

Content

Investigation of the non-linear and isotropic properties of magnetic fluids	1
<i>P. C. Fannin</i>	
Oxide and silicate nanophosphors: soft chemical synthesis routes and luminescence properties	11
<i>Miroslav D. Dramićanin</i>	
Forward calorimetry at ILC	23
<i>I. Božović-Jelisavčić</i>	
Cavitation iron microparticles generation by plasma procedures	29
<i>I. Bica, I. Malaescu, C. N. Marin, B. Vatzulik, A. Pacurar, Oana Andrei</i>	
The application of process integration for the rational management of energy and effluent in industrial complexes	39
<i>Predrag Raskovic</i>	
About the first experiment at JINR nuclotron deuteron beam with energy 2.52 GeV on investigation of transmutation of I-129, Np-237, Pu-238 and Pu-239 in the field of neutrons generated in Pb-target with U-blanket	49
<i>S. Jokić, N. Čitaković, M.I. Krivopustov, A.V. Pavliouk, I.I. Mariin, A.F. Elishev, J. Adam, Yu.A. Batusov, P.Chaloun, V.G. Kalinnikov, V.B.Brudanin, A.A. Solnyshkin, V.I. Stegailov, V.M. Tsoupko-Sitnikov, K. Katovský, R. Brandt, W. Ensinger, H. Robotham, W. Westmeier, O. Svoboda, Z. Dubnička, M. Kála, M. Kloc, A. Krása, A. Kugler, M. Majerle, V. Wagner, M. Bielewicz, S. Kilim, M. Szuta, E. Strugalska-Gola, A. Wojeciechowski, S.R. Hashemi-Nezhad, M. Manolopoulou, M. Fragopoulou, S. Stoulos, M. Zamani-Valasiadou, I.V.Zhuk, A.S. Potapenko, J.P.Lukashevich, A.Voronko, V.V.Sotnikov, V.V.Sidorenko, P. Jivkov, L. Kostov, Ch.Stoyanov, Ts. Damdinsuren, G.Gansorig, S. Gerbish, Ts. Togoo, V. Kumar, H. Kumawat</i>	
Systematic effects in luminosity measurement at ILC	63
<i>Mila Pandurović, Ivanka Božović-Jelisavčić</i>	
Statistics of Ni-Ni bonds in Ni-based ternary solid solutions with non magnetic elements and their magnetic behavior	69
<i>Ioan Cosma, Eugen Culea, Radu Fechete, Simona Nicoară</i>	
Ultra short laser pulse induced electron-phonon dynamics in crystals	75
<i>D. Szentesi, A. Juhász-Nagy, A.M. Balint, A. Belyayev, L. Nánai</i>	
The Positronium Interaction with the Oxygen Molecules measured by Positronium Annihilation Spectroscopy	80
<i>E. Ivanov, Ion Vata, Dorin Dudu, Ion Rusen, Nitisor Stefan</i>	
DIMENSIONAL ANALYSIS OF FREE DROP MOTION	86
<i>R Stan, Maria Tomoaia-Cotisel</i>	

The influence of time dependent electric and magnetic fields on the dynamic localization of lattice electrons	92
<i>C. Micu, E. Papp , D. Racolta</i>	
Irreducible approach to third-order reducible second-class constraints	98
<i>O. Balus, C. Bizdadea, E. M. Cioroianu, S. O. Saliu, S. C. Sararu</i>	
B-Tagging algorithms for the ILC	108
<i>Madalina Stanescu-Bellu, Aura Rosca</i>	
Simulations for the beamcal at the ILC	114
<i>Alexandra Popescu, Aura Rosca</i>	
Sensor development for the beamcal at the ILC	120
<i>A. Rosca</i>	
Testing some non-perturbative QCD predictions with DIRAC experiment at CERN	126
<i>M. Pentia</i>	
Conservation Laws for Calabi Flow Equation	133
<i>Afrodita Liliana Boldea, Costin Radu Boldea, Radu Constantinescu</i>	
Possible Correlations Between Standard Stock Market Analysis and Ising-like Type Analysis of Some Groups of Assets at Bucharest Stock Exchange (BVB)	139
<i>Dorina Andru Vangheli</i>	
Impurity centers of Eu^{3+} in epitaxial heterostructures $\text{CdF}_2/\text{CaF}_2/\text{Si}$	145
<i>V. A. Chernyshev, A. E. Nikiforov, N. M. Avram, S. V. Gastev, A. V. Krupin, J. K. Choi, R. J. Reeves, S. M. Suturin, N. S. Sokolov</i>	