

CONTENTS

Symmetry and conservation law structures of some anti-self-dual (ASD) manifolds	64
..... <i>J Bastingwa, A H Kara, Ashjaque H Bokhari, R A Mousa and F D Zaman</i>	
Review: Characterizing and quantifying quantum chaos with quantum tomography	65
..... <i>Vaibhav Madhok, Carlos A Riofrío and Ivan H Deutsch</i>	
Space-time transformation for the propagator in de Broglie-Bohm theory	66
..... <i>A Tilbi, T Boudjedaa and M Merad</i>	
Effect of Ar bombardment on the electrical and optical properties of low-density polyethylene films	67
..... <i>M F Zaki, M M El Tabay and R M Radwan</i>	
Breaking soliton equations and negative-order breaking soliton equations of typical and higher orders	68
..... <i>Abdul-Majid Wazwaz</i>	
Triple differential cross-sections for the ionization of metastable 2P-state hydrogen atoms by electrons with exchange effects	69
..... <i>Sunil Dhar and Nurun Nahar</i>	
Nonlinear propagation of weakly relativistic ion-acoustic waves in electron-positron-ion plasma	70
..... <i>M G Hafez, M R Talukder and M Hossain Ali</i>	
Spinning Earth and its Coriolis effect on the circuital light beams: Verification of the special relativity theory	71
..... <i>Sankar Hajra</i>	
Optical characteristics of transparent samarium oxide thin films deposited by the radio-frequency sputtering technique	72
..... <i>A A Atta, M M El-Nahass, Khaled M Elsabawy, M M Abd El-Raheem, A M Hassanien, A Alhuthali, Ali Badawi and Amar Merazga</i>	
Heavy quarkonium properties from Cornell potential using variational method and supersymmetric quantum mechanics	73
..... <i>Alfredo Vega and Jorge Flores</i>	
Physics design of a 10 MeV, 6 kW travelling wave electron linac for industrial applications	74
..... <i>Nita S Kulkarni, Rinky Dtingra and Vinit Kumar</i>	
Photodetachment of H^- ion in crossed gradient electric and magnetic fields	75
..... <i>Dehua Wang and Shaohao Cheng</i>	

(Continued on inside back cover)

Indexed in CURRENT CONTENTS ISSN 0304-4289

Edited and published by T N Guru Row
for the Indian Academy of Sciences, Bengaluru 560 080
Printed at Tholasi Prints India Pvt. Ltd., Bengaluru

Registered with Registrar of Newspapers in India, Vide Regn No. 24935/73
Regn. No. KRNA/BGE/337/2015-2017

Licensed to Post without prepayment No. 49

Posted at Bengaluru PSO, Mysore Road, Bengaluru 560026 16/11/2016

(Continued from back cover)

Nonlinear interaction of ultraintense laser pulse with relativistic thin plasma foil in the radiation pressure-dominant regime	<i>Krishna Kumar Soni and K P Maheshwari</i>	76
Bifurcations and new exact travelling wave solutions for the bidirectional wave equations	<i>Heng Wang, Shuhua Zheng, Longwei Chen and Xiaochun Hong</i>	77
Formation of ground and excited hydrogen atoms in proton-potassium inelastic scattering	<i>S A Elkilany</i>	78
New analytical solutions for nonlinear physical models of the coupled Higgs equation and the Maccari system via rational $\exp(-\varphi(\eta))$ -expansion method	<i>Ayyaz Ali, Muhammad Asad Iqbal and Syed Tauseef Mohyud-Din</i>	79
Phenomenological approach to describe logistic growth and carrying capacity-dependent growth processes	<i>Dibyendu Biswas, Swarup Poria and Sankar Narayan Patra</i>	80
Analysis of tokamak plasma confinement modes using the fast Fourier transformation	<i>S R Mirmoeini, A Salar Elahi and M Ghoranneviss</i>	81