

Spis publikacji pracowników Wydziału Fizyki w roku 2011

1. B.Kalska-Szostko, M.Cydzik, D.Satuła and M.Giersig, Mössbauer Studies of Core-Shell Nanoparticles, *Acta Phys.Pol. A* **119** (2011) 15.
2. K.Szymański, K.Perzyńska, D.Satuła, L.Dobrzyński, P.Zaleski, J.Waliszewski, K.Rećko, M.Biernacka and W.Olszewski, Effect of Annealing in Multicomponent bcc Alloys, *Acta Phys.Pol. A* **119** (2011) 62.
3. A.Woźniakowski, J.Deniszczyk and K.Szymański, Effect of Noncollinear Magnetic Order on the Hyperfine Interactions in Pt₃Fe, *Acta Phys.Pol. A* **119** (2011) 65.
4. D.Satuła, K.Szymański and L.Dobrzyński, Maximum Entropy Method in Mössbauer Spectroscopy - a Problem of Magnetic Texture, *Acta Phys.Pol. A* **119** (2011) 78.
5. J.L.Cieśliński, Improved q-exponential and q-trigonometric functions, *Appl. Math. Letters* **24** (2011) 2110-2114.
6. V.E.Demidov, H.Ulrichs, S.Urazhdin, S.O.Demokritov, V.Bessonov, R.Gieniusz, and A.Maziewski, Resonant frequency multiplication in microscopic magnetic dots, *Appl.Phys.Letters* **99** (2011) 012505.
7. T.Trzeźniwski, B.Czerny, V.Karas, T.Pechacek, M.Dovciak, R.Goosmann, and M.Nikołajuk, The flare model for X-ray variability of NGC 4258, *Astron.Astrophys.* **530** (2011) A136.
8. T.Accadia,..., P.Jaranowski,..., M.Piętka,..., M.Yvert, Automatic Alignment system during the second science run of the Virgo interferometer, *Astropart.Phys.* **34** (2011) 327-332.
9. T.Accadia,..., P.Jaranowski,..., M.Piętka,..., M.Yvert, Performance of the Virgo interferometer longitudinal control system during the second science run, *Astropart.Phys.* **34** (2011) 521-527.
10. J.Abadie, ..., P.Jaranowski, ..., M.Piętka, ..., J.Palfreyman, Beating the spin-down limit on gravitational wave emission from the Vela pulsar, *Astrophys.J.* **737** (2011) 93 (16 pp).
11. J.Abadie,..., P.Jaranowski, ..., M.Piętka, ..., K.Yamaoka, Search for gravitational wave bursts from six magnetars, *Astrophys.J. Letters* **734** (2011) L35 (9pp).
12. T.Accadia,..., P.Jaranowski,..., M.Piętka,..., M.Yvert, Calibration and sensitivity of the Virgo detector during its second science run, *Class. Quantum Grav.* **28** (2011) 025005.
13. T.Accadia,..., P.Jaranowski,..., M.Piętka,..., J.-P.Zendri, Status of the Virgo project, *Class. Quantum Grav.* **28** (2011) 114002.
14. S. Marka (for the LIGO Scientific Collaboration and the Virgo Collaboration), Transient multimessenger astronomy with gravitational waves, *Class. Quantum Grav.* **28** (2011) 114013.
15. J.L.Cieśliński, Some implications of a new approach to exponential functions on time scales, *Discrete and Continuous Dynamical Systems – Supplement 2011 (Dynamical Systems, Differential Equations and Applications)* **1** (2011) 302-311.
16. B.Iwan, J.Andreasson, A.Andrejczuk, E.Abreu, M.Bergh, C.Caleman, A.J.Nelson, S.Bajt, ..., N.Timneanu, TOF-OFF: A method for determining focal positions in tightly focused free-electron laser experiments by measurement of ejected ions, *High Energy Density Physics* **7** (2011) 336-342.
17. T.Accadia, ..., M.Piętka, ..., P.Jaranowski, ..., M.Yvert, The Virgo Interferometer for gravitational wave detection, *Int.J.Modern Physics D*, **20** (2011) 2075-2079.
18. J.Jaworowicz, V.Zablotskii, J.-P.Jamet, J.Ferre, N.Vernier, J.-Y.Chauleau, M.Kisielewski, I.Sveklo, A.Maziewski, J.Gierak, and E.Bourhis, Magnetic coercivity of focused ion beam irradiated lines in a Pt/Co(1.4 nm)/Pt film, *J.Appl.Phys.* **109** (2011) 093919.
19. M.Tekielak, R.Gieniusz, M.Kisielewski, P.Mazalski, A.Maziewski, V.Zablotskii, F.Stobiecki, B.Szymański, and R.Schafer, The effect of magnetostatic coupling on spin configurations in ultrathin multilayers, *J.Appl.Phys.* **110** (2011) 043924.
20. K.Szymański and H.Petrache, Composite polarizability and the construction of an invariant function of refraction and mass density for solutions, *J.Chem.Phys.* **134** (2011) 144701.
21. J.L.Cieśliński, On the exact discretization of the classical harmonic oscillator equation, *J.Diff.Eqs. and Appl.* **17** (2011) 1673-1694.
22. T.Accadia,..., P.Jaranowski,..., M.Piętka,..., M.Yvert, The seismic Superattenuators of the Virgo gravitational waves interferometer, *J.Low Freq.Noise Vib.Act. Control* **30** (2011) 63-79.
23. K.Rećko, L.Dobrzyński, A.Senyshyn, H.Fuess, K.Szymański, B.Yu Kotur, W.Suski, Structural and magnetic properties of Sc_{1.1}Fe_{3.9}Al₈ alloys, *J.Magn.Magn.Mater.* **323** (2011) 1860-1867.
24. J.L.Cieśliński and B.Ratkiewicz, Energy-preserving numerical schemes of high accuracy for one-dimensional Hamiltonian systems, *J.Phys. A* **44** (2011) 155206.
25. W.Olszewski, K.Szymański, P.Zaleski and D.A.Zajac, X-ray absorption near edge structure and extended X-ray absorption fine structure analysis of Fe(II) aqueous and acetone solutions, *J.Phys.Chem. A* **115** (2011) 13420-24.
26. M.Daszkiewicz, C.J.Walczyk, Classical mechanics of many particles defined on canonically deformed nonrelativistic spacetime, *Mod.Phys.Lett. A* **26** (2011) 819-832.
27. B.Czerny, K.Hryniewicz, M.Nikołajuk and A.Sądowski, Constraints on the black hole spin in the quasar SDSS J094533.99+100950.1, *Mon. Not. R. Astron. Soc.* **415** (2011) 2942-2952.
28. P.Kuświk, A.Ehresmann, M.Tekielak, B.Szymański, I.Sveklo, P.Mazalski, D.Engel, J.Kisielewski, D.Lengemann, M.Urbaniak, Ch.Schmidt, A.Maziewski and F.Stobiecki, Colloidal domain lithography for regularly arranged artificial magnetic out-of-plane monodomains in Au/Co/Au layers, *Nanotechnology* **22** (2011) 095302.

29. D.Satuła, K.Szymański, L.Dobrzyński, Single line linearly polarized source for Mössbauer Spectroscopy, *Nucl.Instr.Meth. B* **269** (2011) 2504-2508.
30. T.Świsłocki, T.Sowiński, J.Pietraszewicz, M.Brewczyk, M.Lewenstein, J.Zakrzewski, and M.Gajda, Tunable dipolar resonances and Einstein-de Haas effect in a ^{87}Rb -atom condensate, *Phys.Rev. A* **83** (2011) 063617.
31. T.Świsłocki, T.Sowiński, M.Brewczyk, and M.Gajda, Creation of topological states of a Bose-Einstein condensate in a square plaquette of four optical traps, *Phys.Rev. A* **84** (2011) 023625.
32. A.Wawro, E.Sieczkowska, A.Petroutchik, L.T.Baczewski, Z.Kurant, and A.Maziewski, Local variation of ultrathin Co film magnetization orientation induced by a structured buffer: Magnetic dots, *Phys.Rev. B* **83** (2011) 092405.
33. A.Bonanni, M.Sawicki, T.Devillers, W.Stefanowicz, B.Faina, Tian Li, T.E.Winkler, D.Sztenkiel, A.Navarro-Quezada, M.Rovezzi, R.Jakieła, A.Grois, M.Wegscheider, W.Jantsch, J.Suffczyński, F.D'Acapito, A Meingast, G.Kothleitner, and T.Dietl, Experimental probing of exchange interactions between localized spins in the dilute magnetic insulator $(\text{Ga,Mn})\text{N}$, *Phys.Rev. B* **84** (2011) 035206.
34. A.Pisarski, P.Jaranowski, and M.Piętka, Banks of templates for directed searches of gravitational waves from spinning neutron stars, *Phys.Rev. D* **83** (2011) 043001/1-15.
35. I.Booth, M.P.Heller, M.Spaliński, Black brane entropy and hydrodynamics, *Phys.Rev. D* **83** (2011) 061901(R) 1-5.
36. I.Booth, M.P.Heller, G.Plewa, M.Spaliński, Apparent horizon in fluid-gravity duality, *Phys.Rev. D* **83** (2011) 106005.
37. J.Abadie, ..., P.Jaranowski, ..., M.Piętka, ..., J.Zweig, Search for gravitational waves from binary black hole inspiral, merger, and ringdown, *Phys.Rev. D* **83** (2011) 122005.
38. J.Andreasson, B.Iwan, A.Andrejczuk, E.Abreu, M.Bergh, C.Caleman, A.J.Nelson, S.Bajt, J.Chalupsky, H.N.Chapman, R.R.Fäustlin, V.Hajkova, P.A.Heimann, B.Hjörvarsson, L.Juha, D.Klinger, J.Krzywinski, B.Nagler, G.K.Pálsson, W.Singer, M.M.Seibert, R.Sobierajski, S.Toileikis, T.Tschentscher, S.M.Vinko, R.W.Lee, J.Hajdu, and N.Țimneanu, Saturated ablation in metal hydrides and acceleration of protons and deuterons to keV energies with a soft-x-ray laser, *Phys.Rev. E* **83** (2011) 016403/1-7.
39. K.Gawryluk, K.Bongs, and M.Brewczyk, How to observe dipolar effects in spinor Bose-Einstein condensates, *Phys.Rev. Letters* **106** (2011) 140403.
40. J.Abadie, ..., P.Jaranowski, ..., M.Piętka, ..., J.Zweig, Directional Limits on Persistent Gravitational Waves Using LIGO Science data, *Phys.Rev. Letters*, **107** (2011) 271102.
41. G.Kontrym-Sznajd, M.Samsel-Czekała, M.Pylak, L.Dobrzyński, M.Brancewicz, A.Andrejczuk, E.Żukowski, and S.Kaprzyk, Electronic structure of Mg studied by Compton scattering, *Phys.Stat.Sol. B* **248** (2011) 719-724.
42. P.Zaleski, K.Szymański, W.Olszewski, M.Biernacka, K.Perzyńska, D.Satuła, A.Go, J.Przewoźnik, D.A.Zajac, M.Pylak, L.Dobrzyński, Local Structure and magnetism of Fe, Co and Ni doped Cr_3Si , *Physica B* **406** (2011) 3196-3205.
43. Z.Hasiewicz and C.J.Walczyk, The anomalous brst resolution and Dirac type equations for high spins, *Rep.Math.Phys.* **68** (2011) 119.
44. T.Accadia, ..., P.Jaranowski, ..., M.Piętka, ..., J.-P.Zendri, A state observer for the Virgo inverted pendulum, *Rev.Sci.Instrum.* **82** (2011) 094502.
45. K.Szymański, W.Olszewski, L.Dobrzyński, D.Satuła, D.J.Gawryluk, M.Berkowski, R.Puźniak and A.Wiśniewski, Mössbauer studies of powdered single crystals of $\text{FeTe}_{0.5}\text{Se}_{0.5}$, *Supercond.Sci.Tech.* **24** (2011) 105010 (7pp).
46. J.Rodriguez, E.Kuulkers, M.Nikołajuk, C.Ferrigno, M.Cadolle Bel, S.Corbel, M.Coriat, A.Goldwurm, D.Hannikainen, K.Pottschmidt, D.M.Russel, A.A.Tomsick, J.Wilms, INTEGRAL spots the very beginning of the current H1743-322 outburst, *The Astronomer's telegram*, **3267** (2011).
47. K.Postava, D.Hrabovsky, J.Hamrlova, J.Pistora, A.Wawro, L.T.Baczewski, J.Sveklo, A.Maziewski, Selective sensitivity of ellipsometry to magnetic nanostructures, *Thin Solid Films* **519** (2011) 2627-2632.
48. K.Łapiński, E.Borawska, G.Kulesza, Ł.Wieleszczyk, Mechanizmy transportu energii w żarówce, *Młodość akademicka w procesie innowacji (Wyd. Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach, Siedlce 2011, Konferencja kół naukowych; Koło Naukowe Fizyków UwB, opiekun prof. K.Szymański)*.

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