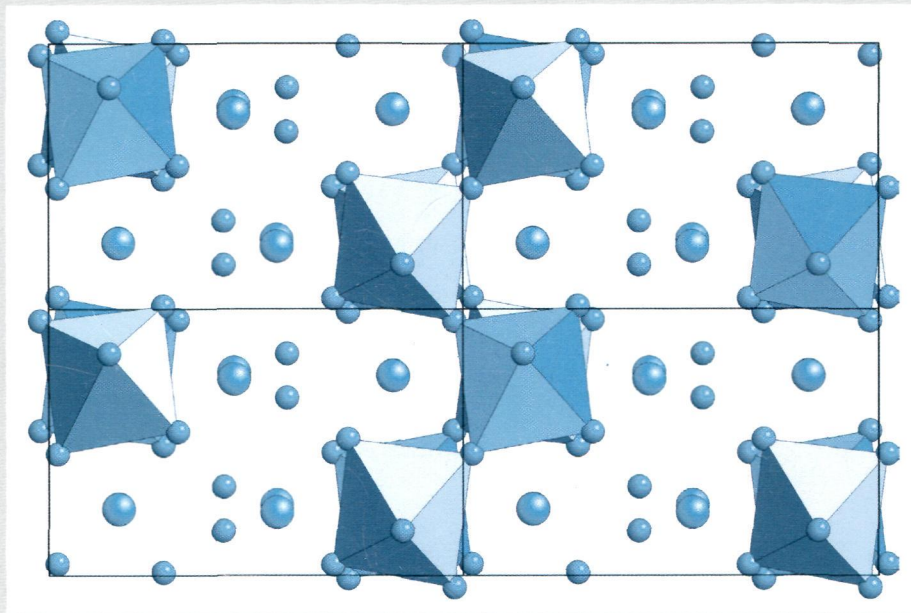


ПИ
J80/pcm

Journal of Physics

Condensed Matter

Volume 25 Number 12 27 March 2013



FAST TRACK COMMUNICATIONS

- 122201 **Antiferromagnetic order in $\text{Ca}_{10}(\text{Pt}_3\text{As}_8)(\text{Fe}_2\text{As}_2)_5$ observed by ^{75}As NMR**
T Zhou, G Koutroulakis, J Lodico, Ni Ni, J D Thompson, R J Cava and S E Brown
- 122202 **Kohn singularity and Kohn anomaly in conventional superconductors—role of pairing mechanism**
Ranjan Chaudhury and Mukunda P Das
- 122203 **Structural and magnetic phase transitions in triclinic $\text{Ca}_{10}(\text{FeAs})_{10}(\text{Pt}_3\text{As}_8)$**
T Stürzer, G M Friederichs, H Luetkens, A Amato, H-H Klauss and Dirk Johrendt
- 122204 **A novel superhard BN allotrope under cold compression of h-BN**
Xue Jiang, Jijun Zhao and Rajeev Ahuja

PAPERS

NANOSTRUCTURES AND NANOELECTRONICS

- 125301 **Temporal evolution of the Seebeck coefficient in an ac driven strongly correlated quantum dot**
A Goker and E Gedik
- 125302 **Elastic properties of monolayer graphene with different chiralities**
Lixin Zhou, Yugang Wang and Guoxin Cao
- 125303 **Exact solution for square-wave grating covered with graphene: surface plasmon-polaritons in the terahertz range**
N M R Peres, Yu V Bludov, Aires Ferreira and M I Vasilevskiy
- 125304 **Quantum dynamical simulations of local field enhancement in metal nanoparticles**
Christian F A Negre, Eduardo M Perassi, Eduardo A Coronado and Cristián G Sánchez
- 125305 ***Ab initio* random structure search for 13-atom clusters of fcc elements**
J P Chou, C R Hsing, C M Wei, C Cheng and C M Chang

SOLID STRUCTURE AND LATTICE DYNAMICS

- 125401 **Electronic structure, optical properties and the mechanism of the B3–B8 phase transition of BeSe: insights from hybrid functionals, lattice dynamics and *NPH* molecular dynamics**
Rajkrishna Dutta, Sebahaddin Alptekin and Nibir Mandal
- 125402 **The nature of high-energy radiation damage in iron**
E Zarkadoula, S L Daraszewicz, D M Duffy, M A Seaton, I T Todorov, K Nordlund, M T Dove and K Trachenko
- 125403 **Bulk, surface and point defect properties in UO_2 from a tight-binding variable-charge model**
G Sattonnay and R Tétot
- 125404 **Lattice dynamics and pressure-induced phase transitions in $\alpha\text{-BaTeMo}_2\text{O}_9$**
M Maczka, W Paraguassu, P T C Freire, A Majchrowski and P S Pizani

ELECTRONIC STRUCTURE

- 125501 **Quantum–classical simulations of the electronic stopping force and charge on slow heavy channelling ions in metals**
C P Race, D R Mason, M H F Foo, W M C Foulkes, A P Horsfield and A P Sutton
- 125502 ***Ab initio* study of the effect of Si on the phase stability and electronic structure of γ - and $\alpha\text{-Al}_2\text{O}_3$**
F Nahif, D Music, S Mráz, M to Baben and J M Schneider
- 125503 **Density functional theory study of the electronic structure of fluorite Cu_2Se**
Mikael Råsander, Lars Bergqvist and Anna Delin

(Continued on inside back cover)

125504 New boron nitride structures B_4N_4 : a first-principles random searching application

Éric Germaneau, Gang Su and Qing-Rong Zheng

CORRELATED ELECTRONS

125601 Band filling and correlation controlling electronic properties and magnetism in $K_xFe_{2-y}Se_2$: a slave boson study

Da-Yong Liu, Ya-Min Quan, Xiao-Jun Zheng, Xiang-Long Yu and Liang-Jian Zou

125602 High-pressure phase transitions, amorphization, and crystallization behaviors in Bi_2Se_3

Jinggeng Zhao, Haozhe Liu, Lars Ehm, Dawei Dong, Zhiqiang Chen and Genda Gu

125603 Quantum phases of dimerized and frustrated Heisenberg spin chains with $s = 1/2, 1$ and $3/2$: an entanglement entropy and fidelity study

V M L Durga Prasad Goli, Shaon Sahoo, S Ramasesha and Diptiman Sen

125604 Metal-insulator transition in $SrIrO_3$ with strong spin-orbit interaction

Fei-Xiang Wu, Jian Zhou, L Y Zhang, Y B Chen, Shan-Tao Zhang, Zheng-Bin Gu, Shu-Hua Yao and Yan-Feng Chen

SUPERCONDUCTORS AND METALS

125701 Structure and paramagnetism in weakly correlated Y_8Co_5

T Klimczuk, V A Sidorov, A Szajek, M Werwiński, S A J Kimber, A L Kozub, D Safarik, J D Thompson and R J Cava

125702 The Fulde-Ferrell-Larkin-Ovchinnikov state in layered d-wave superconductors: in-plane anisotropy and resonance effects in the angular dependence of the upper critical field

M D Croitoru and A I Buzdin

125703 Symmetry-mode and spontaneous strain analysis of the structural transitions in $Fe_{1+y}Te$ and $REFeAsO$ compounds

A Martinelli

SEMICONDUCTORS

125801 Defects in semipolar $(11\bar{2}\bar{2})$ ZnO grown on (112) $LaAlO_3/(La,Sr)(Al,Ta)O_3$ substrate by pulsed laser deposition

Jr-Sheng Tian, Yue-Han Wu, Chun-Yen Peng, Kun-An Chiu, Yi-Sen Shih, Hien Do, Pei-Yin Lin, Yen-Teng Ho, Ying-Hao Chu and Li Chang

125802 A magnetic polaron model for the enhanced Curie temperature of EuO_{1-x}

Pan Liu and Jinke Tang

MAGNETISM AND MAGNETIC MATERIALS

126001 Metamagnetism in $CePd_5Ge_3$

Daniel Gnida, Piotr Wiśniewski, Alexander V Gribanov, Yurii D Seropegin and Dariusz Kaczorowski

126002 Suppression of Ru ($S = 1$) spin dimerization in La_2RuO_5 by Ti substitution

S Riegg, S Widmann, A Günther, H-A Krug von Nidda, A Reller, A Loidl and S G Ebbinghaus

126003 Magnetic phase diagram of clathrate compound $Ce_3Pd_{20}Si_6$ with quadrupolar ordering

H Ono, T Nakano, N Takeda, G Ano, M Akatsu, Y Nemoto, T Goto, A Dönni and H Kitazawa

CORRIGENDUM

129501 Corrigendum: Charge-density wave condensate in charge-ordered manganites: impact of ferromagnetic order and spin-glass disorder

Rakesh Rana, Nilesh Awari, Parul Pandey, Abhishek Singh, S S Prabhu and D S Rana