

## Conference contributions:

1. *K. Potzger*, "Ion beam based doping and defects for tailoring magnetic properties", PNI workshop "Magnetism and highly correlated electron systems", 11.6.-12.6. 2012, Freising, Germany (2012)
2. *M. Butterling, W. Anwand, S. Cornelius, K. Potzger, A. Smekhova, M. Vinnichenko, A. Wagner*, "Investigations of defects in magnetic TiO<sub>2</sub> using a slow-positron-beam", Abstract Book of the 16<sup>th</sup> International Conference on Positron Annihilation (ICPA-16), University of Bristol, United Kingdom, 19-24 August 2012, p.150 (2012)
3. *A. Smekhova, A.F. Orlov, L.A. Balagurov, N.S. Perov, E.A. Gan'shina, A.S. Semisalova, A. Novikov, M. Butterling, S. Cornelius, K. Potzger*, "Defects and Room-Temperature Ferromagnetism in Ti Dioxide DMS with Vanadium", Abstract Book of the 9<sup>th</sup> ETOPIIM conference, Marseille, France, September 2-7 2012, p.116 (2012)
4. *A.F. Orlov, I.V. Kulemanov, L.V. Yashina, N.S. Perov, E.A. Gan'shina, A.S. Semisalova, A. Smekhova*, "Anisotropic intrinsic ferromagnetism and magneto-optics in composite oxide semiconductor films Ti<sub>1-x</sub>V<sub>x</sub>O<sub>2-delta</sub>", Abstract Book of the 9<sup>th</sup> ETOPIIM conference, Marseille, France, September 2-7, 2012, p.108 (2012)
5. *A. Smekhova, A.F. Orlov, L.A. Balagurov, I.V. Kulemanov, N.S. Perov, E.A. Gan'shina, A.S. Semisalova, A. Novikov, K. Potzger, M. Butterling, S. Cornelius*, "Ferromagnetic Order in Ti Dioxide with incorporated Vanadium", Abstract Booklet of EMRS Fall Meeting 2012 (Symposium L), Warsaw, Poland, September 18-22 2012, L19 (p.22) (2012)
6. *O. Yildirim, S. Cornelius, M. Vinnichenko, M. Butterling, A. Orlov, A. Wagner, A. Smekhova, and K. Potzger*, "Defects in Magnetic TiO<sub>2</sub>", Abstract Book of European School of Magnetism, 25.2-08.3.2013, Cargese-Corsica, (2013)
7. *O. Yildirim, S. Cornelius, M. Vinnichenko, M. Butterling, A. Orlov, A. Wagner, A. Smekhova, and K. Potzger*, "Magnetic and Defect Properties of Co Implanted TiO<sub>2</sub>", Abstract Book of Deutsche Physikalische Gesellschaft Spring Meeting, 11.3-15.3.2013, Regensburg, Germany (2013)
8. *A. Smekhova, R. Baulin, F. Pankratyev, A. Semisalova, A. Novikov, Yu. Mikhaylovskiy, A.F. Orlov, M. Butterling, O. Yildirim, K. Potzger*, "Diluted Magnetic Semiconductors TiO<sub>2</sub>:Co, TiO<sub>2</sub>:V and TiO<sub>2</sub>:Mn : relationship of defects, magnetization and MO properties", Abstract booklet of the 47<sup>th</sup> Winter School of PNPI RAS on Condensed Matter Physics "FKS-2013", Zelenogorsk, St.Petersburg region, Russia, p.153 (2013)
9. *A. Smekhova, L.N. Fomicheva, A.V. Tsvyashchenko, V.A. Sidorov, A. Rogalev, O. Yildirim, Ya. Zubavichus*, "Local magnetic moments, macroscopic magnetization and crystal structure of new magnetic superconductor EuRh<sub>4</sub>B<sub>4</sub>", Abstract booklet of the 47<sup>th</sup> Winter School of PNPI RAS on Condensed Matter Physics "FKS-2013", Zelenogorsk, St.Petersburg region, Russia, p. 162 (2013)

## Papers:

1. *A. Granovsky, A. Orlov, N. Perov, E. Gan'shina, A.Semisalova, L. Balagurov, I. Kulemanov, A. Sapelkin, A. Rogaley, and A. Smekhova*, "Above Room Temperature Ferromagnetism in Si:Mn and TiO<sub>2</sub>-δ:Co", *Journal of Nanoscience and Nanotechnology*, 12, pp. 7540-7544 (2012)
2. *A.F. Orlov, L.A. Balagurov, I.V. Kulemanov, E.A. Petrova, N.S. Perov, E.A. Gan'shina, L.Yu. Fetisov, A.S. Semisalova, A.I. Novikov, L.V. Yashina, A. Rogaley, A. Smekhova, A.V. Lashkul, E. Lahderanta*, "Magnetic and magneto-optical properties of Ti<sub>1-x</sub>V<sub>x</sub>O<sub>2-delta</sub> semiconductor oxide films: room-temperature ferromagnetism versus resistivity, *SPIN*, v. 2 (2), p.1250011 (6 pages) (2012)
3. *M. Butterling, W. Anwand, S. Cornelius, K. Potzger, A. Smekhova, M. Vinnichenko, A.Wagner*, "Optimization of growth parameters of TiO<sub>2</sub> thin films using a slow positron beam", *Journal of Physics: Conference Series*, accepted, (2013)