

PM  
S70/5c

Volume 189, 2014 ISSN 0038-1098

Published 20 June 2014



# **solid state communications**

*a condensed matter science journal*

*Submit On-line: [www.elsevier.com/locate/ssc](http://www.elsevier.com/locate/ssc)*

## Communications

- M. Bagheri, A. Bahari, M. Amiri and B. Dehbandi 1 Electronic and structural properties of Au-doped zigzag boron nitride nanotubes: A DFT study
- A. Basu and G.D. Mukherjee 5 Phase transitions in Eu doped BiFeO<sub>3</sub>: High pressure Raman spectroscopy and X-ray diffraction studies
- A.N. Trukhin, K. Smits, G. Chikvaizde, T.I. Dyuzheva and L.M. Lityagina 10 Luminescence of rutile structured crystalline silicon dioxide (stishovite)
- S. Wang, L. Fernandes dos Santos, U. Wurstbauer, L. Wang, L.N. Pfeiffer, J. Hone, J.M. Garcia and A. Pinczuk 15 Single- and bi-layer graphene grown on sapphire by molecular beam epitaxy
- S. Kumar, U.K. Yadav, T. Maitra and I. Singh 21 Study of ground state phases for spin-1/2 Falicov–Kimball model on a triangular lattice
- J. Wanyan, Z. Sun, S. Shi, G. He, M. Wu and G. Li 28 The effect of charge layer separating absorption and multiplication on the performance of GaN avalanche photodiodes
- L. Khaber, A. Beniaiche and A. Hachemi 32 Electronic and optical properties of SrTiO<sub>3</sub> under pressure effect: Ab initio study
- Y.D. Li, C.C. Wang, Q.L. Lu, S.G. Huang, H. Wang and C.S. Liu 38 First-principles study of vacancy-induced ferromagnetism in non-magnetic double perovskite Sr<sub>2</sub>AlTaO<sub>6</sub>
- S. Zhang, X. Zhang, Y. Zhu, N. Sun, J. Qin and R. Liu 43 Mechanical and electronic properties of Rh and Rh<sub>3</sub>Zr from first-principles calculation
- H. Li, X.-Y. Kuang, A.-J. Mao and Z.-H. Wang 47 Investigations of defect structure and EPR parameters for tetragonal Nd<sup>3+</sup> centers in AWO<sub>4</sub> (A=Ca, Sr, Pb) crystals by superposition model analysis
- N. Niketić, V. Milanović and J. Radovanović 52 Properties of the resonant tunneling diode in external magnetic field with inclusion of the Rashba effect
- H.R. Soni and P.K. Jha 58 Vibrational and elastic properties of 2D carbon allotropes: A first principles study
- G.R. Boyd, S. Takei and V. Galitski 63 Nonequilibrium probe of paired electron pockets in the underdoped cuprates
- W. Adli and M. Ferhat 68 *d*<sup>0</sup> Ferromagnetism in oxygen-doped CuCl: First principles study



0038-1098(201407)189:C;1-9

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

Indexed/abstracted in: *Curr. Cont. Res. Alert, Cam. Sci. Abstr., Curr. Cont./Phy. Chem. & Earth Sci., Eng. Ind., INSPEC Data., PASCAL-CNRS Data., Curr. Cont. Sci. Cit. Ind., Curr. Cont. SCISEARCH Data., SSSA/CISA/ISMEC, Chemical Abstracts Service, MSCI*  
Also covered in the abstract and citation database Scopus®  
Full text available on ScienceDirect®