



**Current positions**

Head of the Institute of Applied Materials – Materials Science (IAM-WK) at the Karlsruhe Institute of Technology (KIT) (since 2018)

**Previous positions**

apl. Professor at the Institute of Materials Physics at Georg-August University Göttingen (2008-2018)

Assistant professor and head of research team “H in Metals”, Heisenberg funded

**Scientific degrees**

Professor of Physics, University of Göttingen (2008)

Dr. rer nat. in Material Physics, University of Göttingen (1995)

**Recent research topics**

Structure-property-process relations of materials with a focus on gases in materials, e.g. hydrogen. Size, defects and mechanical stress impact on kinetics and thermodynamics of nano-systems. Materials characterization.

**Awards, honors, memberships**

Steering committee: International Symp. on Metal- Hydrogen Systems (since 2014) and Gordon Research Conference on Hydrogen-Metal- Systems (since 2008)  
Organization board of division “Metal and Material Physics”, DPG (2013)

**Publications/Patents (5 most important)**

- **A. Pundt**, R. Kirchheim. Hydrogen in metals: microstructural aspects, *Annual Review of Materials Research* 36, 555–608. [doi:10.1146/annurev.matsci.36.090804.094451](https://doi.org/10.1146/annurev.matsci.36.090804.094451) (2006)
- R. Gemma, T. Al-Kassab, R. Kirchheim, **A. Pundt**, Visualization of deuterium-dead layer by atom probe tomography, *Scripta Materialia* 67, 903. [doi:10.1016/j.scriptamat.2012.08.025](https://doi.org/10.1016/j.scriptamat.2012.08.025) (2012)
- V. Burlaka, S. Wagner, M. Hamm, **A. Pundt**, Suppression of Phase Transformation in Nb–H Thin Films below Switchover Thickness, *Nano Letters* 16, 6207. [doi:10.1021/acs.nanolett.6b02467](https://doi.org/10.1021/acs.nanolett.6b02467) (2016)
- V. Burlaka, V. Roddatis, M.D. Bongers, **A. Pundt**, Defect generation in Pd layers by ‘smart’ films with high H-affinity, *Scientific Reports* 7, 9564. [doi:10.1038/s41598-017-09900-z](https://doi.org/10.1038/s41598-017-09900-z) (2017)
- V. Roddatis, M.D. Bongers, R. Vink, V. Burlaka, J. Čížek.; **A. Pundt**, Insights into Hydrogen Gas Environment-Promoted Nanostructural Changes in Stressed and Relaxed Palladium by Environmental Transmission Electron Microscopy and Variable-Energy Positron Annihilation Spectroscopy, *The Journal of Physical Chemistry Letters* 9, 5246–5253. [doi:10.1021/acs.jpcelett.8b02363](https://doi.org/10.1021/acs.jpcelett.8b02363) (2018)