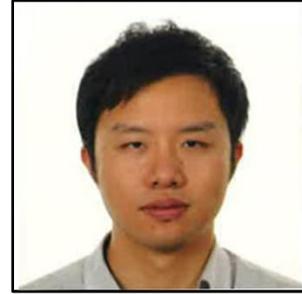


Wei Guo

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[Publications](#)



Education

Max-Planck Institute für Eisenforschung (MPIE)	Mechanical Engineering	Ph.D., 2014
University of Science and Technology, Beijing	Materials Science	M.Eng., 2011
University of Science and Technology, Beijing	Materials Science and Engineering	B.Eng., 2008

Research Interests

The emphasis is currently placed on understanding the influence of interface chemistry and intrinsic nanostructures on the properties of thin films, such as friction resistant multilayers, perovskites, superconductors and photovoltaic materials. A special feature of our approach is that atomistic-scale structural characterization in electron microscope can be combined with three dimensional atom probe tomography (APT), providing intrinsic structural and chemical information of identical position at atomic scale. Superior to conventional EDX and STEM-EELS approach, APT can also offer three dimensional chemical information of target prepared volume (e.g. grain boundary, layered interface and clusters) and be equally sensitive to all the elements down to 100 PPM. The quantification of segregation, coupling, clustering, and doping will in turn guide the design and synthesis of desired nanomaterials.

Professional Experience

2015-Present	Post-doctoral Research Associate, Center for Nanophase Materials Sciences, ORNL
2014-2015	Post-doctoral Research Associate, Department of Microstructural Physics and Alloy Design, MPIE

Professional and Synergistic Activities

2012-Present	Member, Materials Research Society
2013-Present	Member, Atom Probe Tomography and Microscopy
2015-Present	Member, Microscopy and Microanalysis
2014	Best Poster Award at 2014 MRS Fall Meeting
2014	Chinese government award for outstanding students abroad, China Scholarship Council
2014	Max-Planck Society Fellowship
2011-2014	International Max Planck Research School (IMPRS) scholarship
2011	Outstanding Master Thesis, University of Science and Technology, Beijing, China

Research Programs

2011-2014	Correlative TEM and APT study on co-deformation of metallic glass CuZr/nanocrystalline Cu multilayered thin films, principal investigator
2008-2011	Precipitation Behaviors of MnS Particles in Grain Oriented Electrical steels

Selected Publications: (7 first author and 7 co-author papers in SCI peer reviewed journals.)

- W. Guo, J. Yao, E. A. Jägle, P. Choi, M. Herbig, J. M. Schneider, D. Raabe, Deformation induced alloying in crystalline-metallic glass nano-composites, 2015, 628, 269-280.
- W. Guo, E. A. Jägle, P. Choi, J. Yao, A. Kostka, J. M. Schneider, D. Raabe. Shear-induced mixing governs co-deformation of crystalline-amorphous nanolaminates. Physics Review Letters, 2014, 113, 035501.
- W. Guo, E. Jägle, J. Yao, V. Maier, S. Korte, J. M. Schneider, D. Raabe, Extrinsic and intrinsic size effects of amorphous CuZr/nanocrystalline Cu nanolaminates at micron & submicron scale. Acta Materialia, 2014, 80, 94-106.

Graduate and Postdoctoral Advisors

Ph.D. Advisors: Dierk Raabe (MPIE, Dusseldorf), Alexander Hartmaier (RUB, Bochum)
Postdoctoral Advisors: Jonathan D. Poplawsky (ORNL), Karren L. More (ORNL)