

## Spis publikacji pracowników Wydziału Fizyki w roku 2008

1. P.Kuświk, J.Kisielewski, T.Weis, M.Tekielak, B.Szymański, M.Urbaniak, J.Dubowik, F.Stobiecki, A.Maziewski and A.Ehresmann, He<sup>+</sup> Ion Bombardment Induced Effects on Magnetic Properties of Ni-Fe/Au/Co/Au Films, *Acta Physica Polonica A* **113** (2008) 651.
2. D.Satuła, B.Kalska-Szostko, K.Szymański, L.Dobrzański, J.Kozubowski, Microstructure and magnetic properties of iron nanoparticles prepared by wet chemical method, *Acta Physica Polonica A* **114** (2008) 1615.
3. W.Olszewski, K.Szymański, D.Satuła, M.Biernacka, E.Talik, Magnetic moments' arrangement in Fe Layers deposited from acetone based electrolyte, *Acta Physica Polonica A* **144** (2008) 1631.
4. M.Daszkiewicz, Z.Hasiewicz, C.J.Walczyk, High spin particles with spin-mass coupling, *Advances in Applied Clifford Algebras* **18** (2008) 29.
5. M.Daszkiewicz, Z.Hasiewicz, C.J.Walczyk, High spin particles with spin-mass coupling II, *Advances in Applied Clifford Algebras* **18** (2008) 43.
6. E.Piasecki, M.Kowalczyk, J.Jastrzębski, T.Krogulski, K.Piasecki, K.Rusek, Ł.Świderski, S.Khlebnikov, M.Mutterer, W.H.Trzaska, M.Sillanpaa, S.Smirnov, G.Tiourin, S.Dmitriev, E.Kozulin, A.Ogloblin, N.Rowley, Some Questions and Answers in Barrier Distributions, *AIP Conference Proceedings* **1012** (2008) 238.
7. F.Stobiecki, M.Urbaniak, B.Szymański, J.Dubowik, P.Kuświk, M.Schmidt, T.Weis, D.Engel, D.Lengemann, A.Ehresmann, I.Sveklo, A.Maziewski, Magnetic field induced transition from weak to strong ferromagnetic coupling in NiFe/Au/Co/Au multilayers, *Appl.Phys.Letters* **92** (2008) 012511.
8. P.Jaranowski, K.G.Arun, L.Barack, L.Blanchet, A.Buonanno, M.F.De Laurentis, S.Detweiler, H.Dittus, M.Favata, G.Faye, J.L.Friedman, K.Ganz, W.Hikida, B.R.Iyer, T.S.Keidl, Dong-Hoon Kim, K.D.Kokkotas, B.Kol, A.S.Kubeka, C.Lämmerzahl, J.Majar, A.Nagar, H.Nakano, L.R.Price, M.S.S.Qusailah, N.Radicella, N.Sago, D.Singh, H.Sotani, T.Tanaka, A.Tartaglia, M.Vasuth, I.Vega, B.F.Whiting, A.G.Wiseman, S.Yoshida, Summary of session B3: analytic approximations, perturbation methods and their applications, *Class. Quantum Grav.* **25** (2008) 114020.
9. P.Astone, M.Bassan, P.Bonifazi, K.M.Borkowski, R.J.Budzyński, A.Chincarini, E.Coccia, S.D'Antonio, M.Di Paolo Emilio, V.Fafone, S.Frasca, S.Foffa, G.Giordano, P.Jaranowski, W.Kondracki, A.Królak, M.Maggiore, A.Marini, Y.Minenkov, I.Modena, G.Modestino, A.Moleti, G.V.Pallottino, C.Palomba, R.Parodi, M.Piętka, G.Pizzella, H.J.Pletsch, L.Quintieri, F.Ricci, A.Rocchi, F.Ronga, R.Sturani, R.Terenzi, R.Vaccarone, M.Visco, All-sky search of NAUTILUS data, *Class. Quantum Grav.* **25** (2008) 184012.
10. K.Winkler, M.Wysocka-Żołopa, M.O.Oleksicka, K.Rećko, L.Dobrzański, J.R.Stork, E.M.Gussenoven, M.M.Olmstead, A.L.Balch, Variations in the crystalline deposits formed upon electrochemical oxidation of the anions, [Ir(CO)<sub>2</sub>X<sub>2</sub>]<sup>-</sup> (X=Cl, Br, and I), *Electrochimica Acta* **53** (2008) 7288.
11. K.Szymański, D.Satuła, B.Kalska, W.Olszewski, L.Dobrzański, H.Drulis, P.Gaczyński, W.Iwasieczko, L.Bottyan, Advantages of Mössbauer polarimetric methods in material studies, *Hyperfine Interactions* **182** (2008) 125.
12. M.Tekielak, P.Mazalski, A.Maziewski, R.Schäfer, J.McCord, B.Szymański, M.Urbaniak, F.Stobiecki, Creation of out-of-plane magnetization ordering by increasing the repetitions number N in (Co/Au)N multilayers, *IEEE Transactions on Magnetics* **44** (2008) 2850.
13. A.Stupakiewicz, A.Fleurence, A.Maziewski, T.Maroutian, P.Gogol, B.Bartenlian, R.Mégy and P.Beauvillain,, Magnetization processes in ultrathin Co film grown on stepped Si(111) substrate, *IEEE Transactions on Magnetics* **44** (2008) 2887.
14. K.Postava, I.Sveklo, M.Tekielak, P.Mazalski, A.Maziewski, A.Stupakiewicz, M.Urbaniak, B.Szymanski, and F.Stobiecki, Material selective sensitivity of magneto-optical Kerr effect in NiFe/Au/Co/Au periodic multilayers, *IEEE Transactions on Magnetics* **44** (2008) 3261.
15. T.Polyakova, M.Kisielewski, A.Maziewski and V.Zablotskii, Spin reorientation in vicinity of the edge of ultrathin magnetic films and nanowires, *J.Appl.Phys.* **103** (2008) 073912.
16. A.Stupakiewicz, A.Maziewski, M.Ślęzak, T.Ślęzak, M.Zajac, K.Matlak, and J.Korecki, Magnetization processes in ultrathin Au/Co/Au films grown on a bifacial Mo(110)/Mo(540) single crystal, *J.Appl.Phys.* **103** (2008) 07B520.
17. J.L.Cieśliński, Discretization of multidimensional submanifolds associated with spin-valued spectral problems, *Journal of Mathematical Sciences* **149** (2008) 1032.
18. A.Stupakiewicz, A.Fleurence, R.Gieniusz, A.Maziewski, T.Maroutian, P.Gogol, B.Bartenlian, R.Mégy, P.Beauvillain, Study of ultrathin Co films grown on Si(111) substrate, *Mat.Sci.-Poland* **26** (2008) 1012.
19. A.Stupakiewicz, A.Fleurence, R.Gieniusz, A.Maziewski, T.Maroutian, P.Gogol, B.Bartenlian, R.Mégy, P.Beauvillain, Magnetic properties of ultrathin Co(0001) films on vicinal Si(111) substrate, *Mat.Sci.-Poland* **26** (2008) 295.
20. W.Olszewski, K.Szymański, M.Biernacka, R.Sobiecki, 3d-metallic layers electrochemically deposited from nearly nonaqueous electrolyte, *Mat.Sci.-Poland* **26** (2008) 743.

21. K.Rećko, L.Dobrzyński, A.Goukassov, M.Biernacka, M.Brancewicz, A.Makal, K.Woźniak, J.Waliszewski, E.Talik, B.Kotur, W.Suski, Magnetyczne przejścia fazowe w  $\text{ScFe}_4\text{Al}_8$ , *Metody komplementarne w badaniach Faz Skondensowanych*, Wydawnictwo Akademii Podlaskiej (2008)131.
22. J.L.Cieśliński (red. A.Jabłoński, M.Zemło), Zrozumienie kluczem do wiedzy, *Między unifikacją a dezintegracją*, w "Studia nad Wiedzą", tom I, Wyd. KUL, Lublin (2008), str. 37-84.
23. M.Gierliński, M.Nikolajuk, B.Czerny, High-frequency X-ray variability as a mass estimator of stellar and supermassive black holes, *Mon. Not. R. Astron. Soc.* **383** (2008) 741.
24. W.Olszewski, K.Szymański, D.Satula, L.Dobrzyński, L.Bottyan, F.Tancziko, Magnetic texture determination by Conversion Electron Mössbauer Spectroscopy with circularly polarized beam, *Nucl.Instr.Meth. B* **266** (2008) 3319.
25. T.Świślicki, T.Karpiuk, M.Brewczyk, Elementary excitations of a two-component Fermi system using the atomic-orbital approach, *Phys.Rev. A* **77** (2008) 033603.
26. K.Gawryluk, T.Karpiuk, M.Brewczyk, and K.Rzążewski, Splitting of doubly quantized vortices in dilute Bose-Einstein condensates, *Phys.Rev. A* **78** (2008) 025603.
27. D.Satula, K.Szymański, L.Dobrzyński, V.H.Tran, and R.Troć, Mössbauer data analysis based on invariants and application to  $\text{UFe}_5\text{Sn}$ , *Phys.Rev. B* **78** (2008) 014411.
28. T.Damour, P.Jaranowski, G.Schäfer, Hamiltonian of two spinning compact bodies with next-to-leading order gravitational spin-orbit coupling, *Phys.Rev. D* **77** (2008) 064032.
29. M.Daszkiewicz, C.J.Walczyk, Newton equation for canonical, Lie-algebraic and quadratic deformation of classical space, *Phys.Rev. D* **77** (2008) 105008.
30. T.Damour, P.Jaranowski, G.Schäfer, Effective one body approach to the dynamics of two spinning black holes with next-to-leading order spin-orbit coupling, *Phys.Rev. D* **78** (2008) 024009.
31. A.Stupakiewicz, A.Maziewski, K.Matlak, N.Spiridis, M.Ślęzak, T.Ślęzak, M.Zajac, J.Korecki, Tailoring of the perpendicular magnetization component in ferromagnetic films on a vicinal substrate, *Phys.Rev. Letters* **101** (2008) 217202.
32. A.Stupakiewicz, A.Kirilyuk, A.Maziewski, Th.Rasing, A.Wawro, L.T.Baczewski, Linear and nonlinear magneto-optical response of ultrathin Co/Au/Mo and Co/Mo films grown on sapphire substrates, *Phys.Stat.Sol. A* **205** (2008) 1770.
33. K.Szymański, On the momentum of mechanical plane waves, *Physica B* **403** (2008) 2996.
34. K.Szymański, 50 lat spektroskopii mösbauderowskiej, *Postępy Fizyki* **3** (2008) 118.
35. M.Grądzka-Dahlke, J.Waliszewski, Analysis of Phase Transformations of Austenitic 317L Implant Steel, *Proc. of the 4th Int. Conf. on Diffusion in Solid and Liquids, Barcelona 9-11 July* (2008).
36. A.Nedzved, S.Ablameyko, A.Belotserkovsky, A.Maziewski and W.Dobrogowski, The Structure Analysis of Ultra Thin Magnetic Film Images, *Proceedings of ICPR 2008, International Conference on Pattern Recognition, Florida, USA* (2008).
37. J.Przeszowski, Mandelstam-Leibbrandt prescription within path integral formulation, *Proceedings of Science, LIGHT CONE 2008 Relativistic Nuclear and Particle Physics, Mulhouse, France* (2008).
38. T.Damour, P.Jaranowski, G.Schäfer, Dimensional regularization of the gravitational interaction of point masses in the ADM formalism, *Proceedings of the Eleventh Marcel Grossmann Meeting on General Relativity, World Scientific, Singapore* (2008) 2490.
39. A.K.Kwaśniewski, E.Krot-Sieniawska, Lucky 7-th Exercises on inversion formulas and Fibonomial coefficients, *Proceedings of the Jangjeon Mathematical Society* **11** (2008) 65.
40. J.Kisielewski, K.Postava, I.Sveklo, A.Nedzved, P.Trzciński, A.Maziewski, B.Szymański, M.Urbaniak, F.Stobiecki, Magnetic Anisotropy of Co Films Annealed by Laser Pulses, *Sol.State Phen.* **140** (2008) 69.
41. L.Dobrzyński, Oddziaływanie małych dawek promieniowania elektrowni jądrowej na otoczenie w czasie normalnej pracy, *Spektrum*, styczeń/luty (2008) XII.
42. A.Nedzved, S.Ablameyko, A.Belotserkovsky, A.Maziewski and W.Dobrogowski, The algorithm of extracting and analysis of brachness objects, *The Taurian bulletin of computer science and mathematics, Simferopol* **2** (2008) 111.
43. A.Nedzved, S.Ablameyko, A.Belotserkovsky, A.Maziewski and W.Dobrogowski, The algorithm of extracting and analysis of brachness objects, Intellectualization of processing of the information, *Theses of reports of the International scientific conference / Crimean centre of science NAS of Ukraine, Simferopol* (2008) 1865.