

Fortschrittsbericht des  
Helmholtz-Zentrum Berlin  
für Materialien und Energie  
GmbH  
für das Jahr 2018

**Liste der ISI/SCOPUS zitierten  
Veröffentlichungen 2018**

1. Juni 2019

- Abate, A.; Correa-Baena, J.-P.; Saliba, M.; Su'ait, M.S.; Bella, F., *Perovskite solar cells from the lab to the assembly line*, Chem. - a Eur. J. **24**, 3083-3100 (2018), 10.1002/chem.201704507
- Abhuri Venkata, K.; Truman, C.; Wimpory, R.; Pirling, T., *Numerical simulation of a three-pass TIG welding using finite element method with validation from measurements*, Int. J. Pres. Ves. Pip. **164**, 68-79 (2018), 10.1016/j.ijpvp.2017.05.014
- Abdi, F.; Starr, D.; Ahmet, I.; van de Krol, R., *Photocurrent Enhancement by Spontaneous Formation of a p-n Junction in Calcium-Doped Bismuth Vanadate Photoelectrodes*, ChemPlusChem **83**, 941-946 (2018), 10.1002/cplu.201800119
- Abou-Ras, D.; Bär, M.; Caballero, R.; Gunder, R.; Hages, C.; Heinemann, M.D.; Kaufmann, C.A.; Krause, M.; Levenco, S.; Mainz, R.; Márquez, J.; Nikolaeva, A.; Redinger, A.; Schäfer, N.; Schorr, S.; Stange, H.; Unold, T.; Wilks, R.G., *Advanced characterization and in-situ growth monitoring of Cu(In,Ga)Se<sub>2</sub> thin films and solar cells*, Sol. Energy **170**, 102-112 (2018), 10.1016/j.solener.2018.04.032
- Abou-Ras, D.; Schäfer, N.; Hages, C.J.; Levenco, S.; Marquez, J.; Unold, T., *Inhomogeneities in Cu(In,Ga)Se<sub>2</sub> thin films for solar cells: band-gap versus potential fluctuations*, Sol. RRL **2**, 1700199/1-11 (2018), 10.1002/solr.201700199
- Adams, M.; Baroni, N.; Oldenburg, M.; Kraffert, F.; Behrends, J.; MacQueen, R.; Haldar, R.; Busko, D.; Turshatov, A.; Emandi, G.; Senge, M.O.; Wöll, C.; Lips, K.; Richards, B.S.; Howard, I.A., *Reaction of porphyrin-based surface-anchored metal-organic frameworks to prolonged illumination*, Phys. Chem. Chem. Phys. **20**, 29142-29151 (2018), 10.1039/C8CP05254A
- Adams, M.; Baroni, N.; Oldenburg, M.; Kraffert, F.; Behrends, J.; Macqueen, R.W.; Haldar, R.; Busko, D.; Turshatov, A.; Emandi, G.; Senge, M.O.; Wöll, C.; Lips, K.; Richards, B.S.; Howard, I.A., *Reaction of porphyrin-based surface-anchored metal-organic frameworks caused by prolonged illumination*, Phys. Chem. Chem. Phys. **20**, 29142-29151 (2018), 10.1039/c8cp05254a
- Adler, P.; Jeglic, P.; Reehuis, M.; Geiß, M.; Merz, P.; Knaflic, T.; Komelj, M.; Hoser, A.; Sans, A.; Janek, J.; Arcon, D.; Jansen, M.; Felser, C., *Verwey-Type Charge Ordering Transition in an Open-Shell p-Electron Compound*, Sci. Adv. **4**, eaap7581/1-7 (2018), 10.1126/sciadv.aap7581
- Aeschlimann, R.; Preziosi, D.; Scheiderer, P.; Sing, M.; Valencia, S.; Santamaria, J.; Luo, C.; Ryll, H.; Radu, F.; Claessen, R.; Piamonteze, C.; Bibes, M., *A Living-Dead Magnetic Layer at the Surface of Ferrimagnetic DyTiO<sub>3</sub> Thin Films*, Adv. Mat. **30**, 1707489/1-8 (2018), 10.1002/adma.201707489
- Ahn, J.; He, E.; Chen, L.; Wimpory, R.C.; Kabra, S.; Dear, J. P.; Davies, C. M., *FEM prediction of welding residual stresses in fibre laser-welded AA 2024-T3 and comparison with experimental measurement*, Int. J. Adv. Manuf. Techn. **95**, 4243-4263 (2018), 10.1007/s00170-017-1548-7
- Alberto, H.V.; Vilao, R.C.; Vieira, R.B.L.; Gil, J.M.; Weidinger, A.; Sousa, M.G.; Teixeira, J.P.; da Cunha, A. F.; Leitao, J.P.; Salomé, P.M.P.; Fernandes, P.A.; Törndahl, T.; Proschka, T.; Suter, A.; Salman, Z., *Slow-muon study of quaternary solar-cell materials: Single layers and p-n junctions*, Phys. Rev. Mat. **2**, 025402/1-11 (2018), 10.1103/PhysRevMaterials.2.025402
- Al-Hada, M.; Amati, M.; Sezen, H.; Cozzarini, L.; Gregoratti, L., *Photoelectron Spectromicroscopy Through Graphene of Oxidised Ag Nanoparticles*, Cat. Letters **148**, 2247-2255 (2018), 10.1007/s10562-018-2451-z

- Alhassanat, A.; Gamer, C.; Rauguth, A.; Athanasopoulou, A. A.; Sutter, J.; Luo, C.; Ryll, H.; Radu, F.; Sapozhnik, A. A.; Mashoff, T.; Rentschler, E.; Elmers, H. J., *Element-specific magnetic properties of mixed 3d-4f metallacrowns*, Phys. Rev. B **98**, 064428/1-8 (2018), 10.1103/PhysRevB.98.064428
- Ali, H.; Seidel, R.; Pohl, M.N.; Winter, B., *Molecular species forming at the  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticle–aqueous solution interface*, Chem. Sci. **9**, 4511-4523 (2018), 10.1039/C7SC05156E
- Alrwashdeh, S. S.; Alsareireh, F.M.; Saraireh, M.A.; Markötter, H.; Kardjilov, N.; Klages, M.; Scholta, J.; Manke, I., *In-situ investigation of water distribution in polymer electrolyte membrane fuel cells using high-resolution neutron tomography with 6.5 micrometer pixel size*, Acc. Chem. Res. **6**, 607-614 (2018), 10.3934/energy.2018.4.607
- Alvares Ferreira, E.; Yokaichiya, F.; Marumo, J.; Vicente, R.; Garcia-Moreno, F.; Kamm, P.; Klaus, M.; Russina, M.; Günther, G.; Jimenez, C.; Franco, M., *Influence of the irradiation in cement for the Brazilian radioactive waste repositories: Characterization via X-ray diffraction, X-ray tomography and quasielastic neutron scattering*, Phy. B **551**, 256-261 (2018), 10.1016/j.physb.2018.01.018
- Amini, E.; Beyreuther, A.; Herfurth, N.; Steigert, A.; Muydinov, R.; Szyszka, B.; Boit, C., *IC security and quality improvement by protection of chip backside against hardware attacks*, Micro. Rel. **0**, 22-25 (2018), 10.1016/j.microrel.2018.06.099
- Amkreutz, D.; Preissler, N.; Thi-Trinh, C.; Trahms, M.; Sonntag, P.; Schlatmann, R.; Rech, B., *Influence of the precursor layer composition and deposition processes on the electronic quality of liquid phase crystallized silicon absorbers*, Progr. Photovolt. **26**, 524-532 (2018), 10.1002/pip.2953
- Anand, V. K.; Adroja, D. T.; Lees, M. R.; Biswas, P. K.; Hillier, A. D.; Lake, B., *Superconductivity in Ru<sub>0.55</sub>Rh<sub>0.45</sub>P and Ru<sub>0.75</sub>Rh<sub>0.25</sub>As probed by muon spin relaxation and rotation measurements*, Phys. Rev. B **98**, 214517/1-10 (2018), 10.1103/PhysRevB.98.214517
- Anand, V.; Adroja, D.; Hillier, A.; Shigetoh, K.; Takabatake, T.; Park, J.; McEwen, K.; Pixley, J.; Si, Q., *Zero-field ambient-pressure quantum criticality in the stoichiometric non-fermi liquid system CeRhBi*, J. the Phys. Soc. Jpn. **87**, 064708/1-8 (2018), 10.7566/JPSJ.87.064708
- Anand, V.; Opherden, L.; Xu, J.; Adroja, D.; Hillier, A.; Biswas, P.; Herrmannsdörfer, T.; Uhlarz, M.; Hornung, J.; Wosnitza, J.; Canévet, E.; Lake, B., *Evidence for a dynamical ground state in the frustrated pyrochafenate Tb<sub>2</sub>Hf<sub>2</sub>O<sub>7</sub>*, Phys. Rev. B **97**, 094402/1-10 (2018), 10.1103/PhysRevB.97.094402
- Anand, V.K.; Hillier, A.D.; Adroja, D.T.; Khalyavin, D.D.; Manuel, P.; Andre, G.; Rols, S.; Koza, M.M., *Understanding the magnetism in noncentrosymmetric CeIrGe<sub>3</sub>: Muon spin relaxation and neutron scattering studies*, Phys. Rev. B **97**, 184422/1-13 (2018), 10.1103/PhysRevB.97.184422
- Anand, V.K.; Islam, A.T.M.N.; Samartzis, A.; Xu, J.; Casati, N.; Lake, B., *Optimization of single crystal growth of candidate quantum spin-ice Pr<sub>2</sub>Hf<sub>2</sub>O<sub>7</sub> by optical floating-zone method*, J. Cryst. Growth **498**, 124-129 (2018), 10.1016/j.jcrysgro.2018.06.011
- Andreev, A.; Skourski, Y.; Gorbunov, D.; Prokes, K., *High-field study of UCo<sub>2</sub>Si<sub>2</sub>: Magnetostriction at metamagnetic transition and influence of Fe substitution*, Phy. B **536**, 567-571 (2018), 10.1016/j.physb.2017.06.025
- Angioletti-Uberti, S.; Ballauff, M.; Dzubiella, J., *Competitive adsorption of multiple proteins to nanoparticles: the Vroman effect revisited*, Mol. Phys. **116**, 3154-3163 (2018), 10.1080/00268976.2018.1467056

- Antropov, N.O.; Kravtsov, E.A.; Khaidukov, Y.N.; Ryabukhina, M.V.; Proglyado, V.V.; Weschke, O.; Ustinov, V.V., *Coherent Fan Magnetic Structure in Dy/Gd Superlattices*, *Jetp Lett.* **108**, 341-345 (2018), 10.1134/S0021364018170046
- Apel, D.; Meixner, M.; Liehr, .; Klaus, M.; Degener, S.; Wagener, G.; Franz, C.; Zinn, W.; Genzel, C.; Scholtes, B., *Residual stress analysis of energy-dispersive diffraction data using a two-detector setup: Part I - Theoretical concept*, *Nucl. Instrum. Methods Phys. Res. Sect. A* **877**, 24-33 (2018), 10.1016/j.nima.2017.09.005
- Apel, D.; Meixner, M.; Liehr, A.; Klaus, M.; Degener, S.; Wagener, G.; Franz, C.; Zinn, W.; Genzel, C.; Scholtes, B., *Residual stress analysis of energy-dispersive diffraction data using a two-detector setup: Part II - Experimental implementation*, *Nucl. Instrum. Methods Phys. Res. Sect. A* **877**, 56-64 (2018), 10.1016/j.nima.2017.09.006
- Apostolides, D.E.; Patrickios, C.S.; Sakai, T.; Guerre, M.; Lopez, G.; Améduri, B.; Ladmiral, V.; Simon, M.; Gradzielski, M.; Clemens, D.; Krumm, C.; Tiller, J.C.; Ernould, B.; Gohy, J.-F., *Near-model Amphiphilic Polymer Conetworks Based on Four-arm Stars of Poly(vinylidene fluoride) and Poly(ethylene glycol): Synthesis and Characterization*, *Macromolecules* **51**, 2476-2488 (2018), 10.1021/acs.macromol.7b02475
- Ardo, S.; Fernandez Rivas, D.; Modestino, M.; Schulze Greiving, V.; Abdi, F.; Alarcon Llado, E.; Artero, V.; Ayers, K.; Battaglia, C.; Becker, J.; Bederak, D.; Berger, A.; Buda, F.; Chinello, E.; Dam, B.; Di Palma, V.; Edvinsson, T.; Fujii, K.; Gardeniers, *Pathways to electrochemical solar-hydrogen technologies*, *En. Envir. Science* **11**, 2768-2783 (2018), 10.1039/c7ee03639f
- Arion, T.; Eberhardt, W.; Feikes, J.; Gottwald, A.; Goslawski, P.; Hoehl, A.; Kaser, H.; Kolbe, M.; Li, J.; Lupulescu, C.; Richter, M.; Ries, M.; Roth, F.; Ruprecht, M.; Tydecks, T.; Wüstefeld, G., *Transverse resonance island buckets for synchrotron-radiation based electron time-of-flight spectroscopy*, *Rev. Sci. Instrum.* **89**, 103114/1-4 (2018), 10.1063/1.5046923
- Arlt, T.; Kardjilov, N.; Kupsch, A.; Manke, I.; Salvemini, F.; Grazi, F., *Neutron computed laminography on an ancient metal artifact*, *Mater. Test.* **60**, 1209-1214 (2018), 10.3139/120.111261
- Arlt, T.; Wieder, F.; Ritsche, I.; Hilger, A.; Kardjilov, N.; Fahlke, J.M.; Hampe, O.; Manke, I., *Röntgen- und Neutronentomographie am knöchernen Innenohr der Bartenwale*, *Mater. Test.* **60**, 173-178 (2018), 10.3139/120.111129
- Asanova, T.I.; Asanov, I.P.; Kim, M.-G.; Gorgoi, M.; Sottmann, J.; Korenev, S.V.; Yusenko, K.V., *A new approach to the study of processes of thermaldecomposition and formation of nanoalloys: double complex salt [Pd(NH3)4][PtCl6]*, *New J. Chem.* **42**, 5071-5082 (2018), 10.1039/C7NJ04626J
- Avila, J.; Gil-Escrig, L.; Boix, P.; Sessolo, M.; Albrecht, S.; Bolink, H., *Influence of doped charge transport layers on efficient perovskite solar cells*, *Sust. En. Fuels* **2**, 2429-2434 (2018), 10.1039/C8SE00218E
- Awino, C.; Odari, V.; Dittrich, T.; Prajongtat, P.; Sakwa, T.; Rech, B., *Correction: Investigation of Structural and Electronic Properties of CH3NH3PbI3 Stabilized by Varying Concentrations of Poly(Methyl Methacrylate) (PMMA)*, *Coatings* **8**, 452/1-2 (2018), 10.3390/coatings8120452

Babcock, E.; Salhi, Z.; Gainov, R.; Woracek, R.; Soltner, H.; Pistel, P.; Beule, F.; Busmann, K.; Heynen, A.; Kämmerling, H.; Suxdorf, F.; Strobl, M.; Russina, M.; Voigt, J.; Ioffe, A., *Towards wide-angle neutron polarization analysis with a 3He spin filter for TOPAS and NEAT: Testing magic PASTIS on V20 at HZB*, AIP Conf. Proc. **1969**, 050005/1-7 (2018), 10.1063/1.5039302

Babichuk, I.S.; Golovynskiy, S.; Brus, V.V.; Babichuk, I.V.; Datsenko, O.; Li, J.; Xu, G.; Golovynska, I.; Hreshchuk, O.M.; Orletskiy, I.G.; Qu, J.; Yukhymchuk, V.O.; Maryanchuk, P.D., *Secondary phases in Cu<sub>2</sub>ZnSnS<sub>4</sub> films obtained by spray pyrolysis at different substrate temperatures and Cu contents*, Mater. Lett. **216**, 173-175 (2018), 10.1016/j.matlet.2018.01.010

Babichuk, I.S.; Golovynskiy, S.; Caballero, R.; Gurieva, G.; Datsenko, O.I.; Babichuk, I.V.; Golovynska, I.; Havryliuk, Ye.O.; Qu, Junle; Schorr, S.; Yukhymchuk, V.O., *Thickness-dependent structural parameters of kesterite Cu<sub>2</sub>ZnSnSe<sub>4</sub> thin films for solar cell absorbers*, Mater. Lett. **225**, 82-84 (2018), 10.1016/j.matlet.2018.04.109

Bahrtdt, J.; Gluskin, E., *Cryogenic permanent magnet and superconducting undulators*, Nucl. Instrum. Methods Phys. Res. Sect. A **907**, 149-168 (2018), 10.1016/j.nima.2018.03.069

Bär, M.; Schnabel, T.; Ahlsmeier, J.-H.; Krause, S.; Koch, N.; Wilks, R.G.; Ahlswede, E., *CdS/low-band-gap kesterite thin-film solar cell absorber heterojunction: Energy level alignment and dominant recombination process*, ACS Appl. En. Mat. **1**, 475-482 (2018), 10.1021/acsaem.7b00071

Bari, S.; Egorov, D.; Jansen, T.; Boll, R.; Hoekstra, R.; Techert, S.; Zamudio-Bayer, V.; Bülow, C.; Lindblad, R.; Leistner, G.; Lawicki, A.; Hirsch, K.; Miedema, P.; von Issendorff, B.; Lau, J.T.; Schlathölder, T., *Soft X-ray Spectroscopy as a Probe for Gas-Phase Protein Structure: Electron Impact Ionization from Within*, Chem. - a Eur. J. **24**, 7631-7636 (2018), 10.1002/chem.201801440

Becker, C.; Burger, S.; Barth, C.; Manley, P.; Jäger, K.; Eisenhauer, D.; Köppel, G.; Chabera, P.; Chen, J.; Zheng, K.; Pullerits, T., *Nanophotonic-Enhanced Two-Photon-Excited Photoluminescence of Perovskite Quantum Dots*, ACS Phot. **5**, 4668-4676 (2018), 10.1021/acsp Photonics.8b01199

Bendel, E.M.; Kammerer, C.F.; Kardjilov, N.; Fernandez, V.; Fröbisch, J., *Cranial anatomy of the gorgonopsian *Cynariops robustus* based on CT reconstruction*, PLoS One **13**, e0207367/1-37 (2018), 10.1371/journal.pone.0207367

Benemanskaya, G.V.; Lapushkin, M.N.; Marchenko, D.E.; Timoshnev, S.N., *The Electronic Structure of the Cs/n-GaN(0001) Nano-Interface*, Techn. Phys. Lett. **44**, 247-250 (2018), 10.1134/S106378501803015X

Bera, A.M.; Wargulski, D.R.; Unold, T., *High Efficient Perovskite Solar Cell Material CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub>: Synthesis Of Films And Their Characterization*, AIP Conf. Proc. **1942**, 140038/1-4 (2018), 10.1063/1.5029169

Bergenti, I.; Manna, P.; Lin, C.; Graziosi, P.; Liu, X.; Causer, G.; Liscio, F.; Ruotolo, A.; Dediu, V.; Van Lierop, J.; Klose, F.; Lin, K., *Surface engineering with Ar<sup>+</sup>/O<sup>2+</sup> ion beam bombardment: Tuning the electronic and magnetic behavior of Ni<sub>80</sub>Fe<sub>20</sub>/La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>/SrTiO<sub>3</sub>(001) junctions*, J. Appl. Phys. **124**, 183903/1-10 (2018), 10.1063/1.5049235

Berger, L.; Madajska, K.; Szymanska, I.B.; Höflich, K.; Polyakov, M.N.; Jurczyk, J.; Carlos, G.-N.; Utke, I., *Gas-assisted silver deposition with a focused electron beam*, Beilstein J. Nanotechnol. **2018**, 224-232 (2018), 10.3762/bjnano.9.24

Bergmann, N.; Bonhommeau, S.; Lange, K.; Greil, S.; Eisebitt, S.; De Groot, F.; Chergui, M.; Aziz, E., *Retraction: On the enzymatic activity of catalase: an iron L-edge X-ray absorption study of the active centre*, Phys. Chem. Chem. Phys. **20**, 16294 (2018), 10.1039/c8cp91772h

Beyer, W.; Andrä, G.; Bergmann, J.; Breuer, U.; Finger, F.; Gawlik, A.; Haas, S.; Lambertz, A.; Maier, F.; Nickel, N.H.; Zastrow, U., *Temperature and hydrogen diffusion length in hydrogenated amorphous silicon films on glass while scanning with a continuous wave laser at 532 nm wavelength*, J. Appl. Phys. **124**, 153103/1-16 (2018), 10.1063/1.5038090

Bhattacharyya, A.; Adroja, D.T.; Smidman, M.; Anand, V.K., *A brief review on mu SR studies of unconventional Fe- and Cr-based superconductors*, Science China **61**, 127402/1-22 (2018), 10.1007/s11433-018-9292-0

Blanco-Canosa, S.; Schierle, E.; Li, Z.; Guo, H.; Adachi, T.; Koike, Y.; Sobolev, O.; Weschke, E.; Komarek, A.; Schüßler-Langeheine, C., *Magnetic field effect in stripe-ordered 214 (La<sub>1.6-x</sub>Nd<sub>0.4</sub>)SrxCuO<sub>4</sub> and La<sub>2-x</sub>BaxCuO<sub>4</sub> superconducting cuprates studied by resonant soft x-ray scattering*, Phys. Rev. B **97**, 195130/1-7 (2018), 10.1103/PhysRevB.97.195130

Böhme, M.; Ziegenbalg, S.; Aliabadi, A.; Schnegg, A.; Görls, H.; Plass, W., *Magnetic relaxation in cobalt(II)-based single-ion magnets influenced by distortion of the pseudotetrahedral [N<sub>2</sub>O<sub>2</sub>] coordination environment*, Dalton Trans. **47**, 10861-10873 (2018), 10.1039/c8dt01530a

Böker, A.; Pilger, D.; Cordini, D.; Seibel, I.; Riechardt, A.I.; Jousen, A.M.; Bechrakis, N.E., *Neoadjuvant proton beam irradiation vs. adjuvant ruthenium brachytherapy in transscleral resection of uveal melanoma*, Gr. Arch. for Cl. and Exp. Opht. **256**, 1767-1775 (2018), 10.1007/s00417-018-4032-7

Bonke, S.; Abel, K.; Hoogeveen, D.; Chatti, M.; Gengenbach, T.; Fournier, M.; Spiccia, L.; Simonov, A., *Electrolysis of Natural Waters Contaminated with Transition-Metal Ions: Identification of A Metastable FePb-Based Oxygen-Evolution Catalyst Operating in Weakly Acidic Solutions*, ChemPlusChem **83**, 704-710 (2018), 10.1002/cplu.201800020

Bosio, A.; Ciprian, R.; Lamperti, A.; Rago, I.; Ressel, B.; Rosa, G.; Stupar, M.; Weschke, E., *Interface phenomena between CdTe and ZnTe:Cu back contact*, Sol. Energy **176**, 186-193 (2018), 10.1016/j.solener.2018.10.035

Boyaciyan, D.; Braun, L.; Löhmann, O.; Silvi, L.; Schneck, E.; Von Klitzing, R., *Gold nanoparticle distribution in polyelectrolyte brushes loaded at different pH conditions*, J. Chem. Phys. **149**, 163322 (2018), 10.1063/1.5035554

Bozheyev, F.; Harbauer, K.; Zahn, C.; Friedrich, D.; Ellmer, K., *Correction: Highly (001)-textured p-type WSe<sub>2</sub> thin films as efficient large-area photocathodes for solar hydrogen evolution*, Sci. Rep. **8**, 8402/1 (2018), 10.1038/s41598-018-24795-0

Bozzini, B.; Kuscer, D.; Drnovsek, S.; Al-Hada, M.; Amati, M.; Sezen, H.; Gregoratti, L., *Spatially Resolved Photoemission and Electrochemical Characterization of a Single-Chamber Solid Oxide Fuel Cell*, Top. Catal. **61**, 2185-2194 (2018), 10.1007/s11244-018-1064-5

Braig, C.; Zizak, I., *Carbon-based Fresnel optics for hard x-ray astronomy*, Appl. Optics **57**, 1857-1873 (2018), 10.1364/AO.57.001857

Branson, O.; Redfern, S.; Elmore, A.; Read, E.; Valencia, S.; Elderfield, H., *The distribution and coordination of trace elements in Krithe ostracods and their implications for paleothermometry*, Geochim. Cosmo. A. **236**, 230-239 (2018), 10.1016/j.gca.2017.12.005

- Braunger, S.; Mundt, L.E.; Wolff, C.M.; Mews, M.; Rehermann, C.; Jost, M.; Tejada, A.; Eisenhauer, D.; Becker, C.; Guerra, J.A.; Unger, E. L.; Korte, L.; Neher, D.; Schubert, M.; Rech, B.; Albrecht, S., *CsxFA1-xPb(1-yBry)3 Perovskite Compositions: the Appearance of Wrinkled Morphology and its Impact on Solar Cell Performance*, J. Phys. Chem. C **122**, 17123-17135 (2018), 10.1021/acs.jpcc.8b06459
- Breternitz, J.; Schorr, S., *Comment: What Defines a Perovskite?*, Adv. Energy Mat. **8**, 1802366/1-2 (2018), 10.1002/aenm.201802366
- Brooks, A.; Hussey, D.; Yao, H.; Haghshenas, A.; Yuan, J.; LaManna, J.; Jacobson, D.; Lowery, C.; Kardjilov, N.; Guo, S.; Khonsari, M.; Butler, L., *Neutron Interferometry Detection of Early Crack Formation Caused by Bending Fatigue in Additively Manufactured SS316 Dogbones*, Mater. Design **140**, 420-430 (2018), 10.1016/j.matdes.2017.12.001
- Brooks, A.J.; Yao, H.; Yuan, J.; Kio, O.; Lowery, C.G.; Markötter, H.; Kardjilov, N.; Guo, S.; Butler, L.G., *Early detection of fracture failure in SLM AM tension testing with Talbot-Lau neutron interferometry*, Add. Manuf. **22**, 658-664 (2018), 10.1016/j.addma.2018.06.012
- Brus, V. V.; Lang, F.; Fengler, S.; Dittrich, T.; Rappich, J.; Nickel, N. H., *Doping Effects and Charge-Transfer Dynamics at Hybrid Perovskite/Graphene Interfaces*, Adv. Mater. Interfaces **5**, 1800826/1-7 (2018), 10.1002/admi.201800826
- Brus, V.V.; Gluba, M.A.; Rappich, J.; Lang, F.; Kovalyuk, Z.; Maryanchuk, P.; Nickel, N. H., *Fine Art of Thermoelectricity*, ACS Appl. Mat. Interfaces **10**, 4737-4742 (2018), 10.1021/acsami.7b17491
- Buessen, F.; Hering, M.; Reuther, J.; Trebst, S., *Quantum Spin Liquids in Frustrated Spin-1 Diamond Antiferromagnets*, Phys. Rev. Lett. **120**, 057201/1-6 (2018), 10.1103/PhysRevLett.120.057201
- Bulut, A.; Mares, M.; Atak, K.; Zorlu, Y.; Çoçut, B.; Zubieta, J.; Beckmann, J.; Haase, H.; Yücesan, G., *Mimicking cellular phospholipid bilayer packing creates predictable crystalline molecular metal-organophosphonate macrocycles and cages*, CRYSTENCOMM **20**, 2152-2158 (2018), 10.1039/c8ce00072g
- Busch, C.; Löwen, J.; Pilger, D.; Seibel, I.; Heufelder, J.; Jousen, A.M., *Quantification of radiation retinopathy after beam proton irradiation in centrally located choroidal melanoma*, Gr. Arch. for Cl. and Exp. Opht. **256**, 1599-1604 (2018), 10.1007/s00417-018-4036-3
- Busch, M.; Chiatti, O.; Pezzini, S.; Wiedmann, S.; Sánchez-Barriga, J.; Rader, O.; Yashina, L.; Fischer, S., *High-temperature quantum oscillations of the Hall resistance in bulk Bi2Se3*, Sci. Rep. **8**, 485 (2018), 10.1038/s41598-017-18960-0
- Cappel, U.B.; Liu, P.; Johansson, F.O.L.; Philippe, B.; Giangrisostomi, E.; Ovsyannikov, R.; Lindblad, A.; Kloo, L.; Gardner, J.M.; Rensmo, H., *Electronic Structure Characterization of Cross-Linked Sulfur Polymers*, ChemPhysChem **19**, 1041-1047 (2018), 10.1002/cphc.201800043
- Carbonio, E.; Rocha, T.; Klyushin, A.; Pis, I.; Magnano, E.; Nappini, S.; Piccinin, S.; Knop, A.; Schlögl, R.; Jones, T., *Are multiple oxygen species selective in ethylene epoxidation on silver?*, Chem. Sci. **9**, 990-998 (2018), 10.1039/C7SC04728B
- Carreira, S.; Aguirre, M.; Briatico, J.; Weschke, E.; Steren, L., *Tuning the interfacial charge, orbital, and spin polarization properties in La0.67Sr0.33MnO3/La1-xSrxMnO3 bilayers*, Appl. Phys. Lett. **112**, 032401/1-5 (2018), 10.1063/1.5011172

- Carrique, F.; Ruiz-Reina, E.; Roa, R.; Arroyo, F.; Delgado, Á., *Ionic coupling effects in dynamic electrophoresis and electric permittivity of aqueous concentrated suspensions*, *Colloids Surf A: Physicochem Eng. Aspects* **541**, 195-211 (2018), 10.1016/j.colsurfa.2017.09.009
- Chang, H.; Lee, H.; Chung, J.; Chun, S.; Shin, K.; Jeon, B.; Kim, K.; Prokes, K.; Matas, S., *Commensurate transverse helical ordering in the room-temperature magnetoelectric Co<sub>2</sub>Z hexaferrite*, *Phy. B* **551**, 122-126 (2018), 10.1016/j.physb.2017.11.067
- Chen, D.; Manley, P.; Tockhorn, P.; Eisenhauer, D.; Köppel, G.; Hammerschmidt, M.; Burger, S.; Albrecht, S.; Becker, C.; Jäger, K., *Nanophotonic light management for perovskite–silicon tandem solar cells*, *J. Photonics Energy* **8**, 022601/1-14 (2018), 10.1117/1.JPE.8.022601
- Chen, R.; Fan, F.; Dittrich, T.; Li, C., *Imaging photogenerated Charge carriers on surfaces and interfaces of photocatalysts with surface photovoltage microscopy*, *Chem. Soc. Rev.* **47**, 8238-8262 (2018), 10.1039/C8CS00320C
- Chen, W.; Wen, X.; Yang, J.; Latzel, M.; Patterson, R.; Huang, S.; Shrestha, S.; Jia, B.; Moss, D.; Christiansen, S.; Conibeer, G., *Free charges versus excitons: photoluminescence investigation of InGa<sub>N</sub>/Ga<sub>N</sub> multiple quantum well nanorods and their planar counterpartst*, *Nanoscale* **10**, 5358-5365 (2018), 10.1039/c7nr07567g
- Chen, Z.; Higley, D.; Beye, M.; Hantschmann, M.; Mehta, V.; Hellwig, O.; Mitra, A.; Bonetti, S.; Bucher, M.; Carron, S.; Chase, T.; Jal, E.; Kukreja, R.; Liu, T.; Reid, A.; Dakovski, G.; Föhlisch, A.; Schlotter, W.; Dürr, H.; Stöhr, J., *Ultrafast Self-Induced X-Ray Transparency and Loss of Magnetic Diffraction*, *Phys. Rev. Lett.* **121**, 137403/1-5 (2018), 10.1103/PhysRevLett.121.137403
- Cheng, W.-H.; Richter, M.H.; May, M.M.; Ohlmann, J.; Lackner, D.; Dimroth, F.; Hannappel, T.; Atwater, H.A.; Lewerenz, H.-J., *Monolithic Photoelectrochemical Device for Direct Water Splitting with 19% Efficiency*, *ACS En. Lett.* **3**, 1795-1800 (2018), 10.1021/acsenerylett.8b00920
- Chernysheva, E.; Srour, W.; Philippe, B.; Baris, B.; Chenot, S.; Felix Duarte, R.; Gorgoi, M.; Cruguel, H.; Rensmo, H.; Montigaud, H.; Jupille, J.; Cabailh, G.; Grachev, S.; Lazzari, R., *Band alignment at Ag/ZnO(0001) interfaces: A combined soft and hard x-ray photoemission study*, *Phys. Rev. B* **97**, 235430/1-15 (2018), 10.1103/PhysRevB.97.235430
- Chistiakova, G.; Mews, M.; Wilks, R.G.; Bär, M.; Korte, L., *In-system photoelectron spectroscopy study of tin oxide layers produced from tetrakis(dimethylamino)tin by plasma enhanced atomic layer deposition*, *J. Vacuum Sc. Techn. A* **36**, 02D401/1-6 (2018), 10.1116/1.5015967
- Choudhury, S.; Kiendl, B.; Ren, J.; Gao, F.; Knittel, P.; Nebel, C.; Venerosy, A.; Girard, H.; Arnault, J.-C.; Krueger, A.; Larsson, K.; Petit, T., *Combining nanostructuring with boron doping to alter sub band gap acceptor states in diamond materials*, *J. Mater. Chem. A* **6**, 16645-16654 (2018), 10.1039/c8ta05594g
- Chowdhury, N.; Kleemann, W.; Petravic, O.; Kronast, F.; Doran, A.; Scholl, A.; Cardoso, S.; Freitas, P.; Bedanta, S., *360 degrees domain walls in magnetic thin films with uniaxial and random anisotropy*, *Phys. Rev. B* **98**, 134440/1-7 (2018), 10.1103/PhysRevB.98.134440
- Chrabaszczewska, M.; Maszota-Zieleniak, M.; Pietralik, Z.; Taube, M.; Rodziewicz-Motowidlo, S.; Szymanska, A.; Szutkowski, K.; Clemens, D.; Grubb, A.; Kozak, M., *Cyclic trimer of human cystatin C, an amyloidogenic protein - Molecular dynamics and experimental studies*, *J. Appl. Phys.* **123**, 174701/1- (2018), 10.1063/1.5023807



- Chu, A.; Schlecker, B.; Handwerker, J.; Künstner, S.; Ortmanns, M.; Lips, K.; Anders, J., *Live demonstration: A VCO-based point-of-care ESR spectrometer*, , 43525 (2018), 10.1109/BIOCAS.2017.8325098
- Chu, A.; Schlecker, B.; Handwerker, J.; Künstner, S.; Ortmanns, M.; Lips, K.; Anders, J., *VCO-based ESR-on-a-chip as a tool for low-cost, high-sensitivity food quality control*, , 1 (2018), 10.1109/ICSENS.2017.8233896
- Chudoba, R.; Heyda, J.; Dzubiel, J., *Tuning the collapse transition of weakly charged polymers by ion-specific screening and adsorption*, *Soft Matter* **14**, 9631-9642 (2018), 10.1039/c8sm01646a
- Chung, S.-Y.; Abd Elrahman, M.; Stephan, D.; Kamm, P.H., *The influence of different concrete additions on the properties of lightweight concrete evaluated using experimental and numerical approaches*, *Constr. Build. Mat.* **189**, 314-322 (2018), 10.1016/j.conbuildmat.2018.08.189
- Coates, M.; Larsen, M.A.B.; Forbes, R.; Neville, S.; Boguslavskiy, A.E.; Wilkinson, I.; Solling, T.; Lausten, R.; Stolow, A.; Schuurman, M.S., *Vacuum Ultraviolet Excited State Dynamics of the smallest ring, Cyclopropane: II. Time-Resolved Photoelectron Spectroscopy and Ab Initio Dynamics*, *J. Chem. Phys.* **149**, 144311/1-10 (2018), 10.1063/1.5044402
- Cojocar-Miréidin, O.; Schwarz, T.; Abou-Ras, D., *Assessment of elemental distributions at line and planar defects in Cu(In,Ga)Se<sub>2</sub> thin films by atom probe tomography*, *Scripta Mater.* **148**, 106-114 (2018), 10.1016/j.scriptamat.2017.03.034
- Cordill, M.J.; Kleinbichler, A.; Völker, B.; Kraker, P.; Economy, D.R.; Többens, D.; Kirchlechner, C.; Kennedy, M.S., *In-situ observations of the fracture and adhesion of Cu/Nb multilayers on polyimide substrates*, *Mater. Sci. Eng. A* **735**, 456-462 (2018), 10.1016/j.msea.2018.08.043
- Cueva, L. de la; Sánchez, Y.; Calvo-Barrio, L.; Oliva, F.; Izquierdo-Roca, V.; Khelifi, S.; Bertram, T.; Merino, J.; León, M.; Caballero, R., *Sulfurization of co-evaporated Cu<sub>2</sub>ZnSnSe<sub>4</sub> thin film solar cells: The role of Na*, *Solar Energy Mat Solar Cells* **186**, 115-123 (2018), 10.1016/j.solmat.2018.06.015
- Da Silva Neto, E.; Minola, M.; Yu, B.; Tabis, W.; Bluschke, M.; Unruh, D.; Suzuki, H.; Li, Y.; Yu, G.; Betto, D.; Kummer, K.; Yakhou, F.; Brookes, N.; Le Tacon, M.; Greven, M.; Keimer, B.; Damascelli, A., *Coupling between dynamic magnetic and charge-order correlations in the cuprate superconductor Nd<sub>2-x</sub>Ce<sub>x</sub>CuO<sub>4</sub>*, *Phys. Rev. B* **98**, 161114/1-6 (2018), 10.1103/PhysRevB.98.161114
- Dangwal Pandey, A.; Dalla Lana Semione, G.; Prudnikava, A.; Keller, T.; Noei, H.; Vonk, V.; Tamashevich, Y.; Elsen, E.; Foster, B.; Stierle, A., *Surface characterization of nitrogen-doped Nb (100) large-grain superconducting RF cavity material*, *J. Mater. Sci.* **53**, 10411-10422 (2018), 10.1007/s10853-018-2310-8
- Dias, E.; Das, A.; Hoser, A.; Emura, S.; Nigam, A.; Priolkar, K., *Phase separation and effect of strain on magnetic properties of Mn<sub>3</sub>Ga<sub>1-x</sub>Sn<sub>x</sub>C*, *J. Appl. Phys.* **124**, 153902/1-10 (2018), 10.1063/1.5050655
- Djekic, D.; Fantner, G.; Lips, K.; Ortmanns, M.; Anders, J., *A 0.1% THD, 1-M ohm to 1-G Ohm Tunable, Temperature-Compensated Transimpedance Amplifier Using a Multi-Element Pseudo-Resistor*, *IEEE J. Solid-State Circ.* **53**, 1913-1923 (2018), 10.1109/JSSC.2018.2820701
- Dominguez-Trujillo, C.; Péon, E.; Chicardi, E.; Pérez, H.; Rodríguez-Ortiz, J.A.; Pavón, J.J.; García-Couce, J.; Galván, J.C.; Garcia-Moreno, F.; Torres, Y., *Sol-gel deposition of hydroxyapatite coatings on porous titanium for biomedical applications*, *Surf. Coating Tech.* **333**, 158-162 (2018), 10.1016/j.surfcoat.2017.10.079

Dominguez-Trujillo, C.; Ternero, F.; Rodriguez-Ortiz, J.A.; Pavón, J.J.; Montealegre-Meléndez, I.; Arévalo, C.; Garcia-Moreno, F.; Torres, Y., *Improvement of the balance between a reduced stress shielding and bone ingrowth by bioactive coatings onto porous titanium substrates*, Surf. Coating Tech. **338**, 32-37 (2018), 10.1016/j.surfcoat.2018.01.019

Donzel, L.; Mannes, D.; Hagemeister, M.; Lehmann, E.; Hovind, J.; Kardjilov, N.; Grünzweig, C., *Space-resolved study of binder burnout process in dry pressed ZnO ceramics by neutron imaging*, J. Eur. Ceram. Soc. **38**, 5448-5453 (2018), 10.1016/j.jeurceramsoc.2018.08.017

Dühn, J.; Tessarek, C.; Schowalter, M.; Coenen, T.; Gerken, B.; Müller-Caspari, K.; Mehrrens, T.; Heilmann, M.; Christiansen, S.; Rosenauer, A.; Gutowski, J.; Sebald, K., *Spatially resolved luminescence properties of non- and semi-polar InGaN quantum wells on GaN microrods*, J. Phys. D. Appl. Phys. **51**, 355102/1-8 (2018), 10.1088/1361-6463/aad4e6

Dziarzhyski, S.; Siewert, F.; Sokolov, A.; Gwalt, G.; Seliger, T.; Rübhausen, M.; Weigelt, H.; Brenner, G., *Diffraction gratings metrology and ray-tracing results for an XUV Raman spectrometer at FLASH*, J. Synchrot. Radiat. **25**, 138-144 (2018), 10.1107/S1600577517013066

Echevarria, P.; Aldekoa, E.; Jugo, J.; Neumann, A.; Ushakov, A.; Knobloch, J., *Superconducting Radio-frequency Virtual Cavity for Control Algorithms Debugging*, Rev. Sci. Instrum. **8**, 084706/1-8 (2018), 10.1063/1.5041079

Eckert, S.; Vaz da Cruz, V.; Gel'mukhanov, F.; Ertan, E.; Ignatova, N.; Polyutov, S.; Cuoto, R.; Fondell, M.; Dantz, M.; Kennedy, B.; Schmitt, T.; Pietzsch, A.; Odelius, M.; Föhlisch, A., *One-dimensional cuts through multidimensional potential-energy surfaces by tunable x rays*, Phys. Rev. A **97**, 053410/1-7 (2018), 10.1103/PhysRevA.97.053410

Efthimiopoulos, I.; Küllmey, T.; Speziale, S.; Pakhomova, A.; Quennet, M.; Paulus, B.; Ritscher, A.; Lerch, M.; Koch-Müller, M., *Pressure-induced structural and electronic transitions in kesterite-type Cu<sub>2</sub>ZnSnS<sub>4</sub>*, J. Appl. Phys. **124**, 085905/1-10 (2018), 10.1063/1.5047842

Egorov, D.; Bari, S.; Boll, R.; Dörner, S.; Deinert, S.; Techert, S.; Hoekstra, R.; Zamudio-Bayer, V.; Lindblad, R.; Bülow, C.; Timm, M.; von Issendorff, B.; Lau, J.T.; Schlathölter, T., *Near-Edge Soft X-ray Absorption Mass Spectrometry of Protonated Melittin*, J. Am. Soc. Mass Spectr. **29**, 2138–2151 (2018), 10.1007/s13361-018-2035-6

Ehrler, J.; He, M.; Shugaev, M.; Polushkin, N.; Wintz, S.; Liersch, V.; Cornelius, S.; Hübner, R.; Potzger, K.; Lindner, J.; Fassbender, J.; Ünal, A.A.; Valencia, S.; Kronast, F.; Zhigilei, L.; Bali, R., *Laser-Rewritable Ferromagnetism at Thin-Film Surfaces*, ACS Appl. Mat. Interfaces **10**, 15232-15239 (2018), 10.1021/acsami.8b01190

Eisenhauer, D.; Sai, H.; Matsui, T.; Köppel, G.; Rech, B.; Becker, C., *Honeycomb micro-textures for light trapping in multi-crystalline silicon thin-film solar cells*, Opt. Express **26**, A498-A507 (2018), 10.1364/OE.26.00A498

Ekimova, M.; Kubin, M.; Ochmann, M.; Ludwig, J.; Huse, N.; Wernet, P.; Odelius, M.; Nibbering, E., *Soft X-ray Spectroscopy of the Amine Group: Hydrogen Bond Motifs in Alkylamine/Alkylammonium Acid-Base Pairs*, J. Phys. Chem. B **122**, 7737-7746 (2018), 10.1021/acs.jpcc.8b05424

El-Nagar, G.A.; Lauermann, I.; Sarhanad, R.M.; Roth, C., *Hierarchically structured iron-doped silver (Ag-Fe) lotus flowers for an efficient oxygen reduction reaction*, Nanoscale **10**, 7304-7310 (2018), 10.1039/C8NR00020D

- Erfurt, D.; Heinemann, M. D.; Schmidt, S.S.; Körner, S.; Szyszka, B.; Klenk, R.; Schlatmann, R., *Influence of ZnO-Based Sub-Layers on the Growth of Hydrogen Doped Indium Oxide*, ACS Appl. En. Mat. **1**, 5490-5499 (2018), 10.1021/acsaem.8b01039
- Erk, B.; Müller, J.P.; Bomme, C.; Boll, R.; Brenner, G.; Chapman, H.; Correa, J.; Düsterer, S.; Dziarzhyski, S.; Eisebitt, S.; Graafsma, H.; Grunewald, S.; Gumprecht, L.; Hartmann, R.; Hauser, G.; Keitel, B.; von Korff Schmising, C.; Kuhlmann, M.; Mansch, *CAMP at FLASH - An End-Station for Imaging, Electron-and Ion-Spectroscopy, and Pump-Probe Experiments at the FLASH Free-Electron Laser*, J. Synchrot. Radiat. **25**, 1529-1540 (2018), 10.1107/S1600577518008585
- Ertan, E.; Savchenko, V.; Ignatova, N.; Vaz da Cruz, V.; Couto, R.C.; Eckert, S.; Fondell, M.; Dantz, Ma.; Kennedy, B.; Schmitt, T.; Pietzsch, A.; Föhlisch, A.; Gel'mukhanov, F.; Odelius, M.; Kimberg, V., *Ultrafast dissociation features in RIXS spectra of the water molecule*, Phys. Chem. Chem. Phys. **20**, 14384-14397 (2018), 10.1039/C8CP01807C
- Farronato, M.; Bidermane, I.; Luder, J.; Bouvet, M.; Vlad, A.; Jones, A.; Simbrunner, J.; Resel, R.; Brena, B.; Prevot, G.; Witkowski, N., *New Quadratic Self-Assembly of Double-Decker Phthalocyanine on Gold(111) Surface: From Macroscopic to Microscopic Scale*, J. Phys. Chem. C **122**, 26480-26488 (2018), 10.1021/acs.jpcc.8b08462
- Félix, R.; Llobera-Vila, N.; Hartmann, C.; Klimm, C.; Hartig, M.; Wilks, R.; Bär, M., *Preparation and in-situ study of SnCl<sub>2</sub> precursor layers: towards vacuum-based synthesis of Pb-free perovskites*, RSC Adv. **8**, 67-73 (2018), 10.1039/c7ra12172e
- Feng, H.L.; Reehuis, M.; Adler, P.; Hu, Z.; Nicklas, M.; Hoser, A.; Weng, S.-C.; Felser, C.; Jansen, M., *Canted ferrimagnetism and giant coercivity in the nonstoichiometric double perovskite La<sub>2</sub>Ni<sub>1.19</sub>O<sub>s0.81</sub>O<sub>6</sub>*, Phys. Rev. B **97**, 184407/1-9 (2018), 10.1103/PhysRevB.97.184407
- Filatova, E.; Sokolov, A., *Effect of reflection and refraction on NEXAFS spectra measured in TEY mode*, J. Synchrot. Radiat. **25**, 232-240 (2018), 10.1107/S1600577517016253
- Fondell, M.; Gorgoi, M.; Boman, M.; Lindblad, A., *Surface modification of iron oxides by ion bombardment - Comparing depth profiling by HAXPES and Ar ion sputtering*, J. Electr. Spectr. **224**, 23-26 (2018), 10.1016/j.elspec.2017.09.008
- Forbes, R.; Makhija, V.; Underwood, J.G.; Stolow, A.; Wilkinson, I.; Hockett, P.; Lausten, R., *Quantum-beat photoelectron-imaging spectroscopy of Xe in the VUV*, Phys. Rev. A **97**, 063417/1-11 (2018), 10.1103/PhysRevA.97.063417
- Fournier, M.; Hoogeveen, D.A.; Bonke, S.A.; Spiccia, L.; Simonov, A.N., *Cooperative silanetriolate-carboxylate sensitizer anchoring for outstanding stability and improved performance of dye-sensitised photoelectrodes*, Sust. En. Fuels **2**, 1707-1718 (2018), 10.1039/c8se00056e
- Franco, M.K.K.D.; Alkschbirs, M.I.; Akkari, A.C.S; Yokaichiya, F.; de Araújo, D.R., *Budesonide-Hydroxypropyl-B-Cyclodextrin inclusion complex in poloxamer 407 and poloxamer 407/403 Systems: A Structural by Small Angle X-Ray Scattering(SAX)*, Biomed j. of Scient. techn. Res. **10**, 43586 (2018), 10.26717/BJSTR.2018.10.002002
- Franz, A.; Töbrens, D.; Steckhan, J.; Schorr, S., *Determination of the miscibility gap in the solid solutions series of methylammonium lead iodide/chloride*, Acta Crystallogr. B **74**, 445-449 (2018), 10.1107/S2052520618010764

Freitas, V.; Bonadio, T.; Thomen, D.; Miyahara, R.; Silva, D.; Rosso, J.; Dias, G.; Cótica, L.; Santos, I.; Garcia, D.; Eiras, J.; Yokaichiya, F.; Guo, R.; Bhalla, A., *Structural and magnetic properties of BiFeO<sub>3</sub>-PbTiO<sub>3</sub> polycrystals*, *Ferroelectrics* **534**, 121-128 (2018), 10.1080/00150193.2018.1472956

Freyse, F.; Battiato, M.; Yashina, L. V.; Sánchez-Barriga, J., *Impact of ultrafast transport on the high-energy states of a photoexcited topological insulator*, *Phys. Rev. B* **98**, 115132/1-10 (2018), 10.1103/PhysRevB.98.115132

Frick, J.; Klemenz, S.; Bocarsly, A.; Schoop, L.; Topp, A.; Ast, C.; Krivenkov, M.; Varykhalov, A., *Single-Crystal Growth and Characterization of the Chalcopyrite Semiconductor CuInTe<sub>2</sub> for Photoelectrochemical Solar Fuel Production*, *J. Phys. Chem. Lett.* **9**, 6833-6840 (2018), 10.1021/acs.jpcclett.8b03100

Frueh, J.; Rühm, A.; He, Q.; Möhwald, H.; Krastev, R.; Köhler, R., *Elastic to Plastic Deformation in Uniaxially Stressed Polyelectrolyte Multilayer Films*, *Langmuir* **34**, 11933-11942 (2018), 10.1021/acs.langmuir.8b01296

Fu, K.; Wang, R.; Katase, T.; Ohta, H.; Koch, N.; Duhm, S., *Stoichiometric and Oxygen-Deficient VO<sub>2</sub> as Versatile Hole Injection Electrode for Organic Semiconductors*, *ACS Appl. Mat. Interfaces* **10**, 10552-10559 (2018), 10.1021/acsami.8b00026

Funk, H.; Caicedo-Davila, S.; Lovrincic, R.; Müller, C.; Sendner, M.; Lehmann, F.; Gunder, R.; Franz, A.; Wollgarten, M.; Haas, B.; Koch, C.; Abou-Ras, D., *Correlative Microscopy Characterization of Cesium-Lead-Bromide Thin-films*, *ACS Appl. Mat. Interfaces* **10**, 1559-1563 (2018), 10.1109/PVSC.2018.8547837

Furchner, A.; Walder, C.; Zellmeier, M.; Rappich, J.; Hinrichs, K., *Broadband infrared Mueller-matrix ellipsometry for studies of structured surfaces and thin films*, *Appl. Optics* **57**, 7895-7904 (2018), 10.1364/AO.57.007895

Fürsich, K.; Zabolotnyy, V.B.; Schierle, E.; Dudy, L.; Kirilmaz, O.; Sing, M.; Claessen, R.; Green, R.J.; Haverkort, M.W.; Hinkov, V., *Theory-restricted resonant x-ray reflectometry of quantum materials*, *Phys. Rev. B* **97**, 165126/1-6 (2018), 10.1103/PhysRevB.97.165126

Gagliardi, A.; Abate, A., *Mesoporous Electron-Selective Contacts Enhance the Tolerance to Interfacial Ion Accumulation in Perovskite Solar Cells*, *ACS En. Lett.* **3**, 163-169 (2018), 10.1021/acsenergylett.7b01101

Gallo, I.B.; Carbonio, E.A.; Villullas, H.M., *What Determines Electrochemical Surface Processes on Carbon Supported PdAu Nanoparticles?*, *ACS Catal.* **8**, 1818-1827 (2018), 10.1021/acscatal.7b03734

Garces, G.; Mathis, K.; Medina, J.; Horvath, K.; Drozdenko, D.; Onorbe, E.; Dobron, P.; Perez, P.; Klaus, M.; Adeva, P., *Combination of in-situ diffraction experiments and acoustic emission testing to understand the compression behavior of Mg-Y-Zn alloys containing LPSO phase under different loading conditions*, *Int. J. of Plast.* **106**, 107-128 (2018), 10.1016/j.ijplas.2018.03.004

García-Márquez, A.; Glatzel, S.; Kraupner, A.; Kiefer, K.; Siemensmeyer, K.; Giordano, C., *Branch-Like Iron Nitride and Carbide Magnetic Fibres Using an Electrospinning Technique*, *Chem. - a Eur. J.* **24**, 4895-4901 (2018), 10.1002/chem.201705585

Garcia-Moreno, F.; Kamm, P.H.; Neu, T.R.; Banhart, J., *Time-resolved in situ tomography for the analysis of evolving metal-foam granulates*, *J. Synchrot. Radiat.* **25**, 1505-1508 (2018), 10.1107/S1600577518008949

- Garud, S.; Gampa, N.; Allen, T.; Kotipalli, R.; Flandre, D.; Batuk, M.; Hadermann, J.; Meuris, M.; Poortmans, J.; Smets, A.; Vermang, B., *Surface Passivation of CIGS Solar Cells Using Gallium Oxide*, Phys. Status Solidi A **215**, 1700826/1-6 (2018), 10.1002/pssa.201700826
- Gazizulina, A.; Quintero-Castro, D.; Wulferding, D.; Teyssier, J.; Prokes, K.; Yokaichiya, F.; Schilling, A., *Tuning the orbital-lattice fluctuations in the mixed spin-dimer system Ba<sub>3</sub>-xSrxCr<sub>2</sub>O<sub>8</sub>*, Phys. Rev. B **98**, 144115/1-7 (2018), 10.1103/PhysRevB.98.144115
- Gessner, I.; Krakor, E.; Jurewicz, A.; Wulff, V.; Kling, L.; Christiansen, S.; Brodusch, N.; Gauvin, R.; Wortmann, L.; Wolke, M.; Plum, G.; Schauss, A.; Krautwurst, J.; Ruschewitz, U.; Ilyas, S.; Mathur, S., *Hollow silica capsules for amphiphilic transport and sustained delivery of antibiotic and anticancer drugs*, RSC Adv. **8**, 24883-24892 (2018), 10.1039/C8RA03716G
- Ghafari, A.; Moustafa, M.; Di Santo, G.; Petaccia, L.; Janowitz, C., *Opposite dispersion bands at the Fermi level in ZrSe<sub>2</sub>*, Appl. Phys. Lett. **112**, 182105/1-5 (2018), 10.1063/1.5025794
- Gholizadeh, E.; Frazer, L.; MacQueen, R.W.; Gallaher, J.; Schmidt, T., *Photochemical upconversion is suppressed by high concentrations of molecular sensitizers*, Phys. Chem. Chem. Phys. **20**, 19500-19506 (2018), 10.1039/c8cp02650e
- Giangrisostomi, E.; Ovsyannikov, R.; Sorgenfrei, F.; Zhang, T.; Lindblad, A.; Sassa, Y.; Cappel, U.; Leitner, T.; Mitzner, R.; Svensson, S.; Mårtensson, N.; Föhlisch, A., *Low Dose Photoelectron Spectroscopy at BESSY II: Electronic structure of matter in its native state*, J. Electr. Spectr. **224**, 68-78 (2018), 10.1016/j.elspec.2017.05.011
- Gil-Escrig, L.; Momblona, C.; La-Placa, M.; Boix, P.; Sessolo, M.; Bolink, H., *Vacuum Deposited Triple-Cation Mixed-Halide Perovskite Solar Cells*, Adv. Energy Mat. **8**, 1703506/1-6 (2018), 10.1002/aenm.201703506
- Giustiniani, A.; Weis, S.; Poulard, C.; Kamm, P.H.; Garcia-Moreno, F.; Schröter, M.; Drenckhan, W., *Skinny emulsions take on granular matter*, Soft Matter **14**, 7291-7544 (2018), 10.1039/c8sm00830b
- Glaser, M.; Ciccullo, F.; Giangrisostomi, E.; Ovsyannikov, R.; Calzolari, A.; Casu, M.B., *Doping and oxidation effects at ambient conditions in copper surfaces: A "real-life" CuBe surface*, J. Mater. Chem. C **6**, 2769-2777 (2018), 10.1039/C7TC04983H
- Göbel, M.; Kirsch, S.; Schwarze, L.; Schmidt, L.; Scholz, H.; Haußmann, J.; Klages, M.; Scholta, J.; Markötter, H.; Alrwashdeh, S.; Manke, I.; Müller, B.R., *Transient limiting current measurements for characterization of gas diffusion layers*, J. Power Sourc. **402**, 237-245 (2018), 10.1016/j.jpowsour.2018.09.003
- Golias, E.; Krivenkov, M.; Varykhalov, A.; Sánchez-Barriga, J.; Rader, O., *Band Renormalization of Blue Phosphorus on Au(111)*, Nano Lett. **18**, 6672-6678 (2018), 10.1021/acs.nanolett.8b01305
- Gomez, A.; Sanchez, S.; Campoy-Quiles, M.; Abate, A., *Topological distribution of reversible and non-reversible degradation in perovskite solar cells*, Nano Energy **45**, 94-100 (2018), 10.1016/j.nanoen.2017.12.040
- Gorgizadeh, S.; Flisgen, T.; von Rienen, U., *Eigenmode computation of cavities with perturbed geometry using matrix perturbation methods applied on generalized eigenvalue problems*, J. Comp. Phys. **364**, 347-364 (2018), 10.1016/j.jcp.2018.03.012

- Greco, G.; Tatchev, D.; Hoell, A.; Krumrey, M.; Raoux, S.; Hahn, R.; Elia, G., *Influence of the electrode nano/microstructure on the electrochemical properties of graphite in aluminum batteries*, *J. Mater. Chem. A* **6**, 22673-22680 (2018), 10.1039/c8ta08319c
- Gregoratti, L.; Al-Hada, M.; Amati, M.; Brescia, R.; Roccella, D.; Sezen, H.; Zeller, P., *Spatially Resolved Photoelectron Spectroscopy from Ultra-high Vacuum to Near Ambient Pressure Sample Environments*, *Top. Catal.* **61**, 1274-1282 (2018), 10.1007/s11244-018-0982-6
- Greiner, M.T.; Cao, J.; Jones, T.; Beeg, S.; Skorupska, K.; Carbonio, E.; Sezen, H.; Amati, M.; Gregoratti, L.; Willinger, M.; Knop-Gericke, A.; Schlogl, R., *Phase coexistence of multiple copper oxides on AgCu catalysts during ethylene epoxidation*, *ACS Catal.* **8**, 2286-2295 (2018), 10.1021/acscatal.7b04187
- Gretarsson, H.; Souliou, S.; Jeong, S.; Porras, J.; Loew, T.; Bluschke, M.; Minola, M.; Keimer, B.; Le Tacon, M., *Light-induced metastable state in charge-ordered YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub>*, *Phys. Rev. B* **98**, 075134/1-7 (2018), 10.1103/PhysRevB.98.075134
- Groiti, F.; Keller, T.; Habicht, K., *Generalized resolution matrix for neutron spin-echo three-axis spectrometers*, *J. Appl. Crystallogr.* **51**, 818-830 (2018), 10.1107/S1600576718005307
- Gross, M.; Engel, J.; Good, J.; Huck, H.; Isaev, I.; Koss, G.; Krasilnikov, M.; Lishilin, O.; Loisch, G.; Renier, Y.; Rublack, T.; Stephan, F.; Brinkmann, R.; Martinez De La Ossa, A.; Osterhoff, J.; Malyutin, D.; Richter, D.; Mehrling, T.; Khojoyan, M.; S, *Observation of the Self-Modulation Instability via Time-Resolved Measurements*, *Phys. Rev. Lett.* **120**, 144802/1-5 (2018), 10.1103/PhysRevLett.120.144802
- Grundmann, S.; Trinter, F.; Bray, A.W.; Eckart, S.; Rist, J.; Kastirke, G.; Metz, D.; Klumpp, S.; Viehhaus, J.; Schmidt, L.; Ph.; Williams, J.B.; Dörner, R.; Jahnke, T.; Schöffler, M.S.; Kheifets, A., *Separating Dipole and Quadrupole Contributions to Single-Photon Double Ionization*, *Phys. Rev. Lett.* **121**, 173003/1-5 (2018), 10.1103/PhysRevLett.121.173003
- Gunder, R.; Márquez-Prieto, J.A.; Gurieva, G.; Unold, T.; Schorr, S., *Structural characterization of off-stoichiometric kesterite-type Cu<sub>2</sub>ZnGeSe<sub>4</sub> compound semiconductors: from cation distribution to intrinsic point defect density*, *CRYSTENGGCOMM* **20**, 1491-1498 (2018), 10.1039/c7ce02090b
- Gurieva, G.; Ferreira, R.; Knoll, P.; Schorr, S., *Cu<sub>2</sub>ZnSnSe<sub>4</sub>: How Far Does Off-Stoichiometry Go?*, *Phys. Status Solidi A* **215**, 1700957/1-6 (2018), 10.1002/pssa.201700957
- Gurieva, G.; Valle Rios, L.E.; Franz, A.; Whitfield, P.; Schorr, S., *Intrinsic point defects in off-stoichiometric Cu<sub>2</sub>ZnSnSe<sub>4</sub>: A neutron diffraction study*, *J. Appl. Phys.* **123**, 161519/1-12 (2018), 10.1063/1.4997402
- Gurudayal, ; Bassi, P.S.; Sritharan, T.; Wong, L.H., *Recent progress in iron oxide based photoanodes for solar water splitting*, *J. Phys. D. Appl. Phys.* **51**, 473002/1-28 (2018), 10.1088/1361-6463/aae138
- Guttman, P.; Werner, S.; Rehbein, S.; Häbel, C.; Schneider, G., *First Results from the X-Ray Microscopy Beamline U41-PGM1-XM at BESSY II*, *Micro. Microanal.* **24**, 202-203 (2018), 10.1017/S1431927618013363
- Guttman, P.; Werner, S.; Siewert, F.; Sokolov, A.; Schmidt, J.-S.; Mast, M.; Brzhezinskaya, M.; Jung, C.; Follath, R.; Schneider, G., *The New HZB X-Ray Microscopy Beamline U41-PGM1-XM at BESSY II*, *Micro. Microanal.* **24**, 204-205 (2018), 10.1017/S1431927618013375

- Hadke, S.H.; Levchenko, S.; Lie, S.; Hages, C.J.; Márquez, J.A.; Unold, T.; Wong, L.H., *Synergistic Effects of Double Cation Substitution in Solution-Processed CZTS Solar Cells with over 10% Efficiency*, *Adv. Energy Mat.* **8**, 1802540/1-9 (2018), 10.1002/aenm.201802540
- Hajdeu-Chicarosh, E.; Lähderanta, E.; Guc, M.; Lisunov, K.; Shakhov, M.; Zakharchuk, I.; Levchenko, S.; Arushanov, E., *High-field magnetotransport in Cu<sub>2</sub>ZnGeS<sub>4</sub> single crystals*, *Sol. Energy* **172**, 184-190 (2018), 10.1016/j.solener.2018.04.043
- Haller, A.; Bande, A., *Favoritism of Quantum Dot Inter-Coulombic Decay over Direct and Multi-Photon Ionization by Laser Strength and Focus*, *J. Chem. Phys.* **149**, 134102/1-11 (2018), 10.1063/1.5042208
- Härk, E.; Jäger, R.; Kasatkin, P.; Möller, P.; Kanarbik, R.; Tallo, I.; Joost, U.; Aruväli, J.; Paiste, P.; Jiang, H.; Kallio, T.; Kirsimäe, K.; Lust, E., *The electrochemical activity of two binary alloy catalysts toward oxygen reduction reaction in 0.1 M KOH*, *J. of Solid St. Electroch.* **22**, 31-40 (2018), 10.1007/s10008-017-3720-2
- Harti, R.P.; Strobl, M.; Schäfer, R.; Kardjilov, N.; Tremsin, A.S.; Grünzweig, C., *Dynamic volume magnetic domain wall imaging in grain oriented electrical steel at power frequencies with accumulative high-frame rate neutron dark-field imaging*, *Sci. Rep.* **2018**, 15754/1-7 (2018), 10.1038/s41598-018-33835-8
- Hartmann, C.; Sadoughi, G.; Felix, R.; Handick, E.; Klemm, H.W.; Peschel, G.; Madej, E.; Fuhrich, A.B.; Liao, X.; Raoux, S.; Abou-Ras, D.; Wargulski, D.; Schmidt, Th.; Wilks, R.G.; Snaith, H.; Bär, M., *Spatially-resolved insight into the chemical and electronic structure of solution processed perovskites – why to (not) worry about pin-holes*, *Adv. Mater. Interfaces* **5**, 1701420/1-9 (2018), 10.1002/admi.201701420
- Hartwig, S.; Schäfer, N.; Schulze, M.; Landsgesell, S.; Abou-Ras, D.; Blum, C.G.F.; Wurmehl, S.; Sokolowski, A.; Büchner, B.; Prokes, K., *Inhomogeneities and superconductivity in poly-phase Fe-Se-Te systems*, *Phys. B* **531**, 102-109 (2018), 10.1016/j.physb.2017.12.024
- Hase, H.; O'Neill, K.; Frisch, J.; Opitz, A.; Koch, N.; Salzmann, I., *Unraveling the Microstructure of Molecularly Doped Poly(3-hexylthiophene) by Thermally Induced Dedoping*, *J. Phys. Chem. C* **122**, 25893-25899 (2018), 10.1021/acs.jpcc.8b08591
- Hauschild, D.; Meyer, F.; Benkert, A.; Kreikemeyer-Lorenzo, D.; Dalibor, T.; Palm, J.; Blum, M.; Yang, W.; Wilks, R.G.; Bär, M.; Reinert, F.; Heske, C.; Weinhardt, L., *Improving performance by Na doping of a buffer layer-chemical and electronic structure of the In<sub>x</sub>Sy:Na/CuIn(S,Se)<sub>2</sub> thin-film solar cell interface*, *Progr. Photovolt.* **26**, 359-366 (2018), 10.1002/pip.2993
- Haverkamp, C.; Sarau, G.; Polyakov, M.N.; Utke, I.; Puydinger dos Santos, M.V.; Christiansen, S.; Höflich, K., *A novel copper precursor for electron beam induced deposition*, *Beilstein J. Nanotechnol.* **2018**, 1220–1227 (2018), 10.3762/bjnano.9.113
- He, Y.; Wu, S.; Song, Y.; Lee, W.; Said, A.; Alatas, A.; Bosak, A.; Girard, A.; Souliou, S.; Ruiz, A.; Hepting, M.; Bluschke, M.; Schierle, E.; Weschke, E.; Lee, J.; Jang, H.; Huang, H.; Hashimoto, M.; Lu, D.; Song, D.; Yoshida, Y.; Eisaki, H.; Shen, Z., *Persistent low-energy phonon broadening near the charge-order q vector in the bilayer cuprate Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub>+delta*, *Phys. Rev. B* **98**, 035102/1-10 (2018), 10.1103/PhysRevB.98.035102
- Heim, K.; Garcia-Moreno, F.; Banhart, J., *Particle size and fraction required to stabilise aluminium alloy foams created by gas injection*, *Scripta Mater.* **153**, 54-58 (2018), 10.1016/j.scriptamat.2018.04.041

Heinze, L.; Beltran-Rodriguez, R.; Bastien, G.; Wolter, A.; Reehuis, M.; Hoffmann, J.; Rule, K.; Süllow, S., *The magnetic properties of single-crystalline atacamite, Cu<sub>2</sub>Cl(OH)(3)*, *Phys. B* **536**, 377-378 (2018), 10.1016/j.physb.2017.09.073

Hempel, H.; Eichberger, R.; Repins, I.; Unold, T., *The Effect of Cu-Zn Disorder on Charge Carrier Mobility and Lifetime in Cu<sub>2</sub>ZnSnSe<sub>4</sub>*, *Thin Solid Films* **666**, 40-43 (2018), 10.1016/j.tsf.2018.09.027

Hempel, H.; Hages, C.J.; Eichberger, R.; Repin, I.; Unold, T., *Minority and Majority Charge Carrier Mobility in Cu<sub>2</sub>ZnSnSe<sub>4</sub> revealed by Terahertz Spectroscopy*, *Sci. Rep.* **8**, 14476/1-9 (2018), 10.1038/s41598-018-32695-6

Henkel, S.; Trosien, I.; Mieres-Pérez, J.; Lohmiller, T.; Savitsky, A.; Sanchez-Garcia, E.; Sander, W., *Reactions of Cyclopentadienylidenes with CF<sub>3</sub>I: Electron Bond Donation versus Halogen Bond Donation of the Iodine Atom*, *J. of Org. Chem.* **83**, 7586-7592 (2018), 10.1021/acs.joc.8b01328

Hepting, M.; Green, R.; Zhong, Z.; Bluschke, M.; Suyolcu, Y.; Macke, S.; Frano, A.; Catalano, S.; Gibert, M.; Sutarto, R.; He, F.; Cristiani, G.; Logvenov, G.; Wang, Y.; van Aken, P.; Hansmann, P.; Le Tacon, M.; Triscone, J.; Sawatzky, G.; Keimer, B.; Ben, *Complex magnetic order in nickelate slabs*, *Nat. Phys.* **14**, 1097-1102 (2018), 10.1038/s41567-018-0218-5

Hermans, Y.; Klein, A.; Ellmer, K.; Van de Krol, R.; Toupance, T.; Jaegermann, W., *Energy-Band Alignment of BiVO<sub>4</sub> from Photoelectron Spectroscopy of Solid-State Interfaces*, *J. Phys. Chem. C* **122**, 20861-20870 (2018), 10.1021/acs.jpcc.8b06241

Herrero-Albillos, J.; Castán-Guerrero, C.; Valdés-Bango, F.; Bartolomé, J.; Bartolomé, F.; Kronast, F.; Hierro-Rodriguez, A.; Álvarez Prado, L.M.; Martín, J.I.; Vélez, M.; Alameda, J.M.; Sesé, J.; García, L.M., *2D magnetic domain wall ratchet: The limit of submicrometric holes*, *Mater. Design* **138**, 111-118 (2018), 10.1016/j.matdes.2017.09.060

Heubner, F.; Hilger, A.; Kardjilov, N.; Manke, I.; Kieback, B.; Gondek, L.; Banhart, J.; Röntzsch, L., *In-operando stress measurement and neutron imaging of metal hydride composites for solid-state hydrogen storage*, *J. Power Sourc.* **397**, 262-270 (2018), 10.1016/j.jpowsour.2018.06.093

Hilger, A.; Manke, I.; Kardjilov, N.; Osenberg, M.; Markötter, H.; Banhart, J., *Tensorial neutron tomography of threedimensional magnetic vector fields in bulk materials*, *Nat. Commun.* **9**, 775418 (2018), 10.1038/s41467-018-06593-4

Hlawenka, P.; Siemensmeyer, K.; Weschke, E.; Varykhalov, A.; Sánchez-Barriga, J.; Shitsevalova, N.; Dukhnenko, A.; Filipov, V.; Gabáni, S.; Flachbart, K.; Rader, O.; Rienks, E., *Samarium hexaboride is a trivial surface conductor*, *Nat. Commun.* **9**, 517/1-7 (2018), 10.1038/s41467-018-02908-7

Hoffmann, I.; Hoffmann, C.; Farago, B.; Prevost, S.; Gradzielski, M., *Dynamics of small unilamellar vesicles*, *J. Chem. Phys.* **148**, 104901/1-8 (2018), 10.1063/1.5009424

Höflich, K.; Jurczyk, J.M.; Madajska, K.; Götz, M.; Berger, L.; Guerra-Nuñez, C.; Haverkamp, C.; Szymanska, I.; Utke, I., *Towards the third dimension in direct electron beam writing of silver*, *Beilstein J. Nanotechnol.* **9**, 842-849 (2018), 10.3762/bjnano.9.78

Homburg, T.; Tschense, C.B.L.; Wolkersdoerfer, K.; Reinsch, H.; Wark, M.; Többens, D.; Zander, S.; Senker, J.; Stock, N., *Magnesium doped Gallium Phosphonates Ga<sub>1-x</sub>Mg<sub>x</sub>[H<sub>3+x</sub>(O<sub>3</sub>PCH<sub>2</sub>)<sub>3</sub>N] (x = 0, 0.20) and the influence on proton conductivity*, *Z. Anorg. Allg. Chem.* **644**, 86-91 (2018), 10.1002/zaac.201700371



- Hoser, A.; Köbler, U., *Linear spin chains in paramagnetic and in ordered bulk magnets*, *Phys. B* **551**, 83-88 (2018), 10.1016/j.physb.2018.01.017
- Huang, Q.; Liu, J.; Zhang, L.; Xu, S.; Chen, L.; Wang, P.; Ivey, D.; Wei, W., *Tailoring alternating heteroepitaxial nanostructures in Na-ion layered oxide cathodes via an in-situ composition modulation route*, *Nano Energy* **44**, 336-344 (2018), 10.1016/j.nanoen.2017.12.014
- Huesges, Z.; Kliemt, K.; Krellner, C.; Sarkar, R.; Klauß, H.-H.; Geibel, C.; Rotter, M.; Novák, P.; Kunes, J.; Stockert, O., *Analysis of the crystal electric field parameters of YbNi<sub>4</sub>P<sub>2</sub>*, *New J. Phys.* **20**, 073021/1-10 (2018), 10.1088/1367-2630/aace35
- Huesges, Z.; Schmalzl, K.; Geibel, C.; Brando, M.; Steglich, F.; Stockert, O., *Robustness of magnons near the quantum critical point in the heavy-fermion superconductor CeCu<sub>2</sub>Si<sub>2</sub>*, *Phys. Rev. B* **98**, 134425/1-6 (2018), 10.1103/PhysRevB.98.134425
- Hwang, J.-G.; Kim, E.-S., *Generation of femtosecond extreme ultraviolet pulses using low-energy electron beams for a pump-probe experiment*, *Nucl. Instrum. Methods Phys. Res. Sect. A* **906**, 159-163 (2018), 10.1016/j.nima.2018.07.092
- Imber, M.; Vu Van Loi, ; Reznikov, S.; Fritsch, V.N.; Pietrzyk-Brzezinska, A.J.; Prehn, J.; Hamilton, C.; Wahl, M.C.; Bronowska, A.K.; Antelmann, H., *The aldehyde dehydrogenase AldA contributes to the hypochlorite defense and is redox-controlled by protein S-bacillithiolation in Staphylococcus aureus*, *Redox Biol.* **15**, 557-568 (2018), 10.1016/j.redox.2018.02.001
- Ince, U.U.; Markötter, H.; George, M.G.; Liu, H.; Ge, N.; Lee, J.; Alrwashdeh, S.S.; Zeis, R.; Messerschmidt, M.; Scholta, J.; Bazylak, A.; Manke, I., *Effects of compression on water distribution in gas diffusion layer materials of PEMFC in a point injection device by means of synchrotron X-ray imaging*, *Int. J. Hydrogen Energ.* **43**, 391-406 (2018), 10.1016/j.ijhydene.2017.11.047
- Iqbal, Y.; Müller, T.; Jeschke, H.; Thomale, R.; Reuther, J., *Stability of the spiral spin liquid in MnSc<sub>2</sub>S<sub>4</sub>*, *Phys. Rev. B* **98**, 064427/1-11 (2018), 10.1103/PhysRevB.98.064427
- Isaac, A.; Antunes, F.A.F.; Conti, R.; Montoro, L.A.; Malachias, A.; Massara, P.; Kitten, G.; Markötter, H.; Manke, I.; da Silva, S.S., *Unveiling 3D physicochemical changes of sugarcane bagasse during sequential acid/alkali pretreatments by synchrotron phase-contrast Imaging*, *Ind. Cro. Prod.* **114**, 19-27 (2018), 10.1016/j.indcrop.2018.01.028
- Jacobsen, H.; Holm, S.; Lacatusu, M.; Rømer, A.; Bertelsen, M.; Boehm, M.; Toft-Petersen, R.; Grivel, J.; Emery, S.; Udby, L.; Wells, B.; Lefmann, K., *Distinct Nature of Static and Dynamic Magnetic Stripes in Cuprate Superconductors*, *Phys. Rev. Lett.* **120**, 037003/1-5 (2018), 10.1103/PhysRevLett.120.037003
- Jäger, K.; Köppel, G.; Hammerschmidt, M.; Burger, S.; Becker, C., *On accurate simulations of thin-film solar cells with a thick glass superstrate*, *Opt. Express* **26**, A99-A107 (2018), 10.1364/OE.26.000A99
- Jäger, R.; Kasatkin, P.; Härk, E.; Teppor, P.; Romann, T.; Härmas, R.; Tallo, I.; Mäeorg, U.; Joost, U.; Paiste, P.; Kirsimäe, K.; Lust, E., *The effect of N precursors in Fe-N/C type catalysts based on activated silicon carbide derived carbon for oxygen reduction activity at various pH values*, *J. Electroanal. Chem.* **823**, 593-600 (2018), 10.1016/j.jelechem.2018.06.040

- Jay, R.; Eckert, S.; Fondell, M.; Miedema, P.; Norell, J.; Pietzsch, A.; Quevedo, W.; Niskanen, J.; Kunnus, K.; Föhlisch, A., *The nature of frontier orbitals under systematic ligand exchange in (pseudo-)octahedral Fe(II) complexes*, *Phys. Chem. Chem. Phys.* **20**, 27745-27751 (2018), 10.1039/c8cp04341h
- Jay, R.; Norell, J.; Eckert, S.; Hantschmann, M.; Beye, M.; Kennedy, B.; Quevedo, W.; Schlotter, W.; Dakovski, G.; Minitti, M.; Hoffmann, M.; Mitra, A.; Moeller, S.; Nordlund, D.; Zhang, W.; Liang, H.; Kunnus, K.; Kubicek, K.; Techert, S.; Lundberg, M.; W., *Disentangling Transient Charge Density and Metal-Ligand Covalency in Photoexcited Ferricyanide with Femtosecond Resonant Inelastic Soft X-ray Scattering*, *J. Phys. Chem. Lett.* **9**, 3538-3543 (2018), 10.1021/acs.jpcllett.8b01429
- Jerliu, B.; Hüger, E.; Dörrer, L.; Seidlhofer, B.-K.; Steitz, R.; Horisberger, M.; Schmidt, H., *Lithium insertion into silicon electrodes studied by cyclic voltammetry and operando neutron reflectometry*, *Phys. Chem. Chem. Phys.* **20**, 23480-23491 (2018), 10.1039/C8CP03540G
- Jia, H.; Gao, H.; Mei, S.; Kneer, J.; Lin, X.; Ran, Q.; Wang, F.; Palzer, S.; Lu, Y., *Cu<sub>2</sub>O@PNIPAM core-shell microgels as novel inkjet materials for the preparation of CuO hollow porous nanocubes gas sensing layers*, *J. Mater. Chem. C* **6**, (2018), 10.1039/c8tc01995a
- Jia, L.; Bogdanoff, P.; Schmid, M.; Bloeck, U.; Fiechter, S.; Wang, H., *Reconstruction of Solar Fuel Ultrathin Films via Periodically Microbending for Efficient Photoelectrochemical Water Splitting*, *ACS Appl. En. Mat.* **1**, 6748–6757 (2018), 10.1021/acsaem.8b01654
- Jian, J.; Jiang, G.; van de Krol, R.; Wei, B.; Wang, H., *Recent advances in rational engineering of multinary semiconductors for photoelectrochemical hydrogen generation*, *Nano Energy* **51**, 457-480 (2018), 10.1016/j.nanoen.2018.06.074
- Jimenez, C.; Paeplow, M.; Kamm, P.; Neu, T.; Klaus, M.; Wagener, G.; Banhart, J.; Genzel, C.; Garcia-Moreno, F., *Simultaneous X-ray radioscopy/tomography and energy-dispersive diffraction applied to liquid aluminium alloy foams*, *J. Synchrot. Radiat.* **25**, 1790-1796 (2018), 10.1107/S1600577518011657
- Jones, T.E.; Wyrwich, R.; Böcklein, S.; Carbonio, E.A.; Greiner, M.T.; Klyushin, A.Yu.; Moritz, W.; Locatelli, A.; Mente, T.O.; Niño, M.A.; Knop-Gericke, A.; Schlögl, R.; Günther, S.; Wintterlin, J.; Piccinin, S., *The selective species in ethylene epoxidation on silver*, *ACS Catal.* **8**, 3844-3852 (2018), 10.1021/acscatal.8b00660
- Jošt, M.; Köhnen, E.; Morales-Vilches, A.B.; Lipovšek, B.; Jäger, K.; Macco, B.; Al-Ashouri, A.; Krc, J.; Korte, L.; Rech, B.; Schlatmann, R.; Topic, M.; Stannowski, B.; Albrecht, S., *Textured interfaces in monolithic perovskite/silicon tandem solar cells: advanced light management for improved efficiency and energy yield*, *En. Envir. Science* **11**, 3511-3523 (2018), 10.1039/C8EE02469C
- Kamiya, Y.; Ge, L.; Hong, T.; Qiu, Y.; Quintero-Castro, D.L.; Lu, Z.; Cao, H.B.; Matsuda, M.; Choi, E.S.; Batista, C.D.; Mourigal, M.; Zhou, H.D.; Ma, J., *The nature of spin excitations in the one-third magnetization plateau phase of Ba<sub>3</sub>CoSb<sub>2</sub>O<sub>9</sub>*, *Nat. Commun.* **9**, 279788 (2018), 10.1038/s41467-018-04914-1
- Kanduc, M.; Eixeres, L.; Liese, S.; Netz, R., *Generalized line tension of water nanodroplets*, *Phys. Rev. E* **98**, 032804/1-6 (2018), 10.1103/PhysRevE.98.032804

- Kanduc, M.; Kim, W.; Roa, R.; Dzubiella, J., *Selective Molecular Transport in Thermoresponsive Polymer Membranes: Role of Nanoscale Hydration and Fluctuations*, *Macromolecules* **51**, 4853-4864 (2018), 10.1021/acs.macromol.8b00735
- Kardjilov, N.; Manke, I.; Woracek, R.; Hilger, A.; Banhart, J., *Advances in neutron imaging*, *Mater. Today* **21**, 652-672 (2018), 10.1016/j.mattod.2018.03.001
- Karimi, F.; Riglos, M.; Santoru, A.; Hoell, A.; Raghuvanshi, V.; Milanese, C.; Bergemann, N.; Pistidda, C.; Nolis, P.; Baro, M.; Gizer, G.; Le, T.; Pranzas, P.; Dornheim, M.; Klassen, T.; Schreyer, A.; Puszkil, J., *In Situ Formation of TiB<sub>2</sub> Nanoparticles for Enhanced Dehydrogenation/Hydrogenation Reaction Kinetics of LiBH<sub>4</sub>-MgH<sub>2</sub> as a Reversible Solid-State Hydrogen Storage Composite System*, *J. Phys. Chem. C* **122**, 11671-11679 (2018), 10.1021/acs.jpcc.8b02258
- Kartouzian, D.; Mohseninia, A.; Markötter, H.; Scholta, J., *Neutron Tomographic Investigation of the Effect of Hydrophobicity Gradients within MPL and MEA on the Spatial Distribution and Transport of Liquid Water in PEMFCs*, *ECS Trans.* **85**, 927-934 (2018), 10.1149/08513.0927ecst
- Kataev, E.Yu.; Usachov, D.Yu.; Frolov, A.S.; Rulev, A.A.; Volykhov, A.A.; Kozmenkova, A.Ya.; Krivenkov, M.; Marchenko, D.; Varykhalov, A.; Kuznetsov, M.V.; Vyalikh, D.V.; Yashina, L.V., *Native and graphene-coated flat and stepped surfaces of TiC*, *Carbon* **132**, 656-666 (2018), 10.1016/j.carbon.2018.02.065
- Kellner, J.; Bihlmayer, G.; Liebmann, M.; Otto, S.; Pauly, C.; Boschker, J. E.; Bragaglia, V.; Cecchi, S.; Wang, R. N.; Deringer, V. L.; Küppers, P.; Bhaskar, P.; Golias, E.; Sánchez-Barriga, J.; Dronskowski, R.; Fauster, T.; Rader, O.; Calarco, R.; Morge, *Mapping the band structure of GeSbTe phase change alloys around the Fermi level*, *Comm. Phys.* **1**, 40548 (2018), 10.1038/s42005-018-0005-8
- Kermadi, S.; Sali, S.; Zougar, L.; Boumaour, M.; Gunder, R.; Schorr, S.; Izquierdo-Roca, V.; Pérez-Rodríguez, A., *An in-depth investigation on the grain growth and the formation of secondary phases of ultrasonic-sprayed Cu<sub>2</sub>ZnSnS<sub>4</sub> based thin films assisted by Na crystallization catalyst*, *Sol. Energy* **176**, 277-286 (2018), 10.1016/j.solener.2018.10.045
- Khomchenko, V.A.; Karpinsky, D.V.; Troyanchuk, I.O.; Sikolenko, V.V.; Toebbens, D.M.; Ivanov, M.S.; Silibin, M.V.; Rai, R.; Paixao, J.A., *Polar-antipolar transition and weak ferromagnetism in Mn-doped Bi<sub>0.86</sub>La<sub>0.14</sub>FeO<sub>3</sub>*, *J. Phys. D. Appl. Phys.* **51**, 165001/1-6 (2018), 10.1088/1361-6463/aab58f
- Kidakova, A.; Reut, J.; Rappich, J.; Öpik, A.; Syritski, V., *Preparation of a surface-grafted protein-selective polymer film by combined use of controlled/living radical photopolymerization and microcontact imprinting*, *React. Funct. Poly.* **125**, 47-56 (2018), 10.1016/j.reactfunctpolym.2018.02.004
- Kidalov, S.V.; Shnitov, V.V.; Baidakova, M.V.; Brzhezinskaya, M.; Dideikin, A.T.; Shestakov, M.S.; Smirnov, D.A.; Serenkov, I.T.; Sakharov, V.I.; Sokolov, V.V.; Tatarnikov, N.I.; Vul, A.Ya., *Chemical composition of surface and structure of defects in diamond single crystals produced from detonation nanodiamonds*, *Nanosyst.* **9**, 21-24 (2018), 10.17586/2220-8054-2018-9-1-21-24
- Kiermasch, D.; Gil-Escrig, L.; Bolink, H.; Tvingstedt, K., *Effects of Masking on Open-Circuit Voltage and Fill Factor in Solar Cells*, *Joule* **3**, 16-26 (2018), 10.1016/j.joule.2018.10.016

Kipgen, L.; Bernien, M.; Ossinger, S.; Nickel, F.; Britton, A.J.; Arruda, L.M.; Naggert, H.; Luo, C.; Lotze, C.; Ryll, H.; Radu, F.; Schierle, E.; Weschke, E.; Tuczek, F.; Kuch, W., *Evolution of cooperativity in the spin transition of an iron(II) complex on a graphite surface*, Nat. Commun. **9**, 395932 (2018), 10.1038/s41467-018-05399-8

Kirchartz, T.; Krückemeier, L.; Unger, E.L., *Research Update: Recombination and open-circuit voltage in lead-halide perovskites*, APL Mater. **6**, 100702/1-25 (2018), 10.1063/1.5052164

Klyushin, A.; Jones, T.; Lunkenbein, T.; Kube, P.; Li, X.; Hävecker, M.; Knop-Gericke, A.; Schlögl, R., *Strong Metal Support Interaction as a Key Factor of Au Activation in CO Oxidation*, ChemCatChem **10**, 3985-3989 (2018), 10.1002/cctc.201800972

Klyushina, E.; Islam, N.; Park, J.; Goremychkin, E.; Wheeler, E.; Klemke, B.; Lake, B., *Hamiltonian of the  $S=\frac{1}{2}$  dimerized antiferromagnetic-ferromagnetic quantum spin-chain  $BaCu_2VO_8$* , Phys. Rev. B **98**, 104413/1-13 (2018), 10.1103/PhysRevB.98.104413

Kodalle, T.; Heinemann, M.D.; Greiner, D.; Yetkin, H.A.; Klupsch, M.; Li, C.; Aken, P.A. van; Lauer mann, I.; Schlatmann, R.; Kaufmann, C.A., *Elucidating the Mechanism of an RbF Post Deposition Treatment in CIGS Thin Film Solar Cells*, Sol. RRL **2**, 1800156/1-9 (2018), 10.1002/solr.201800156

Kölbach, M.; Pereira, I.; Harbauer, K.; Plate, P.; Höflich, K.; Berglund, S.; Friedrich, D.; Van de Krol, R.; Abdi, F., *Revealing the Performance-Limiting Factors in a-SnWO<sub>4</sub> Photoanodes for Solar Water Splitting*, Chem. Mater. **30**, 8322-8331 (2018), 10.1021/acs.chemmater.8b03883

Konashuk, A.S.; Samoilenko, D.O.; Klyushin, A.Y.; Svirskiy, G.I.; Sakhonenkov, S.S.; Brykalova, X.O.; Kuz'Mina, M.A.; Filatova, E.O.; Vinogradov, A.S.; Pavlychev, A.A., *Thermal changes in young and mature bone nanostructure probed with Ca 2p excitations*, Biomed. Phys. Eng. Express **4**, 035031/1-9 (2018), 10.1088/2057-1976/aab92b

Körner, S.; Hartig, M.; Muydinov, R.; Erfurt, D.; Klenk, R.; Szyszka, B.; Schlatmann, R., *Serial cosputtering for aluminum doping manipulated zinc oxide as front contact for Cu(In,Ga)Se<sub>2</sub> solar cells*, Jap. J. Appl. Phys. **57**, 08RC18-1-08RC18-7 (2018), 10.7567/JJAP.57.08RC18

Kot, M.; Kegelmann, L.; Das, C.; Kus, P.; Tsud, N.; Matolinova, I.; Albrecht, S.; Matolin, V.; Schmeisser, D., *Room Temperature Atomic Layer Deposited Al<sub>2</sub>O<sub>3</sub> Improves the Efficiency of Perovskite Solar Cells over Time*, ChemSusChem **11**, 3640-3648 (2018), 10.1002/cssc.201801434

Kovaliuk, T.T.; Solovan, M.M.; Parfenyuk, O.A.; Brus, V.V.; Koziarskyi, I.P.; Maryanchuk, P.D., *Influence of technological conditions on optical and structural properties of molybdenum oxide thin films*, **0**, 1061210/1-3 (2018), 10.1117/12.2304772

Kozhevnikov, S.; Ignatovich, V.; Radu, F., *On the Application of Zeeman Spatial Beam Splitting in Polarized Neutron Reflectometry*, J. Surf. Invest. **12**, 103-113 (2018), 10.1134/S1027451018010275

Kozhevnikov, S.; Khaidukov, Y.; Ott, F.; Radu, F., *Channeling of Neutrons in the Potential Well of a Planar Waveguide*, J. Exp. Theor. Phys. **126**, 592-599 (2018), 10.1134/S1063776118040064

Kozhevnikov, S.; Ott, F.; Radu, F., *Methods for Probing Magnetic Films with Neutrons*, Phys. Part. Nucl. **49**, 308-330 (2018), 10.1134/S1063779618020053

Kozhevnikov, S.V.; Zhaketov, V.D.; Radu, F., *Neutron Microbeam from a Planar Waveguide*, J. Exp. Theor. Phys. **127**, 593-607 (2018), 10.1134/S1063776118100163

Kraffert, K.; Kabelitz, A.; Siemensmeyer, K.; Schmack, R.; Bernsmeier, D.; Emerling, F.; Kraehnert, R., *Nanocasting of Superparamagnetic Iron Oxide Films with Ordered Mesoporosity*, *Adv. Mater. Interfaces* **5**, 1700960/1-8 (2018), 10.1002/admi.201700960

Krause, S.; Bon, V.; Senkovska, I.; Töbrens, D.; Wallacher, D.; Pillai, R.; Maurin, G.; Kaskel, S., *The effect of crystallite size on pressure amplification in switchable porous solids*, *Nat. Commun.* **9**, 1573 (2018), 10.1038/s41467-018-03979-2

Krzywinski, J.; Conley, R.; Moeller, S.; Gwalt, G.; Siewert, F.; Waberski, C.; Zeschke, T.; Cocco, D., *Damage thresholds for blaze diffraction gratings and grazing incidence optics at an X-ray free-electron laser*, *J. Synchrot. Radiat.* **25**, 85-90 (2018), 10.1107/S1600577517016083

Kubin, M.; Guo, M.; Ekimova, M.; Baker, M.; Kroll, T.; Källman, E.; Kern, J.; Yachandra, V.; Yano, J.; Nibbering, E.; Lundberg, M.; Wernet, P., *Direct Determination of Absolute Absorption Cross Sections at the L-Edge of Dilute Mn Complexes in Solution Using a Transmission Flatjet*, *Inorg. Chem.* **57**, 5449-5462 (2018), 10.1021/acs.inorgchem.8b00419

Kubin, M.; Guo, M.; Ekimova, M.; Kern, J.; Yachandra, V.; Yano, J.; Nibbering, E.; Lundberg, M.; Wernet, P., *Cr L-Edge X-ray Absorption Spectroscopy of CrIII(acac)3 in Solution with Measured and Calculated Absolute Absorption Cross Sections*, *J. Phys. Chem. B* **122**, 7375-7384 (2018), 10.1021/acs.jpcc.8b04190

Kubin, M.; Guo, M.; Kroll, T.; Löchel, H.; Källman, E.; Baker, M.; Mitzner, R.; Gul, S.; Kern, J.; Föhlisch, A.; Erko, A.; Bergmann, U.; Yachandra, V.; Yano, J.; Lundberg, M.; Wernet, Ph., *Probing the Oxidation State of Transition Metal Complexes: A Case Study on How Charge and Spin Densities Determine Mn L-Edge X-ray Absorption Energies*, *Chem. Sci.* **9**, 6813-6829 (2018), 10.1039/c8sc00550h

Kubin, M.; Kern, J.; Guo, M.; Källman, E.; Mitzner, R.; Yachandra, V.; Lundberg, M.; Yano, J.; Wernet, P., *X-ray-induced sample damage at the Mn L-edge: a case study for soft X-ray spectroscopy of transition metal complexes in solution*, *Phys. Chem. Chem. Phys.* **20**, 16817-16827 (2018), 10.1039/c8cp03094d

Kuchler, K.; Prifling, B.; Schmidt, D.; Markötter, H.; Manke, I.; Bernthaler, T.; Knoblauch, V.; Schmidt, V., *Analysis of the 3D microstructure of experimental cathode films for lithium-ion batteries under increasing compaction*, *J. of Microsc.* **272**, 96-110 (2018), 10.1111/jmi.12749

Kuchler, K.; Westhoff, D.; Feinauer, J.; Mitsch, T.; Manke, I.; Schmidt, V., *Stochastic model for the 3D microstructure of pristine and cyclically aged cathodes in Li-ion batteries*, *Model. Simul. Mater. Sci. Eng.* **26**, 035005/1-33 (2018), 10.1088/1361-651X/aaa6da

Kühn, D.; Sorgenfrei, F.; Giangrisostomi, E.; Jay, R.; Musazay, A.; Ovsyannikov, R.; Stråhlman, C.; Svensson, S.; Mårtensson, N.; Föhlisch, A., *Capabilities of Angle Resolved Time of Flight electron spectroscopy with the 60 degrees wide angle acceptance lens*, *J. Electr. Spectr.* **224**, 45-50 (2018), 10.1016/j.elspec.2017.06.008

Kultaeva, A.; Bon, V.; Weiss, M.S.; Pöppel, A.; Kaskel, S., *Elucidating the Formation and Transformation Mechanisms of the Switchable Metal-Organic Framework ELM-11 by Powder and Single-Crystal EPR Study*, *Inorg. Chem.* **57**, 11920-11929 (2018), 10.1021/acs.inorgchem.8b01241

Kumar, S.H.B.V.; Muydinov, R.; Kol'tsova, T.; Erfurt, D.; Steigert, A.; Tolochko, O.; Szyszka, B., *Graphene assisted effective hole-extraction on In2O3:H/CH3NH3PbI3 interface: Studied by modulated surface spectroscopy*, *Appl. Phys. Lett.* **112**, 011604/1-3 (2018), 10.1063/1.5017579

- Kumar, V.; Reehuis, M.; Hoser, A.; Adler, P.; Felser, C., *Crystal and magnetic structure of antiferromagnetic Mn<sub>2</sub>PtPd*, J. Phys.: Condens. Matter **30**, 265803/1-6 (2018), 10.1088/1361-648X/aac6fb
- Kurdyukov, D.A.; Eurov, D.A.; Rabchinskii, M.K.; Shvidchenko, A.V.; Baidakova, M.V.; Kirilenko, D.A.; Koniakhin, S.V.; Shnitov, V.V.; Sokolov, V.V.; Brunkov, P.N.; Dideikin, A.T.; Sgibnev, Y.M.; Mironov, L.Yu.; Smirnov, D.A.; Vul, A.Ya.; Golubev, V.G., *Controllable spherical aggregation of monodisperse carbon nanodots*, Nanoscale **10**, 13223-13235 (2018), 10.1039/c8nr01900b
- Kurpiers, J.; Ferron, T.; Roland, S.; Jakoby, M.; Thiede, T.; Jaiser, F.; Albrecht, S.; Janietz, S.; Collins, B.A.; Howard, I.; Neher, D., *Probing the pathways of free charge generation in organic bulk heterojunction solar cells*, Nat. Commun. **9**, 50416 (2018), 10.1038/s41467-018-04386-3
- Kutukova, K.; Liao, Z.; Werner, S.; Guttmann, P.; Standke, Y.; Gluch, J.; Schneider, G.; Zschech, E., *In-situ X-ray microscopy of crack-propagation to study fracture mechanics of on-chip interconnect structures*, MRS Adv. **3**, 2305-2310 (2018), 10.1557/adv.2018.410
- Kutzschbach, M.; Guttmann, P.; Marquardt, K.; Werner, S.; Henzler, K. D.; Wilke, M., *A transmission x-ray microscopy and NEXAFS approach for studying corroded silicate glasses at the nanometre scale*, Phys. Chem. Glass. B **59**, 46327 (2018), 10.13036/17533562.59.1.043
- Kyndiah, A.; Ablat, A.; Guyot-Reeb, S.; Schultz, T.; Zu, F.; Koch, N.; Amsalem, P.; Chiodini, S.; Yilmaz Alic, T.; Topal, Y.; Kus, M.; Hirsch, L.; Fasquel, S.; Abbas, M., *A Multifunctional Interlayer for Solution Processed High Performance Indium Oxide Transistors*, Sci. Rep. **8**, 10946/1-7 (2018), 10.1038/s41598-018-29220-0
- Lähderanta, E.; Lisunov, K.; Shakhov, M.A.; Guc, M.; Hajdeu-Chicarosh, E.; Levchenko, S.; Zakharchuk, I.; Arushanov, E., *High-field hopping magnetotransport in kesterites*, J. Magn. Magn. Mater. **459**, 246-251 (2018), 10.1016/j.jmmm.2017.10.094
- Lamers, M.; Fiechter, S.; Friedrich, D.; Abdi, F.; Van de Krol, R., *Formation and suppression of defects during heat treatment of BiVO<sub>4</sub> photoanodes for solar water splitting*, J. Mater. Chem. A **6**, 18694-18700 (2018), 10.1039/c8ta06269b
- Lamers, M.; Li, W.; Favaro, M.; Starr, D.E.; Friedrich, D.; Lardhi, S.; Cavallo, L.; Harb, M.; Van de Krol, R.; Wong, L.; Abdi, F.F., *Enhanced Carrier Transport and Bandgap Reduction in Sulfur-Modified BiVO<sub>4</sub> Photoanodes*, Chem. Mater. **30**, 8630-8638 (2018), 10.1021/acs.chemmater.8b03859
- Lampen-Kelley, P.; Rachel, S.; Reuther, J.; Yan, J.; Banerjee, A.; Bridges, C.; Cao, H.; Nagler, S.; Mandrus, D., *Anisotropic susceptibilities in the honeycomb Kitaev system alpha-RuCl<sub>3</sub>*, Phys. Rev. B **98**, 100403(R)/1-6 (2018), 10.1103/PhysRevB.98.100403
- Lamperti, A.; Cianci, E.; Ciprian, R.; Capasso, L.; Weschke, E.; Debernardi, A., *Magnetic properties of iron doped zirconia as a function of Fe concentration: From ab initio simulations to the growth of thin films by atomic layer deposition and their characterization by synchrotron radiation*, J. Vacuum Sc. Techn. A **36**, 02D404/1-7 (2018), 10.1116/1.5016028
- Lang, F.; Shargaieva, O.; Brus, V.; Neitzert, H.C.; Rappich, J.; Nickel, N.H., *Influence of Radiation on the Properties and the Stability of Hybrid Perovskites*, Adv. Mat. **30**, 1702905/1-22 (2018), 10.1002/adma.201702905

- Lang, F.; Shargaieva, O.; Brus, V.V.; Rappich, J.; Nickel, N.H., *Creation and annealing of metastable defect states in CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> at low temperatures*, Appl. Phys. Lett. **112**, 081102/1-3 (2018), 10.1063/1.5019921
- Lanzilotto, V.; Silva, J.; Zhang, T.; Stredansky, M.; Grazioli, C.; Simonov, K.; Giangrisostomi, E.; Ovsyannikov, R.; De Simone, M.; Coreno, M.; Araujo, C.; Brena, B.; Puglia, C., *Spectroscopic Fingerprints of Intermolecular H-Bonding Interactions in Carbon Nitride Model Compounds*, Chem. - a Eur. J. **24**, 14198-14206 (2018), 10.1002/chem.201802435
- Le, T.; Pistidda, C.; Puzkiel, J.; Castro Riglos, M.; Karimi, F.; Skibsted, J.; Gharibdoust, S.; Richter, B.; Emmeler, T.; Milanese, C.; Santoru, A.; Hoell, A.; Krumrey, M.; Gericke, E.; Akiba, E.; Jensen, T.; Klassen, T.; Dornheim, M., *Design of a Nanometric AlTi Additive for MgB<sub>2</sub>-Based Reactive Hydride Composites with Superior Kinetic Properties*, J. Phys. Chem. C **122**, 7642-7655 (2018), 10.1021/acs.jpcc.8b01850
- Leitner, T.; Josefsson, I.; Mazza, T.; Miedema, P.; Schröder, H.; Beye, M.; Kunnus, K.; Schreck, S.; Düsterer, S.; Föhlich, A.; Meyer, M.; Odelius, M.; Wernet, P., *Time-resolved electron spectroscopy for chemical analysis of photodissociation: Photoelectron spectra of Fe(CO)<sub>5</sub>, Fe(CO)<sub>4</sub>, and Fe(CO)<sub>3</sub>*, J. Chem. Phys. **149**, 044307/1-12 (2018), 10.1063/1.5035149
- Levcenko, S.; Hajdeu-Chicarosh, E.; Garcia-Llamas, E.; Caballero, R.; Serna, R.; Bodnar, I.V.; Victorov, I.A.; Guc, M.; Merino, J.M.; Pérez-Rodríguez, A.; Arushanov, E.; León, M., *Spectroscopic ellipsometry study of Cu<sub>2</sub>ZnSnS<sub>4</sub> bulk poly-crystals*, Appl. Phys. Lett. **112**, 161901/1-5 (2018), 10.1063/1.5024683
- Li, J.; Dobrovolsky, A.; Merdasa, A.; Unger, E.L.; Scheblykin, I.G., *Luminescent Intermediates and Humidity-Dependent Room-Temperature Conversion of the MAPbI<sub>3</sub> Perovskite Precursor*, ACS Omega **3**, 14494-14502 (2018), 10.1021/acsomega.8b01799
- Li, Z.; Liu, X.; Causer, G.; Lin, K.; Pong, P.; Holt, S.; Klose, F.; Li, Y., *Structural evolution of a Ni/NiOx based supercapacitor in cyclic charging-discharging: A polarized neutron and X-ray reflectometry study*, Electrochim. Acta **290**, 118-127 (2018), 10.1016/j.electacta.2018.09.051
- Lin, X.; Madhavanc, V.E.; Kavalakkatt, J.; Hinrichs, V.; Laueremann, I.; Lux-Steiner, M.Ch.; Ennaoui, A.; Klenk, R., *Inkjet-printed CZTSSe absorbers and influence of sodium on device performance*, Solar Energy Mat Solar Cells **180**, 373-380 (2018), 10.1016/j.solmat.2017.09.003
- Lin, Y.; Arlt, T.; Kardjilov, N.; Manke, I.; Lehnert, W., *Operando Neutron Radiography Analysis of a High Temperature Polymer Electrolyte Fuel Cell based on a Phosphoric Acid-Doped Polybenzimidazole Membrane Using the Hydrogen-Deuterium Contrast Method*, Energ. **11**, 114701 (2018), 10.3390/en11092214
- Linnenbank, H.; Saliba, M.; Gui, L.; Metzger, B.; Tikhodeev, S.; Kadro, J.; Nasti, G.; Abate, A.; Hagfeldt, A.; Grätzel, M.; Giessen, H., *Temperature dependent two-photon photoluminescence of CH<sub>3</sub>NH<sub>3</sub>PbBr<sub>3</sub>: structural phase and exciton to free carrier transition*, Opt. Mat. Expr. **8**, 511/1-11 (2018), 10.1364/OME.8.000511
- Liu, C.; Hübner, R.; Xie, Y.; Wang, M.; Xu, C.; Jiang, Z.; Weschke, E., *Ultra-fast annealing manipulated spinodal nano-decomposition in Mn-implanted Ge*, Nanotechnology **30**, 54001 (2018), 10.1088/1361-6528/aaefb1

- Liu, D.; Wang, Q.; Elinski, M.; Chen, P.; Traverse, C.; Yang, C.; Young, M.; Hamann, T.; Lunt, R., *Ultrathin Hole Extraction Layer for Efficient Inverted Perovskite Solar Cells*, ACS Omega **3**, 6339-6345 (2018), 10.1021/acsomega.8b00741
- Liu, H.; Zhang, X.; He, X.; Senyshyn, A.; Wilken, A.; Zhou, D.; Fromm, O.; Niehoff, P.; Yan, B.; Li, J.; Muehlbauer, M.; Wang, J.; Schumacher, G.; Paillard, E.; Winter, M.; Li, J., *Truncated Octahedral High-Voltage Spinel LiNi<sub>0.5</sub>Mn<sub>1.5</sub>O<sub>4</sub> Cathode Materials for Lithium Ion Batteries: Positive Influences of Ni/Mn Disorder and Oxygen Vacancies*, J. Electrochem. Soc. **165**, A1886-A1896 (2018), 10.1149/2.1241809jes
- Liu, J.; Savici, A.; Granroth, G.; Habicht, K.; Qiu, Y.; Hu, J.; Mao, Z.; Bao, W., *A Triplet Resonance in Superconducting Fe<sub>1.03</sub>Se<sub>0.4</sub>Te<sub>0.6</sub>*, Chin. Phys. Lett. **35**, 127401/1-4 (2018), 10.1088/0256-307X/35/12/127401
- Liu, L.; Ning, D.; Zheng, L.; Zhang, Q.; Gu, L.; Gao, R.; Zhang, J.; Franz, A.; Schumacher, G.; Liu, X., *Improving the electrochemical performances of Li-rich Li<sub>1.20</sub>Ni<sub>0.13</sub>Co<sub>0.13</sub>Mn<sub>0.54</sub>O<sub>2</sub> through a cooperative doping of Na(+) and PO<sub>4</sub>(3+) with Na<sub>3</sub>PO<sub>4</sub>*, J. Power Sourc. **375**, 43739 (2018), 10.1016/j.jpowsour.2017.11.042
- Liu, X.; Wimpory, R.C.; Gong, H.; Liu, Y.; Chen, D.; Liu, Y.; Wu, Y.; Li, C., *The Determination of Residual Stress in Quenched and Cold-Compressed 7050 Aluminum Alloy T-Section Forgings by the Contour Method and Neutron Diffraction*, J. Mater. Eng. Perform. **27**, 6049–6057 (2018), 10.1007/s11665-018-3676-0
- Liu, Y.; Ning, D.; Zheng, L.; Zhang, Q.; Gu, L.; Gao, R.; Zhang, J.; Franz, A.; Schumacher, G.; Liu, X., *Improving the electrochemical performances of Li-rich Li<sub>1.20</sub>Ni<sub>0.13</sub>Co<sub>0.13</sub>Mn<sub>0.54</sub>O<sub>2</sub> through a cooperative doping of Na<sup>+</sup> and PO<sub>4</sub><sup>3-</sup> with Na<sub>3</sub>PO<sub>4</sub>*, J. Power Sourc. **375**, 43739 (2018), 10.1016/j.jpowsour.2017.11.042
- Lo Celso, F.; Yoshida, Y.; Lombardo, R.; Jafta, C.; Gontrani, L.; Triolo, A.; Russina, O., *Mesoscopic structural organization in fluorinated room temperature ionic liquids*, Comptes Rendus Chimie **21**, 757-770 (2018), 10.1016/j.crci.2018.02.001
- Lu, Z.; Ge, L.; Wang, G.; Russina, M.; Günther, G.; Dela Cruz, C.; Sinclair, R.; Zhou, H.; Ma, J., *Lattice distortion effects on the frustrated spin-1 triangular-antiferromagnet A(3)NiNb(2)O(9) (A = Ba, Sr, and Ca)*, Phys. Rev. B **98**, 094412/1-10 (2018), 10.1103/PhysRevB.98.094412
- Luo, Y.; Jiang, W.; Chen, D.; Wimpory, R.C.; Li, M.; Liu, X., *The repaired weld residual stress in tube to tube-sheet joint by neutron diffraction measurement and finite element method*, J. Press. Vessel Technol. **140**, 021404/1-8 (2018), 10.1115/1.4039069
- Lv, Y.; Wang, X.; Gao, D.; Ma, X.; Li, S.; Wang, Y.; Song, G.; Duan, A.; Chen, G., *Hierarchically Porous ZSM-5/SBA-15 Zeolite: Tuning Pore Structure and Acidity for Enhanced Hydro-Upgrading of FCC Gasoline*, Ind. Eng Chem Res **57**, 14031-14043 (2018), 10.1021/acs.iecr.8b02952
- MacQueen, R.W.; Liebhaber, M.; Niederhausen, J.; Mews, M.; Gersmann, C.; Jäckle, S.; Jäger, K.; Tayebjee, M.J.Y.; Schmidt, T.W.; Rech, B.; Lips, K., *Crystalline silicon solar cells with tetracene interlayers: the path to silicon-singlet fission heterojunction devices*, Mater. Horizons **5**, 1065-1075 (2018), 10.1039/C8MH00853A
- Madanat, M.; Liu, M.; Banhart, J., *Reversion of natural ageing in Al-Mg-Si alloys*, Acta Mat. **159**, 163-172 (2018), 10.1016/j.actamat.2018.07.066



Maehrlein, S.; Radu, I.; Maldonado, P.; Paarmann, A.; Gensch, M.; Kalashnikova, A.; Pisarev, R.; Wolf, M.; Oppeneer, P.; Barker, J.; Kampfrath, T., *Dissecting spin-phonon equilibration in ferrimagnetic insulators by ultrafast lattice excitation*, *Sci. Adv.* **4**, eaar5164/1-11 (2018), 10.1126/sciadv.aar5164

Magi, A.; Harmat, P.; Russina, M.; Günther, G.; Mezei, F., *Ready to Use Detector Modules for the NEAT Spectrometer: Concept, Design, First Results*, *AIP Conf. Proc.* **1969**, 040001/1 (2018), 10.1063/1.5039297

Magomedov, A.; Al-Ashouri, A.; Kasparavicius, E.; Strazdaite, S.; Niaura, G.; Jost, M.; Malinauskas, T.; Albrecht, S.; Getautis, V., *Self-Assembled Hole Transporting Monolayer for Highly Efficient Perovskite Solar Cells*, *Adv. Energy Mat.* **8**, 1801892/1-9 (2018), 10.1002/aenm.201801892

Majhi, A.; Nayak, M.; Pradhan, P.C.; Filatova, E.O.; Sokolov, A.; Schäfers, F., *Soft X-ray Reflection Spectroscopy for Nano-Scaled Layered Structure Materials*, *Sci. Rep.* **8**, 15724/1-9 (2018), 10.1038/s41598-018-34076-5

Makhotkin, I.; Milov, I.; Chalopsky, J.; Tiedtke, K.; Enkisch, H.; de Vries, G.; Scholze, F.; Siewert, F.; Sturm, J.; Nicolaev, K.; van de Kruijs, R.; Smithers, M.; van Wolferen, H.; Keim, E.; Louis, E.; Jacyna, I.; Jurek, M.; Klinger, D.; Pelka, J.; Juha, *Damage accumulation in thin ruthenium films induced by repetitive exposure to femtosecond XUV pulses below the single-shot ablation threshold*, *J. the Opt. Soc. America B* **35**, 2799-2805 (2018), 10.1364/JOSAB.35.002799

Makhotkin, I.A.; Sobierajski, R.; Chalopsky, J.; Tiedtke, K.; de Vries, G.; Störmer, M.; Scholze, F.; Siewert, F.; van de Kruijs, R.W. E.; Milov, I.; Louis, E.; Jacyna, I.; Jurek, M.; Klinger, D.; Nittler, La.; Syryanyy, Y.; Juha, L.; Hajkova, V.; Vozda, *Experimental study of EUV mirror radiation damage resistance under long-term free-electron laser exposures below the single-shot damage threshold*, *J. Synchrot. Radiat.* **25**, 77-84 (2018), 10.1107/S1600577517017362

Makowska, M.; Strobl, M.; Kardjilov, N.; Frandsen, H.; Manke, I.; Morgano, M.; Lacatusu, M.; de Angelis, S.; Lauridsen, E.; Kuhn, L., *Investigating phase behavior and structural changes in NiO/Ni-YSZ composite with monochromatic in-situ 2D and static 3D neutron imaging*, *Phy. B* **551**, 24-28 (2018), 10.1016/j.physb.2017.11.026

Manley, P.; Abdi, F.F.; Berglund, S.; Islam, A. T. M. N.; Burger, S.; Krol, R.v.d.; Schmid, M., *Absorption Enhancement for Ultrathin Solar Fuel Devices with Plasmonic Gratings*, *ACS Appl. En. Mat.* **1**, 5810-5815 (2018), 10.1021/acsaem.8b01070

Manley, P.; Song, M.; Burger, S.; Schmid, M., *Efficient determination of bespoke optically active nanoparticle distributions*, *J. Opt.* **20**, 085003/1-11 (2018), 10.1088/2040-8986/aad114

Manzoni, A.; Wallez, G.; Denquin, A.; Prima, F.; Portier, R.; Vermaut, P., *Martensite crystal structure in Ru-based high temperature shape memory alloys*, *Mat. Character.* **142**, 109-114 (2018), 10.1016/j.matchar.2018.05.019

Manzoni, A.M.; Haas, S.; Daoud, H.; Glatzel, U.; Förster, C.; Wanderka, N., *Tensile Behavior and Evolution of the Phases in the Al<sub>10</sub>Co<sub>25</sub>Cr<sub>8</sub>Fe<sub>15</sub>Ni<sub>36</sub>Ti<sub>6</sub> Compositionally Complex/High Entropy Alloy*, *Entr.* **20**, 646/1-20 (2018), 10.3390/e20090646

Marcano, L.; Muñoz, D.; Martín-Rodríguez, R.; Orue, R.; Alonso, J.; García-Prieto, A.; Serrano, A.; Valencia, S.; Abrudan, R.; Fernández Barquín, L.; García-Arribas, A.; Muela, A.; Fdez-Gubieda, M.L., *Magnetic Study of Co-Doped Magnetosome Chains*, *J. Phys. Chem. C* **122**, 7541-7550 (2018), 10.1021/acs.jpcc.8b01187

- Marchenko, D.; Evtushinsky, D.; Golias, E.; Varykhalov, A.; Seyller, Th.; Rader, O., *Extremely flat band in bilayer graphene*, *Sci. Adv.* **4**, eaau0059/1-8 (2018), 10.1126/sciadv.aau0059
- Marciszko, M.; Baczmanski, A.; Klaus, M.; Genzel, C.; Oponowicz, A.; Wronski, S.; Wróbel, M.; Braham, C.; Sidhom, H.; Wawszczak, R., *A multireflection and multiwavelength residual stress determination method using energy dispersive diffraction*, *J. Appl. Crystallogr.* **51**, 732-745 (2018), 10.1107/S1600576718004193
- Maslyanchuk, O.; Solovan, M.; Brus, V.; Maryanchuk, P.; Maistruk, E.; Fodchuk, I.; Gnatyuk, V.; Aoki, T.; Lambropoulos, C.; Potiriadis, C., *Performance Comparison of X-and gamma-Ray CdTe Detectors with MoO<sub>x</sub>, TiO<sub>x</sub>, and TiN Schottky Contacts*, *IEEE Trans. Nucl. Sci.* **65**, 1365-1370 (2018), 10.1109/TNS.2018.2838766
- Maslyanchuk, O.; Solovan, M.; Maistruk, E.; Brus, V.; Maryanchuk, P.; Gnatyuk, V.; Aoki, T., *Prospects of In/CdTe X- and gamma-ray detectors with MoO Ohmic contacts*, **0**, 10612 0V/1-6 (2018), 10.1117/12.2305085
- Massa, N.E.; Campo, L. del; Holldack, Karsten; Ta Phuoc, Vinh; Echegut, Patrick; Kayser, Paula; José, A.A., *Far- and mid-infrared emission and reflectivity of orthorhombic and cubic ErMnO<sub>3</sub>:Polarons and bipolarons*, *Phys. Rev. B* **98**, 184302-184315 (2018), 10.1103/PhysRevB.98.184302
- Massa, N.E.; Holldack, K.; Sopracase, R.; Ta Phuoc, Vinh; del Campo, Leire; Echegut, Patrick; Antonio, José, *Identification of spin wave resonances and crystal field levels in simple chromites RCrO<sub>3</sub> (R = Pr, Sm, Er) at low temperatures in the THz spectral region*, *J. Magn. Magn. Mater.* **468**, 294-303 (2018), 10.1016/j.jmmm.2018.07.028
- Matos, B.R.; Politano, R.; Rey, J.F.Q.; Hermino-Merino, D.; Schade, U.; Puskar, L.; Fonseca, F.C., *Interplay of alpha/beta-Relaxation Dynamics and the Shape of Ionomer Building Blocks*, *Sci. Rep.* **8**, 13441/1-8 (2018), 10.1038/s41598-018-31368-8
- Mazilova, T.I.; Wanderka, N.; Sadanov, E.V.; Mikhailovskij, I.M., *Measurement of the Ideal Strength of Graphene Nanosheets*, *Low Temp. Phys.* **44**, 925-929 (2018), 10.1063/1.5052678
- Mazzarella, L.; Morales-Vilches, A.B.; Hendrichs, M.; Kirner, S.; Korte, L.; Schlatmann, R.; Stannowski, B., *Nanocrystalline n-Type Silicon Oxide Front Contacts for Silicon Heterojunction Solar Cells: Photocurrent Enhancement on Planar and Textured Substrates*, *IEEE J. Photovolt.* **8**, 70-80 (2018), 10.1109/JPHOTOV.2017.2770164
- Mazzarella, L.; Morales-Vilches, A.B.; Korte, L.; Schlatmann, R.; Stannowski, B., *Ultra-thin nanocrystalline n-type silicon oxide front contact layers for rear-emitter silicon heterojunction solar cells*, *Solar Energy Mat Solar Cells* **179**, 386-391 (2018), 10.1016/j.solmat.2018.01.034
- Mazzarella, L.; Werth, M.; Jäger, K.; Jošt, M.; Korte, L.; Albrecht, S.; Schlatmann, R.; Stannowski, B., *Infrared photocurrent management in monolithic perovskite/silicon heterojunction tandem solar cells by using a nanocrystalline silicon oxide interlayer*, *Opt. Express* **26**, A487-A497 (2018), 10.1364/OE.26.00A487
- Mazzio, K.A.; Prasad, S.K.K.; Okamoto, K.; Hodgkiss, J.M.; Luscombe, C.K., *End-Functionalized Semiconducting Polymers as Reagents in the Synthesis of Hybrid II-VI Nanoparticles*, *Langmuir* **34**, 9692-9700 (2018), 10.1021/acs.langmuir.8b01307

- Meier, S.C.; Holz, A.; Kulenkampff, J.; Schmidt, A.; Kratzert, D.; Himmel, D.; Schmitz, D.; Scheidt, E.; Scherer, W.; Bülow, C.; Timm, M.; Lindblad, R.; Akin, S.; Zamudio-Bayer, V.; von Issendorff, B.; Duncan, M.; Lau, J.T.; Krossing, I., *Access to the Bis-benzene Cobalt(I) Sandwich Cation and its Derivatives: Synthons for a Naked Cobalt(I) Source?*, *Angew. Chem. Int. Ed.* **57**, 9310-9314 (2018), 10.1002/anie.201803108
- Meixner, M.; Klaus, M.; Zinn, W.; Apel, D.; Liehr, A.; Genzel, C.; Scholtes, B., *Analysis of Multiaxial Near-Surface Residual Stress Fields by Energy- and Angle-Dispersive X-ray Diffraction: Semi- Versus Nondestructive Techniques*, *Mat. Perf. Charact.* **7**, 465-487 (2018), 10.1520/MPC20170135
- Mendis, B.G.; McKenna, K.P.; Gurieva, G.; Rumsey, M.S.; Schorr, S., *Crystal structure and anti-site boundary defect characterisation of Cu<sub>2</sub>ZnSnSe<sub>4</sub>*, *J. Mater. Chem. A* **6**, 189-197 (2018), 10.1039/c7ta08263k
- Meng, N.; Ren, J.; Liu, Y.; Huang, Y.; Petit, T.; Zhang, B., *Engineering oxygen-containing and amino groups into two-dimensional atomically-thin porous polymeric carbon nitrogen for enhanced photocatalytic hydrogen production*, *En. Envir. Science* **11**, 566-571 (2018), 10.1039/c7ee03592f
- Meng, S.; Toft-Petersen, R.; Hao, L.; Habicht, K., *multiflexlib: A Python package for data reduction and visualization for the cold-neutron multi energy wide angle analyzer MultiFLEX*, *SoftwareX* **7**, 309-312 (2018), 10.1016/j.softx.2018.09.006
- Meng, X.; Zuo, G.; Zong, P.; Pang, H.; Ren, J.; Zeng, X.; Liu, S.; Shen, Y.; Zhou, W.; Ye, J., *A rapidly room-temperature-synthesized Cd/ZnS:Cu nanocrystal photocatalyst for highly efficient solar-light-powered CO<sub>2</sub> reduction*, *Appl. Cat. B* **237**, 68-73 (2018), 10.1016/j.apcatb.2018.05.066
- Menzel, D.; Mews, M.; Rech, B.; Korte, L., *Electronic structure of indium-tungsten-oxide alloys and their energy band alignment at the heterojunction to crystalline silicon*, *Appl. Phys. Lett.* **112**, 011602/1-5 (2018), 10.1063/1.5010278
- Mertins, H.-Ch.; Jansing, C.; Krivenkov, M.; Varykhalov, A.; Rader, O.; Wahab, H.; Timmers, H.; Gaupp, A.; Sokolov, A.; Tesch, M.; Oppeneer, P. M., *Giant magneto-optical Faraday effect of graphene on Co in the soft x-ray range*, *Phys. Rev. B* **98**, 064408/1-9 (2018), 10.1103/PhysRevB.98.064408
- Meyer, F.; Blum, M.; Benkert, A.; Hauschild, D.; Jeyachandran, Y.; Wilks, R.; Yang, W.; Bär, M.; Reinert, F.; Heske, C.; Zharnikov, M.; Weinhardt, L., *Site-specific electronic structure of imidazole and imidazolium in aqueous solutions*, *Phys. Chem. Chem. Phys.* **20**, 8302-8310 (2018), 10.1039/C7CP07885D
- Mhamdi, A.; Trinter, F.; Rauch, C.; Weller, M.; Rist, J.; Waitz, M.; Siebert, J.; Metz, D.; Janke, C.; Kastirke, G.; Wiegandt, F.; Bauer, T.; Tia, M.; Cunha de Miranda, B.; Travnikova, O.; Pitzer, M.; Sann, H.; Schiwietz, G.; Schöffler, M.; Simon, M.; Gok, *Resonant interatomic Coulombic decay in HeNe: Electron angular Emission distributions*, *Phys. Rev. A* **0**, 053407/1-9 (2018), 10.1103/PhysRevA.97.053407
- Mikoushkin, V.M.; Bryzgalov, V.V.; Makarevskaya, E.A.; Solonitsyna, A.P.; Marchenko, D.E., *Modification of the GaAs native oxide surface layer into the layer of the Ga<sub>2</sub>O<sub>3</sub> dielectric by an Ar<sup>+</sup> ion beam*, *Surf. Coating Tech.* **344**, 149-153 (2018), 10.1016/j.surfcoat.2018.03.004

- Mikoushkin, V.M.; Bryzgalov, V.V.; Nikonov, S.Yu.; Solonitsyna, A.P.; Marchenko, D.E., *The p-n junction formation effect of an Ar<sup>+</sup> ion beam on the n-GaAs surface*, EPL **122**, 27002/1-5 (2018), 10.1209/0295-5075/122/27002
- Mikoushkin, V.M.; Bryzgalov, V.V.; Nikonov, S.Yu.; Solonitsyna, A.P.; Marchenko, D.E., *Composition and Band Structure of the Native Oxide Nanolayer on the Ion Beam Treated Surface of the GaAs Wafer*, Semicon. **52**, 593-596 (2018), 10.1134/S1063782618050214
- Mill, L.; Bier, B.; Syben, C.; Kling, L.; Klingberg, A.; Christiansen, S.; Schett, G.; Maier, A., *Towards in-vivo X-ray nanoscopy: The effect of motion on image quality*, , 115-120 (2018), 10.1007/978-3-662-56537-7\_40
- Milov, I.; Makhotkin, I.A.; Sobierajski, R.; Medvedev, N.; Lipp, V.; Chalupsky, J.; Sturm, J.M.; Tiedtke, K.; de Vries, G.; Störmer, M.; Siewert, F.; van de Kruijs, R.; Louis, E.; Jacyna, I.; Jurek, M.; Juha, L.; Hajkova, V.; Vozda, V.; Burian, T.; Saksl,, *Mechanism of single-shot damage of Ru thin films irradiated by femtosecond extreme UV free-electron laser*, Opt. Express **26**, 19665-19684 (2018), 10.1364/OE.26.019665
- Milovanovic, P.; vom Scheidt, A.; Mletzko, K.; Sarau, G.; Püschel, K.; Djuric, M.; Amling, M.; Christiansen, S.; Busse, B., *Bone tissue aging affects mineralization of cement lines*, Bone **110**, 187-193 (2018), 10.1016/j.bone.2018.02.004
- Mishurova, T.; Cabeza, S.; Thiede, T.; Nadammal, N.; Kromm, A.; Klaus, M.; Genzel, C.; Haberland, C.; Bruno, G., *The Influence of the Support Structure on Residual Stress and Distortion in SLM Inconel 718 Parts*, Metall. Mater. Trans. A **49**, 3038-3046 (2018), 10.1007/s11661-018-4653-9
- Mohamed, R.; Binniger, T.; Kooyman, P.; Hoell, A.; Fabbri, E.; Patru, A.; Heinritz, A.; Schmidt, T.; Levecque, P., *Facile deposition of Pt nanoparticles on Sb-doped SnO<sub>2</sub> support with outstanding active surface area for the oxygen reduction reaction*, Catal. Sc. Techn. **8**, 2672-2685 (2018), 10.1039/c7cy02591b
- Mohseninia, A.; Kartouzian, D.; Markötter, H.; Ince, U.U.; Manke, I.; Scholta, J., *Neutron Radiographic Investigations on the Effect of Hydrophobicity Gradients within MPL and MEA on Liquid Water Distribution and Transport in PEMFCs*, ECS Trans. **85**, 1013-1021 (2018), 10.1149/08513.1013ecst
- Morales-Vilches, A.B.; Cruz, A.; Pingel, S.; Neubert, S.; Mazzarella, L.; Meza, D.; Korte, L.; Schlatmann, R.; Stannowski, B., *ITO-Free Silicon Heterojunction Solar Cells With ZnO:Al/SiO<sub>2</sub> Front Electrodes Reaching a Conversion Efficiency of 23%*, IEEE J. Photovolt, **9**, 34-39 (2018), 10.1109/JPHOTOV.2018.2873307
- Morales-Vilches, A.B.; Larionova, Y.; Wietler, T.; Cruz, A.; Korte, L.; Peibst, R.; Brendel, R.; Schlatmann, R.; Stannowski, B., *ZnO:Al/a-SiO<sub>x</sub> front contact for polycrystalline-silicon-on-oxide (POLO) solar cells*, AIP Conf. Proc. **1999**, 040016/1-6 (2018), 10.1063/1.5049279
- Mueller, N.; Juergensen, S.; Höflich, K.; Reich, S.; Kusch, P., *Excitation-Tunable Tip-Enhanced Raman Spectroscopy*, J. Phys. Chem. C **122**, 28273-28279 (2018), 10.1021/acs.jpcc.8b10272
- Müller, A.; Borovik, A.; Buhr, T.; Hellhund, J.; Holste, K.; Kilcoyne, A.; Klumpp, S.; Martins, M.; Ricz, S.; Viehhaus, J.; Schippers, S., *Near-K-edge single, double, and triple photoionization of C<sup>+</sup> ions*, Phys. Rev. A **97**, 013409/1-14 (2018), 10.1103/PhysRevA.97.013409

Müller, A.; Lindroth, E.; Bari, S.; Borovik, A.; Hillenbrand, P.; Holste, K.; Indelicato, P.; Kilcoyne, A.; Klumpp, S.; Martins, M.; Viefhaus, J.; Wilhelm, P.; Schippers, S., *Photoionization of metastable heliumlike C4+ (1s2s S-3(1)) ions: Precision study of intermediate doubly excited states*, Phys. Rev. A **98**, 033416/1-16 (2018), 10.1103/PhysRevA.98.033416

Munshi, A.M.; Kim, D.C.; Heimdal, C.P.; Heilmann, M.; Christiansen, S.H.; Vullum, P.E.; Van Helvoort, A.T.J.; Weman, H., *Selective area growth of AlGaIn nanopyramid arrays on graphene by metal-organic vapor phase epitaxy*, Appl. Phys. Lett. **113**, 263102 (2018), 10.1063/1.5052054

Muydinov, R.; Seeger, S.; Vinoth Kumar, S.; Klimm, C.; Kraehnert, R.; Wagner, M.; Szyszka, B., *Crystallisation behaviour of CH3NH3PbI3 films: The benefits of sub-second flash lamp annealing*, Thin Solid Films **653**, 204-214 (2018), 10.1016/j.tsf.2018.03.050

Naberezhnov, A.A.; Vanina, P.Yu.; Sysoeva, A.A.; Cizman, A.; Rysiakiewicz-Pasek, E.; Hoser, A., *Effect of Restricted Geometry on the Structure and Phase Transitions in Potassium Nitrate Nanoparticles*, Phys. Solid State **60**, 442-446 (2018), 10.1134/S1063783418030204

Nascimento, M.; Franco, M.; Yokaichyia, F.; de Paula, E.; Lombello, C.; de Araujo, D., *Hyaluronic acid in Pluronic F-127/F-108 hydrogels for postoperative pain in arthroplasties: Influence on physico-chemical properties and structural requirements for sustained drug-release*, Int. J. Biol. Macromol. **111**, 1245-1254 (2018), 10.1016/j.ijbiomac.2018.01.064

Navarro-Senent, C.; Fornell, J.; Isarain-Chávez, E.; Quintana, A.; Menéndez, E.; Foerster, M.; Aballe, L.; Weschke, E.; Nogués, J.; Pellicer, E.; Sort, J., *Large Magnetoelectric Effects in Electrodeposited Nanoporous Microdisks Driven by Effective Surface Charging and Magneto-Ionics*, ACS Appl. Mat. Interfaces **10**, 44897-44905 (2018), 10.1021/acsami.8b17442

Naveen, K.; Reehuis, M.; Adler, P.; Pattison, P.; Hoser, A.; Mandal, T.K.; Arjun, U.; Mukharjee, P.K.; Nath, R.; Felser, C.; Paul, A.K., *Reentrant magnetism at the borderline between long-range antiferromagnetic order and spin-glass behavior in the B-site disordered perovskite system Ca2-xSrxFeRuO6*, Phys. Rev. B **98**, 224423/1-15 (2018), 10.1103/PhysRevB.98.224423

Nehrkorn, J.; Veber, S.; Zhukas, L.; Novikov, V.; Nelyubina, Y.; Voloshin, Y.; Holldack, K.; Stoll, S.; Schnegg, A., *Determination of Large Zero-Field Splitting in High-Spin Co(I) Clathrochelates*, Inorg. Chem. **57**, 15330-15340 (2018), 10.1021/acs.inorgchem.8b02670

Neumann, M.; Osenberg, M.; Hilger, A.; Franzen, D.; Turek, T.; Manke, I.; Schmidt, V., *On a pluri-Gaussian model for three-phase microstructures, with applications to 3D image data of gas-diffusion electrodes*, Comp Mat Science **156**, 325-331 (2018), 10.1016/j.commatsci.2018.09.033

Neuschitzer, M.; Espindola Rodriguez, M.; Guc, M.; Marquez, J.A.; Giraldo, S.; Forbes, I.; Perez-Rodriguez, A.; Saucedo, E., *Revealing the beneficial effects of Ge doping on Cu2ZnSnSe4 thin film solar cells*, J. Mater. Chem. A **6**, 11759-11772 (2018), 10.1039/c8ta02551g

Nichols, C.; Krakow, R.; Herrero-Albillos, J.; Kronast, F.; Northwood-Smith, G.; Harrison, R., *Microstructural and paleomagnetic insight into the cooling history of the IAB parent body*, Geochim. Cosmo. A. **229**, 43466 (2018), 10.1016/j.gca.2018.03.009

Niederhausen, J.; Zhang, Y.; Cheenicode Kabeer, F.; Garmshausen, Y.; Schmidt, B.; Li, Y.; Braun, K.; Hecht, S.; Tkatchenko, A.; Koch, N.; Hla, S., *Subtle Fluorination of Conjugated Molecules Enables Stable Nanoscale Assemblies on Metal Surfaces*, J. Phys. Chem. C **122**, 18902-18911 (2018), 10.1021/acs.jpcc.8b03398

- Nikam, R.; Xu, X.; Ballauff, M.; Kanduc, M.; Dzubiella, J., *Charge and hydration structure of dendritic polyelectrolytes: molecular simulations of polyglycerol sulphate*, *Soft Matter* **14**, 4300-4310 (2018), 10.1039/c8sm00714d
- Nikitin, S.E.; Wu, L.S.; Sefat, A.S.; Shaykhutdinov, K.A.; Lu, Z.; Meng, S.; Pomjakushina, E. V.; Conder, K.; Ehlers, G.; Lumsden, M.D.; Kolesnikov, A.I.; Barilo, S.; Guretskii, S. A.; Inosov, D.S.; Podlesnyak, A., *Decoupled spin dynamics in the rare-earth orthoferrite YbFeO<sub>3</sub>: Evolution of magnetic excitations through the spin-reorientation transition*, *Phys. Rev. B* **98**, 064424/1-13 (2018), 10.1103/PhysRevB.98.064424
- Nikolaeva, A.; Krause, M.; Marquez, J.; Hages, C.; Levchenko, S.; Unold, T.; Witte, W.; Hariskos, D.; Abou-Ras, D., *Fluctuations in net doping and lifetime in Cu(In,Ga)Se<sub>2</sub> solar cells*, , 2512-2514 (2018), 10.1109/PVSC.2018.8547874
- Norell, J.; Jay, R.; Hantschmann, M.; Eckert, S.; Guo, M.; Gaffney, K.; Wernet, P.; Lundberg, M.; Föhlisch, A.; Odelius, M., *Fingerprints of electronic, spin and structural dynamics from resonant inelastic soft X-ray scattering in transient photo-chemical species*, *Phys. Chem. Chem. Phys.* **20**, 7243-7253 (2018), 10.1039/c7cp08326b
- Nowotny, J.; Dodson, J.; Fiechter, S.; Gür, T.M.; Kennedy, B.; Macyk, W.; Bak, T.; Sigmund, W.; Yamakawi, M.; Rahman, K.A., *Towards Global Sustainability: Education on Environmentally Clean Energy Technologies*, *Ren. Sust. En. Rev.* **81**, 2541-2551 (2018), 10.1016/j.rser.2017.06.060
- Nucara, A.; Corasaniti, M.; Kalaboukhov, A.; Ortolani, M.; Falsetti, E.; Sambri, A.; Miletto Granozio, F.; Capitani, F.; Brubach, J.; Roy, P.; Schade, U.; Calvani, P., *Infrared study of the quasi-two-dimensional electron system at the interface between SrTiO<sub>3</sub> and crystalline or amorphous LaAlO<sub>3</sub>*, *Phys. Rev. B* **97**, 155126/1-7 (2018), 10.1103/PhysRevB.97.155126
- Nürnberg, D.; Seibel, I.; Riechardt, A.; Brockmann, C.; Zeitz, O.; Heufelder, J.; Jousen, AM, *Multimodale Bildgebung des Aderhautmelanoms mit seinen Differenzialdiagnosen, Therapie (Bestrahlungsplanung) und Verlaufskontrolle*, *Klin Monatsbl Augenheilkd* **0**, 1001-1012 (2018), 10.1055/a-0667-0806
- Opherden, L.; Bilitewski, T.; Hornung, J.; Herrmannsdörfer, T.; Samartzis, A.; Islam, A.; Anand, V.; Lake, B.; Moessner, R.; Wosnitza, J., *Inverted hysteresis and negative remanence in a homogeneous antiferromagnet*, *Phys. Rev. B* **98**, 180403(R)/1-5 (2018), 10.1103/PhysRevB.98.180403
- Orendác, M.; Gabáni, S.; Gazo, E.; Pristás, G.; Shitsevalova, N.; Siemensmeyer, K.; Flachbart, K., *Rotating magnetocaloric effect and unusual magnetic features in metallic strongly anisotropic geometrically frustrated TmB<sub>4</sub>*, *Sci. Rep.* **8**, 10933/1-10 (2018), 10.1038/s41598-018-29399-2
- Orlandi, F.; Aza, E.; Bakaimi, I.; Kiefer, K.; Klemke, B.; Zorko, A.; Arcon, D.; Stock, C.; Tsibidis, G.; Green, M.; Manuel, P.; Lappas, A., *Incommensurate atomic and magnetic modulations in the spin-frustrated beta-NaMnO<sub>2</sub> triangular lattice*, *Phys. Rev. Mat.* **2**, 074407/1-14 (2018), 10.1103/PhysRevMaterials.2.074407
- Orue, I.; Marcano, L.; Bender, P.; García-Prieto, A.; Valencia, S.; Mawas, M.A.; Alba Venero, D.; Honnecker, D.; Garcia-Arribas, A.; Fernandez Barquín, L.; Muela, A.; Fdez-Gubieda, M.L., *Configuration of the magnetosome chain: a natural magnetic nanoarchitecture*, *Nanoscale* **10**, 7407-7419 (2018), 10.1039/C7NR08493E

Osenberg, M.; Manke, I.; Hilger, A.; Kardjilov, N.; Banhart, J., *An X-ray Tomographic Study of Rechargeable Zn/MnO<sub>2</sub> Batteries*, *Mat.* **11**, 1486/1-14 (2018), 10.3390/ma11091486

Ossiander, M.; Riemensberger, J.; Nepl, S.; Mittermair, M.; Schäffer, M.; Duensing, A.; Wagner, M.; Heider, R.; Wurzer, M.; Gerl, M.; Schnitzenbaumer, M.; Barth, J.; Libisch, F.; Lemell, C.; Burgdörfer, J.; Feulner, P.; Kienberger, R., *Absolute timing of the photoelectric effect*, *Nat.* **561**, 374-377 (2018), 10.1038/s41586-018-0503-6

Oßmann, B.E.; Sarau, G.; Holtmannspötter, H.; Pischetsrieder, M.; Christiansen, S.H.; Dicke, W., *Small-sized microplastics and pigmented particles in bottled mineral water*, *Water Res.* **141**, 307-316 (2018), 10.1016/j.watres.2018.05.027

Panchenko, O.; Borgardt, E.; Zwaygardt, W.; Hackemüller, F.J.; Bram, M.; Kardjilov, N.; Arlt, T.; Manke, I.; Müller, M.; Stolten, D.; Lehnert, W., *In-situ two-phase flow investigation of different porous transport layer for a polymer electrolyte membrane (PEM) electrolyzer with neutron spectroscopy*, *J. Power Sourc.* **390**, 108-115 (2018), 10.1016/j.jpowsour.2018.04.044

Panda, C.; Chandra, A.; Coron, T.; Andris, E.; Pandey, B.; Garai, S.; Lindenmaier, N.; Künstner, S.; Farquhar, E.R.; Roithová, J.; Rajaraman, G.; Driess, M.; Ray, K., *Nucleophilic versus Electrophilic Reactivity of Bioinspired Superoxido Nickel(II) Complexes*, *Angew. Chem. Int. Ed.* **57**, 14883-14887 (2018), 10.1002/anie.201808085

Pandya, R.; MacQueen, R.; Rao, A.; Davis, N.J.L.K., *Simple and Robust Panchromatic Light Harvesting Antenna Composites via FRET Engineering in Solid State Host Matrices*, *J. Phys. Chem. C* **122**, 22330-22338 (2018), 10.1021/acs.jpcc.8b07998

Papagiannopoulos, A.; Meristoudi, A.; Pispas, S.; Keiderling, U., *Thermal response of self-organization in an amphiphilic triblock polyelectrolyte and the influence of the globular protein lysozyme*, *Eur. Pol. J.* **99**, 49-57 (2018), 10.1016/j.eurpolymj.2017.12.005

Papagiannopoulos, A.; Zhao, J.; Zhang, G.; Pispas, S.; Jafta, C.J., *Viscosity Transitions Driven by Thermoresponsive Self-Assembly in PHOS-g-P(PO-r-EO) Brush Copolymer*, *Macromolecules* **51**, 1644-1653 (2018), 10.1021/acs.macromol.7b02711

Papaoiannou, E.Th.; Fang, H.; Caballero, B.; Akinoglu, E.M.; Giersig, M.; Garcia-Martin, A.; Fumagalli, P., *Correction: Role of interactions in the magneto-plasmonic response at the geometrical threshold of surface continuity*, *Opt. Express* **26**, 338/1 (2018), 10.1364/OE.26.000338

Park, C.; Kanduc, M.; Chudoba, R.; Ronneburg, A.; Risse, S.; Ballauff, M.; Dzubiella, J., *Molecular simulations of electrolyte structure and dynamics in lithium-sulfur battery solvents*, *J. Power Sourc.* **373**, 70-78 (2018), 10.1016/j.jpowsour.2017.10.081

Park, S.; Mutz, N.; Schultz, T.; Blumenstengel, S.; Han, A.; Aljarb, A.; Li, L.-J.; List-Kratochvil, E.; Amsalem, P.; Koch, N., *Direct determination of monolayer MoS<sub>2</sub> and WSe<sub>2</sub> exciton binding energies on insulating and metallic substrates*, *2D Mat.* **5**, 025003/1-8 (2018), 10.1088/2053-1583/aaa4ca

Parkhomenko, H.; Solovan, M.; Brus, V.; Maystruk, E.; Maryanchuk, P.D., *Structural, electrical, and photoelectric properties of p-NiO/n-CdTe heterojunctions*, *Opt. Eng.* **57**, 017116/1- (2018), 10.1117/1.OE.57.1.017116

Parvan, V.; Mizrak, A.; Majumdar, I.; Ümsür, B.; Calvet, W.; Greiner, D.; Kaufmann, C.A.; Dittrich, T.; Avancini, E.; Lauermann, I., *Cu(In,Ga)Se<sub>2</sub> surface treatment with Na and NaF: A combined photoelectron spectroscopy and surface photovoltage study in ultra-high vacuum*, *Appl. Surf. Sci.* **444**, 436-441 (2018), 10.1016/j.apsusc.2018.03.014

Paull, O.; Pan, A.; Causer, G.; Fedoseev, S.; Jones, A.; Liu, X.; Rosenfeld, A.; Klose, F., *Field dependence of the ferromagnetic/superconducting proximity effect in a YBCO/STO/LCMO multilayer*, *Nanoscale* **10**, 18995-19003 (2018), 10.1039/c8nr01210e

Peeters, D.; Mendoza Reyes, O.; Mai, L.; Sadlo, A.; Cwik, S.; Rogalla, D.; Becker, H.-W.; Schütz, H.M.; Hirst, J.; Müller, S.; Friedrich, D.; Mitoraj, D.; Nagli, M.; Caspary Toroker, M.; Eichberger, R.; Beranek, R.; Devi, A., *CVD-grown copper tungstate thin films for solar water splitting*, *J. Mater. Chem. A* **6**, 10206-10216 (2018), 10.1039/C7TA10759E

Penc, B.; Hoser, A.; Baran, S.; Duraj, R.; Marzec, M.; Jaworska-Golab, T.; Szytula, A.; Dyakonov, V.; Nedelko, N.; Sivachenko, A.; Dyakonov, K.; Bazela, W.; Szymczak, H., *Influence of Ti atoms on the magnetic order in quaternary NiMnGe:Ti compounds*, *Phase Transit.* **91**, 1107-1121 (2018), 10.1080/01411594.2018.1502884

Pérez Tamarit, S.; Solórzano, E.; Hilger, A.; Manke, I.; Rodríguez-Pérez, M.A., *Multi-scale tomographic Analysis of polymeric foams: A detailed study of the cellular structure.*, *Eur. Pol. J.* **109**, 169-178 (2018), 10.1016/j.eurpolymj.2018.09.047

Pesach, A.; Tiferet, E.; Vogel, S.; Chonin, M.; Diskin, A.; Zilberman, L.; Rivin, O.; Yeheskel, O.; Caspi, E., *Texture analysis of additively manufactured Ti-6Al-4V using neutron diffraction*, *Add. Manuf.* **23**, 394-401 (2018), 10.1016/j.addma.2018.08.010

Peter, L.M.; Gurudayal, ; Wong, L.H.; Abdi, F.F., *Understanding the role of nanostructuring in photoelectrode performance for light-driven water splitting*, *J. Electroanal. Chem.* **819**, 447-458 (2018), 10.1016/j.jelechem.2017.12.031

Petersen, B.; Roa, R.; Dzubiella, J.; Kanduc, M., *Ionic structure around polarizable metal nanoparticles in aqueous electrolytes*, *Soft Matter* **14**, 4053-4063 (2018), 10.1039/c8sm00399h

Petit, T.; Puskar, L., *FTIR spectroscopy of nanodiamonds: Methods and interpretation*, *Diamond Relat. Mat.* **89**, 52-66 (2018), 10.1016/j.diamond.2018.08.005

Pflug, C.; Franz, A.; Kohlmann, H., *Crystal structure and europium luminescence of NaMgH<sub>3</sub>-xFx*, *J. Solid State Chem.* **258**, 391-396 (2018), 10.1016/j.jssc.2017.10.034

Phung, N.; Abate, A., *The Impact of Nano- and Microstructure on the Stability of Perovskite Solar Cells*, *Small* **14**, 1802573/1-11 (2018), 10.1002/smll.201802573

Pietrzyk-Brzezinska, A.J.; Absmeier, E.; Klauck, E.; Wen, Y.; Antelmann, H.; Wahl, M.C., *Crystal Structure of the Escherichia coli DEXH-Box NTPase HrpB*, *Struc.* **26**, 1462-1473.e4 (2018), 10.1016/j.str.2018.07.013

Pietsch, A.; Sokolov, A.; Blume, T.; Neppl, S.; Senf, F.; Siewert, F.; Föhlisch, A., *Inverted VLS Spectrometer at BESSY for Molecular Potential Energy Surfaces and Excitations*, *Syn. Rad. News* **31**, 20-25 (2018), 10.1080/08940886.2018.1435952



Pontius, N.; Beye, M.; Trabant, C.; Mitzner, R.; Sorgenfrei, F.; Kachel, T.; Wöstmann, M.; Roling, S.; Zacharias, H.; Ivanov, R.; Treusch, R.; Buchholz, M.; Metcalf, P.; Schüßler-Langeheine, C.; Föhlisch, A., *Probing the non-equilibrium transient state in magnetite by a jitter-free two-color X-ray pump and X-ray probe experiment*, *Str. Dyn.* **5**, 054501/1-8 (2018), 10.1063/1.5042847

Pookpanratana, S.J.; Goetz, K.P.; Bittle, E.G.; Haneef, H.; You, L.; Hacker, C.A.; Robey, S.W.; Jurchescu, O.D.; Ovsyannikov, R.; Giangrisostomi, E., *Electronic properties and structure of single crystal perylene*, *Org. Electr.* **61**, 157-163 (2018), 10.1016/j.orgel.2018.05.035

Post, K.; McLeod, A.; Hepting, M.; Bluschke, M.; Wang, Y.; Cristiani, G.; Logvenov, G.; Charnukha, A.; Ni, G.; Radhakrishnan, P.; Minola, M.; Pasupathy, A.; Boris, A.; Benckiser, E.; Dahmen, K.; Carlson, E.; Keimer, B.; Basov, D., *Coexisting first- and second-order electronic phase transitions in a correlated oxide*, *Nat. Phys.* **14**, 1056-1061 (2018), 10.1038/s41567-018-0201-1

Pournemat, A.; Markötter, H.; Wilhelm, F.; Enz, S.; Kropf, H.; Manke, I.; Scholta, J., *Nano-scale Monte Carlo study on liquid water distribution within the polymer electrolyte membrane fuel cell microporous layer, catalyst layer and their interfacial region*, *J. Power Sourc.* **397**, 271-279 (2018), 10.1016/j.jpowsour.2018.07.027

Prajongtat, P.; Dittrich, T.; Hinrichs, K.; Rappich, J., *Thickness of AVA(+) Controls the Direction of Charge Transfer at TiO<sub>2</sub>/PbI<sub>2</sub> Interfaces*, *J. Phys. Chem. C* **122**, 5020-5025 (2018), 10.1021/acs.jpcc.8b00579

Prajongtat, P.; Hannongbua, S., *A combined theoretical and experimental study of CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> Containing AVAI films prepared via an intramolecular exchange process*, *J. Phys. Chem. C* **122**, 19705-19711 (2018), 10.1021/acs.jpcc.8b06160

Preissler, N.; Amkreutz, D.; Dulanto, J.; Töfflinger, J.A.; Thi Trinh, C.; Trahms, M.; Abou-Ras, D.; Kirmse, H.; Weingärtner, R.; Rech, B.; Schlatmann, R., *Passivation of Liquid-Phase Crystallized Silicon With PECVD-SiNx and PECVD-SiNx/SiOx*, *Phys. Status Solidi A* **215**, 1800239/1-9 (2018), 10.1002/pssa.201800239

Preissler, N.; Trinh, C.T.; Trahms, M.; Sonntag, P.; Abou-Ras, D.; Kirmse, H.; Schlatmann, R.; Rech, B.; Amkreutz, D., *Impact of Dielectric Layers on Liquid-Phase Crystallized Silicon Solar Cells*, *IEEE J. Photovolt.* **8**, 30-37 (2018), 10.1109/JPHOTOV.2017.2768960

Preziosi, D.; Lopez-Mir, L.; Li, X.; Cornelissen, T.; Lee, J.; Trier, F.; Bouzehouane, K.; Valencia, S.; Gloter, A.; Barthélémy, A.; Bibes, M., *Direct Mapping of Phase Separation across the Metal-Insulator Transition of NdNiO<sub>3</sub>*, *Nano Lett.* **18**, 2226-2232 (2018), 10.1021/acs.nanolett.7b04728

Principi, E.; Giangrisostomi, E.; Mincigrucchi, R.; Beye, M.; Kurdi, G.; Cucini, R.; Gessini, A.; Bencivenga, F.; Masciovecchio, C., *Extreme ultraviolet probing of nonequilibrium dynamics in high energy density germanium*, *Phys. Rev. B* **97**, 174107/1-5 (2018), 10.1103/PhysRevB.97.174107

Prudnikava, A.; Tamashevich, Y.; Yanushkevich, K.; Noei, H.; Lott, D.; Stierle, A.; Foster, B., *Toward Optimization of Centrifugal Barrel Polishing Procedure for Treatment of Niobium Cavities*, *IEEE Trans. Appl. Supercond.* **28**, 3500105/1-5 (2018), 10.1109/TASC.2018.2791641

Pryadchenko, V.V.; Belenov, S.V.; Shemet, D.B.; Srabionyan, V.V.; Avakyan, L.A.; Volochaev, V.A.; Mikheykin, A.S.; Bdoyan, K.E.; Zizak, I.; Guterman, V.E.; Bugaev, L.A., *Effect of Thermal Treatment on the Atomic Structure and Electrochemical Characteristics of Bimetallic PtCu Core-Shell Nanoparticles in PtCu/C Electrocatalysts*, *J. Phys. Chem. C* **122**, 17199-17210 (2018), 10.1021/acs.jpcc.8b03696

- Pudell, J.; Maznev, A.A.; Herzog, M.; Kronseder, M.; Back, C.H.; Malinowski, G.; von Reppert, A.; Bargheer, M., *Layer specific observation of slow thermal equilibration in ultrathin metallic nanostructures by femtosecond X-ray diffraction*, Nat. Commun. **9**, 524131 (2018), 10.1038/s41467-018-05693-5
- Pulvirenti, F.; Wegner, B.; Noel, N.; Mazzotta, G.; Hill, R.; Patel, J.; Herz, L.; Johnston, M.; Riede, M.; Snaith, H.; Koch, N.; Barlow, S.; Marder, S., *Modification of the fluorinated tin oxide/electron-transporting material interface by a strong reductant and its effect on perovskite solar cell efficiency*, Mol. Syst. Design Eng. **3**, 741-747 (2018), 10.1039/c8me00031j
- Pun, J.K.H.; Gallaher, J.K.; Frazer, L.; Prasad, S.K.K.; Dover, C.B.; Macqueen, R.W.; Schmidt, T.W., *TIPS-anthracene: a singlet fission or triplet fusion material?*, J. Photonics Energy **8**, 022006/1-9 (2018), 10.1117/1.JPE.8.022006
- Putz, B.; May-Miller, C.; Matl, V.; Völker, B.; Többens, D.; Semprimoschnig, C.; Cordill, M., *Two-stage cracking of metallic bi-layers on polymer substrates under tension*, Scripta Mater. **145**, 43682 (2018), 10.1016/j.scriptamat.2017.09.039
- Qi, W.; Zhang, Y.; Kochovski, Z.; Wang, J.; Lu, Y.; Chen, G.; Jiang, M., *Self-assembly of Human Galectin-1 via dual supramolecular interactions and its inhibition of T-cell agglutination and apoptosis*, Nano Res. **11**, 5566-5572 (2018), 10.1007/s12274-018-2169-7
- Qi, W.; Zhang, Y.; Wang, J.; Tao, G.; Wu, L.; Kochovski, Z.; Gao, H.; Chen, G.; Jiang, M., *Deprotection-Induced Morphology Transition and Immunoactivation of Glycovesicles: A Strategy of Smart Delivery Polymersomes*, J. Am. Chem. Soc. **140**, 8851-8857 (2018), 10.1021/jacs.8b04731
- Qu, Y.; Legen, J.; Arndt, J.; Henkel, S.; Hoppe, G.; Thieme, C.; Ranzini, G.; Muino, J.; Weihe, A.; Ohler, U.; Weber, G.; Ostersetzer, O.; Schmitz-Linneweber, C., *Ectopic transplastomic expression of a synthetic MatK gene leads to cotyledon-specific leaf variegation*, Front. Plant Sc. **9**, 1453/1-14 (2018), 10.3389/fpls.2018.01453
- Raghuwanshi, V.; Garusinghe, U.; Raj, P.; Kirby, N.; Hoell, A.; Batchelor, W.; Garnier, G., *Cationic polyacrylamide induced nanoparticles assembly in a cellulose nanofiber network*, J. Colloid Interface Sci. **529**, 180-186 (2018), 10.1016/j.jcis.2018.06.009
- Raju, R.; Liebig, F.; Klemke, B.; Koetz, J., *pH-responsive magnetic Pickering Janus emulsions*, Colloid Polym. Sci. **296**, 1039-1046 (2018), 10.1007/s00396-018-4321-z
- Ralaifarisoa, M.; Salzmann, I.; Zu, F.; Koch, N., *Effect of Water, Oxygen, and Air Exposure on CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> Perovskite Surface Electronic Properties*, Adv. El. Mat. **4**, 1800307/1-8 (2018), 10.1002/aelm.201800307
- Ran, N.A.; Love, J.A.; Heiber, M.C.; Jiao, X.; Hughes, M.P.; Karki, A.; Wang, M.; Brus, V.V.; Wang, H.; Neher, D.; Ade, H.; Bazan, G.C.; Nguyen, T.-Q., *Charge Generation and Recombination in an Organic Solar Cell with Low Energetic Offsets*, Adv. Energy Mat. **8**, 1701073/1-12 (2018), 10.1002/aenm.201701073
- Ran, Q.; Xu, X.; Dey, P.; Yu, S.; Lu, Y.; Dzubiella, J.; Haag, R.; Ballauff, M., *Interaction of human serum albumin with dendritic polyglycerol sulfate: Rationalizing the thermodynamics of binding*, J. Chem. Phys. **149**, 163324/1-10 (2018), 10.1063/1.5030601

- Ran, Q.; Xu, X.; Dzubiella, J.; Haag, R.; Ballauff, M., *Thermodynamics of the Binding of Lysozyme to a Dendritic Polyelectrolyte: Electrostatics Versus Hydration*, ACS Omega **3**, 9086-9095 (2018), 10.1021/acsomega.8b01493
- Rappich, J.; Hinrichs, K.; Sun, G.; Zhang, X., *Application of In-Situ IR-Ellipsometry in Silicon Electrochemistry to Study Ultrathin Films*, , 459-479 (2018), 10.1007/978-3-319-75895-4\_20
- Raventós, M.; Lehmann, E.; Boin, M.; Morgano, M.; Hovind, J.; Harti, R.; Valsecchi, J.; Kaestner, A.; Carminati, C.; Boillat, P.; Trtik, P.; Schmid, F.; Siegwart, M.; Mannes, D.; Strobl, M.; Grünzweig, C., *A Monte Carlo approach for scattering correction towards quantitative neutron imaging of polycrystals*, J. Appl. Crystallogr. **51**, 386-394 (2018), 10.1107/S1600576718001607
- Ravishankar, S.; Gharibzadeh, S.; Roldán-Carmona, C.; Grancini, G.; Lee, Y.; Ralaiarisoa, M.; Asiri, A.; Koch, N.; Bisquert, J.; Nazeeruddin, M., *Influence of Charge Transport Layers on Open-Circuit Voltage and Hysteresis in Perovskite Solar Cells*, Joule **2**, 788-798 (2018), 10.1016/j.joule.2018.02.013
- Rayaprol, S.; Siruguri, V.; Hoser, A.; Sampathkumaran, E., *In-field neutron diffraction investigation of metamagnetism in Nd7Rh3*, Phys. B **551**, 127-131 (2018), 10.1016/j.physb.2017.11.027
- Redinger, A.; Unold, T., *High surface recombination velocity limits Quasi-Fermi level splitting in kesterite absorbers*, Sci. Rep. **8**, 1874/1-9 (2018), 10.1038/s41598-018-19798-w
- Ricci, C.; Li, B.; Cheng, L.; Dzubiella, J.; McCammon, J., *Tailoring the variational implicit solvent method for New challenges: Biomolecular recognition and assembly*, Front. Molec. Bios. **5**, 40191 (2018), 10.3389/fmolb.2018.00013
- Riechard, A.I.; Klein, J.P.; Cordini, D.; Heufelder, J.; Rehak, M.; Seibel, I.; Joussem, A.M., *Salvage proton beam therapy for recurrent iris melanoma: outcome and side effects*, Gr. Arch. for Cl. and Exp. Opht. **0**, 1325-1332 (2018), 10.1007/s00417-018-3929-5
- Riedel, W.; Thum, L.; Möser, J.; Fleischer, V.; Simon, U.; Siemensmeyer, K.; Schnegg, A.; Schomäcker, R.; Risse, T.; Dinse, K., *Magnetic Properties of Reduced and Reoxidized Mn-Na2WO4/SiO2: A Catalyst for Oxidative Coupling of Methane (OCM)*, J. Phys. Chem. C **122**, 22605-22614 (2018), 10.1021/acs.jpcc.8b07386
- Risthaus, T.; Zhou, D.; Cao, X.; He, X.; Qiu, B.; Wang, J.; Zhang, L.; Liu, Z.; Paillard, E.; Schumacher, G.; Winter, M.; Li, J., *A high-capacity P2 Na2/3Ni1/3Mn2/3O2 cathode material for sodium ion batteries with oxygen activity*, J. Power Sourc. **395**, 16-24 (2018), 10.1016/j.jpowsour.2018.05.026
- Ritsche, I.S.; Fahlke, J.M.; Wieder, F.; Hilger, A.; Manke, I.; Hampe, O., *Relationships of cochlear coiling shape and hearing frequencies in cetaceans, and the occurrence of infrasonic hearing in Miocene Mysticeti*, Foss. Rec. **21**, 33-45 (2018), 10.5194/fr-21-33-2018
- Roa, R.; Angioletti-Uberti, S.; Lu, Y.; Dzubiella, J.; Piazza, F.; Ballauff, M., *Catalysis by Metallic Nanoparticles in Solution: Thermosensitive Microgels as Nanoreactors*, Z. Phys. Chem. **232**, 773-803 (2018), 10.1515/zpch-2017-1078
- Roa, R.; Siegl, T.; Kim, W.; Dzubiella, J., *Product interactions and feedback in diffusion-controlled reactions*, J. Chem. Phys. **148**, 064705/1-6 (2018), 10.1063/1.5016608

Robert, E.V.C.; Gunder, R.; Wild, J.de; Spindler, C.; Babbe, F.; Elanzeery, H.; El Adib, B.; Treharne, R.; Miranda, H.P.C.; Wirtz, L.; Schorr, S.; Dale, P.J., *Synthesis, theoretical and experimental characterisation of thin film Cu<sub>2</sub>Sn<sub>1-x</sub>GexS<sub>3</sub> ternary alloys (x = 0 to 1): Homogeneous intermixing of Sn and Ge*, Acta Mat. **151**, 125-136 (2018), 10.1016/j.actamat.2018.03.043

Robinson, J.; Wimpory, R.; Tanner, D.; Mooney, B.; Truman, C.; Panzner, T., *Cold compression of 7075 and factors influencing stress relief*, Mat. Perf. Charact. **7**, 898-911 (2018), 10.1520/MPC20170130

Roccella, D.; Amati, M.; Sezen, H.; Brescia, R.; Gregoratti, L., *Size contrast of Pt nanoparticles formed on neighboring domains within suspended and supported graphene*, Nano Res. **11**, 1589-1598 (2018), 10.1007/s12274-017-1774-1

Rondelli, V.; Del Favero, E.; Brocca, P.; Fragneto, G.; Trapp, M.; Mauri, L.; Ciampa, M.; Romani, G.; Braun, C.; Winterstein, L.; Schroeder, I.; Thiel, G.; Moroni, A.; Cantu, L., *Directional K<sup>+</sup> channel insertion in a single phospholipid bilayer: Neutron reflectometry and electrophysiology in the joint exploration of a model membrane functional platform*, Bioch. et Bioph. Acta - GEN SUBJECTS **1862**, 1742-1750 (2018), 10.1016/j.bbagen.2018.05.007

Roodenko, K.; Aureau, D.; Yang, F.; Thissen, P.; Rappich, J., *Characterization of Thin Organic Films with Surface-Sensitive FTIR Spectroscopy*, **0**, 483-503 (2018), 10.1007/978-3-319-75895-4\_21

Roose, B.; Johansen, C.M.; Dupraz, K.; Jaouen, T.; Aebi, P.; Steiner, U.; Abate, A., *Ga-doped SnO<sub>2</sub> mesoporous contact for UV stable highly efficient perovskite solar cells*, J. Mater. Chem. A **6**, 1850-1857 (2018), 10.1039/C7TA07663K

Rostock, L.; Driller, R.; Grätz, S.; Kerwat, D.; von Eckardstein, L.; Petras, D.; Kunert, M.; Alings, C.; Schmitt, F.-J.; Friedrich, T.; Wahl, M.C.; Loll, B.; Mainz, A.; Süßmuth, R.D., *Molecular insights into antibiotic resistance - how a binding protein traps albicidin*, Nat. Commun. **9**, 436479 (2018), 10.1038/s41467-018-05551-4

Roy, A.; Seidel, R.; Kumar, G.; Bradforth, S.E., *Exploring Redox Properties of Aromatic Amino Acids in Water: Contrasting Single Photon vs Resonant Multiphoton Ionization in Aqueous Solutions*, J. Phys. Chem. B **122**, 3723-3733 (2018), 10.1021/acs.jpcc.7b11762

Rück, M.; Reuther, J., *Effects of two-loop contributions in the pseudofermion functional renormalization group method for quantum spin systems*, Phys. Rev. B **97**, 144404/1-15 (2018), 10.1103/PhysRevB.97.144404

Russina, M.; Guenther, G.; Grzimek, V.; Gainov, R.; Schlegel, M.; Drescher, L.; Kaulich, T.; Graf, W.; Urban, B.; Daske, A.; Grotjahn, K.; Hellhammer, R.; Buchert, G.; Kutz, H.; Rossa, L.; Sauer, O.-P.; Fromme, M.; Wallacher, D.; Kiefer, K.; Klemke, B.; G., *Upgrade project NEAT'2016 at Helmholtz Zentrum Berlin - What can be done on the medium power neutron source*, Phys. B **551**, 506-511 (2018), 10.1016/j.physb.2017.12.026

Ryll, B.; Schmitz, A.; de Boor, J.; Franz, A.; Whitfield, P.S.; Reehuis, M.; Hoser, A.; Müller, E.; Habicht, K.; Fritsch, K., *Structure, Phase Composition, and Thermoelectric Properties of YbxCo<sub>4</sub>Sb<sub>12</sub> and Their Dependence on Synthesis Method*, ACS Appl. En. Mat. **1**, 113-122 (2018), 10.1021/acsaem.7b00015

Ryukhtin, V.; Bakai, S.; Shin, T.; Seong, B.; Pipich, V.; Feoktystov, A.; Wanderka, N.; Bakai, O., *Microstructural investigations of bulk metallic glass using small-angle neutron scattering techniques*, Phy. B **551**, 29-32 (2018), 10.1016/j.physb.2017.12.028

- Sahle, C.; Niskanen, J.; Gilmore, K.; Jahn, S., *Exchange-correlation functional dependence of the O 1s excitation spectrum of water*, J. Electr. Spectr. **222**, 57-62 (2018), 10.1016/j.elspec.2017.09.003
- Saliba, M.; Correa-Baena, J.; Wolff, C.; Stolterfoht, M.; Phung, N.; Albrecht, S.; Neher, D.; Abate, A., *How to Make over 20% Efficient Perovskite Solar Cells in Regular (n-i-p) and Inverted (p-i-n) Architectures*, Chem. Mater. **30**, 4193-4201 (2018), 10.1021/acs.chemmater.8b00136
- Saliba, M.; Correa-Baena, J.-P.; Graetzel, M.; Hagfeldt, A.; Abate, A., *Perovskite solar cells from the atomic to the film level*, Angew. Chem. Int. Ed. **57**, 2554-2569 (2018), 10.1002/anie.201703226
- Saliba, M.; Stolterfoht, M.; Wolff, C.; Neher, D.; Abate, A., *Measuring Aging Stability of Perovskite Solar Cells*, Joule **2**, 1019-1024 (2018), 10.1016/j.joule.2018.05.005
- Salnikov, E.; Drung, B.; Fabre, G.; Itkin, A.; Otyepka, M.; Dencher, N.; Schmidt, B.; Hauß, T.; Trouillas, P.; Bechinger, B., *Lipid bilayer position and orientation of novel carprofens, modulators of gamma-secretase in Alzheimer's disease*, Biochim. Biophys. Acta Biomembr. **1860**, 2224-2233 (2018), 10.1016/j.bbamem.2018.09.003
- Sanchez, S.; Hua, X.; Phung, N.; Steiner, U.; Abate, A., *Flash Infrared Annealing for Antisolvent-Free Highly Efficient Perovskite Solar Cells*, Adv. Energy Mat. **8**, 1702915/1-7 (2018), 10.1002/aenm.201702915
- Sanchez, S.; Neururer, C.; Grobety, B.; Phung, N.; Steiner, U.; Saliba, M.; Abate, A., *Efficient and Stable Inorganic Perovskite Solar Cells Manufactured by Pulsed Flash Infrared Annealing*, Adv. Energy Mat. **8**, 1802060 (2018), 10.1002/aenm.201802060
- Sánchez-Barriga, J.; Aguilera, I.; Yashina, L. V.; Tsukanova, D. Y.; Freyse, F.; Chaika, A. N.; Callaert, C.; Abakumov, A. M.; Hadermann, J.; Varykhalov, A.; Rienks, E. D. L.; Bihlmayer, G.; Blügel, S.; Rader, O., *Anomalous behavior of the electronic structure of  $(Bi_{1-x}In_x)_2Se_3$  across the quantum phase transition from topological to trivial insulator*, Phys. Rev. B **98**, 235110/1.9 (2018), 10.1103/PhysRevB.98.235110
- Sánchez-Barriga, J.; Ovsyannikov, R.; Fink, J., *Strong Spin Dependence of Correlation Effects in Ni Due to Stoner Excitations*, Phys. Rev. Lett. **121**, 267201/1-6 (2018), 10.1103/PhysRevLett.121.267201
- Sandzhieva, A.V.; Sybachin, A.V.; Zaborova, O.V.; Ballauff, M.; Yaroslavov, A.A., *Cationic colloid-anionic liposome-protein ternary complex: formation, properties, and biomedical importance*, MENDELEEV COMMUN **28**, 326-328 (2018), 10.1016/j.mencom.2018.05.033
- Sangeetha, N.S.; Anand, V.K.; Cuervo-Reyes, E.; Smetana, V.; Mudring, A.-V.; Johnston, D.C., *Enhanced moments of Eu in single crystals of the metallic helical antiferromagnet  $EuCo_2-yAs_2$* , Phys. Rev. B **97**, 144403/1-27 (2018), 10.1103/PhysRevB.97.144403
- Sapozhnik, A. A.; Luo, C.; Ryll, H.; Radu, F.; Jourdan, M.; Zabel, H.; Elmers, H.-J., *Experimental determination of exchange constants in antiferromagnetic  $Mn_2Au$* , Phys. Rev. B **97**, 184416 (2018), 10.1103/PhysRevB.97.184416
- Sapozhnik, A.A.; Filianina, M.; Bodnar, S.Yu.; Lamirand, A.; Mawass, M.-A.; Skourski, Y.; Elmers, H.-J.; Zabel, H.; Kläui, M.; Jourdan, M., *Direct imaging of antiferromagnetic domains in  $Mn_2Au$  manipulated by high magnetic fields*, Phys. Rev. B **97**, 134429/1-5 (2018), 10.1103/PhysRevB.97.134429

- Sasinska, A.; Leduc, J.; Frank, M.; Czypiel, L.; Fischer, T.; Christiansen, S.H.; Mathur, S., *Competitive interplay of deposition and etching processes in atomic layer growth of cobalt and nickel metal films*, J. Mater. Res. **33**, 4241-4250 (2018), 10.1557/jmr.2018.379
- Schiwietz, G.; Hwang, J.-G.; Koopmans, M.; Ries, M.; Schällicke, A., *Development of the Electron-Beam Diagnostics for the Future BESSY-VSR Storage Ring*, J. Phys. Conf. **1067**, 072005/1-5 (2018), 10.1088/1742-6596/1067/7/072005
- Schmeißer, M.A.H.; Mistry, S.; Kirschner, H.; Schubert, S.; Jankowiak, A.; Kamps, T.; Kühn, J., *Towards the operation of Cs-K-Sb photocathodes in superconducting rf photoinjectors*, Phys. Rev. Accel. Beams **21**, 113401 (2018), 10.1103/PhysRevAccelBeams.21.113401
- Schmid, M.; Heidmann, B.; Ringleb, F.; Eylers, K.; Ernst, O.; Andree, S.; Bonse, J.; Boeck, T.; Krüger, J., *Locally grown Cu(In,Ga)Se-2 micro islands for concentrator solar cells*, , 1052707/1-10 (2018), 10.1117/12.2288253
- Schmidt, T.W.; MacQueen, R.W.; Tayebjee, M.J.Y.; Castellano, F.N., *Special section guest editorial: Spectral management for renewable energy conversion*, J. Photonics Energy **8**, 022001/1-2 (2018), 10.1117/1.JPE.8.022001
- Schmitt, S.W.; Sarau, G.; Speich, C.; Döhler, G.; Liu, Z.; Hao, X.; Rechberger, S.; Dieker, C.; Spiecker, E.; Prost, W.; Tegude, F.; Conibeer, G.; Green, M.; Christiansen, S., *Germanium Template Assisted Integration of Gallium Arsenide Nanocrystals on Silicon: A Versatile Platform for Modern Optoelectronic Materials*, Adv. Opt. Mat. **6**, 1701329/1-6 (2018), 10.1002/adom.201701329
- Schmitt, T.; Gupta, R.; Lange, S.; Sonnenberger, S.; Dobner, B.; Hauß, T.; Rai, B.; Neubert, R., *Impact of the ceramide subspecies on the nanostructure of stratum corneum lipids using neutron scattering and molecular dynamics simulations. Part I: impact of CER[NS]*, Chem. Phys. Lipids **214**, 58-68 (2018), 10.1016/j.chemphyslip.2018.05.006
- Schmitt, T.; Lange, S.; Dobner, B.; Sonnenberger, S.; Hauß, T.; Neubert, R.H.H., *Investigation of a CER[NP]- and [AP]-Based Stratum Corneum Modeling Membrane System: Using Specifically Deuterated CER Together with a Neutron Diffraction Approach*, Langmuir **34**, 1742-1749 (2018), 10.1021/acs.langmuir.7b01848
- Schmitz, B.; Köszegi, J.; Alomari, K.; Kugeler, O.; Knobloch, J., *Magnetometric Mapping of Superconducting RF Cavities*, Rev. Sci. Instrum. **89**, 054706/1-8 (2018), 10.1063/1.5030509
- Schmitz-Antoniak, C.; Schmitz, D.; Warland, A.; Darbandi, M.; Haldar, S.; Bhandary, S.; Sanyal, B.; Eriksson, O.; Wende, H., *Suppression of the Verwey Transition by Charge Trapping*, Ann. d. Phys. **530**, 1700363/1-7 (2018), 10.1002/andp.201700363
- Schnohr, C.S.; Eckner, S.; Schöppe, P.; Haubold, E.; d'Acapito, F.; Greiner, D.; Kaufmann, Ch.A., *Reversible correlation between subnanoscale structure and Cu content inco-evaporated Cu(In,Ga)Se2 thin films*, Acta Mat. **153**, 41852 (2018), 10.1016/j.actamat.2018.04.047
- Scholz, J.; Kayaalp, B.; Juhl, A.C.; Clemens, D.; Froeba, M.; Mascotto, S., *Severe Loss of Confined Sulfur in Nanoporous. Carbon for Li-S Batteries under Wetting Conditions*, ACS En. Lett. **3**, 387-392 (2018), 10.1021/acsenergylett.7b01238

- Schoop, L.; Topp, A.; Lippmann, J.; Rost, A.; Duppel, V.; Sheoran, S.; Kremer, R.; Ast, C.; Lotsch, B.; Orlandi, F.; Manuel, P.; MÜchler, L.; Vergniory, M.; Sun, Y.; Krivenkov, M.; Varykhalov, A.; Yan, B., *Tunable Weyl and Dirac states in the nonsymmorphic compound CeSbTe*, *Sci. Adv.* **4**, eaar2317/1-9 (2018), 10.1126/sciadv.aar2317
- Schuck, G.; Többens, D.M.; Koch-Müller, M.; Efthimiopoulos, I.; Schorr, S., *Infrared Spectroscopic Study of Vibrational Modes across the Orthorhombic–Tetragonal Phase Transition in Methylammonium Lead Halide Single Crystals*, *J. Phys. Chem. C* **122**, 5227–5237 (2018), 10.1021/acs.jpcc.7b11499
- Schultz, C.; Schneider, F.; Neubauer, A.; Bartelt, A.; Jost, M.; Rech, B.; Schlatmann, R.; Albrecht, S.; Stegemann, B., *Evidence of PbI<sub>2</sub>-Containing Debris Upon P2 Nanosecond Laser Patterning of Perovskite Solar Cells*, *IEEE J. Photovolt.* **8**, 1244-1251 (2018), 10.1109/JPHOTOV.2018.2858934
- Schultz, C.; Schneider, F.; Neubauer, A.; Bartelt, A.; Jost, M.; Rech, B.; Schlatmann, R.; Albrecht, S.; Stegemann, B., *Observation of PbI<sub>2</sub> Residuals after P2 Nanosecond Laser Ablation of Perovskite Absorber Layers*, , 2812-2815 (2018), 10.1109/PVSC.2018.8547456
- Schultz, T.; Niederhausen, J.; Schlesinger, R.; Sadofev, S.; Koch, N., *Impact of surface states and bulk doping level on hybrid inorganic/organic semiconductor interface energy levels*, *J. Appl. Phys.* **123**, 245501/1-5 (2018), 10.1063/1.5036579
- Schwörer, F.; Trapp, M.; Xu, X.; Soltwedel, O.; Dzubiella, J.; Steitz, R.; Dahint, R., *Drastic Swelling of Lipid Oligobilayers by Polyelectrolytes: A Potential Molecular Model for the Internal Structure of Lubricating Films in Mammalian Joints*, *Langmuir* **34**, 1287-1299 (2018), 10.1021/acs.langmuir.7b03229
- Seibel, I.; Riechardt, A.I.; Erb-Eigner, K.; Böker, A.; Cordini, D.; Heufelder, J.; Jousen, A.M., *Proton Beam Irradiation: A Safe Procedure in Postequatorial Extraocular Extension From Uveal Melanoma*, *Am. J. of Opht.* **191**, 49-53 (2018), 10.1016/j.ajo.2018.04.006
- Sentker, K.; Zantop, A.W.; Lippmann, M.; Hofmann, T.; Seeck, O.H.; Kityk, A.V.; Yildirim, A.; Schönhals, A.; Mazza, M.G.; Huber, P., *Quantized Self-Assembly of Discotic Rings in a Liquid Crystal Confined in Nanopores*, *Phys. Rev. Lett.* **120**, 067801/1-7 (2018), 10.1103/PhysRevLett.120.067801
- Sezen, H.; Al-Hada, M.; Amati, M.; Gregoratti, L., *In situ chemical and morphological characterization of copper under near ambient reduction and oxidation conditions*, *Surf. Interf. Anal.* **50**, 921-926 (2018), 10.1002/sia.6276
- Shaker, M.N.; Bonke, S.A.; Xiao, J.; Khan, M.A.; Hocking, R.K.; Tesch, M.F., *Insight into pH-Dependent Formation of Mn Oxide Phases in Electrodeposited Catalytic Films Probed by Soft X-Ray Absorption Spectroscopy*, *ChemPlusChem* **83**, 721-727 (2018), 10.1002/cplu.201800055
- Shamieh, B.; Anselmo, A.; Vogel, U.; Lariou, E.; Hayes, S.; Koch, N.; Frey, G., *Correlating the effective work function at buried organic/metal interfaces with organic solar cell characteristics*, *J. Mater. Chem. C* **6**, 8060-8068 (2018), 10.1039/c8tc02381f
- Shankar, S.; Peters, M.; Steinborn, K.; Krahwinkel, B.; Sönnichsen, F.; Grote, D.; Sander, W.; Lohmiller, T.; Rüdiger, O.; Herges, R., *Light-controlled switching of the spin state of iron(III)*, *Nat. Commun.* **9**, 1040954 (2018), 10.1038/s41467-018-07023-1

- Shen, D.; Mao, H.; Li, Y.; Abate, A.; Wei, M., *Covering effect of conductive glass: a facile route to tailor the grain growth of hybrid perovskites for highly efficient solar cells*, *J. Mater. Chem. A* **6**, 20289-20296 (2018), 10.1039/c8ta07043a
- Shen, D.; Xie, F.; Abate, A.; Wei, M., *Graphene quantum dots decorated TiO<sub>2</sub> mesoporous film as an efficient electron transport layer for high-performance perovskite solar cells*, *J. Power Sourc.* **402**, 320-236 (2018), 10.1016/j.jpowsour.2018.09.056
- Shen, D.; Zhang, W.; Li, Y.; Abate, A.; Wei, M., *Facile Deposition of Nb<sub>2</sub>O<sub>5</sub> Thin Film as an Electron-Transporting Layer for Highly Efficient Perovskite Solar Cells*, *ACS App. Nano Mat.* **1**, 4101&#8722;4109 (2018), 10.1021/acsanm.8b00859
- Siewert, F.; Löchel, B.; Buchheim, J.; Eggenstein, F.; Firsov, A.; Gwalt, G.; Kutz, O.; Lemke, S.; Nelles, B.; Rudolph, I.; Schäfers, F.; Seliger, T.; Senf, F.; Sokolov, A.; Waberski, C.; Wolf, J.; Zeschke, T.; Zizak, I.; Follath, R.; Arnold, T.; Frost, F., *Gratings for synchrotron and FEL beamlines: a project for the manufacture of ultra-precise gratings at Helmholtz Zentrum Berlin*, *J. Synchrot. Radiat.* **25**, 91-99 (2018), 10.1107/S1600577517015600
- Sikolenko, V.; Efimova, E.; Franz, A.; Ritter, C.; Troyanchuk, I.; Karpinsky, D.; Zubavichus, Y.; Veligzhanin, A.; Tiutiunnikov, S.; Sazonov, A.; Efimov, V., *X-ray absorption spectroscopy and neutron diffraction study of the perovskite-type rare-earth cobaltites*, *Phy. B* **536**, 640-642 (2018), 10.1016/j.physb.2017.09.104
- Sim, C.M.; Seong, B.J.; Kim, D.W.; Kim, Y.B.; Wi, S.G.; Kim, G.; Oh, H.; Kim, T.J.; Chung, B.Y.; Song, J.Y.; Kim, H.G.; Oh, S.K.; Shin, Y.D.; Seok, J.H.; Kang, M.Y.; Lee, Y.; Radebe, M.J.; Kardjilov, N.; Honermeier, B., *Continuous cropping of endangered therapeutic plants via electron beam soil-treatment and neutron tomography*, *Sci. Rep.* **2018**, 86212 (2018), 10.1038/s41598-018-20124-7
- Singh, A.; Lutz, L.; Ong, G.K.; Bustillo, K.; Raoux, S.; Jordan-Sweet, J.L.; Milliron, D.J., *Controlling Morphology in Polycrystalline Films by Nucleation and Growth from Metastable Nanocrystals*, *Nano Lett.* **18**, 5530-5537 (2018), 10.1021/acs.nanolett.8b01916
- Smith, M.C.; Smith, A. C.; Ohms, C.; Wimpory, R.C., *The NeT Task Group 4 residual stress measurement and analysis round robin on a three-pass slot-welded plate specimen*, *Int. J. Pres. Ves. Pip.* **164**, 44256 (2018), 10.1016/j.ijpvp.2017.09.003
- Sokolov, A.; Sertsu, M.; Gaupp, A.; Lüttecke, M.; Schäfers, F., *Efficient high-order suppression system for a metrology beamline*, *J. Synchrot. Radiat.* **25**, 100-107 (2018), 10.1107/S1600577517016800
- Soltwisch, V.; Hoenicke, P.; Kayser, Y.; Eilbracht, J.; Probst, J.; Scholze, F.; Beckhoff, B., *Element sensitive reconstruction of nanostructured surfaces with finite elements and grazing incidence soft X-ray fluorescence*, *Nanoscale* **10**, 6177-6185 (2018), 10.1039/c8nr00328a
- Song, Y.; Chen, J.; Liu, X.; Wang, C.; Zhang, J.; Liu, H.; Zhu, H.; Hu, L.; Lin, K.; Zhang, S.; Xing, X., *Zero Thermal Expansion in Magnetic and Metallic Tb(Co,Fe)<sub>2</sub> Intermetallic Compounds*, *J. Am. Chem. Soc.* **140**, 602-605 (2018), 10.1021/jacs.7b12235
- Song, Y.; Qiao, Y.; Huang, Q.; Wang, C.; Liu, X.; Li, Q.; Chen, J.; Xing, X., *Opposite Thermal Expansion in Isostructural Noncollinear Antiferromagnetic Compounds of Mn<sub>3</sub>A (A = Ge and Sn)*, *Chem. Mater.* **30**, 6236-6241 (2018), 10.1021/acs.chemmater.8b03283



- Song, Y.; Tan, G.; Zhang, C.; Toft-Petersen, R.; Yu, R.; Dai, P., *Unusual suppression of a spin resonance mode by magnetic field in underdoped NaFe<sub>1-x</sub>CoxAs: Evidence for orbital-selective pairing*, Phys. Rev. B **98**, 064507/1-6 (2018), 10.1103/PhysRevB.98.064507
- Sonntag, N.; Cabeza, S.; Kuntner, M.; Mishurova, T.; Klaus, M.; Kling e Silva, L.; Skrotzki, B.; Genzel, C.; Bruno, G., *Visualisation of deformation gradients in structural steel by macroscopic magnetic domain distribution imaging (Bittertechnique)*, Strain **54**, e12296/1-15 (2018), 10.1111/str.12296
- Sonntag, P.; Bocalic, M.; Preissler, N.; Amkreutz, D.; Rech, B.; Topic, M., *Liquid phase crystallized silicon - A holistic absorber quality assessment*, Solar Energy Mat Solar Cells **181**, 43679 (2018), 10.1016/j.solmat.2017.08.019
- Stegemann, R.; Cabeza, S.; Pelkner, M.; Lyamkin, V.; Pittner, A.; Werner, D.; Wimpory, R.; Boin, M.; Kreuzbruck, M.; Bruno, G., *Influence of the Microstructure on Magnetic Stray Fields of Low-Carbon Steel Welds*, J. Neutron Research **37**, 66/1-18 (2018), 10.1007/s10921-018-0522-0
- Stein, H.; Müller, S.; Schwarzburg, K.; Friedrich, D.; Ludwig, A.; Eichberger, R., *Charge Carrier Lifetimes in Cr-Fe-Al-O Thin Films*, ACS Appl. Mat. Interfaces **10**, 35869-35875 (2018), 10.1021/acsami.8b04900
- Stephan-Scherb, C.; Nützmann, K.; Kranzmann, A.; Klaus, M.; Genzel, C., *Real time observation of high temperature oxidation and sulfidation of Fe-Cr model alloys*, Mat. Corr. **69**, 678-689 (2018), 10.1002/maco.201709892
- Stete, F.; Koopman, W.; Bargheer, M., *Signatures of strong coupling on nanoparticles: Revealing absorption anticrossing by tuning the dielectric environment*, , 445-447 (2018), 10.1007/978-94-024-1544-5\_53
- Stete, F.; Schoßbau, P.; Bargheer, M.; Koopman, W., *Size-Dependent Coupling of Hybrid Core-Shell Nanorods: Toward Single-Emitter Strong-Coupling*, J. Phys. Chem. C **122**, 17976-17982 (2018), 10.1021/acs.jpcc.8b04204
- Stete, F.; Schoßbau, P.; Koopman, W.; Bargheer, M., *Size dependence of the coupling strength in plasmon-exciton nanoparticles*, , 381-383 (2018), 10.1007/978-94-024-1544-5\_26
- Stiel, H.; Blechschmidt, A.; Dehlinger, A.; Jung, R.; Malm, E.; Pfau, B.; Pratsch, C.; Seim, C.; Tümmeler, J.; Zürich, M., *Chapter 39: 2D and 3D Nanoscale Imaging Using High Repetition Rate Laboratory-Based Soft X-Ray Sources*, **0**, 265-272 (2018), 10.1007/978-3-319-73025-7\_39
- Stoerzinger, K.; Favaro, M.; Ross, P.; Hussain, Z.; Liu, Z.; Yano, J.; Crumlin, E., *Stabilizing the Meniscus for Operando Characterization of Platinum During the Electrolyte-Consuming Alkaline Oxygen Evolution Reaction*, Top. Catal. **61**, 2152-2160 (2018), 10.1007/s11244-018-1063-6
- Stoerzinger, K.; Favaro, M.; Ross, P.; Yano, J.; Liu, Z.; Hussain, Z.; Crumlin, E., *Probing the Surface of Platinum during the Hydrogen Evolution Reaction in Alkaline Electrolyte*, J. Phys. Chem. B **122**, 864-870 (2018), 10.1021/acs.jpcc.7b06953
- Stolterfoht, M.; Wolff, C.M.; Márquez, J.A.; Zhang, S.; Hages, C.J.; Rothhardt, D.; Albrecht, S.; Burn, P.L.; Meredith, P.; Unold, T.; Neher, D., *Visualization and suppression of interfacial recombination for high-efficiency large-area pin perovskite solar cells*, Nat. Energy **3**, 847-854 (2018), 10.1038/s41560-018-0219-8

- Stone, K.H.; Gold-Parker, A.; Pool, V.L.; Unger, E.L.; Bowring, A.R.; McGehee, M.D.; Toney, M.F.; Tassone, C.J., *Transformation from crystalline precursor to perovskite in PbCl<sub>2</sub>-derived MAPbI<sub>3</sub>*, *Nat. Commun.* **9**, 569056 (2018), 10.1038/s41467-018-05937-4
- Störmer, M.; Siewert, F.; Horstmann, C.; Buchheim, J.; Gwalt, G., *Coatings for FEL optics: preparation and characterization of B4C and Pt*, *J. Synchrot. Radiat.* **25**, 116-122 (2018), 10.1107/S1600577517016095
- Stüsser, N.; Reehuis, M.; Tovar, M.; Klemke, B.; Hoser, A.; Hoffmann, J., *Magnetically ordered and disordered sublattices in geometrically frustrated Ni chromite*, *Phys. Rev. B* **98**, 144424/1-9 (2018), 10.1103/PhysRevB.98.144424
- Sumida, K.; Natsumeda, T.; Miyamoto, K.; Silkin, I., V; Kuroda, K.; Shirai, K.; Zhu, S.; Taguchi, K.; Arita, M.; Fujii, J.; Varykhalov, A.; Rader, O.; Golyashov, V. A.; Kokh, K. A.; Tereshchenko, O. E.; Chulkov, E.V.; Okuda, T.; Kimura, A., *Enhanced surface state protection and band gap in the topological insulator PbBi<sub>4</sub>Te<sub>4</sub>S<sub>3</sub>*, *Phys. Rev. Mat.* **2**, 104201/1-8 (2018), 10.1103/PhysRevMaterials.2.104201
- Sun, F.; Dong, K.; Osenberg, M.; Hilger, A.; Risse, S.; Lu, Y.; Kamm, P.H.; Klaus, E.; Markötter, H.; Garcia-Moreno, F.; Arlt, T.; Manke, I., *Visualizing the morphological and compositional evolution of the interface of InLi-anode|thio-LISiON electrolyte in an all-solid-state Li-S cell by in operando synchrotron X-ray tomography and energy dispersive diffraction*, *J. Mater. Chem. A* **6**, 22489-22496 (2018), 10.1039/c8ta08821g
- Sun, F.; Osenberg, M.; Dong, K.; Zhou, D.; Hilger, A.; Jafta, C.J.; Risse, S.; Lu, Y.; Markötter, H.; Manke, I., *Correlating Morphological Evolution of Li Electrodes with Degrading Electrochemical Performance of Li/LiCoO<sub>2</sub> and Li/S Battery Systems: Investigated by Synchrotron X-rayPhase Contrast Tomography*, *ACS En. Lett.* **3**, 356-365 (2018), 10.1021/acsenerylett.7b01254
- Sutka, A.; Kaambre, T.; Joost, U.; Kooser, K.; Kook, M.; Felix Duarte, R.; Kisand, V.; Maiorov, M.; Doebelin, N.; Smits, K., *Solvothermal synthesis derived Co-Ga codoped ZnO diluted magnetic degenerated semiconductor nanocrystals*, *J. Alloy. Compd.* **763**, 164-172 (2018), 10.1016/j.jallcom.2018.05.036
- Svanström, S.; Jacobsson, T.; Sloboda, T.; Giangrisostomi, E.; Ovsyannikov, R.; Rensmo, H.; Cappel, U., *Effect of halide ratio and Cs+ addition on the photochemical stability of lead halide perovskites*, *J. Mater. Chem. A* **6**, 22134-22144 (2018), 10.1039/c8ta05795h
- Svechnikov, M.V.; Chkhalo, N.I.; Gusev, S.A.; Nechay, A.N.; Pariev, D.E.; Pestov, A.E.; Polkovnikov, V.N.; Tatarskiy, D.A.; Salashchenko, N.N.; Schäfers, F.; Sertsu, M.G.; Sokolov, A.; Vainer, Y.A.; Zorina, M.V., *Influence of barrier interlayers on the performance of Mo/Be multilayer mirrors for next-generation EUV lithography*, *Opt. Express* **26**, 33718-33731 (2018), 10.1364/OE.26.033718
- Svirskiy, G.I.; Generalov, A.V.; Klyushin, A.Yu.; Simonov, K.A.; Krasnikov, S.A.; Vinogradov, N.A.; Trigub, A.L.; Zubavichus, Y.V.; Preobrazhenski, A.B.; Vinogradov, A.S., *Comparative X-Ray Absorption Analysis of the Spectrum of Vacant Electronic States in Cobalt and Nickel Tetraphenylporphyrin Complexes*, *Phys. Solid State* **60**, 581-591 (2018), 10.1134/S1063783418030307
- Szabo, E.; Mizsei, R.; Wilk, P.; Zambo, Z.; Torocsik, B.; Weiss, M.; Adam-Vizi, V.; Ambrus, A., *Crystal structures of the disease-causing D444V mutant and the relevant wild type human dihydrolipoamide dehydrogenase*, *Free Rad. Biol. Med.* **124**, 214-220 (2018), 10.1016/j.freeradbiomed.2018.06.008

- Tan, L.; Liu, B.; Siemensmeyer, K.; Glebe, U.; Böker, A., *Synthesis of Polystyrene-Coated Superparamagnetic and Ferromagnetic Cobalt Nanoparticles*, Polym. **10**, 1053/1-18 (2018), 10.3390/polym10101053
- Tan, L.; Liu, B.; Siemensmeyer, K.; Glebe, U.; Böker, A., *Synthesis of thermo-responsive nanocomposites of superparamagnetic cobalt nanoparticles/poly(N-isopropylacrylamide)*, J. Colloid Interface Sci. **526**, 124-134 (2018), 10.1016/j.jcis.2018.04.074
- Tejada, A.; Braunger, S.; Korte, L.; Albrecht, S.; Rech, B.; Guerra, J.A., *Optical characterization and bandgap engineering of flat and wrinkle-textured FA0.83Cs0.17Pb(1-xBrx)3 perovskite thin films*, J. Appl. Phys. **123**, 175302/1-7 (2018), 10.1063/1.5025728
- Teppor, P.; Jaeger, R.; Haerk, E.; Tallo, I.; Joost, U.; Kook, M.; Paiste, P.; Smits, K.; Kirsimäe, K.; Lust, E., *ORR Activity and Stability of Co-N/C Catalysts Based on Silicon Carbide Derived Carbon and the Impact of Loading in Acidic Media*, J. Electrochem. Soc. **165**, F1217-F1223 (2018), 10.1149/2.0961814jes
- Teppor, P.; Jäger, R.; Härk, E.; Joost, U.; Tallo, I.; Paiste, P.; Kirsimäe, K.; Lust, E., *Oxygen reduction reaction on nitrogen and cobalt modified silicon carbide derived carbon in acidic media*, ECS Trans. **85**, 1475-1480 (2018), 10.1149/08513.0855ecst
- Theelen, M.; Schiepers, E.; Vermeer, J.; Falk, S.; Hovestad, A.; Steijvers, H.; Vleuten, M.; Bakker, K.; Dörenkämper, M.; Linden, H., *Raman analysis of Cu(In,Ga)(Se,S)2 absorbers obtained from atmospheric selenium-sulfur annealing of electrodeposited precursors*, , 170-175 (2018), 10.1109/PVSC.2018.8547280
- Timpel, M.; Li, H.; Nardi, M.; Wegner, B.; Frisch, J.; Hotchkiss, P.; Marder, S.; Barlow, S.; Brédas, J.; Koch, N., *Correction: Electrode Work Function Engineering with Phosphonic Acid Monolayers and Molecular Acceptors: Charge Redistribution Mechanisms*, Adv. Funct. Mater. **28**, 1870098/1 (2018), 10.1002/adfm.201801349
- Timpel, M.; Li, H.; Nardi, M.; Wegner, B.; Frisch, J.; Hotchkiss, P.; Marder, S.; Barlow, S.; Brédas, J.-L.; Koch, N., *Electrode Work Function Engineering with Phosphonic Acid Monolayers and Molecular Acceptors: Charge Redistribution Mechanisms*, Adv. Funct. Mater. **28**, 1704438/1-12 (2018), 10.1002/adfm.201704438
- Tiwari, D.; Cattelan, M.; Harniman, R.L.; Sarua, A.; Fox, N.; Koehler, T.; Klenk, R.; Fermin, D.J., *The Impact of Sb and Na Doping on the Surface Electronic Landscape of Cu<sub>2</sub>ZnSnS<sub>4</sub> Thin-films*, ACS En. Lett. **3**, 2977-2982 (2018), 10.1021/acsenergylett.8b02081
- Tobin, M.; Vongsvivut, J.; Martin, D.E.; Sizeland, K.H.; Hackett, M.J.; Takechi, R.; Fimorgnari, N.; Lam, V.; Mamo, J.C.; Carter, E.A.; Swarbrick, B.; Lay, P.A.; Christensen, D.A.; Perez-Guaita, D.; Lowery, E.; Heraud, P.; Wood, B.R.; Puskar, L.; Bamberg, F., *Focal Plane Array IR imaging at the Australian Synchrotron*, Infr. Phys. Techn. **94**, 85-90 (2018), 10.1016/j.infrared.2018.06.022
- Toft-Petersen, R.; Abrahamsen, A.; Balog, S.; Porcar, L.; Laver, M., *Decomposing the Bragg glass and the peak effect in a Type-II superconductor*, Nat. Commun. **9**, 901/1-12 (2018), 10.1038/s41467-018-03267-z

- Toft-Petersen, R.; Jensen, T.B.S.; Jensen, J.; Von Zimmermann, M.; Sloth, S.; Isaksen, F.W.; Christensen, N.; Chen, Y.; Siemensmeyer, K.; Kawano-Furukawa, H.; Takeya, H.; Abrahamsen, A.B.; Andersen, N.H., *Magnetoelastic phase diagram of TbNi<sub>2</sub>B<sub>2</sub>C*, Phys. Rev. B **97**, 224417/1-8 (2018), 10.1103/PhysRevB.97.224417
- Trinh, C.T.; Preissler, N.; Sonntag, P.; Muske, M.; Jäger, K.; Trahms, M.; Schlatmann, R.; Rech, B.; Amkreutz, D., *Potential of interdigitated back-contact silicon heterojunction solar cells for liquid phase crystallized silicon on glass with efficiency above 14%*, Solar Energy Mat Solar Cells **174**, 187-195 (2018), 10.1016/j.solmat.2017.08.042
- Trinh, C.T.; Schlatmann, R.; Rech, B.; Amkreutz, D., *Progress in and potential of liquid phase crystallized silicon solar cells*, Sol. Energy **175**, 75-83 (2018), 10.1016/j.solener.2017.12.041
- Troyanchuk, I. O.; Bushinsky, M. V.; Tereshko, N. V.; Sirenko, V. A.; Sikolenko, V.; Schorr, S.; Ritter, C.; Franz, A., *Ferromagnetic ordering, magnetic and magnetotransport properties of R<sub>1-x</sub>Sr<sub>x</sub>(Mn<sub>1-x/2</sub>Sb<sub>x/2</sub>)O<sub>3</sub> (R = La, Pr, Nd, Sm, Eu) manganites*, Mat. Res. Expr. **5**, 066101/1-10 (2018), 10.1088/2053-1591/aac7b8
- Troyanchuk, I.; Bushinskii, M.; Tereshko, N.; Sikolenko, V.; Ritter, C.; Schorr, S., *Magnetic Phase Diagrams of R<sub>1-x</sub>Sr<sub>x</sub>(Mn<sub>1-x/2</sub>Sb<sub>x/2</sub>)O<sub>3</sub> (R = La, Pr, Nd, Sm, Eu) with Trivalent Manganese Ions*, Phys. Solid State **60**, 1762-1767 (2018), 10.1134/S1063783418090330
- Troyanchuk, I.; Bushinsky, M.; Karpinsky, D.; Sikolenko, V.; Gavrillov, S.; Silibin, M.; Franz, A.; Ritter, C., *Magnetic and magnetotransport properties of La<sub>1-x</sub>Sr<sub>x</sub>Mn<sub>0.5</sub>-Co<sub>0.5</sub>O<sub>3</sub> perovskites*, Ceram. Intern. **44**, 1432-1537 (2018), 10.1016/j.ceramint.2017.09.239
- Troyanchuk, I.; Bushinsky, M.; Tereshko, M.; Sikolenko, V.; Schorr, S., *Magnetic Structure and Magnetotransport Properties of La<sub>0.7</sub>Sr<sub>0.3</sub>Mn<sub>1-x</sub>Ni<sub>x</sub>O<sub>3</sub>*, Phys. Met. Metallogr. **119**, 316-323 (2018), 10.1134/S0031918X18040166
- Tuominen, M.; Mäkelä, J.; Yasir, M.; Dahl, J.; Granroth, S.; Lehtiö, J.-P.; Félix, R.; Laukkanen, P.; Kuzmin, M.; Laitinen, M.; Punkkinen, M.P.J.; Hedman, H.-P.; Punkkinen, R.; Polojärvi, V.; Lyytikäinen, J.; Tukiainen, A.; Guina, M.; Kokko, K., *Oxidation-Induced Changes in the ALD-Al<sub>2</sub>O<sub>3</sub>/InAs(100) Interface and Control of the Changes for Device Processing*, ACS Appl. Mat. Interfaces **10**, 44932-44940 (2018), 10.1021/acsami.8b17843
- Turren-Cruz, S.-H.; Saliba, M.; Mayer, M.T.; Juárez-Santiesteban, H.; Mathew, X.; Nienhaus, L.; Tress, W.; Erodici, M.P.; Sher, M.-J.; Bawendi, M.G.; Grätzel, M.; Abate, A.; Hagfeldt, A.; Correa-Baena, J.-P., *Enhanced charge carrier mobility and lifetime suppress hysteresis and improve efficiency in planar perovskite solar cells*, En. Envir. Science **11**, 78-86 (2018), 10.1039/C7EE02901B
- Uchida, R.; Binet, S.; Arora, N.; Jacopin, G.; Alotaibi, M.; Taubert, A.; Zakeeruddin, S.; Dar, M.; Graetzel, M., *Insights about the Absence of Rb Cation from the 3D Perovskite Lattice: Effect on the Structural, Morphological, and Photophysical Properties and Photovoltaic Performance*, Small **14**, 1802033/1-7 (2018), 10.1002/smll.201802033
- Upadhyay, S.K.; Sampathkumaran, E.V.; Rayaprol, S.; Hoser, A., *Magnetic and magnetodielectric behavior of the Haldane spin-chain system, Ho<sub>2</sub>BaNiO<sub>5</sub>*, Mat. Res. Expr. **6**, 36107 (2018), 10.1088/2053-1591/aaf443

Usachov, D.Yu.; Bokai, K.A.; Marchenko, D.E.; Fedorov, A.V.; Shevelev, V.O.; Vilkov, O.Yu.; Kataev, E.Yu.; Yashina, L.V.; Rühl, E.; Laubschat, C.; Vyalykh, D.V., *Cobalt-Assisted Recrystallization and Alignment of Pure and Doped Graphene*, *Nanoscale* **10**, 12123-12132 (2018), 10.1039/C8NR03183E

Valencia, S.; Calderón, M.J.; López-Mir, L.; Konstantinovic, Z.; Schierle, E.; Weschke, E.; Brey, L.; Martínez, B.; Balcells, Ll., *Enhancement of spin-orbit coupling at manganite surfaces*, *Phys. Rev. B* **98**, 115142/1-8 (2018), 10.1103/PhysRevB.98.115142

van Duren, S.; Sylla, D.; Fairbrother, A.; Sánchez, Y.; López-Marino, S.; Márquez Prieto, J.; Izquierdo-Roca, V.; Saucedo, E.; Unold, T., *Pre-annealing of metal stack precursors and its beneficial effect on kesterite absorber properties and device performance*, *Solar Energy Mat Solar Cells* **185**, 226-232 (2018), 10.1016/j.solmat.2018.04.022

Vilão, R.; Vieira, R.; Alberto, H.; Gil, J.; Weidinger, A.; Lichti, R.; Mengyan, P.; Baker, B.; Lord, J., *Barrier model in muon implantation and application to Lu2O3*, *Phys. Rev. B* **98**, 115201/1-9 (2018), 10.1103/PhysRevB.98.115201

Vogel, F.; Ngai, S.; Fricke, K.; McKechnie, M.; Wanderka, N.; Hentrich, T.; Banhart, J.; Thompson, G.B., *Tracing the three-dimensional nanochemistry of phase separation in an inverse Ni-based superalloy*, *Acta Mat.* **157**, 326-338 (2018), 10.1016/j.actamat.2018.07.038

Vogel, F.; Ngai, S.; Smith, C.; Holler, R.; Thompson, G., *Complex evaporation behavior of a transition metal carbo-nitride (Hf(C,N)) studied by atom probe tomography*, *Ultramicroscopy* **194**, 154-166 (2018), 10.1016/j.ultramic.2018.08.004

Volkov, O.; Kronast, F.; Mönch, I.; Mawass, M.; Kákay, A.; Fassbender, J.; Makarov, D., *Experimental and Theoretical Study of Curvature Effects in Parabolic Nanostripes*, *Phys. Status Solidi RRL* **13**, 1800309/1-5 (2018), 10.1002/pssr.201800309

Volykhov, A.A.; Sánchez-Barriga, J.; Batuk, M.; Callaert, C.; Hadermann, J.; Sirotna, A.P.; Neudachina, V.S.; Belova, A.I.; Vladimirova, N.V.; Tamm, M.E.; Khmelevsky, N.O.; Escudero, C.; Pérez-Dieste, V.; Knop-Gericke, A.; Yashina, L.V., *Can surface reactivity of mixed crystals be predicted from their counterparts? A case study of (Bi<sub>1-x</sub>Sbx)<sub>2</sub>Te<sub>3</sub> topological insulators*, *J. Mater. Chem. C* **6**, 8941-8949 (2018), 10.1039/C8TC02235F

von Reppert, A.; Willig, L.; Pudell, J.-E.; Rössle, M.; Leitenberger, W.; Herzog, M.; Ganss, F.; Hellwig, O.; Bargheer, M., *Ultrafast laser generated strain in granular and continuous FePt thin films*, *Appl. Phys. Lett.* **113**, 123101/1-5 (2018), 10.1063/1.5050234

Vorwerk, C.; Hartmann, C.; Cocchi, C.; Sadoughi, G.; Habisreutinger, S.; Félix, R.; Wilks, R.; Snaith, H.; Bär, M.; Draxl, C., *Correction: Exciton-Dominated Core-Level Absorption Spectra of Hybrid Organic-Inorganic Lead Halide Perovskites*, *J. Phys. Chem. Lett.* **9**, 3193 (2018), 10.1021/acs.jpcclett.8b01552

Vorwerk, C.; Hartmann, C.; Cocchi, C.; Sadoughi, G.; Habisreutinger, S.; Félix, R.; Wilks, R.G.; Snaith, H.; Bär, M.; Draxl, C., *Exciton-Dominated Core-Level Absorption Spectra of Hybrid Organic-Inorganic Lead Halide Perovskites*, *J. Phys. Chem. Lett.* **9**, 1852-1858 (2018), 10.1021/acs.jpcclett.8b00378

Wagner, P.; Stang, J.-C.; Mews, M.; Morales-Vilches, A.B.; Stannowski, B.; Stegemann, B.; Korte, L., *Interdigitated back contact silicon heterojunction solar cells: Towards an industrially applicable structuring method*, *AIP Conf. Proc.* **1999**, 60001/1-7 (2018), 10.1063/1.5049299

- Wanderka, N.; Kropf, H.; Timpel, M., *Morphological characterization of eutectic Si and Ge phases in the corresponding Al-15Si and Al-20Ge alloys using FIB tomography*, *Jord. J. of Phys.* **11**, 42125 (2018),
- Wang, H.; Chen, Q.; Xu, H.; Sun, H.; Huang, F.; Raja, W.; Toma, A.; Proietti Zaccaria, R., *Hybrid-State Dynamics of Dye Molecules and Surface Plasmon Polaritons under Ultrastrong Coupling Regime*, *Laser Phot. Rev.* **12**, 1700176/1-7 (2018), 10.1002/lpor.201700176
- Wang, Q., *Fast Voltage Decay in Perovskite Solar Cells Caused by Depolarization of Perovskite Layer*, *J. Phys. Chem. C* **122**, 4822-4827 (2018), 10.1021/acs.jpcc.8b01033
- Wang, Q.; Abate, A., *Strategies toward Stable Perovskite Solar Cells*, *Adv. Mater. Interfaces* **5**, 1800264/1-6 (2018), 10.1002/admi.201800264
- Wang, Q.; Ligorio, G.; Diez-Cabanes, V.; Cornil, D.; Kobin, B.; Hildebrandt, J.; Nardi, M.; Timpel, M.; Hecht, S.; Cornil, J.; List-Kratochvil, E.; Koch, N., *Dynamic Photoswitching of Electron Energy Levels at Hybrid ZnO/Organic Photochromic Molecule Junctions*, *Adv. Funct. Mater.* **28**, 1800716/1-9 (2018), 10.1002/adfm.201800716
- Wang, R.; Katase, T.; Fu, K.; Zhai, T.; Yang, J.; Wang, Q.; Ohta, H.; Koch, N.; Duhm, S., *Oxygen Vacancies Allow Tuning the Work Function of Vanadium Dioxide*, *Adv. Mater. Interfaces* **5**, 1801033/1-7 (2018), 10.1002/admi.201801033
- Wang, Y.; Wensch, R.; Schlatmann, R.; Lauermann, I., *Inorganic Materials as Hole Selective Contacts and Intermediate Tunnel Junction Layer for Monolithic Perovskite-CIGSe Tandem Solar Cells*, *Adv. Energy Mat.* , 1801692/1-18 (2018), 10.1002/aenm.201801692
- Wang, Z.; Wu, J.; Yang, W.; Bera, A.K.; Kamenskyi, D.; Islam, A.T.M.N.; Xu, S.; Law, J.; Lake, B.; Wu, C.; Loidl, A., *Experimental observation of Bethe strings*, *Nat.* **554**, 219-223 (2018), 10.1038/nature25466
- Watanabe, T.; Kobayashi, S.; Hara, Y.; Xu, J.; Lake, B.; Yan, J.-Q.; Niazi, A.; Johnston, D.C., *Orbital-and spin-driven lattice instabilities in quasi-one-dimensional CaV<sub>2</sub>O<sub>4</sub>*, *Phys. Rev. B* **98**, 094427/1-6 (2018), 10.1103/PhysRevB.98.094427
- Weber, G.; DeKoster, G.T.; Holton, N.; Hall, K.B.; Wahl, M.C., *Molecular principles underlying dual RNA specificity in the Drosophila SNF protein*, *Nat. Commun.* **9**, 2220 (2018), 10.1038/s41467-018-04561-6
- Wei, R.G.; Chudoba, R.; Setny, P.; Dzubiela, J., *Affinity, kinetics, and pathways of anisotropic ligands binding to hydrophobic model pockets*, *J. Chem. Phys.* **149**, 094902/1-10 (2018), 10.1063/1.5025118
- Westhoff, D.; Manke, I.; Schmidt, V., *Generation of virtual lithium-ion battery electrode microstructures based on spatial stochastic modeling*, *Comp Mat Science* **151**, 53-64 (2018), 10.1016/j.commatsci.2018.04.060
- Wilk, P.; Uehlein, M.; Piwowarczyk, R.; Dobbek, H.; Mueller, U.; Weiss, M.S., *Structural basis for prolidase deficiency disease mechanisms*, *FEBS J.* **285**, 3422-3441 (2018), 10.1111/febs.14620
- Wimpory, R.; Hofmann, M.; Akrivos, V.; Smith, M.; Pirling, T.; Ohms, C., *Precise measurement of steep residual strain gradients using neutron diffraction in strongly absorbing materials with chemical compositional gradients*, *Mat. Perf. Charact.* **7**, 488-503 (2018), 10.1520/MPC20170114

- Wimpory, R.C.; Martins, R.V.; Hofmann, M.; Rebelo Kornmeier, J.; Moturu, S.; Ohms, C., *A complete reassessment of standard residual stress uncertainty analyses using neutron diffraction emphasizing the influence of grain size*, *Int. J. Pres. Ves. Pip.* **164**, 80-92 (2018), 10.1016/j.ijpvp.2017.09.002
- Winterfeld, L.; Koppka, C.; Abou-Ras, D.; Kleinschmidt, P.; Supplie, O.; Hannappel, T.; Runge, E., *Mechanism of twin-reduced III-V epitaxy on As-modified vicinal Si(111)*, *Phys. Rev. Mat.* **2**, 124601/1-15 (2018), 10.1103/PhysRevMaterials.2.124601
- Wollenhaupt, J.; Henning, L.M.; Sticht, J.; Becke, C.; Freund, C.; Santos, K.F.; Wahl, M.C., *Intrinsically Disordered Protein Ntr2 Modulates the Spliceosomal RNA Helicase Brr2*, *Biophys. J.* **114**, 788-799 (2018), 10.1016/j.bpj.2017.12.033
- Wozniak, P.; De Léon, I.; Höflich, K.; Haverkamp, C.; Christiansen, S.; Leuchs, G.; Banzer, P., *Chiroptical response of a single plasmonic nanohelix*, *Opt. Express* **26**, 19275-19293 (2018), 10.1364/OE.26.019275
- Xi, L.; Lange, K.M., *Surface modification of hematite photoanodes for improvement of photoelectrochemical performance*, *Cat.* **8**, 497/1-15 (2018), 10.3390/catal8110497
- Xi, L.; Schellenberger, M.; Präg, R.P.; Golnak, R.; Schuck, G.; Lange, K.M., *Ionic Current Mn K-edge X-ray Absorption Spectra Obtained in a Flow Cell*, *J. Phys. Chem. C* **122**, 15588-15594 (2018), 10.1021/acs.jpcc.8b04693
- Xu, J.; Islam, A.T.M.N.; Glavatsky, I.; Reehuis, M.; Hoffmann, J.-U.; Lake, B., *Field-induced quantum spin-12 chains and disorder in Nd<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub>*, *Phys. Rev. B* **98**, 060408/1-5 (2018), 10.1103/PhysRevB.98.060408
- Xu, X.; Ran, Q.; Dey, P.; Nikam, R.; Haag, R.; Ballauff, M.; Dzubiella, J., *Counterion-Release Entropy Governs the Inhibition of Serum Proteins by Polyelectrolyte Drugs*, *Biomacromolecules* **19**, 409-416 (2018), 10.1021/acs.biomac.7b01499
- Xu, X.; Schultz, T.; Qin, Z.; Severin, N.; Haas, B.; Shen, S.; Kirchhof, J.; Opitz, A.; Koch, C.; Bolotin, K.; Rabe, J.; Eda, G.; Koch, N., *Microstructure and Elastic Constants of Transition Metal Dichalcogenide Monolayers from Friction and Shear Force Microscopy*, *Adv. Mat.* **30**, 1803748/1-8 (2018), 10.1002/adma.201803748
- Yang, G.; Hu, R.; Ding, H.; Kochovski, Z.; Mei, S.; Lu, Y.; Ma, Y.; Chen, G.; Jiang, M., *CO<sub>2</sub>-switchable response of protein microtubules: behaviour and mechanism*, *Mat. Chem. Front.* **2**, 1642-1646 (2018), 10.1039/C8QM00245B
- Yin, G.; Manley, P.; Schmid, M., *Light trapping in ultrathin CuIn<sub>1-x</sub>Ga<sub>x</sub>Se<sub>2</sub> solar cells by dielectric nanoparticles*, *Sol. Energy* **163**, 443-452 (2018), 10.1016/j.solener.2018.01.096
- Yin, Z.; Löchel, H.; Rehanek, J.; Goy, C.; Kalinin, A.; Schottelius, A.; Trinter, F.; Miedema, P.; Jain, A.; Valerio, J.; Busse, P.; Lehmkuhler, F.; Möller, J.; Grübel, G.; Madsen, A.; Viehhaus, J.; Grisenti, R.; Beye, M.; Erko, A.; Teichert, S., *X-ray spectroscopy with variable line spacing based on reflection zone plate optics*, *Opt. Lett.* **43**, 4390-4393 (2018), 10.1364/OL.43.004390
- Yokaichiya, F.; Schmidt, C.; Storsberg, J.; Kumpugdee Vollrath, M.; Ribeiro de Araujo, D.; Kent, B.; Clemens, D.; Wingert, F.; Franco, M.K.K.D., *Effects of doxorubicin on the structural and morphological characterization of solid lipid nanoparticles (SLN) using small angle neutron scattering (SANS) and small angle X-ray scattering (SAXS)*, *Phy. B* **551**, 191-196 (2018), 10.1016/j.physb.2017.12.036

Yu, J.M.; Wanderka, N.; Rack, A.; Daudin, R.; Boller, E.; Markötter, H.; Manzoni, A.; Vogel, F.; Arlt, T.; Manke, I.; Banhart, J., *Influence of impurities, strontium addition and cooling rate on microstructure evolution in Al-10Si-0.3Fe casting alloys*, *J. Alloy. Compd.* **766**, 818-827 (2018), 10.1016/j.jallcom.2018.06.372

Yu, S.; Kent, B.; Jafta, C.; Petzold, A.; Radulescu, A.; Schuchardt, M.; Tölle, M.; van der Giet, M.; Zidek, W.; Ballauff, M., *Stability of human serum albumin structure upon toxin uptake explored by small angle neutron scattering*, *Polym.* **141**, 175-183 (2018), 10.1016/j.polymer.2018.02.060

Zamudio-Bayer, V.; Hirsch, K.; Langenberg, A.; Lawicki, A.; Terasaki, A.; von Issendorff, B.; Lau, T., *Large orbital magnetic moments of small, free cobalt cluster ions  $Co^{+n}$  with  $n \leq 9$* , *J. Phys.: Condens. Matter* **30**, 464002/1-10 (2018), 10.1088/1361-648X/aae54a

Zeller, P.; Amati, M.; Sezen, H.; Scardamaglia, M.; Struzzi, C.; Bittencourt, C.; Lantz, G.; Hajlaoui, M.; Papalazarou, E.; Marino, M.; Fanetti, M.; Ambrosini, S.; Rubini, S.; Gregoratti, L., *Scanning Photoelectron Spectro-Microscopy: A Modern Tool for the Study of Materials at the Nanoscale*, *Phys. Status Solidi A* **215**, 1800308/1-8 (2018), 10.1002/pssa.201800308

Zellmeier, M.; Brenner, T.J.K.; Janietz, S.; Nickel, N.; Rappich, J., *Polythiophenes as emitter layers for crystalline silicon solar cells: Parasitic absorption, interface passivation, and open circuit voltage*, *J. Appl. Phys.* **123**, 033102/1-5 (2018), 10.1063/1.5006625

Zhang, J.; Liu, J.; Xi, L.; Yu, Y.; Chen, N.; Sun, S.; Wang, W.; Lange, K.M.; Zhang, B., *Single-Atom Au/NiFe Layered Double Hydroxide Electrocatalyst: Probing the Origin of Activity for Oxygen Evolution Reaction*, *J. Am. Chem. Soc.* **140**, 3876-3879 (2018), 10.1021/jacs.8b00752

Zhang, M.; Ma, Y.; Friedrich, D.; Van De Krol, R.; Wong, L.; Abdi, F., *Elucidation of the opto-electronic and photoelectrochemical properties of FeVO<sub>4</sub> photoanodes for solar water oxidation*, *J. Mater. Chem. A* **6**, 548-555 (2018), 10.1039/c7ta08923f

Zhang, P.; Dong, Z.; Ran, Y.; Xie, H.; Lu, Y.; Ding, S., *Preparation and photocatalytic application of AgBr modified Bi<sub>2</sub>WO<sub>6</sub> nanosheets with high adsorption capacity*, *J. Mater. Res.* **33**, 3953-3962 (2018), 10.1557/jmr.2018.386

Zhang, S.; Kronast, F.; van der Laan, G.; Hesjedal, T., *Real-Space Observation of Skyrmionium in a Ferromagnet-Magnetic Topological Insulator Heterostructure*, *Nano Lett.* **18**, 1057-1063 (2018), 10.1021/acs.nanolett.7b04537

Zhang, S.; Stolterfoht, M.; Armin, A.; Lin, Q.; Zu, F.; Sobus, J.; Jin, H.; Koch, N.; Meredith, P.; Burn, P.; Neher, D., *Interface Engineering of Solution-Processed Hybrid Organohalide Perovskite Solar Cells*, *ACS Appl. En. Mat.* **10**, 21681-21687 (2018), 10.1021/acsmi.8b02503

Zhao, K.; Golias, E.; Zhang, Q. H.; Krivenkov, M.; Jesche, A.; Gu, L.; Rader, O.; Mazin, I. I.; Gegenwart, P., *Quantum oscillations and Dirac dispersion in the BaZnBi<sub>2</sub> semimetal guaranteed by local Zn vacancy order*, *Phys. Rev. B* **97**, 115166/1-7 (2018), 10.1103/PhysRevB.97.115166

Zivanovic, V.; Kochovski, Z.; Arenz, C.; Lu, Y.; Kneipp, J., *SERS and Cryo-EM Directly Reveal Different Liposome Structures during Interaction with Gold Nanoparticles*, *J. Phys. Chem. Lett.* **9**, 6767-6772 (2018), 10.1021/acs.jpcclett.8b03191