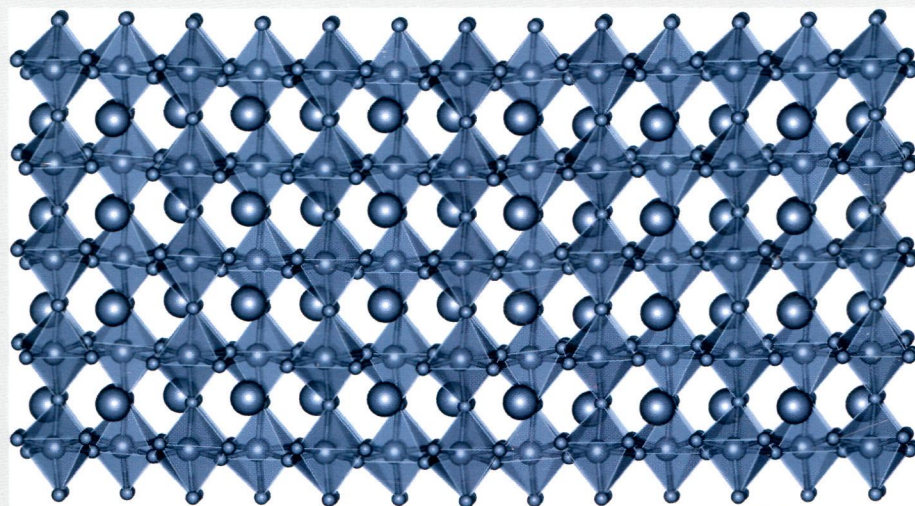


# Journal of Physics

## Condensed Matter

Volume 25 Number 10 13 March 2013



**FAST TRACK COMMUNICATIONS**

**102201 Lattice dynamics of multiferroic BiFeO<sub>3</sub> studied by inelastic x-ray scattering**  
Elena Borissenko, Marco Goffinet, Alexei Bosak, Pauline Rovillain, Maximilien Cazayous, Dorothée Colson, Philippe Ghosez and Michael Krisch

**102202 Development of a bond-valence based interatomic potential for BiFeO<sub>3</sub> for accurate molecular dynamics simulations**  
Shi Liu, Ilya Grinberg and Andrew M Rappe

**PAPERS**

**NANOSTRUCTURES AND NANOELECTRONICS**

**105301 Time- and momentum-resolved phonon-induced relaxation dynamics in carbon nanotubes**  
Christopher Köhler, Tobias Watermann and Ermin Malic

**105302 Electronic and spin transport properties of graphene nanoribbon mediated by metal adatoms: a study by the QUAMBO-NEGF approach**  
G P Zhang, Xiaojie Liu, C Z Wang, Y X Yao, Jian Zhang and K M Ho

**105303 A disorder induced field effect transistor in bilayer and trilayer graphene**  
Dongwei Xu, Haiwen Liu, Vincent Sacksteder IV, Juntao Song, Hua Jiang, Qing-feng Sun and X C Xie

**SOLID STRUCTURE AND LATTICE DYNAMICS**

**105401 On the use of symmetry in configurational analysis for the simulation of disordered solids**  
Sami Mustapha, Philippe D'Arco, Marco De La Pierre, Yves Noël, Matteo Ferrabone and Roberto Dovesi

**105402 Second-order Raman scattering in CuO**  
A P Litvinchuk, A Möller, L Debbichi, P Krüger, M N Iliev and M M Gospodinov

**105403 Luminescence properties of Ce<sup>3+</sup>-doped NaPr<sub>4</sub>O<sub>12</sub> polyphosphate**  
T Shalapska, G Stryganyuk, A Gektin, A Kotlov, P Demchenko and A Voloshinovskii

**105404 An *n*-body potential for a Zr-Nb system based on the embedded-atom method**  
De-Ye Lin, S S Wang, D L Peng, M Li and X D Hui

**ELECTRONIC STRUCTURE**

**105501 Time-dependent electron transport through a strongly correlated quantum dot: multiple-probe open-boundary conditions approach**  
A Pertsova, M Stamenova and S Sanvito

**105502 High pressure luminescence spectra of CaMoO<sub>4</sub>:Ln<sup>3+</sup> (Ln = Pr, Tb)**  
S Mahlik, M Behrendt, M Grinberg, E Cavalli and M Bettinelli

**105503 Quasiparticle semiconductor band structures including spin-orbit interactions**  
Brad D Malone and Marvin L Cohen

**105504 First-principles study of layered antiferromagnetic CuCrX<sub>2</sub> (X = S, Se and Te)**  
Divya Srivastava, Girish C Tewari, Maarit Karppinen and R M Nieminen

**105505 Projection potentials and angular momentum convergence of total energies in the full-potential Korringa-Kohn-Rostoker method**  
Rudolf Zeller

**105506 Effects of charge doping and constrained magnetization on the electronic structure of an FeSe monolayer**  
Timur Bazhurov and Marvin L Cohen

*(Continued on inside back cover)*

CORRELATED ELECTRONS

- 105601** **Electron spin resonance and cyclotron resonance for fractional quantum Hall states in narrow-gap QW heterostructures**  
S S Krishtopenko

SUPERCONDUCTORS AND METALS

- 105701** **Thermoelectric properties of Bi-added  $\text{Co}_4\text{Sb}_{12}$  skutterudites**  
R C Mallik, R Anbalagan, K K Raut, A Bali, E Royanian, E Bauer, G Rogl and P Rogl

SEMICONDUCTORS

- 105801** **Novel alloy polymers formed from *ortho*-carborane and benzene or pyridine**  
Frank L Pasquale, Yun Li, Jincheng Du and Jeffry A Kelber
- 105802** **Effect of geometrical rotation on conductance fluctuations in graphene quantum dots**  
Lei Ying, Liang Huang, Ying-Cheng Lai and Yan Zhang

MAGNETISM AND MAGNETIC MATERIALS

- 106001** **Low-energy spin dynamics of the  $s = 1/2$  kagome system herbertsmithite**  
G J Nilsen, M A de Vries, J R Stewart, A Harrison and H M Rønnow
- 106002**  **$\text{Ti}_8(\text{Ti}_x\text{Mn}_{1-x})_6\text{Mn}_{39}$  (' $\text{TiMn}_{\sim 4}$ ') : a metallic spin fluctuation system**  
Atta U Khan, G Rogl, M Kriegisch, H Michor, H Müller, E Bauer, A Grytsiv, G Giester and P Rogl
- 106003** **Tuning of uniaxial magnetic anisotropy in amorphous CoFeB films**  
B Cui, C Song, Y Y Wang, W S Yan, F Zeng and F Pan
- 106004** **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
- 106005** **The origin of perpendicular magneto-crystalline anisotropy in  $\text{L1}_0$ -FeNi under tetragonal distortion**  
Yoshio Miura, Sho Ozaki, Yasushi Kuwahara, Masahito Tsujikawa, Kazutaka Abe and Masafumi Shirai
- 106006** **Enhancement of the magnetic anisotropy barrier in critical long range spin systems**  
F Borgonovi and G L Celardo