

Tomáš Šikola

(Faculty of Mechanical Engineering; Brno University of Technology (BUT); Institute of Physical Engineering - Director of the Institute)

Citation Report:

Sum of articles in WoS: 40

Sum of articles in WoS (2004 - 2008): 20

Sum of the Times Cited: 95

h-index : 6

Number of patents: 0

Prof. Šikola (1957) has been the director of IPE since 2006 and the head of Solid State Physics and Surface Science Division at this institute since 1999. He leads the research group consisting of 3 senior researchers, 9 junior researchers and 9 PhD students. His main research fields are Surface Science, Thin Film Physics, and Nanotechnology. He has been the principal investigator of many domestic research projects and several international bilateral projects (e.g, with Arizona State University, TU Wien, UJK Linz). In 1995 - 97 he was the coordinator of an EU Copernicus project No. CIPA - CT94 – 0224 aimed at the development of in situ surface and thin film monitoring techniques. At present, for instance, he coordinates the major project “Centre on Fundamental Research - Structures for Nanophotonics and Nanoelectronics” (Ministry of Education CR, 2006 – 2010, 37 mil. CZK) and has been the investigator of the EUROCORES project “Spin dependent transport in nanostructures ...”, (2006 – 2009), and in the bilateral international project “Plasmon antenna resonances.....” - The Royal Society grant BUT – Imperial College, 2009 – 2010. He has been the Member of the board of the Czech Vacuum Society (since 1999), an Alternate councilor in Int. Union on Vacuum Science, Technology and Applications - IUVSTA (since 2003), and the principal organizer of International Schools on Surface Science and Nanotechnology (1993, 1996, 1999, 2002, 2005, 2008) since 1993, (www.fzu.cz/~iss). In 2006/2007 he was the visiting scientist at Stanford University (Mark Brongersma's group) for 8 months – Fulbright Scholarship for Advanced Research (nanoplasmonics).

Five selected Publications:

- Bartošík M., Škoda D., Tomanec O., Kalousek R., Jánský P., Zlámal J., Spousta J., Dub P., and Tomáš Šikola Role of Humidity in Local Anodic Oxidation - a study of water condensation and electric field distribution, Phys. Rev. B, in print.
- Čechal J., Tomanec O., Škoda D., Koňáková K., Hrnčíř T., Mach J., Kolíbal M., and Šikola T.: Selective growth of Co islands on ion beam induced nucleation centers in a native SiO₂ film, J. Appl. Phys. 105 (2009), 084314.
- Kolíbal M., Čechal T., Brandejsová E., Čechal J., and Šikola T.: Self-limiting cyclic growth of gallium droplets on Si(111), Nanotechnology 19 (2008), 475606.
- Primetzhofer D., Markin S. N., Zeppenfeld P., Bauer P., Průša S., Kolíbal M., Šikola T.: Quantitative analysis of ultrathin layer growth by time-of-flight low energy ion scattering, Appl. Phys. Lett. 92 (1) (2008), art no. 011929 (3pp).
- Červenka J., Kalousek R., Bartošík M., Škoda D., Tomanec O., and Šikola T.: Fabrication of nano-structures on Si(100) and GaAs(100) by local anodic oxidation, Appl. Surf. Sci. 253 (5) (2006), 2373.