



VOLUME 75 ISSUE 1 ISSN 0022-3697
2014 JANUARY

JOURNAL OF
PHYSICS
AND
CHEMISTRY
OF SOLIDS

AN
INTERNATIONAL
JOURNAL

EDITORS

Arun Bansil

Boston

Hai-Ping Cheng

Florida

Kosmas Prassides

Durham

Masaki Azuma

Japan

Abstracted / indexed in: Cambridge Scientific Abstracts, Chemical Abstracts, Current Contents/Engineering, Computing & Technology, EIC/Intelligence, Engineering Index, INSPEC & PASCAL/CNRS Database, Materials Science Citation Index, SSSA/CISA/ECA/ISMEC, etc. Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®

CONTENTS

Review article

J. G. Albornoz, R. M. Rojas L., J. M. Merino and M. León 1 Structural, thermal and electrical properties of the semiconductor system $Ag_{(1-x)}Cu_xInSe_2$

Original articles

- G. R. Dillip, K. Mallikarjuna, S. J. Dhoble and B. D. P. Raju 8 The luminescence and structural characteristics of Eu^{3+} -doped $NaSrB_5O_9$ phosphor
- K. Kiani 15 Vibration and instability of a single-walled carbon nanotube in a three-dimensional magnetic field
- C. A. Escobar, J. C. Caicedo and W. Aperador 23 Corrosion resistant surface for vanadium nitride and hafnium nitride layers as function of grain size
- J. H. Kim, H. S. Jung, C. H. Park and T. J. Kang 31 Porous PVdF-HFP/P123 electrolyte membrane containing flexible quasi-solid-state dye-sensitized solar cells produced by the compression method
- C.-Y. Liao, S.-T. Wang, F.-C. Chang, H. P. Wang and H.-P. Lin 38 Preparation of TiO_2 hollow spheres for DSSC photoanodes
- T. Guo, G. Dong, Q. Chen, X. Diao and F. Gao 42 First-principles calculation on p-type conduction of (Sb, N) codoping in ZnO
- Y. Kohno, E. Haga, K. Yoda, M. Shibata, C. Fukuhara, Y. Tomita, Y. Maeda and K. Kobayashi 48 Adsorption behavior of natural anthocyanin dye on mesoporous silica
- V. Thakre and S. Singh 52 Analysis of structural properties of refractory compounds at high temperature and pressure using a potential model
- M. Jana, A. Sil and S. Ray 60 Morphology of carbon nanostructures and their electrochemical performance for lithium ion battery
- S. Yokoyama, H. Takahashi, T. Itoh, K. Motomiya and K. Tohji 68 Surface modification of Cu metal particles by the chemical reaction between the surface oxide layer and a halogen surfactant
- H. Shi, B. Lan, C. Zhang and Z. Zou 74 Nitrogen doping concentration influence on $NaNbO_3$ from first-principle calculations
- Md. Motin Seikh, V. Caignaert, V. Pralong and B. Raveau 79 High sensitivity of magnetism of the “114” ferrimagnet $CaBaCo_4O_7$ to stoichiometry deviation
- Y.-F. Li, W.-P. Zhang, X. Li and Y. Yu 86 TiO_2 nanoparticles with high ability for selective adsorption and photodegradation of textile dyes under visible light by feasible preparation
- H. Akazawa and Y. Ueno 94 Control of composition and crystallinity in hydroxyapatite films deposited by electron cyclotron resonance plasma sputtering
- S. Wang, J. Zhang, D. He, Y. Zhang, L. Wang, H. Xu, X. Wen, H. Ge and Y. Zhao 100 Sulfur-catalyzed phase transition in MoS_2 under high pressure and temperature

continued on inside back cover

Available online at www.sciencedirect.com

ScienceDirect



continued from outside back cover

P. Chandra Sati, M. Arora, S. Chauhan, M. Kumar and S. Chhoker	105	Effect of Dy substitution on structural, magnetic and optical properties of BiFeO ₃ ceramics
A. Bello, M. Fabiane, D. Dodoo-Arhin, K. I. Ozoemena and N. Manyala	109	Silver nanoparticles decorated on a three-dimensional graphene scaffold for electrochemical applications
M. B. Smirnov, V. Yu. Kazimirov, R. Baddour-Hadjean, K. S. Smirnov and J.-P. Pereira-Ramos	115	Atomistic mechanism of α - β phase transition in vanadium pentoxide
X. Yang, D. Chen, Y. Du and A. C. To	123	Heat conduction in extended X-junctions of single-walled carbon nanotubes
J. L. Nie, L. Ao, X. T. Zu and H. Gao	130	First-principles study of O ₂ adsorption on the α -U(001) surface
I. S. Zouboulis, F. Jiang, J. Wang and T. S. Duffy	136	Single-crystal elastic constants of magnesium difluoride (MgF ₂) to 7.4 GPa
C.-Y. Tsay and T.-Y. Yan	142	Solution processed amorphous InGaZnO semiconductor thin films and transistors
A. F. Lima	148	Interpretation of the optical absorption spectrum of Co ₃ O ₄ with normal spinel structure from first principles calculations
N. Habiballah, M. Qjani, A. Arbaoui and J. Dumas	153	Effect of a Gaussian white noise on the charge density wave dynamics in a one dimensional compound
H. Li, W. Wang, J. Fu and Y. Liang	157	Synthesis and magnetic properties of three-dimensional metal (II) organophosphates

For a full and complete Guide for Authors, please go to: <http://www.elsevier.com/locate/jpcs>

Journal of Physics and Chemistry of Solids has no page charges