

Publications

Thin Films

1. Abd El-Rahman, A. M.; Mohamed, S. H.; Ahmed, M. R.; Richter, E.; Prokert, F.
Nitrocarburizing of AISI-304 stainless steel using high-voltage plasma immersion ion implantation
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Deposition of functional coatings on polyethylene terephthalate films by magnetronplasma-enhanced chemical vapour deposition
Thin Solid Films **517**, 3043 (2009).
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13. Kölpin, H.; Music, D.; Emmerlich, J.; Munnik, F.; Schneider, J. M.
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Nuclear Instruments and Methods in Physics Research B **267**, 2233 (2009).
198. Wang, T. S.; Lv, H. Y.; Grambole, D.; Yang, Z.; Peng, H. B.; Han, Y. C.
Hydrogen micro-kinetics in titanium under mechanical stress studied by ion beam analysis
Journal of Nuclear Materials **386**, 214 (2009).
199. Zharnylskaya, A. L.; Volkhin, V. V.; Shcherban, M. G.; Reuther, H.
Synthesis of a precursor for an alumina ceramic reinforced by zirconium dioxide from inorganic compounds in the presence of urea
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200. Zharnylskaya, A. L.; Volkhin, V. V.; Reuther, H.
Effect of the nature of anions of aluminum salts used to synthesize a precursor of the $\text{Al}_2\text{O}_3\text{-ZrO}_2$ ceramics on the stabilization of the tetragonal modification of zirconium dioxide
Zhurnal Prikladnoi Khimii **82**, 1268 (2009).
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Invited Conference Talks

1. Abrasonis, G.
Surface diffusion assisted phase separation during the growth of carbon:transition metal nanocomposite thin films
2nd Plasma-Nano International Workshop at Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO), 9.02.2009, Lindfield, Australia
2. Brauer, G.; Anwand, W.; Grambole, D.; Egger, W.; Sperr, P.; Beynik, I.; Hofer, C.; Teichert, C.; Kuriplach, J.; Lang, J.; Zviagin, S.; Cizmar, E.; Ling, C. C.; Hsu, Y. F.; Xi, Y. Y.; Djuricic, A. B.; Skorupa, W.
Characterization of ZnO nanostructures: A challenge to positron annihilation spectroscopy and other methods
15th International Conference on Positron Annihilation, 18.-23.01.2009, Kolkata, India
3. Facsko, S.; Ranjan, M.; Keller, A.; Oates, T. W. H.; Rosen, J.
Self-aligned metal nanoparticles and nanowires grown on ripple-templates
MRS 2009 Fall Meeting, Symposium "Nanoscale Pattern Formation", 30.11.-4.12.2009, Boston MA, USA
4. Faßbender, J.
Engineering surfaces, interfaces and structural phases to tailor magnetic properties
Gaede-Preis-Vortrag, Frühjahrstagung der Deutschen Physikalischen Gesellschaft, 24.03.2009, Dresden, Germany
5. Faßbender, J.; Liedke, M. O.; Strache, T.; Marko, D.; Lenz, K.; Keller, A.; Facsko, S.; Tibus, S.; Springer, F.; Albrecht, M.; Rohrmann, H.
Periodically modulated surfaces and interfaces: Introducing artificial length scales to tailor magnetic properties
MRS 2009 Spring Meeting, Symposium "Ion Beams and Nano-Engineering", 13.-17.04.2009, San Francisco, USA
6. *2nd International Conference on Physics at Surfaces and Interfaces, 23.-27.02.2009, Puri, Orissa, India*
7. Faßbender, J.
Nanomagnets - Created and tailored by ions
International Seminar and Workshop on Magnonics: From Fundamentals to Applications, 2.-7.08.2009, Dresden, Germany
8. *International Workshop "Nanoscale Modification of Surfaces and Thin Films", 30.08.-3.09.2009, Rathen, Germany*
9. Faßbender, J.; Liedke, M. O.; Körner, M.; Markó, D.; Lenz, K.; Facsko, S.
Ion-erosion-induced pattern as template for layers with magnetic anisotropy and coupling
MRS 2009 Fall Meeting, Symposium "Nanoscale Pattern Formation" 30.11.-4.12.2009, Boston MA, USA
10. Gemming, S.
First-principles investigation of metal/oxide contacts and related metal/group-IV interfaces
CECAM-Workshop on Metal-Ceramic Interfaces, 20.-22.07.2009, Zürich, Switzerland
11. Heinig, K.-H.
Fundamentals of ion beam synthesis of nanostructures
12. **Formation of nanodots, nanowires, wormholes etc. driven by capillary forces-reaction pathways predicted by atomistic simulations**
13. **Spontaneous formation of regular nanopattern on surfaces during thin film deposition and ion beam erosion**
3 Talks given at Winter School on Nanoelectronics and Nanophotonics, 19.-25.01.2009, Ankara, Turkey
14. Heinig, K.-H.; Beyer, V.; Schmidt, B.; Stegemann, K.-H.
Novel LEFET with two self-aligned Si nanocrystal layers
Workshop on Nanoelectronics and Nanophotonics, 26.-28.01.2009, Ankara, Turkey
15. Heinig, K.-H.; Liedke, B.; Numazawa, S.; Ranjan, M.; Möller, W.; Facsko, S.
Ion-beam-assisted nanostructure formation - Atomistic reaction pathways
International Conference on Ion-Surface Interactions 2009, 21.-25.08.2009, Zvenigorod, Russia
16. Heinig, K.-H.; Schmidt, B.; Vredenberg, A.; Polman, A.; Toulemonde, M.
Shaping of Au and Ge nanoparticles in SiO_2 with swift heavy ions
International Workshop on Nanostructures in Silica, 6.-9.09.2009, Ivalo, Finland