cylindrical nano-cavities*, Soft Matter **9**, 10550-10558, (2013), 10.1039/c3sm51188j
- Desmedt, A.; Lechner, R.E.; Lassegues, J.C.; Guillaume, F.; Cavagnat, D.; Grondin, J., *Hydronium dynamics in the perchloric acid clathrate hydrate*, Solid State Ionics **252**, 19-25, (2013), 10.1016/j.ssi.2013.06.004
- Hord, R.; Pascua, G.; Hofmann, K.; Cordier, G.; Kurian, J.; Luetkens, H.; Pomjakushin, V.; Reehuis, M.; Albert, B.; Alff, L., *Oxygen stoichiometry of low-temperature synthesized metastable T'- La_2CuO_4* , Supercond Scie Tech **26**, 105026/1-6, (2013), 10.1088/0953-2048/26/10/105026
- Rybkina, A.A.; Rybkin, A.G.; Fedorov, A.V.; Usachov, D.Yu.; Yachmenev, M.E.; Marchenko, D.E.; Vilkov, O.Yu.; Nelyubov, A.V.; Adamchuk, V.K.; Shikin, A.M., *Interaction of graphene with intercalated Al: The process of intercalation and specific features of the electronic structure of the system*, Surf. Sci. **609**, 7, (2013), 10.1016/j.susc.2012.08.022
- Soloviev, S.M.; Pettenkofer, C.; Pronin, I.I.; Pothekina, N.D.; Petrov, V.N., *Interaction of Pd electron states with adsorbed hydrogen*, Surf. Sci. **608**, 165-172, (2013), 10.1016/j.susc.2012.10.001

- Peters, S; Peredkov, S; Neeb, M; Eberhardt, W; Al-Hada, M, *Size-dependent XPS spectra of small supported Au-clusters*, *Surf. Sci.* **608**, 129-134, (2013), 10.1016/j.susc.2012.09.024
- Jegou, S.; Christiansen, T.L.; Klaus, M.; Genzel, Ch.; Somers, M.A.J., *Determination of composition, residual stress and stacking fault depth profiles in expanded austenite with energy-dispersive diffraction*, *Thin Solid Films* **530**, 71-76, (2013), 10.1016/j.tsf.2012.06.029
- Konashuk, A.S.; Sokolov, A.A.; Drozd, V.E.; Schaefer, F.; Filatova, E.O., *Study of Al₂O₃ nanolayers synthesized onto porous SiO₂ using X-ray reflection spectroscopy*, *Thin Solid Films* **534**, 363–366, (2013), 10.1016/j.tsf.2013.03.020
- Manzoni, A.; Daoud, H.; Völkl, R.; Glatzel, U.; Wanderka, N., *Phase separation in equiatomic AlCoCrFeNi high-entropy alloy*, *Ultramicroscopy* **132**, 212-215, (2013), 10.1016/j.ultramic.2012.12.015
- Timpel, M.; Wanderka, N.; Schlesiger, R.; Yamamoto, T.; Isheim, D.; Schmitz, G.; Matsumura, S.; Banhart, J., *Sr-Al-Si co-segregated regions in eutectic Si phase of Sr-modified Al-10Si alloy*, *Ultramicroscopy* **132**, 216-221, (2013), 10.1016/j.ultramic.2012.10.006
- Verma, A.; Wanderka, N.; Singh, J.B.; Kumar, B.; Banhart, J., *Statistical analysis of composition fluctuations and short-range order in stoichiometric Ni-Cr-Mo alloys*, *Ultramicroscopy* **132**, 227-232, (2013), 10.1016/j.ultramic.2013.02.024
- Paul, A.K.; Reehuis, M.; Felser, C.; Abdala, P.M.; Jansen, M., *Synthesis, Crystal Structure, and Properties of the Ordered Double Perovskite $\text{Sr}_2\text{CoOsO}_6$* , *Z. Anorg. Allg. Chem.* **639**, 2421-2425, (2013), 10.1002/zaac.201300429
- Guo, Z.; Li, B.; Dzubiella, J.; Cheng, L.-T.; McCammon, J.A.; Che, J., *Evaluation of Hydration Free Energy by Level-Set Variational Implicit-Solvent Model with Coulomb-Field Approximation*, **9**, 1778-1787, (2013), 10.1021/ct301087w

Andere, referierte Publikationen

Programm EE

Herrmann-Geppert, I.; Bogdanoff, P.; Fengler, S.; Dittrich, T.; Fiechter, S., *Photoelectrooxidation of Water on Hematite Thin Films*, ECS Trans. **45**, 137-147, (2013), 10.1149/04520.0137ecst

Wang, H.; Lichao, J.; Bogdanoff, P.; Fiechter, S.; Möhwald, H.; Shchukin, D., *Size-related native defect engineering in high intensity ultrasonication of nanoparticles for photoelectrochemical water splitting*, ENERGY ENVIRON SCI **6**, 799-804, (2013), 10.1039/c3ee24058d

Mews, M.; Schulze, T.F.; Mingirulli, N.; Korte, L., *Amorphous silicon passivation of surfaces promoting epitaxy*, Energy Procedia **38**, 855-861, (2013), 10.1016/j.egypro.2013.07.356

Haschke, J.; Chen, Y.-Y.; Gogolin, R.; Mews, M.; Mingirulli, N.; Korte, L.; Rech, B., *Approach for a Simplified Fabrication Process for IBC-SHJ Solar Cells with High Fill Factors*, Energy Procedia **38**, 732-736, (2013),

Kegel, J.; Angermann, H.; Stürzebecher, U.; Stegemann, B., *IPA-free texturization of n-type Si wafers: Correlation of optical, electronic and morphological surface properties*, Energy Procedia **38**, 833-842, (2013), 10.1016/j.egypro.2013.07.353

Stegemann, B.; Kegel, J.; Mews, M.; Conrad, E.; Korte, L.; Stürzebecher, U.; Angermann, H., *Passivation of Textured Silicon Wafers: Influence of Pyramid Size Distribution, a-Si:H Deposition Temperature, and Post-Treatment*, Energy Procedia **38**, 881-889, (2013), 10.1016/j.egypro.2013.07.360

Chen, Y.-Y.; Korte, L.; Leendertz, C.; Haschke, J.; Gan, J.-Y.; Wu, D.-C., *Simulation of contact schemes for silicon heterostructure rear contact solar cells*, Energy Procedia **38**, 677-683, (2013), 10.1016/j.egypro.2013.07.332

Teodoreanu, A.-M.; Friedrich, F.; Leihkauf, R.; Boit, C.; Leendertz, C.; Korte, L., *2D modelling of polycrystalline silicon thin film solar cells*, EPJ Photovolt **4**, 45104/1-6, (2013), 10.1051/epjpv/2013017

Gerlach, D.; Wippler, D.; Wilks, R.G.; Wimmer, M.; Lozac'h, M.; Felix, R.; Ueda, S.; Yoshikawa, H.; Lips, K.; Rech, B.; Sumiya, M.; Kobayashi, K.; Gorgoi, M.; Hüpkes, J.; Bär, M., *p-Type a-Si:H/ZnO:Al and mu c-Si:H/ZnO:Al Thin-Film Solar Cell Structures-A Comparative Hard X-Ray Photoelectron Spectroscopy Study*, IEEE j photovolt **3**, 483-487, (2013), 10.1109/JPHOTOV.2012.2224644

Bär, M.; Klaer, J.; Felix, R.; Barreau, N.; Weinhardt, L.; Wilks, R.G.; Heske, C.; Schock, H.-W., *Surface Off-Stoichiometry of CuInS2 Thin-Film Solar Cell Absorbers*, IEEE j photovolt **3**, 828-832, (2013), 10.1109/JPHOTOV.2012.2228299

Schulze, T.F.; Cheng, Y.Y.; Khoury, T.; Crossley, M.J.; Stannowski, B.; Lips, K.; Schmidt, T.W., *Micro-optical design of photochemical upconverters for thin-film solar cells*, J Photonics Energy **3**, 034598/1-14, (2013), 10.1117/1.JPE.3.034598

Dam, B.; Abdi, F.F.; van de Krol, R., *Van zonlicht naar waterstof*, NEDERLANDS TIJDSCHRIFT VOOR NATUURKUNDE **2013**, 416-419, (2013),

Welzel, T.; Ellmer, K., *Negative ions in reactive magnetron sputtering - Detecting the cause of damages in sensitive TCO films with energy resolved mass spectrometry*, *VIP* **25**, 52-56, (2013), 10.1002/vipr.201300518

Teodoreanu, A.-M.; Friedrich, F.; Leihkauf, R.; Korte, L.; Kittler, M.; Rech, B.; Boit, C., *2D simulations of the grain boundary light beam induced current (GB-LBIC) technique on polycrystalline silicon thin films*, , 2666-2670, (2013), 10.4229/28thEUPVSEC2013-3DV.1.19

Young, D.L.; Teplin, C. W.; Grover, S.; Lee, B.; Oh, J.; LaSalvia, V.; Amkreutz, D.; Gall, S.; Chahal, M.; Couillard, G.J.; Chuang, T.-K.; Selj, J.; Deceglie, M.; Atwater, H.; Branz, H.M.; Stradins, P., *600 mV epitaxial crystal silicon solar cells grown on seeded glass*, , 54-57, (2013),

Hinrichs, V.; Fengler, S.; Lascova, R.; Kulyuk, L.; Dittrich, Th.; Lux-Steiner, M.Ch.; Rusu, M., *CHARGE GENERATION AND SELECTIVE SEPARATION AT PbS-QUANTUM DOT / METAL OXIDE INTERFACES*, , 349-351, (2013), 10.4229/28thEUPVSEC2013-1AV.2.37

Angermann, H.; Kegel, J.; Stürzebecher, U.; Grün, A.; Stegemann, B., *Conditioning of Silicon substrates by wet-chemical etching and oxidation*, , , (2013),

Meadows, H.J.; Bhatia, A.; Stefan, C.; Schorr, S.; Scapulla, M.A.; Dale, P.J., *Crystallographic study of phases present in CuInSe₂ absorber layers produced by laser annealing co-electrodeposited precursors*, , 882302/1-9, (2013), 10.1117/12.2024084

Klenk, R.; Gerhardt, P.; Lauermann, I.; Steigert, A.; Stober, F.; Hergert, F.; Zweigart, S.; Lux-Steiner, M., *Design, Preparation and Performance of Cu(In,Ga)(S,Se)₂/Zn(O,S)/ZnO:Al Solar Cells*, , 0853 - 0856, (2013), 10.1109/PVSC.2013.6744279

Hannappel, Th.; May, M.M.; Lewerenz, H.-J., *Epitaxial III-V Thin Film Absorbers: Preparation, Efficient InP Photocathodes and Routes to High Efficiency Tandem Structures*, , 223-265, (2013), 10.1039/9781849737739-00223

Hammerschmidt, M.; Lockau, D.; Burger, S.; Schmidt, F.; Schwanke, C.; Kirner, S.; Calnan, S.; Stannowski, B.; Rech, B., *FEM-based optical modeling of silicon thin-film tandem solar cells with randomly textured interfaces in 3D*, , 86201H/1-9, (2013), 10.1117/12.2001789

El Mel, A. A.; Buffiere, M.; Bouts, N.; Gautron, E.; Bittencourt, C.; Guttman, P.; Tessier, P. Y.; Konstantinidis, S.; Snyders, R., *Growth control of CuO nanowires on copper thin films: Toward the development of pn nanojunction arrays*, , 201-202, (2013),

Neubert, Sebastian; Wimmer, Mark; Ruske, Florian; Calnan, Sonya; Gabriel, Onno; Stannowski, Bernd; Schlatmann, Rutger; Rech, Bernd, *Improved conversion efficiency of a-Si:H/ μ c-Si:H thin-film solar cells by using annealed Al-doped zinc oxide as front electrode material*, , , (2013), 10.1002/pip.2389

Kegel, J.; Angermann, H.; Stürzebecher, U.; Conrad, E.; Korte, L.; Stegemann, B., *IPA-free textured a-Si:H/C-Si heterojunction solar cells exceeding 20 % efficiency*, , 1093 - 1098, (2013), 10.4229/28thEUPVSEC2013-2BV.1.17

Manley, P.; Schmidt, F.; Schmid, M., *Light Extraction from Plasmonic Particles with Dielectric Shells and Overcoatings*, , , (2013), 10.1364/PV.2013.PW3B.7

- Augarten, Y.; Sprenger, W.; Pieters, B.; Varache, R.; Bakaeva, O.; Janssen, G.; Guanchao, Y.; Friedrich, F.; Schmid, M.; Celino, M.; Hüpkes, J., *Modelling infrastructure along the value chain: from materials to system performance*, , 3949-3952, (2013),
- Becker, C.; Xavier, J.; Preidel, V.; Wyss, P.; Sontheimer, T.; Rech, B.; Probst, J.; Hülsen, C.; Löchel, B.; Erko, A.; Burger, S.; Schmidt, F.; Back, F.; Rudigier-Voigt, E., *Nanophotonic light trapping in polycrystalline silicon thin-film solar cells using periodically nanoimprint-structured glass substrates*, , 88240D/1-9, (2013), 10.1117/12.2023871
- Stellmach, D.; Bogdanoff, P.; Gabriel, O.; Stannowski, B.; Schlatmann, R.; van de Krol, R.; Fiechter, S., *Nanostructured MoS₂ particles as a novel hydrogen evolving catalyst integrated in a PV-hybrid electrolyzer*, , 880-886, (2013),
- Lockau, D.; Sontheimer, T.; Preidel, V.; Becker, C.; Ruske, F.; Schmidt, F.; Rech, B., *Optical properties and Limits of a Large-Area Periodic Nanophotonic Light Trapping Design for Polycrystalline Silicon Thin Film Solar Cells*, , 59-64, (2013), 10.1557/opl.2013.28
- Grzanna, Jürgen; Lewerenz, H. Joachim, *Oscillations at the Si/electrolyte contact: Discretization of phase oscillators*, **410**, 12160, (2013), 10.1088/1742-6596/410/1/012160
- Fiechter, S.; Bogdanoff, P., *Oxygen evolution and reduction catalysts: structural and electronic aspects of transition metal based compounds and composites*, , 154-192, (2013),
- Dullweber, T.; Preu, R.; Rau, B.; Degner, T., *Photovoltaik-Technologiezentren für den beschleunigten Technologietransfer von Instituten zur PV Industrie*, , 38-41, (2013),
- Zakhvalinskii, V.; Piliuk, E.; Goncharov, I.; Simashkevich, A.; Sherban, D.; Bruc, L.; Curmei, N.; Rusu, M., *p-Si/n-SiC NANOLAYER PHOTOVOLTAIC CELL*, , 1317-1320, (2013), 10.4229/28thEUPVSEC2013-2BV.2.31
- Schindler, Wolfram; Wollgarten, Markus; Kropf, Holger; Chouliaras, G; Fostiropulos, Kosta, *Revealing the nanomorphology in organic solar cells with energy filtered TEM*, , , (2013),
- Rech, B.; Schmidt, S.S.; Schlatmann, R., *Towards Photovoltaic Technology on the Terawatt Scale: Status and Challenges*, , 283-306, (2013),
- May, M.M.; Supplie, O.; Höhn, C.; Zabka, W.-D.; Lewerenz, H.-J.; van de Krol, R.; Hannappel, T., *Water-induced modifications of GaP(100) and InP(100) surfaces studied by photoelectron spectroscopy and reflection anisotropy spectroscopy*, , 88220M/1-7, (2013), 10.1117/12.2026172
- Steffens, S.; Becker, C.; Rech, B., *Optical analysis of subbandgap defects in polycrystalline silicon thin film solar cells*, , 1374-1378, (2013), 10.1109/PVSC.2013.6744400

Programm PNI

Goerigk, G.J., *The Solution of the Eigenvector Problem in Synchrotron Radiation Based Anomalous Small-Angle X-ray Scattering*, ALAMT **3**, 59-68, (2013), 10.4236/alamt.2013.34012

Schubert, S.; Ruiz-Osés, M.; Ben-Zvi, I.; Kamps, T.; Liang, X.; Muller, E.; Müller, K.; Padmore, H.; Rao, T.; Tong, X.; Vecchione, T.; Smedley, J., *Bi-alkali antimonide photocathodes for high brightness accelerators*, APL Materials **1**, 032119/1-6, (2013), 10.1063/1.4821625

Schöbel, M.; Großeiber, S.; Jonke, J.; Wimpory, R.; Ilie, S.; Requena, G., *Residual Stresses in Continuously Cast Steel Slabs*, BHM **158**, 475-476, (2013), 10.1007/s00501-013-0210-4

Lebedev, A.M.; Menshikov, K.A.; Svechnikov, N.Yu.; Sukhanov, L.P.; Chumakov, R.G.; Brzhezinskaya, M.M.; Stankevich, V.G., *Investigating the fine structure of near-edge X-ray absorption in the molecular spectra of C60F18 adsorbed on a single nickel crystal*, Bull. Russ. AoS Physics **77**, 1131–1136, (2013), 10.3103/S1062873813090268

Dreiser, J.; Pedersen, K.S.; Schnegg, A.; Holldack, K.; Nehr Korn, J.; Sigrist, M.; Tregenna-Piggott, P.; Mutka, H.; Weihe, H.; Mironov, V.S.; Bendix, J.; Waldmann, O., *Anisotropic Exchange Coupling in the Single-Molecule Magnets (NEt4)[Mn2(5-Brsalen)2(MeOH)2M(CN)6], M = Ru*, Chem. Eur. J. **19**, 3693-3701, (2013), 10.1002/chem.201203781

Uhlig, Steffen; Struis, Rudolf; Schmid-Engel, Hanna; Bock, Jochen; Probst, Anne-Catherine; Freitag-Weber, Olivia; Zizak, Ivo; Chernikov, Roman; Schultes, Guenter, *Piezoresistive Ni:a-C:H thin films containing hcp-Ni or Ni3C investigated by XRD, EXAFS, and wavelet analysis*, DIAM RELAT MATER **34**, 25-35, (2013), 10.1016/j.diamond.2013.01.013

Wieder, F.; Kallfaß, Ch.; Manke, I.; Hilger, A.; Tötze, C.; Hoch, C.; Schier, H.; Graf, K.; Banhart, J., *Electrolyte distribution and discharge time – a combined study of X-ray tomography and electrical measurements of a commercially available lithium-ion capacitor*, ECS Trans. **53**, 211-218, (2013), 10.1149/05330.0211ecst

Arlt, T.; Klages, M.; Manke, I.; Messerschmidt, M.; Riesemeier, H.; Hilger, A.; Scholta, J.; Banhart, J., *Influence of Artificial Ageing of Gas Diffusion Layers on the Water Management of PEM Fuel Cells*, ECS Trans. **53**, 21-28, (2013), 10.1149/05330.0021ecst

Markötter, H.; Haußmann, J.; Alink, R.; Dittmann, K.; Tötze, C.; Krüger, P.; Klages, M.; Arlt, T.; Müller, B.; Riesemeier, H.; Scholta, J.; Gerteisen, D.; Manke, I.; Banhart, J., *Investigation of Fuel Cell Materials and Liquid Water Transport by Means of Synchrotron Imaging*, ECS Trans. **45**, 195-202, (2013), 10.1149/04529.0195ecst

Enz, S.; Klages, M.; Bergbreiter, C.; Messerschmidt, M.; Markötter, H.; Kardjilov, N.; Manke, I.; Scholta, J., *Investigation on Dynamic Water Transport of PEFCs combining Neutron Radiography and CFD Simulation*, ECS Trans. **51**, 215-226, (2013), 10.1149/05101.0215ecst

Bauder, A.; Friedrich, K.A.; Haußmann, J.; Markötter, H.; Manke, I.; Alink, R.; Scholta, J., *Self-Supporting Microporous Layers (MPLs) for PEM Fuel Cells*, ECS Trans. **58**, 1391-1399, (2013), 10.1149/05801.1391ecst

- Matas, S.; Mihalik, M.; Klemke, B.; Sokolowski, A., *Low Temperature Properties of Selected Kramers Rare Earth Oxychlorides*, EPJ Web Conf **40**, 11005/1-4, (2013), 10.1051/epjconf/20134011005
- Trabant, C.; Pontius, N.; Schierle, E.; Weschke, E.; Kachel, T.; Springholz, G.; Holldack, K.; Föhlisch, A.; Schüßler-Langeheine, C., *Time and momentum resolved resonant magnetic x-ray diffraction on EuTe*, EPJ Web Conf **41**, 03014/1-3, (2013), 10.1051/epjconf/20134103014
- Dixon, I.R.; Adkins, T.; Ehmler, H.; Marshall, William S.; Bird, Mark D., *Fabrication Progress of the Outsert Coils of the Series-Connected Hybrid Magnets*, IEEE Trans. Appl. Supercond. **23**, 4300204/1-4, (2013), 10.1109/TASC.2012.2232338
- Matsushima, U.; Graf, W.; Zabler, S.; Manke, I.; Dawson, M.; Choinka, G.; Hilger, A.; Herppich, W.B., *3D-analysis of plant microstructures: advantages and limitations of synchrotron X-ray microtomography*, Intern. Agr. **27**, 23-30, (2013), 10.2478/v10247-012-0064-0
- Campana, M.; Webster, J. R. P.; Gutberlet, T.; Wojciechowski, K.; Zorbakhsh, A., *Surfactant mixtures at the oil-water interface*, J. Colloid Interface Sci. **398**, 126-133, (2013), 10.1016/j.jcis.2013.01.069
- Lipski, Ac; Lakotka, N; Riechardt, Al; Willerding, GD; Heufelder, Jens; Türkmen, S; Moser, Lutz; Keilholz, U; Jousen, AM, *Diagnostik und Therapie choroidaler Melanome*, Klin Monatsbl Augenheilkd **230**, 1005-19, (2013), 10.1055/s-0033-1350833
- Huelsen, C.; Probst, J.; Loechel, B., *Replication of sub-100 nm structures using h- and s-PDMS composite stamps*, Microsyst Technol **19**, 41730, (2013), 10.1007/s00542-013-2043-1
- Iles, G.N., *International Workshop on Neutron Laue Diffraction*, Neutron News **24**, 3, (2013), 10.1080/10448632.2013.804350
- Treimer, Wolfgang; Ebrahimi, Omid; Karakas, Nursel, *Imaging of Quantum mechanical effects in superconductors by means of polarized neutron radiography*, Phy Pro **43**, 243-253, (2013), doi: 10.1016/j.phpro.2013.03.028
- Treimer, W.; Ebrahimi, O.; Karakas, N., *Imaging Quantum Mechanical Effects in Superconductors with Polarized Neutrons*, Phy Pro **42**, 31-38, (2013), 10.1016/j.phpro.2013.03.172
- Lo Vecchio, I.; Perucchi, A.; Di Pietro, P.; Limaj, O.; Schade, U.; Sun, Y.; Arai, M.; Yamaura, K.; Lupi, S., *Infrared evidence of a Slater metal-insulator transition in NaOsO₃*, Sci. Rep. **3**, ARTN 2990, (2013), 10.1038/srep02990
- Finizio, S; Foerster, M; Vaz, CAF.; Buzzi, M; Hockel, J; Miyawaki, T; Mix, C; Mawass, MA; Tkach, A; Valencia, S; Kronast, F; Carman, GP; Klauui, M; Nolting, F, *Electrical-field control of magnetism mediated by strain in Ni nanostructures fabricated on pre-poled PMN-PT (011)*, SPIN **3**, 1340008-1-7, (2013), 10.1142/S2010324713400080
- Dehlinger, M.; Fauquet, C.; Jandard, F.; Bjeoumikhov, A.; Bjeoumikhova, S.; Gubzhokov, R.; Erko, A.; Zizak, I.; Pailharey, D.; Ferrero, S.; Dahmani, B.; Tonneau, D., *Toward sub-micro-XRF working at nanometer range using capillary optics*, X-ray Spectrom. (GB) **42**, 456-461, (2013), 10.1002/xrs.2503
- Scheffler, Matthias; Liu, Wei; Carrasco, Javier; Santra, Biswajit; Michaelides, Angelos; Tkatchenko, Alexandre; Schlesinger, R.; Xu, Yong; Hofmann, Oliver T.; Winkler, S.; Frisch, J.; Niederhausen, J.;

- Vollmer, A.; Blumstengel, S.; Rinke, Patrick; Hennebe, *Adsorption of organic molecules at metal and metal-oxide surfaces: Theoretical challenges, concepts, and insights*, **245**, 157-COLL, (2013),
- Petenev, Y.; Atkinson, T.; Bondarenko, A.V.; Matveenko, A.N., *Analysis of Injection and Recovery Schemes for a Multi-Turn ERL Based Light Source*, , 32-37, (2013),
- Schälicke, A.; Falkenstern, F.; Müller, R., *Bunch-by-Bunch Feedback and Diagnostics at BESSY II*, , 399-402, (2013),
- Barday, R.; Kamps, T.; Kugeler, O.; Neumann, A.; Schmeißer, M.; Völker, J.; Sekutowicz, Jacek; Nietubyc, Robert; Smedley, John; Kneisel, Peter, *Characterization of a Superconducting Pb Photocathode in a SRF Gun Cavity*, , 279-281, (2013),
- Kaufmann, C.A.; Greiner, D.; Rodriguez-Alvarez, H.; Weber, A.; Heinemann, M.D.; Lauche, J.; Klaus, M.; Genzel, C.; Schock, H.W.; Mainz, R., *Co-evaporation of Cu(In,Ga)Se₂ at Low Temperatures: an In-Situ X-Ray Growth Analysis*, , 3058-3061, (2013), 10.1109/PVSC.2013.6745106
- Isaev, I.I.; Boonpornprasert, P.; Good, J.D.; Groß, M.; Hakobyan, L.; Khojayan, M.; Kourkafas, G.; Köhler, W.; Krasilnikov, M.; Malyutin, D.; Marchetti, B.; Martin, R.; Nozdrin, M.A.; Oppelt, A.; Otevrel, M.; Pathak, G.; Petrosyan, B.; Shapovalov, A.; Ste, *Conditioning Status of the First XFEL Gun at PITZ*, , 282-286, (2013),
- Kuske, P., *CSR-driven Longitudinal Single Bunch Instability Thresholds*, , 2041-2043, (2013),
- Teichert, J.; Arnold, A.; Murcek, P.; Staats, G.S.; Xiang, R.; Lu, P.N.; Vennekate, H.; Barday, R.; Kamps, T., *Dark Current in Superconducting RF Photoinjectors – Measurements and Mitigation*, , 75-79, (2013),
- Müller, R.; Birke, T.; Diehn, M.; Engel, D.; Franksen, B.; Görgen, R.; Kuske, P.; Lange, R.; Müller, I.; Schälicke, A.; Schindhelm, G., *Fast Orbit Feedback at BESSY-II: Performance and Operational Experiences*, , 2920-2922, (2013),
- Matveenko, A.N.; Atkinson, T.; Bondarenko, A.V.; Petenev, Y., *Feasibility Study of Multi-Turn ERL-Based Synchrotron Light Facility*, , 80-84, (2013),
- Teichert, J.; Arnold, A.; Büttig, H.; Justus, M.; Kamps, T.; Lu, P.; Michel, P.; Lehnert, U.; Murcek, P.; Rudolph, J.; Schurig, R.; Seidel, W.; Vennekate, H.; Xiang, R.; Will, I., *FEL Operation with the Superconducting RF Photo Gun at ELBE*, , 136-139, (2013),
- Lemke, S.; Seliger, T.; Naß, C.; Götttert, P.; Rudolph, I.; Kutz, O.; Gwalt, G.; Nelles, B.; Senf, F.; Löchel, B., *Fertigung laminarer optischer Gitter am HZB*, , 447-449, (2013),
- Vogt, J.; Kugeler, O.; Knobloch, J., *High Q0 research: The dynamics of flux trapping in superconducting niobium*, , 371-374, (2013),
- van der Pol, E.; Coumans, F.; Varga, Z.; Krumrey, M.; Nieuwland, R., *Innovation in detection of microparticles and exosomes*, **11**, 36-45, (2013), 10.1111/jth.12254
- Goetsch, T.; Feikes, J.; Ries, M.; Wüstefeld, G.; Müller, A.-S., *Lifetime Studies at Metrology Light Source and ANKA*, , 88-90, (2013),

Getmanov, Ya.V.; Shevchenko, O.A.; Atkinson, T.; Vinokurov, N.A., *Longitudinal stability of multi-turn ERL with split accelerating structure*, , WEPWA047/2226-2228, (2013),

Woracek, R.; Bunn, J.R.; Penumadu, D.; Tremsin, A.; Siriruk, A.; Kardjilov, N.; Manke, I.; Boin, M.; Hilger, A.; Hubbard, C.R.; Clausen, B.; Sisneros, T.A., *Methodology for Combined Neutron Diffraction and Bragg Edge Imaging*, , 1, (2013), 10.1557/opl.2013.571

Petenev, Y.; Atkinson, T.; Bondarenko, A.V.; Matveenko, A.N., *Multi turn ERL based light source: Analysis of injection and recovery schemes.*, , WEPWA004/2129-2131, (2013),

Poeplau, G.; van Rienen, U.; Meseck, A., *Numerical Studies on the Impact of Ionized Residual Gas on an Electron Beam in an ERL*, , 903-905, (2013),

Kugeler, O.; Vogt, J.; Knobloch, J.; Aull, S., *Pathway to a post processing increase in Q0 of SRF cavities. IPAC 2013*, , 3129-3131, (2013),

Krasilnikov, M.; Stephan, F.; Asova, G.; Grabosch, H.-J.; Groß, M.; Hakobyan, L.; Isaev, I.I.; Ivanisenko, Ye.; Jachmann, L.; Khojayan, M.; Klemz, G.; Köhler, W.; Mahgoub, M.; Malyutin, D.; Nozdrin, M.A.; Oppelt, A.; Otevrel, M.; Petrosyan, B.; Rimjaem, S., *PITZ Experience on the Experimental Optimization of the RF Photo Injector for the European XFEL*, , 160-168, (2013),

Teichert, J.; Arnold, A.; Murcek, P.; Xiang, R.; Lu, P.; Vennekate, H.; Kamps, T.; Rudolph, J.; Kneisel, P.; Will, I., *Progress of SRF Gun Development and Operation at the ELBE Accelerator*, , 11, (2013),

Genzel, C.; Denks, I.A.; Klaus, M., *Residual Stress Analysis by X-Ray Diffraction Methods in Modern Diffraction Methods*, , 127-153, (2013),

Hensel, J.; Nitschke-Pagel, Th.; Dilger, K.; Wimpory, R.C., *Residual Stresses in Welded Steels with Longitudinal Stiffeners Determined by Neutron and X-Ray Diffraction*, , 189-195, (2013),

Schmeißer, M.; Barday, R.; Burrill, A.; Jankowiak, A.; Kamps, T.; Knobloch, J.; Kugeler, O.; Lauinger, P.; Matveenko, A.N.; Neumann, A.; Völker, J.; Sekutowicz, J.; Kneisel, P.; Smedley, J.; Nietubyc, R.; Will, I., *Results from Beam Commissioning of an SRF Plug-Gun Cavity Photoinjector*, , 282-284, (2013),

Burrill, A.; Anders, W.; Kamps, T.; Knobloch, J.; Kugeler, O.; Lauinger, P.; Neumann, A.; Sekutowicz, J.; Kneisel, P.; Nietubyc, R., *RF Measurements of the 1.6 cell Lead/Niobium Photoinjector in HoBiCat*, , WEPWO002/2313-23-15, (2013),

Ruprecht, M.; Jankowiak, A.; Neumann, A.; Ries, M.; Wüstefeld, G.; Weis, T., *Single Particle Tracking for Simultaneous Long and Short Electron Bunches in the BESSY II Storage Ring*, , 2038-2040, (2013),

Neumann, A.; Anders, W.; Burrill, A.; Frahm, A.; Kamps, T.; Knobloch, J.; Kugeler, O.; Zaplatin, E., *SRF PHOTOINJECTOR CAVITY FOR BERLinPro*, , 285-287, (2013),

Atkinson, T.; Bondarenko, A.; Matveenko, A.; Petenev, Y., *Start-to-End Beam Dynamic Simulations for Femto-Science-Factory Feasibility Study*, , 38-43, (2013),

Ries, M.; Feikes, J.; Goetsch, T.; Wüstefeld, G., *Survey of Beam Optics Solutions for the MLS Lattice*, , 1883-1885, (2013),

Kuske, B.; Abo-Bakr, M.; Duerr, V.; Jankowiak, A.; Kamps, T.; Knobloch, J.; Kuske, P.; Wesch, S., *The Injector Layout of BERLinPro*, , 288-290, (2013),

Schubert, S.; Smedley, J.; Rao, T.; Ruiz-Osés, M.; Liang, X.; Ben-Zvi, I.; Padmore, H.; Vecchione, T., *XPS and UHV-AFM Analysis of the K_2CsSb - Photocathodes Growth*, , 291-293, (2013),