

## Spis publikacji pracowników Instytutu Fizyki Doświadczalnej i Instytutu Fizyki Teoretycznej (obecnie Wydziału Fizyki) w roku 2004

1. K.Szymański, D.Satuła, L.Dobrzyński and B.Kalska, Nuclear Resonance Scattering of Circularly Polarized SR, *Acta Physica Polonica B* **35** (2004) 2313-2325.
2. B.Steeg, L.Juha, J.Feldhaus, S.Jacobi, R.Sobierajski, C.Michaelsen, A.Andrejczuk, J.Krzywinski, Total reflection amorphous carbon mirrors for vacuum ultraviolet free electron lasers, *Appl.Phys.Letters* **84** (2004) 657-9.
3. K.Szymański, D.Satuła and L.Dobrzyński, Angular Distribution of Hyperfine Magnetic Field in  $\text{Fe}_3\text{O}_4$  and  $\text{Fe}_{66}\text{Ni}_{34}$  from Mössbauer Polarimetry, *Hyperfine Interactions* **156/157** (2004) 21-26.
4. K.Szymański, D.Satuła, L.Dobrzyński E.Voronina and E.P.Yelsukov, Hyperfine fields in nanocrystalline  $\text{Fe}_{0.48}\text{Al}_{0.52}$ , *Hyperfine Interactions* **159** (2004) 75-80.
5. L.Świdorski, P.Czosnyka, M.Kowalczyk, E.Piasecki, K.Piasecki, J.Jastrzębski, A.Kordyasz, M.Kisieliński, T.Krogulski, N.Rowley, C.Marchetta, A.Pagano, M.Muttereb, W.H.Trzaska, K.Hagino, How many fusion barriers?, *Int.J.Modern Physics E* **13** (2004) 315-320.
6. Ch.Bellin, V.Honkimäki, H.Reniewicz, P.Zaleski, A.Andrejczuk, L.Dobrzyński, E.Żukowski and S.Kaprzyk, A high-resolution Compton scattering study of hexagonal zinc, *J.Alloys and Compounds* **362** (2004) 314-317.
7. J.B.Pelka, A.Andrejczuk, H.Reniewicz, N.Schell, J.Krzywinski, R.Sobierajski, A.Wawro, Z.R.Zytkiewicz, D.Klinger, L.Juha, Structure modifications in silicon irradiated by ultra-short pulses of XUV free electron laser, *J.Alloys and Compounds* **382** (2004) 264-70.
8. B.Kalska, J.J.Paggel, P.Fumagalli, J.Rybczyński, M.Hilgendorf, D.Satuła, M.Giersig, Magnetite particles studied by Mössbauer and magneto-optical Kerr effect, *J.Appl.Phys.* **95** (2004) 1343-50.
9. A.Go, M.Pugaczowa-Michalska and L.Dobrzyński, An Influence of the Local Environment on Local Magnetic Moments and Hyperfine Fields in  $\text{Fe}_{3-x}\text{Cr}_x\text{Si}$ , *J.Magn.Magn.Mater.* **272-276** (2004) E217-E219.
10. J.Jaworowicz, A.Maziewski, M.Tekielak, V.Zablotskii, T.Ślęzak, N. Spiridis, J.Korecki, Domain structures and magnetization processes of ultrathin ordered iron-gold alloys films, *J.Magn.Magn.Mater.* **272-276** (2004) E555-E556.
11. M.Kisielewski, A.Maziewski, T.Polyakova, and V.Zablotskii, Models and Simulations for Analysis of Domain Sizes in Ultrathin Magnetic Films, *J.Magn.Magn.Mater.* **272-276** (2004) E825-E826.
12. M.Kisielewski, Z.Kurant, A.Maziewski, M.Tekielak, A.Wawro, A. Maneikis, L.T. Baczewski, Overlayer induced changes of magnetic ordering in ultrathin cobalt film, *J.Magn.Magn.Mater.* **272-276** (2004) E861-E862.
13. R.Gieniusz, A.Stupakiewicz, O.Liedke, A.Maziewski, P.Gogol, P.Beauvillain, FMR study of ultrathin Co magnetic films on vicinal Si (111) substrates, *J.Magn.Magn.Mater.* **272-276** (2004) E911-E912.
14. K.Rećko, B.C.Hauback, L.Dobrzyński, K.Szymański, D.Satuła, B.Yu.Kotur, W.Suski, Modulated Magnetic Structure of  $\text{ScFe}_4\text{Al}_8$  by X-ray, Neutron Powder Diffraction and Mössbauer Effect, *J.Magn.Magn.Mater.* **272-276** (2004) 764-766.
15. M.Kisielewski, A.Maziewski, V.Zablotskii, Description of giant changes of domain sizes in ultrathin magnetic films, *J.Magn.Magn.Mater.* **282** (2004) 39-43.
16. A.Doliwa, M.Nieszporski, P.M.Santini, Geometric discretization of the Bianchi system, *Journal of Geometry and Physics* **52** (2004) 217-240.
17. M.Brewczyk, P.Borowski, M.Gajda, K.Rzążewski, Temperature-dependent Bogoliubov approximation in the classical field approach to weakly interacting Bose gases, *Journal of Physics B* **37** (2004) 2725-2738.
18. R.Pawlikowski, J.Zagrodziński, T.Nikiciuk, Circular and annular two-dimensional Josephson junction: Statics and dynamics, *Journal of Superconductivity* **17** (2004) 329-338.
19. Z.Kurant, A.Wawro, A.Maziewski, Maneikis, L.T.Baczewski, The influence of annealing on magnetic properties of ultrathin cobalt film, *Molecular Physics Reports* **40** (2004) 104-107.
20. A.Maziewski, M.Kisielewski, Z.Kurant, M.Tekielak, A.Wawro, L.T.Baczewski, Tuning of ultrathin cobalt film magnetic properties by underlayer and overlayer structures, *Molecular Physics Reports* **40** (2004) 119-124.
21. W.Stefanowicz, M.Kisielewski, A.Maziewski, Numerical simulations of magnetization distribution and magnetization processes in ultrathin films, *Molecular Physics Reports* **42** (2004) 150-155.
22. K.Szymański, W.Olszewski, L.Dobrzyński, D.Satuła, J.Jankowska-Kisielińska, Mössbauer studies of single crystal  $\gamma\text{-Mn-Fe}$ , *Nukleonika* **49** (Suplement 3) (2004) S75-S78.
23. L.Dobrzyński, K.Szymański, D.Satuła, The maximum entropy method in the analysis of the Mössbauer spectra, *Nukleonika* **49** (Suplement 3) (2004) S89-S93.
24. K.Postava, A.Maziewski, T.Yamaguchi, R.Ossikovski, S.Višňovsky, J.Pišťora, Null ellipsometer with phase modulation, *Optics Express* **12** (2004) 6040-6045.
25. E.Żukowski (Eds M.Cooper, P.Mijnarends, N.Shotani, N.Sakai, A.Bansil), *X-Ray Compton Scattering*, Oxford University Press, **Chapter 5** (2004) 133-162.

26. L.Dobrzyński (Eds M.Cooper, P.Mijnarends, N.Shiotani, N.Sakai, A.Bansil), *X-Ray Compton Scattering*, Oxford University Press, **Chapter 7** (2004) 188-211.
27. T.Karpiuk, M.Brewczyk, K.Rzążewski, Ground state of two-component degenerate fermionic gases, *Phys.Rev. A* **69** (2004) 043603.
28. Ł.Zawitkowski, M.Brewczyk, M.Gajda, K.Rzążewski, Classical-field approximation for cold weakly interacting bosons without free parameters, *Phys.Rev. A* **70** (2004) 033614.
29. M.Kisielewski, A.Maziewski, T.Polyakova, V.Zablotskii, Wide-scale evolution of magnetization distribution in ultrathin films, *Phys.Rev. B* **69** (2004) 184419/1-7.
30. G.Faye, P.Jaranowski, G.Schäfer, Skeleton approximate solution of the Einstein field equations for multiple black-hole systems, *Phys.Rev. D* **69** (2004) 124029.
31. T.Karpiuk, M.Brewczyk, S.Ospelkaus-Szwarzer, K.Bongs, M.Gajda, K.Rzążewski, Soliton trains in Bose-Fermi mixtures, *Phys.Rev. Letters* **93** (2004) 100401.
32. V.Zablotskii, T.Polyakova, A.Maziewski, P.Petrenko, I.Tomas, Domain wall profiles constrained by spatial modulation of anisotropy of ultrathin film, *Phys.Stat.Sol. A* **201** (2004) 3366-70.
33. H.Reniewicz, A.Andrejczuk, M.Brancewicz, E.Żukowski, L.Dobrzyński and S.Kaprzyk, Electron momentum density of hexagonal cadmium studied by Compton scattering, *Phys.Stat.Sol. B* **241** (2004) 1849-58.
34. M.Nieszporski, P.M.Santini, A.Doliwa, Darboux transformations for 5-point and 7-point self-adjoint schemes and an integrable discretization of the 2D Schrödinger operator, *Physics Letters A* **323** (2004) 241-250.
35. M.Bittner, L.Juha, D.Chvostova, V.Letal, J.Krasa, Z.Otcenasek, M.Kozlova, J.Polan, A.R.Praeg, B.Rus, M.Stupka, J.Krzywinski, A.Andrejczuk, J.B.Pelka, R.Sobierajski, J.Feldhaus, F.P.Boody, M.E.Grisham, G.O.Vaschenko, C.S.Menoni, J.J.Rocca, Comparing ablation induced by fs, ps, and ns XUV-laser pulses, *Proceedings of SPIE* **5448** (2004) 827-36.
36. C.J.Walczyk, Interakcyjny podręcznik z fizyki, *XX Konferencja Informatyka w szkole, Wrocław, 6–9 września 2004*.