

ISSN 0953-8584

Journal of Physics

Condensed Matter

Volume 25 Number 7 20 February 2013



iopscience.org/jpcm

IOP Publishing

FAST TRACK COMMUNICATION

- 072201** **Bound states, electron localization and spin correlations in low-dimensional GaAs/AlGaAs quantum constrictions**
I I Yakimenko, V S Tsykunov and K-F Berggren

PAPERS

NANOSTRUCTURES AND NANOELECTRONICS

- 075301** **Asymmetry-induced effects in Kondo quantum dots coupled to ferromagnetic leads**
K P Wójcik, I Weymann and J Barnaś
- 075302** **The limit spin current in a time-dependent Rashba spin-orbit coupling system**
Shu-feng Zhang and Wei Zhu
- 075303** **Scattering by linear defects in graphene: a tight-binding approach**
J N B Rodrigues, N M R Peres and J M B Lopes dos Santos
- 075304** **Electronic transport between quantum Hall states and quantum anomalous Hall states in a graphene nanoribbon based heterojunction**
Xin-rong Xu and Shu-guang Cheng

SOLID STRUCTURE AND LATTICE DYNAMICS

- 075401** **Study of B1 (NaCl-type) to B2 (CsCl-type) pressure-induced structural phase transition in BaS, BaSe and BaTe using *ab initio* computations**
X Zhou, J L Roehl, C Lind and S V Khare
- 075402** **Phase stability and elastic properties of Cr-V alloys**
M C Gao, Y Suzuki, H Schweiger, Ö N Doğan, J Hawk and M Widom

ELECTRONIC STRUCTURE

- 075501** **Signatures of charge inhomogeneities in the infrared spectra of topological insulators Bi₂Se₃, Bi₂Te₃ and Sb₂Te₃**
S V Dordevic, M S Wolf, N Stojilovic, Hechang Lei and C Petrovic
- 075502** **Labeling interacting configurations through an analysis of excitation dynamics in a resonant photoemission experiment: the case of rutile TiO₂**
G Derra, L Sangaletti, F Bondino, M Malvestuto, L Malavasi, Y Diaz-Fernandez, S Dash, M C Mozzati and P Galinetto
- 075503** **Wavefunctions, quantum diffusion, and scaling exponents in golden-mean quasiperiodic tilings**
Stefanie Thiem and Michael Schreiber

SUPERCONDUCTORS AND METALS

- 075701** **Effect of nanoholes on the vortex core fermion spectrum and heat transport in p-wave superconductors**
B Rosenstein, I Shapiro and B Ya Shapiro
- 075702** **A Markovian kinetic equation approach to electron transport through a quantum dot coupled to superconducting leads**
Daniel S Kosov, Tomaž Prosen and Bojan Žunkovič
- 075703** **Dependence of the structural, transport and magnetic properties of Tl_{1-y}Fe_{2-z}(Se_{1-x}S_x)₂ with isovalent substitution of Se by S**
P Toulemonde, D Santos-Cottin, Ch Lepoittevin, P Strobel and J Marcus

(Continued on inside back cover)

SEMICONDUCTORS

- 075801 Anomalous electron collimation in HgTe quantum wells with inverted band structure**
Y L Zou, L B Zhang and J T Song
- 075802 Size-dependent reversal of the elastic interaction energy between misfit nanostructures**
L Persichetti, A Sgarlata, M Fanfoni and A Balzarotti
- 075803 Lead monoxide α -PbO: electronic properties and point defect formation**
J Berashevich, O Semeniuk, O Rubel, J A Rowlands and A Reznik
- 075804 Single-crystal growth and thermoelectric properties of $\text{Ge}(\text{Bi,Sb})_4\text{Te}_7$**
Fabian von Rohr, Andreas Schilling and Robert J Cava

DIELECTRICS AND FERROELECTRICS

- 075901 Omnidirectional suppression of Anderson localization of light in disordered one-dimensional photonic superlattices**
E Reyes-Gómez, S B Cavalcanti and L E Oliveira
- 075902 Influence of N–H–O hydrogen bonds on the structure and properties of $(\text{K}_{1-x}(\text{NH}_4)_x\text{H}_2\text{PO}_4)$ proton glasses: a single crystal neutron diffraction study**
Rajul Ranjan Choudhury and R Chitra
- 075903 On the Landau theory of phase transitions: a hierarchical dynamic model**
John Y Fu

MAGNETISM AND MAGNETIC MATERIALS

- 076001 Negative spin polarization of Mn_2VGa probed by tunnel magnetoresistance**
Christoph Klewe, Markus Meinert, Jan Schmalhorst and Günter Reiss
- 076002 Magnetic and ^{57}Fe Mössbauer study of magneto-electric GaFeO_3 prepared by the sol–gel route**
Kavita Sharma, V Raghavendra Reddy, Ajay Gupta, A Banerjee and A M Awasthi
- 076003 Two-dimensional magnetic clusters in $\text{La}_n(\text{Ti}_{1-x}\text{Fe}_x)_n\text{O}_{3n+2}$ ($n = 5$ with $x = 0.2$ and $n = 6$ with $x = 0.33$)**
Alexander Wölfel, Frank Lichtenberg and Sander van Smaalen
- 076004 Magnetic dynamic properties of electron-doped $\text{La}_{0.23}\text{Ca}_{0.77}\text{MnO}_3$ nanoparticles**
B Dolgin, R Puzniak, D Mogilyansky, A Wisniewski, V Markovich and G Jung
- 076005 A mechanism to pin skyrmions in chiral magnets**
Ye-Hua Liu and You-Quan Li