

177  
S70/5c

Volume 177, 2014 ISSN 0038-1098

Published 20 December 2013



ELSEVIER

# solid state communications

*a condensed matter science journal*

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

## Communications

- E. Kantar and Y. Kocakaplan 1 Hexagonal type Ising nanowire with core/shell structure: The phase diagrams and compensation behaviors
- W. Wang, B. Xu, P. Gao, W. Zhang and Y. Sun 7 Electrical and dielectric properties of  $\text{HoMnO}_3$  ceramics
- L.J. Ding, Y. Zhong, S.W. Fan and K.L. Yao 10 Spin-singlet recombination responsible for the magnetization plateau in a tetrameric ladder-like system
- K.A. Kokh, V.V. Atuchin, T.A. Gavrilova, N.V. Kuratieva, N.V. Pervukhina and N.V. Surovtsev 16 Microstructural and vibrational properties of PVT grown  $\text{Sb}_2\text{Te}_3$  crystals
- S. Fan, Z. Chen, X. He and L. Li 20 First-principles study on  $\text{Si}(-220)/6\text{H-SiC}(0001)$  interface
- K.I. Alzebedeh 25 An atomistic-based continuum approach for calculation of elastic properties of single-layered graphene sheet
- Y. Uehara, M. Kuwahara and S. Katano 29 Measurement of phonon energy of  $\text{Sb}_2\text{Te}_3$  by scanning tunneling microscope light-emission spectroscopy
- C.I. Sathish, Y. Shirako, Y. Tsujimoto, H.L. Feng, Y. Sun, M. Akaogi and K. Yamaura 33 Superconductivity of  $\delta\text{-MoC}_{0.75}$  synthesized at 17 GPa
- Y. Zhang and J.J. Heremans 36 Effects of ferromagnetic nanopillars on spin coherence in an InGaAs quantum well
- C.Y. Chen, C.L. Chan, S. Mukherjee, C.C. Chou, C.M. Tseng, S.L. Hsu, M.-W. Chu, J.-Y. Lin and H.D. Yang 42 Pressure effect and electron diffraction on the anomalous transition in ternary superconductor  $\text{Bi}_2\text{Rh}_3\text{Se}_2$
- A.S. Goualnik and M.V. Ivanchenko 46 Tailoring the Indium island sizes on the Silicon surface by controlling the deposition rate. Interplay between the size selectivity due to the quantum confinement effect and kinetic factors
- B. Zhang 50 Structural properties of a hypothetical H6-Boron with three-dimensional all  $\text{sp}^2$  network
- R. Bacewicz, J. Antonowicz, S. Podsiadło and S. Schorr 54 Local structure in  $\text{Cu}_2\text{ZnSnS}_4$  studied by the XAFS method
- H. Wu, Y. Ma, Y. Qian, E. Kan, R. Lu, Y. Liu, W. Tan, C. Xiao and K. Deng 57 The effect of oxygen vacancy on the half-metallic nature of double perovskite  $\text{Sr}_2\text{FeMoO}_6$ : A theoretical study
- H. Taira and H. Shima 61 Optical conductivity of semiconductor crystals with a screw dislocation
- P.S. Sokolov, A.N. Baranov, A.M.T. Bell and V.L. Solozhenko 65 Low-temperature thermal expansion of rock-salt ZnO
- L. Zhang and J.J. Shi 68 Phonon states of polar mixing optical modes in wurtzite ZnO-based coupling quantum dots



0038-1098(201401)177:C;1-K



ELSEVIER

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 *SciVerse Scopus®*  
 Full text available on *SciVerse ScienceDirect®*



V. Wang, R.-J. Liu, H.-P. He, C.-M. Yang and L. Ma	74	Hybrid functional with semi-empirical van der Waals study of native defects in hexagonal BN
B.S. Kandemir and A. Mogulkoc	80	Zone-boundary phonon induced mini band gap formation in graphene
A. Shahee, R.J. Choudhary, R. Rawat, A.M. Awasthi and N.P. Lalla	84	Effect of oxygen off-stoichiometry on coupled structural and magnetic phase-transitions in $\text{La}_{0.15}\text{Sr}_{0.85}\text{MnO}_{3-\delta}$ ( $\delta=0.02, 0.14$ )
K. Govind Raj and P.A. Joy	89	Magnetism in disordered carbon as a function of the extent of graphitization
C.B.R. Jesus, P.F.S. Rosa, T.M. Garitezi, G.G. Lesseux, R.R. Urbano, C. Rettori and P.G. Pagliuso	95	Electron spin resonance of the half-Heusler antiferromagnet GdPdBi
A. Hadizadeh Kheirkhah, E. Saeivar Iranizad, M. Raeisi and A. Rajabpour	98	Mechanical properties of hydrogen functionalized graphene under shear deformation: A molecular dynamics study
R. Katoch, R. Gupta and A. Garg	103	Large ferroelectric polarization of chemical solution processed $\text{BiFeO}_3$ - $\text{PbTiO}_3$ thin films
G. Sreevidya Varma, C. Das and S. Asokan	108	Evidence of an intermediate phase in a quaternary Ag bearing telluride glass system using alternating DSC
H.L. Tao, Z.H. Zhang, L.L. Pan, M. He and B. Song	113	Magnetic mechanism investigations on n-type ferromagnetic $\text{Li}(\text{Zn},\text{Mn})\text{As}$
K. Górný, Z. Dendzik, B. Sawicki, A. Dawid and Z. Gburski	117	Thermal activation of ethylene glycol embedded in carbon nanotubes – Computer simulation study
B. Liu, X. Yan and F. Yuan	123	Quasiparticle resonance states induced by a nonmagnetic impurity in Gossamer superconductors
V.M. Apalkov and T. Chakraborty	128	Incompressible states of dirac fermions in graphene with anisotropic interactions
J.R. Collave, H.A. Borges, S.M. Ramos, E.N. Hering, M.B. Fontes, E. Baggio-Saitovitch, A. Eichler, E.M. Bittar and P.G. Pagliuso	132	Electrical resistivity under extreme conditions in the $\text{Ce}_3\text{Ir}_4\text{Sn}_{13}$ heavy fermion compound