

Indian Journal of Pure & Applied Physics

<http://www.niscair.res.in>; <http://nopr.niscair.res.in>; Impact Factor: 0.766 (JCR 2014)

VOLUME 54

NUMBER 4

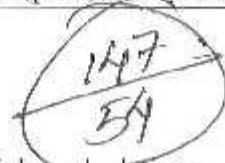
APRIL 2016

CODEN : IJOPAU 54(4) 223-296

ISSN : 0019-5596 (print); 0975-1041 (Online)

CONTENTS

Papers



Structural, anisotropic and thermodynamic properties of boron carbide: First principles calculations Qingyang Fan, Qun Wei, Changchun Chai, Haiyan Yan, Meiguang Zhang, Zixia Zhang, Junqin Zhang & Dongyun Zhang	227
Structural and optical modification of Ga-doped zinc oxide thin films induced by thermal annealing Sandhya Negi, Mahender Partap Singh Rana, Subodh K Gautam, R G Singh, Fouran Singh & R C Ramola	236
Mechanical properties of polycarbonate-TiO ₂ nanocomposite film Nima Shahbazi, Babak Jaleh & Amir Momeni	241
Effect of size with freedom of pressure and temperature for nanomaterials Geeta Sharma & Munish Kumar	251
Measurements of dose rate for 10-16 keV Synchrotron X-ray photons at BL-16 beam line of Indus-2 Debasis Sinhamahapatra, G Haridas, Pradeep Kumar, A D Ghodke, M K Tiwari & P R Hannurkar	259
Magnetic field induced bandgap in two dimensional magneto-optical photonic crystals Z H Yu, P Yu, B H Yin & Z Y Wang	263
FTIR, FT-Raman spectra and DFT analysis of 3-methyl-4-nitrophenol S Jeyavijayan	269
Structural and electrical properties of $y(Ni_{0.9}Co_{0.1}Cd_{0.1}Fe_2O_4) + (1-y)Ba_{0.9}Sr_{0.1}TiO_3$ magnetoelectric composite R K Pinjari, B A Aldar, N M Burange & C H Bhosale	279
Physico-chemical studies on some mono and disaccharides in aqueous media at 298.15 K S Thirumaran & J Ernest Jayakumar	284