

## Table of Contents

Volume 3    Number 2

February 2015

<b>Analysis of Nonlinear Dust-Acoustic Shock Waves in an Unmagnetized Dusty Plasma with <math>q</math>-Nonextensive Electrons Where Dust Is Arbitrarily Charged Fluid</b>	
G. Mandal, N. Y. Tanisha.....	103
<b>Light Red Shift in Cosmic Background Photon Gas</b>	
J. K. Chen.....	111
<b>The Effective Chiral <math>(\sigma, \pi, \omega)</math> Model of Quantum Hadrodynamics Applied to Nuclear Matter and Neutron Stars</b>	
H. Uechi.....	114
<b>On the Semianalytical Two-Body Regularization in <math>N</math>-Body Simulations</b>	
S. Chernyagin, K. Lezhnin.....	124
<b>Additional Space Dimension in Bound Spaces Created by a Central Object</b>	
T. V. B. S. Satyanarayana Murthy.....	130
<b>Scalar Particles' Tunneling and Effect of Quantum Gravity</b>	
G. P. Li, X. T. Zu.....	134
<b>Spectroscopic Evaluation of the Molecular Structures of di-<math>\mu</math>-Chlorobis(1,5-Cyclooctadiene) Iridium (I) and Rhodium (I) Complexes</b>	
S. A. Popoola, A. A. Al-Saadi.....	140
<b>Research on Spectral Polarization Imaging Technique</b>	
H. B. Zhao, Z. Wang, X. L. Lin, H. Li, L. Feng, Y. Zhou.....	145
<b>Magnetic Mineralogical Characteristics of Hamersley Iron Ores in Western Australia</b>	
W. W. Guo.....	150
<b>A Study of Rock Magnetism of High-Grade Hematite Ores</b>	
W. W. Guo.....	156
<b>Turbulent-Induced Noise around a Circular Cylinder Using Permeable FW-H Method</b>	
W.-S. Choi, S.-Y. Hong, J.-H. Song, H.-W. Kwon, C.-M. Jung, T.-G. Kim.....	161
<b>Radar Cross Section Analysis Using Physical Optics and Its Applications to Marine Targets</b>	
J.-T. Hwang, S.-Y. Hong, J.-H. Song, H.-W. Kwon.....	166
<b>A Study on Transmission Loss Characteristics of Honeycomb Panel for Offshore Structures</b>	
J.-D. Jung, S.-Y. Hong, J.-H. Song, H.-W. Kwon.....	172

<b>Intelligibility of Reverberant Speech with Amplification: Limitation of Speech Intelligibility Metrics, and a Preliminary Examination of an Alternative Approach</b>	
D. Lee, E. Gong, D. Cabrera, M. Yadav, W. L. Martens.....	177
<b>Nonlocal Models of Cosmic Ray Transport in the Galaxy</b>	
V. V. Uchaikin.....	187
<b>A Study of Design Optimization Using Response Surface Analysis and Fabrication MEMS Probe Tip</b>	
K. B. Kim, J. W. Lee, S. J. Ha, Y. K. Cho, M. W. Cho.....	201
<b>Evaluation of the Surface of Nitinol after MR Polishing Process</b>	
B.-C. Kim, J.-W. Lee, S.-J. Ha, Y.-K. Cho, D.-S. Kang, M.-W. Cho.....	208
<b>Advanced Laser Retroreflectors for Astrophysics and Space Science</b>	
S. Dell’Agnello, G. D. Monache, R. Vittori, A. Boni, C. Cantone, E. Ciocci, M. Martini, G. Patrizi, M. Tibuzzi, G. Bianco, D. Currie, N. Intaglietta, L. Salvatori, C. Lops, S. Contessa, L. Porcelli, C. Mondaini, P. Tuscano, M. Maiello.....	218
<b>On the Origin of the Gamma-Ray Burst Redshift Distribution in the Early Universe</b>	
S. Al Dallal, W. J. Azzam.....	228
<b>Solid-State Reaction and Vacancy-Type Defects in Bilayer Fe/Hf Studied by the Slow Positron Beam</b>	
K. Yamada, T. Sasaki, T. Nagata, I. Kanazawa, R. Suzuki, T. Ohdaira, K. Nozawa, F. Komori.....	233
<b>Potential and Limits of a High-Density Hemispherical Array of Loudspeakers for Spatial Hearing and Auralization Research</b>	
W. L. Martens, D. Cabrera, L. Miranda, D. Jimenez.....	240
<b>Quiet Zone Design in Diffuse Fields Using Ultrasonic Transducers</b>	
W.-K. Tseng.....	247
<b>Interpreting the Shortwave Infrared &amp; Thermal Infrared Regions of Remote Sensed Electromagnetic Spectrum with Application for Mineral-Deposits Exploration</b>	
Y.-J. Zhang, F.-J. Yao.....	254
<b>Influence of Doping on the Magnetic Properties and Local Microstructures in Fe-Doped <math>YMnO_3</math></b>	
X. P. Ge, J. O. Wang, K. Ibrahim, W. B. Yang, X. G. Dong, Q. Li.....	262
<b>Spectral Imagers with Linear Detector Imager Systems Based on Spectrum Compressed</b>	
X. M. Zhong, H. Li.....	267
<b>Prospects of the Hard X-Ray Instrument POLAR to Measure Polarization of Solar Flares</b>	
W. Hajdas, T. W. Bao, T. Batsch, I. Britvitch, J. Y. Chai, Y. W. Dong, N. Gauvin, M. N. Kong, R. Kramert, C. Lechanoine-Leluc, L. Li, J. T. Liu, X. Liu, R. Marcinkowski, S. Orsi, M. Panicca, M. Pohl, N. Produit, D. Rapin, A. Rutczynska, D. Rybka, H. L. Shi, J. C. Sun, J. Szabelski, I. Traceira, R. J. Wang, X. Wen, B. B. Wu, H. L. Xiao, H. H. Xu, L. Zhang, L. Y. Zhang, S. N. Zhang, Y. J. Zhang, A. Zwolinska.....	272