

Curriculum Vitae

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Education

2015 PhD in Physics at BTU Cottbus-Senftenberg, Department of Experimentalphysik II;
1992 Diploma in Physics, Kazan State University, Kazan USSR

Current Position Postdoctoral researcher/academic stuff at BTU Cottbus-Senftenberg,
Department of experimental physics and functional materials

Experience/Teaching experience

2004-2015 Academic stuff at BTU Cottbus-Senftenberg, Department of Experimentalphysik II
with the following functions: exercises/tutorials in courses of classical physics, laser,
solid state physics/semiconductors and quantum optics.

2016 Lecturer in "Laser: Grundlagen und Anwendungen";
Substitute lecturer in "Allgemeine Physik".

2017 Lecturer in "Ultra-fast optics"

Scientific and professional references

28 peer reviewed papers/chapter in book

More than 20 talks/posters at national (DPG Tagung) and international conferences (EMRS, PIERS,
NanoSEA, GADEST, IWAN, IMA) and workshops.

Reviewer for the following journals: Applied Surface Science; Optics and Lasers in Engineering;
Journal of American Chemical Society, Chinese Optics Letters.

National and International Projects

2010-2012 Participant in the DAAD project "Projektbezogener Personenaustausch mit Frankreich
(PROCOPE)";

2017 Participant in the BTU-GRS-Cluster-Project "Experimental and Theoretical Analysis of
Atomic Surface Processes".

Awards

2015 University prize "Beste Dissertation der BTU Cottbus-Senftenberg".

2017 PostDoc grant "Early Career Fellowship", BTU Cottbus-Senftenberg.

List of Publications

- [10] O. Varlamova, K. Hoefner, M. Ratzke, D. Sarker; *"Modification of surface properties of solids by femtosecond LIPSS writing: comparative studies on silicon and stainless steel."* Applied Physics A **123**, 725 (2017).
- [9] O. Varlamova, J. Reif, S. Varlamov, M. Bestehorn; (Eds.: S. Sakabe, C. Lienau, R. Grunwald) Ch. *"Self-organized surface patterns originating from laser-induced instability"* in *Progress in nonlinear nano-optics* (Springer, 2015).
- [8] O. Varlamova, J. Reif; *"Evolution of Femtosecond Laser Induced Surface Structures at Low Number of Pulses near the Ablation Threshold"*, J. Laser Micro-/Nanoeng. **8**, 300 (2013).
- [7] O. Varlamova, M. Bounhalli, J. Reif; *"Influence of Irradiation Dose on Laser-Induced Surface Nanostructures on Silicon"*, Appl. Surf. Sci. **278**, 62 (2012).
- [6] O. Varlamova, J. Reif, S. Varlamov, M. Bestehorn; *"Modeling of the Laser Polarization as Control Parameter in Self-Organized Surface Patterns"*, Journal of Nanoscience and Nanotechnology **11**, 9274 (2011).
- [5] O. Varlamova, J. Reif, S. Varlamov, M. Bestehorn; *"The laser polarization as control parameter in the formation of laser-induced periodic surface structures: Comparison of numerical and experimental results"*, Appl. Surf. Sci. **257**, 5465 (2011).
- [4] M. Schade, O. Varlamova, J. Reif, H. Blumtritt, W. Erfurth, H.S. Leipner; *"High-resolution investigations of ripple structures formed by femtosecond laser irradiation of silicon"*, Anal. Bioanal. Chem. **396**, 1905 (2010).
- [3] O. Varlamova, M. Ratzke, J. Reif; *"Feedback effect on the self-organized nanostructures formation on Silicon upon femtosecond laser ablation"*, Sol. St. Phen. **156**, 535 (2010).
- [2] O. Varlamova, F. Costache, M Ratzke, J. Reif; *"Control parameters in pattern formation upon femtosecond laser ablation"*, Appl. Surf. Sci. **253**, 7932 (2007).
- [1] O. Varlamova, F Costache, J. Reif, M Bestehorn; *"Self-organized pattern formation upon femtosecond laser ablation by circularly polarized light"*, Appl. Surf. Sci. **252**, 4702 (2006).