Svetlana Santer (born Prokhorova), Prof. Dr. rer. nat.

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Date of birth 15.07.1972

Research areas Physics and chemistry at interfaces, functional thin polymer films, manipulation of nano-objects

Scientific Training and Academic Positions

Professor: since 2009 Professor (W2) at the University of Potsdam, Institute for Physics and Astronomy, Department of "Experimental physics"

Post-doc: 2008 – 2009 Junior Fellow at the Freiburg Institute of Advanced Studies, Freiburg
2007 Habilitation in Microsystem Technology (MST) at IMTEK, Germany 2000 – 2001 Postdoc at the University of Freiburg, Institute for Microsystem Technology (IMTEK), Germany (group Prof. J. Rühe) 2003–2007 Research Assistant at the Institute for Microsystem Technology (IMTEK), Freiburg, Germany
2000–2003 Group Leader "Interface Analysis" at the Freiburger Material-forschungszentrum (FMF), Germany

PhD: 1997– 2000 at the University of Ulm, Germany (group Prof. M. Möller)
2000 Promotion in Physics at the Ulm University

Study: 1989 – 1996 Study of physics at the St.-Petersburg State University, Russia

Honours, awards, and activities in the scientific community

1995	Soros Preis for young researchers for the work on "Interaction of Molecule DNA with Antitumor Compounds"
2003	Margarethe von Wrangell Habilitationsstipendium
2004	Eliteförderprogramm für Postdoktorandinnen und Postdoktoranden, Landesstiftung Baden-Württemberg
2007	Heisenberg stipend, DFG

List of the most relevant and important publications (2018-2013)

1. Loebner, S.; Lomadze, N.; Kopyshev, A.; Koch, M.; Guskova, O.; Grenzer Saphiannikova, M.; Santer, S. A. «Light Induced Deformation of Azobenzene Containing Colloidal Spheres: Calculation and Measurement of Opto-Mechanical Stresses» The Journal of Physical Chemistry B, 122 (**2018**) 2001.
2. Santer, S. «Remote control of soft nano-objects by light using azobenzene containing surfactants» Journal of Physics D: Applied Physics, 51 (**2017**) 013002.
3. Feldmann, D.; Maduar, S.R.; Santer, M.; Lomadze, N.; Vinogradova, O.I.; Santer, S. «Cleaning up at the bottom with photo-soap: light driven diffusioosmosis» *Scientific Reports*, 6 (**2016**) 36443.
4. Yadavalli, N. S.; Loebner, S.; Papke, Th.; Sava, E.; Hurduc, N.; Santer, S. «A comparative study of photoinduced deformation in azobenzene containing polymer films» *Soft Matter*, 12 (**2016**) 2593-2603.
5. Kopyshev, A.; Galvin, C.J.; Patil, R.R.; Genzer, J.; Lomadze, N.; Feldmann, D.; Zakrevski, J.; Santer, S. «Light-induced reversible change of roughness and thickness of photosensitive polymer brushes» *ACS Applied Materials & Interfaces*, 8 (**2016**) 19175–19184.
6. Kopyshev, A.; Galvin, C. J.; Genzer, J.; Lomadze, N.; Santer, S. «Polymer brushes modified by photosensitive azobenzene containing polyamines» Polymer, 98 (**2016**) 421-428.
7. Di Florio, G.; Brundermann, E.; Yadavalli, N.S.; Santer, S.A. and Havenith, M. «Graphene multilayer as nano-sized optical strain gauge for polymer surface relief gratings.» *Nano Letters*, 14 (**2014**) 5754–5760.
8. Yadavalli, N.S.; Saphiannikova, M.; Santer, S. «Photosensitive response of azobenzene containing films towards pure intensity or polarization interference patterns» *Appl. Phys. Lett.*, 105 (**2014**) 051601.
9. Papke, Th.; Yadavalli, N.S.; Henkel, C.; Santer, S. «Mapping a plasmonic hologram with photosensitive polymer films: standing versus propagating waves» *ACS Applied Materials & Interfaces*, 6 (**2014**) 14174–14180.
10. König, T.; Tsukruk V. V.; Santer, S. «Controlled Topography Change of Subdiffraction Structures Based on Photosensitive Polymer Films Induced by Surface Plasmon Polaritons» *ACS Applied Materials & Interfaces*, 5 (**2013**) 6009–6016.