

28. M. Z. Baykara, **H. Mönig**, T. C. Schwendemann, Ö. Ünverdi E. I. Altman, and U. D. Schwarz:  
*Three-Dimensional Interaction Force and Tunneling Current Spectroscopy of Point Defects on Rutile TiO<sub>2</sub>(110).*  
Applied Physics Letters **108**, 071601 (2016).
27. **H. Mönig**, D. Rodríguez Hermoso, O. Díaz Arado, M. Todorović, A. Timmer, S. Schüer, G. Langewisch, R. Pérez and H. Fuchs:  
*Submolecular Imaging by Noncontact Atomic Force Microscopy with an Oxygen Atom Rigidly Connected to a Metallic Probe.*  
ACS Nano **10**, 1201 (2016).
26. S. Bröker, D. Kück, A. Timmer, I. Lauermann, B. Ümsür, D. Greiner, C. A. Kaufmann and **H. Mönig**:  
*Correlating the Local Defect Level Density with the Macroscopic Composition and Energies of Chalcopyrite Thin Film Surfaces*  
ACS Applied Materials & Interfaces **7**, 13062 (2015)
25. M. Z. Baykara, M. Todorović, **H. Mönig**, T. C. Schwendemann, L. Rodrigo, E. I. Altman, R. Pérez and U. D. Schwarz:  
*Simultaneous Measurement of Multiple Independent Atomic-Scale Interactions Using Scanning Probe Microscopy: Data Interpretation and the Effect of Cross-Talk.*  
The Journal of Physical Chemistry C **119**, 6670 (2015).
24. O. Díaz Arado, **H. Mönig**, J.-H. Franke, A. Timmer, P. A. Held, A. Studer and H. Fuchs:  
*On-Surface Reductive Coupling of Aldehydes on Au(111).*  
Chemical Communications **51**, 4887 (2015).
23. N. F. Kleinmeier, A. Timmer, L. Bignardi, **H. Mönig**, X. L. Feng, K. Müllen, L. F. Chi, H. Fuchs, and H. Zacharias:  
*Electron Dynamics in Unoccupied States of Spatially Aligned 7-a Graphene Nanoribbons on Au(788)*  
Physical Review B **90**, 245408 (2014).
22. **H. Mönig**, D. Lockhorn, N. Aghdassi, A. Timmer, C. A. Kaufmann, R. Caballero, H. Zacharias and H. Fuchs:  
*Heat Induced Passivation of CuInSe<sub>2</sub> Surfaces: A Strategy to Optimize the Efficiency of Chalcopyrite Thin Film Solar Cells?*  
Advanced Materials Interfaces **1**, 1300040 (2014).

21. M. W. Herdiech, **H. Möning**, E. I. Altman:  
*An X-ray photoelectron spectroscopy study of  $BF_3$  adsorption on positively and negatively poled  $LiNbO_3$  (0001).*  
Surface Science **626**, 53 (2014).
20. H. Y. Gao, D. Zhong, **H. Möning**, H. Wagner, P. A. Held, A. Timmer, A. Studer and H. Fuchs:  
*Photochemical Glaser Coupling at Metal Surfaces.*  
The Journal of Physical Chemistry C **118**, 6272 (2014).
19. H. Zhang, J.-H. Franke, D. Zhong, Y. Li, A. Timmer, O. Díaz Arado, **H. Möning**, H. Wang, L. Chi, Z. Wang, K. Müllen and H. Fuchs:  
*Surface Supported Gold-Organic Hybrids: On-Surface Synthesis and Surface Directed Orientation.*  
Small **10**, 1361 (2013).
18. **H. Möning**, M. Todorović, M. Z. Baykara, T. C. Schwendemann, L. Rodrigo, E. I. Altman, R. Pérez and U. D. Schwarz:  
*Understanding Scanning Tunneling Microscopy Contrast Mechanisms on Metal Oxides: A Case Study.*  
ACS Nano **7**, 10233 (2013).
17. O. Díaz Arado, **H. Möning**, H. Wagner, J.-H. Franke, G. Langewisch, P. A. Held, A. Studer and H. Fuchs:  
*On-Surface Azide-Alkyne Cycloaddition on Au(111).*  
ACS Nano **7**, 8509 (2013).
16. M. Z. Baykara, M. Todorović, **H. Möning**, T. C. Schwendemann, Ö. Ünverdi, L. Rodrigo, E. I. Altman, R. Pérez and U. D. Schwarz:  
*Atom-specific forces and defect identification on surface-oxidized Cu(100) with combined 3D-AFM and STM measurements.*  
Physical Review B **87**, 155414 (2013) ⇒ Editors' Suggestion.
15. M. Z. Baykara, T. C. Schwendemann, B. J. Albers, N. Pilet, **H. Möning**, E. I. Altman and U. D. Schwarz:  
*Exploring atomic-scale lateral forces in the attractive regime: a case study on graphite (0001).*  
Nanotechnology **23**, 405703 (2012).
14. M. Z. Baykara, O. E. Dagdeviren, T. C. Schwendemann, **H. Möning**, E. I. Altman and U. D. Schwarz:  
*Probing three-dimensional surface force fields with atomic resolution: Measurement strategies, limitations, and artifact reduction.*  
Beilstein Journal of Nanotechnology **3**, 637-650 (2012).

13. S. Schorr, R. Mainz, **H. Mönig**, I. Lauermann and M. Bär:  
*The complex material properties of chalcopyrite and kesterite thin-film solar cell absorbers tackled by synchrotron-based analytics.*  
 Progress in Photovoltaics: Research and Applications **20**, 557-567 (2012).
12. **H. Mönig**, C. A. Kaufmann, Ch.-H. Fischer, A. Grimm, R. Caballero, B. Johnson, N. Allsop, A. Eicke, M. Gorgoi, M. Ch. Lux-Steiner and I. Lauermann:  
*Gallium gradients in chalcopyrite thin films: depth profile analyses of films grown at different temperatures.*  
 Journal of Applied Physics **110**, 093509 (2011).
11. D. Abou-Ras, R. Caballero, C.-H. Fischer, C. A. Kaufmann, I. Lauermann, R. Mainz, **H. Mönig**, A. Schöpke, C. Stephan, C. Streeck, S. Schorr, A. Eicke, M. Döbeli, B. Gade, J. Hinrichs, T. Nunney, H. Dijkstra, V. Hoffmann, D. Klemm, V. Efimova, A. Bergmaier, G. Dollinger, T. Wirth, W. Unger, A. A. Rockett, A. Perez Rodriguez, J. Alvarez Garcia, V. Izquierdo, T. Schmid, P.-P. Choi, S. Zaefferer, A. J. Wilkinson, M. Müller, F. Bertram, J. Christen, H. Khatri, R. W. Collins, S. Marsillac, and I. Kötschau:  
*Comprehensive comparison of various techniques for the analysis of elemental distributions in thin films.*  
 Microscopy and Microanalysis **17**, 728-751 (2011).
10. **H. Mönig**, R. Caballero, C. A. Kaufmann, T. L. Schmidt, M. Ch. Lux-Steiner and S. Sadewasser:  
*Nanoscale investigations of the electronic surface properties of Cu(In,Ga)Se<sub>2</sub> thin films by scanning tunneling spectroscopy.*  
 Solar Energy Materials & Solar Cells **95**, 1537-1543 (2011).
9. **H. Mönig**, Y. Smith, R. Caballero, C. A. Kaufmann, I. Lauermann, M. Ch. Lux-Steiner and S. Sadewasser:  
*Direct evidence for a reduced density of deep level defects at grain boundaries of Cu(In,Ga)Se<sub>2</sub> thin films.*  
 Physical Review Letters **105**, 116802 (2010).
8. **H. Mönig**, Ch.-H. Fischer, A. Grimm, B. Johnson, C. A. Kaufmann, R. Caballero, I. Lauermann and M. Ch. Lux-Steiner:  
*Surface Cu depletion of Cu(In,Ga)Se<sub>2</sub> films: Further experimental evidence for a defect-induced surface reconstruction.*  
 Journal of Applied Physics **107**, 113540 (2010).
7. **H. Mönig**, Ch.-H. Fischer, R. Caballero, C. A. Kaufmann, N. Allsop, M. Gorgoi, R. Klenk, H.-W. Schock, S. Lehmann, M. Ch. Lux-Steiner and I. Lauermann:  
*Surface Cu depletion of Cu(In,Ga)Se<sub>2</sub> films: an investigation by hard X-ray photoelectron spectroscopy.*  
 Acta Materialia **57**, 3645-3651 (2009) ⇒ Helmholtz-Zentrum Berlin, Highlights 2009/2010.

6. **H. Mönig**, I. Lauermann, A. Grimm, C. Camus, C.A. Kaufmann, P. Pistor, Ch. Jung, T. Kropp, M. Ch. Lux-Steiner and Ch.-H. Fischer:  
*Controlled variation of the information depth by angle dependent soft x-ray emission spectroscopy: a study on polycrystalline Cu(In,Ga)Se<sub>2</sub>*.  
*Applied Surface Science* **255**, 2474-2477 (2008).
5. C. A. Kaufmann, R. Caballero, T. Unold, **H. Mönig**, R. Hesse, R. Klenk and H.-W. Schock:  
*Low Temperature growth of Cu(In,Ga)Se<sub>2</sub>*.  
23rd European Photovoltaic Solar Energy Conference, Valencia (Spain); Proceedings, 2170-2174 (2008).
4. P. Pistor, N. Allsop, W. Braun, R. Caballero, C. Camus, Ch.-H. Fischer, M. Gorgoi, A. Grimm, B. Johnson, T. Kropp, I. Lauermann, S. Lehmann, **H. Mönig**, S. Schorr, A. Weber and R. Klenk:  
*Cu in In<sub>2</sub>S<sub>3</sub>: interdiffusion phenomena analysed by high kinetic energy x-ray photoelectron spectroscopy*.  
*Physica Status Solidi A* **206**, 1059-1062 (2008).
3. I. Lauermann, Ch. Loreck, A. Grimm, R. Klenk, **H. Mönig**, M. Ch. Lux-Steiner, Ch.-H. Fischer, S. Visbeck and T. P. Niesen:  
*Cu-accumulation at the interface between sputter-(Zn,Mg)O and Cu(In,Ga)(S,Se)<sub>2</sub> - A key to understanding the need for buffer layers ?*  
*Thin Solid Films* **515**, 6015-6019 (2007).
2. S. Lehmann, D. Fuertes Marrón, M. Bär, I. Lauermann, **H. Mönig** and M.Ch. Lux-Steiner:  
*Tailoring the work function of chalkopyrite thin films with self-assembled monolayers of thiols*.  
Materials Research Society Symposium, San Francisco 2007; Proceedings **1012**, 497-502.
1. **H. Mönig**, J. Sun, Yu. M. Koroteev, G. Bihlmayer, J. Wells, E. V. Chulkov, K. Pohl and Ph. Hofmann:  
*Structure of the (111) surface of bismuth: LEED analysis and first-principles calculations*.  
*Physical Review B* **72**, 085410 (2005).