# PHYSICAL REVIEW B

Volume 91, Issue 3

15 January 2015

### HIGHLIGHTED ARTICLES

### **Editors' Suggestion**

Distributed twofold ordering in URu2Si2

S. Kambe, Y. Tokunaga, H. Sakai, and R. E. Walstedt

Phys. Rev. B 91, 035111 (2015) - Published 12 January 2015

The identification of hidden order in URu2Si2 is currently a hot topic in condensed matter physics. By performing a much more detailed lineshape analysis of their own NMR data previously published in PRL, a strong argument is put forward that nematic/orthorhombic distortion is not the primary hidden order parameter and that this parameter may be sensitive to disorder. Many local defects were found, even in the best quality samples.

### **Editors' Suggestion**

Nonlinear terahertz field-induced carrier dynamics in photoexcited epitaxial monolayer graphene

Hassan A. Hafez, Ibraheem Al-Naib, Marc M. Dignam, Yoshiaki Sekine, Katsuya Oguri, François Blanchard, David G. Cooke, Satoru Tanaka, Fumio Komori, Hiroki Hibino, and Tsuneyuki Ozaki

Phys. Rev. B 91, 035422 (2015) - Published 16 January 2015

Optical measurements on highly doped single-layer epitaxial graphene reveal that the photoexcitation of charge carriers leads to an enhancement of the THz transmission. In this paper, the results are explained in terms of the change in the carrier scattering rate due to the optical pump fluence and the THz electric field.

### **ARTICLES**

Electronic structure and strongly correlated systems

Study of d-electron correlations in skutterudite-related  $Ce_3M_4Sn_{13}$  (M=Co, Ru, and Rh)

A. Ślebarski, J. Goraus, P. Witas, L. Kalinowski, and M. Fijałkowski

Phys. Rev. B 91, 035101 (2015) - Published 5 January 2015

Complex magnetism and strong electronic correlations in  $Ce_2PdGe_3$ 

R. E. Baumbach, A. Gallagher, T. Besara, J. Sun, T. Siegrist, D. J. Singh, J. D. Thompson, F. Ronning, and E. D. Bauer

Phys. Rev. B 91, 035102 (2015) - Published 5 January 2015

Magnetic excitation spectrum of LuFe2O4 measured with inelastic neutron scattering

S. M. Gaw, H. J. Lewtas, D. F. McMorrow, J. Kulda, R. A. Ewings, T. G. Perring, R. A. McKinnon, G. Balakrishnan, D. Prabhakaran, and A. T. Boothroyd

Phys. Rev. B 91, 035103 (2015) - Published 5 January 2015

Direct dark mode excitation by symmetry matching of a single-particle-based metasurface

Shah Nawaz Burokur, Anatole Lupu, and André de Lustrac

Phys. Rev. B **91**, 035104 (2015) – Published 5 January 2015

Atomic force calculations within the all-electron FLAPW method: Treatment of core states and discontinuities at the muffin-tin sphere boundary

Daniel A. Klüppelberg, Markus Betzinger, and Stefan Blügel

Phys. Rev. B 91, 035105 (2015) - Published 5 January 2015

Collective modes in two- and three-dimensional electron systems with Rashba spinorbit coupling

Saurabh Maiti, Vladimir Zyuzin, and Dmitrii L. Maslov

Phys. Rev. B 91, 035106 (2015) - Published 6 January 2015

Improved ground-state electronic structure and optical dielectric constants with a semilocal exchange functional

Vojtěch Vlček, Gerd Steinle-Neumann, Linn Leppert, Rickard Armiento, and Stephan Kümmel

Phys. Rev. B **91**, 035107 (2015) – Published 6 January 2015

Quantized electromagnetic response of three-dimensional chiral topological insulators

S.-T. Wang, D.-L. Deng, Joel E. Moore, Kai Sun, and L.-M. Duan

Phys. Rev. B 91, 035108 (2015) - Published 7 January 2015

Dynamical Jahn-Teller instability in metallic fullerides

Naoya Iwahara and Liviu F. Chibotaru

Phys. Rev. B 91, 035109 (2015) - Published 7 January 2015

Tunable semimetallic state in compressive-strained SrIrO3 films revealed by transport behavior

Lunyong Zhang, Qifeng Liang, Ye Xiong, Binbin Zhang, Lei Gao, Handong Li, Y. B. Chen, Jian Zhou, Shan-Tao Zhang, Zheng-Bin Gu, Shu-hua Yao, Zhiming Wang, Yuan Lin, and Yan-Feng Chen

Phys. Rev. B 91, 035110 (2015) - Published 9 January 2015

### **Editors' Suggestion**

Distributed twofold ordering in URu2Si2

S. Kambe, Y. Tokunaga, H. Sakai, and R. E. Walstedt

Phys. Rev. B 91, 035111 (2015) - Published 12 January 2015

The identification of hidden order in URu2Si2 is currently a hot topic in condensed matter physics. By performing a much more detailed lineshape analysis of their own NMR data previously published in PRL, a strong argument is put forward that nematic/orthorhombic distortion is not the primary hidden order parameter and that this parameter may be sensitive to disorder. Many local defects were found, even in the best quality samples.

First-principles studies of lone-pair-induced distortions in epitaxial phases of perovskite SnTiO3 and PbTiO3

Krishna Chaitanya Pitike, William D. Parker, Lydie Louis, and Serge M. Nakhmanson

Phys. Rev. B 91, 035112 (2015) - Published 12 January 2015

Thermalization processes in interacting Anderson insulators

Z. Ovadyahu

Phys. Rev. B 91, 035113 (2015) - Published 13 January 2015

Plasmon mode as a detection of the chiral anomaly in Weyl semimetals

Jianhui Zhou, Hao-Ran Chang, and Di Xiao

Phys. Rev. B **91**, 035114 (2015) – Published 13 January 2015

Interacting bosons in topological optical flux lattices

A. Sterdyniak, B. Andrei Bernevig, Nigel R. Cooper, and N. Regnault

Phys. Rev. B 91, 035115 (2015) - Published 13 January 2015

Subwavelength localization and toroidal dipole moment of spoof surface plasmon polaritons

Seong-Han Kim, Sang Soon Oh, Kap-Joong Kim, Jae-Eun Kim, Hae Yong Park, Ortwin Hess, and Chul-Sik Kee

Phys. Rev. B 91, 035116 (2015) - Published 13 January 2015

Ground-state wave function of plutonium in PuSb as determined via x-ray magnetic circular dichroism

M. Janoschek, D. Haskel, J. Fernandez-Rodriguez, M. van Veenendaal, J. Rebizant, G. H. Lander, J.-X. Zhu, J. D. Thompson, and E. D. Bauer

Phys. Rev. B 91, 035117 (2015) - Published 14 January 2015

Critical charge fluctuations in a pseudogap Anderson model

Tathagata Chowdhury and Kevin Ingersent

Phys. Rev. B 91, 035118 (2015) - Published 15 January 2015

One-step theory of pump-probe photoemission

J. Braun, R. Rausch, M. Potthoff, J. Minár, and H. Ebert

Phys. Rev. B 91, 035119 (2015) - Published 20 January 2015

Conformal data from finite entanglement scaling

Vid Stojevic, Jutho Haegeman, I. P. McCulloch, Luca Tagliacozzo, and Frank Verstraete

Phys. Rev. B **91**, 035120 (2015) – Published 20 January 2015

Analysis of charge states in the mixed-valent ionic insulator AgO

Yundi Quan and Warren E. Pickett

Phys. Rev. B 91, 035121 (2015) - Published 20 January 2015

Condensation of lattice defects and melting transitions in quantum Hall phases

Gil Young Cho, Onkar Parrikar, Yizhi You, Robert G. Leigh, and Taylor L. Hughes

Phys. Rev. B 91, 035122 (2015) - Published 20 January 2015

Use of x-ray scattering functions in Kramers-Kronig analysis of reflectance

D. B. Tanner

Phys. Rev. B **91**, 035123 (2015) – Published 21 January 2015 Low-temperature structural investigations of the frustrated quantum antiferromagnets  $Cs_2Cu(Cl_{4-x}Br_x)$ 

N. van Well, K. Foyevtsova, S. Gottlieb-Schönmeyer, F. Ritter, R. S. Manna, B. Wolf, M. Meven, C. Pfleiderer, M. Lang, W. Assmus, R. Valentí, and C. Krellner

Phys. Rev. B 91, 035124 (2015) - Published 21 January 2015

Kohn-Sham kinetic energy density in the nuclear and asymptotic regions: Deviations from the von Weizsäcker behavior and applications to density functionals

Fabio Della Sala, Eduardo Fabiano, and Lucian A. Constantin

Phys. Rev. B **91**, 035126 (2015) – Published 23 January 2015

General procedure for determining braiding and statistics of anyons using entanglement interferometry

Yi Zhang, Tarun Grover, and Ashvin Vishwanath

Phys. Rev. B 91, 035127 (2015) - Published 26 January 2015

Symmetry and correlations underlying hidden order in  $URu_2Si_2$ 

Nicholas P. Butch, Michael E. Manley, Jason R. Jeffries, Marc Janoschek, Kevin Huang, M. Brian Maple, Ayman H. Said, Bogdan M. Leu, and Jeffrey W. Lynn

Phys. Rev. B 91, 035128 (2015) - Published 26 January 2015

Lattice dynamics of the heavy-fermion compound  $URu_2Si_2$ 

J. Buhot, M. A. Méasson, Y. Gallais, M. Cazayous, A. Sacuto, F. Bourdarot, S. Raymond, G. Lapertot, D. Aoki, L. P. Regnault, A. Ivanov, P. Piekarz, K. Parlinski, D. Legut, C. C. Homes, P. Lejay, and R. P. S. M. Lobo

Phys. Rev. B **91**, 035129 (2015) – Published 26 January 2015

Avoided ferromagnetic quantum critical point in CeRuPO

E. Lengyel, M. E. Macovei, A. Jesche, C. Krellner, C. Geibel, and M. Nicklas

Phys. Rev. B **91**, 035130 (2015) – Published 26 January 2015

Experimental signatures of phase interference and subfemtosecond time dynamics on the incident energy axis of resonant inelastic x-ray scattering

L. Andrew Wray, Shih-Wen Huang, Yuqi Xia, M. Zahid Hasan, Charles Mathy, Hiroshi Eisaki, Zahid Hussain, and Yi-De Chuang

Phys. Rev. B 91, 035131 (2015) - Published 27 January 2015

Impurity-induced magnetic moments on the graphene-lattice Hubbard model: An inhomogeneous cluster dynamical mean-field theory study

M. Charlebois, D. Sénéchal, A.-M. Gagnon, and A.-M. S. Tremblay

Phys. Rev. B 91, 035132 (2015) - Published 28 January 2015

Unconventional localization transition in high dimensions

S. V. Syzranov, V. Gurarie, and L. Radzihovsky

Phys. Rev. B 91, 035133 (2015) - Published 28 January 2015

Non-Abelian string and particle braiding in topological order:

Modular SL(3,Z) representation and (3+1)-dimensional twisted gauge theory

Juven C. Wang and Xiao-Gang Wen

Phys. Rev. B 91, 035134 (2015) - Published 29 January 2015

Charge fluctuations in the unconventional metallic state of Li0.9Mo6O17

J. Merino and J. V. Alvarez

Phys. Rev. B 91, 035135 (2015) - Published 29 January 2015

Characterization and stability of a fermionic v=1/3 fractional Chern insulator

Adolfo G. Grushin, Johannes Motruk, Michael P. Zaletel, and Frank Pollmann

Phys. Rev. B 91, 035136 (2015) - Published 30 January 2015

Semiconductors I: bulk

Carrier screening, transport, and relaxation in three-dimensional Dirac semimetals

S. Das Sarma, E. H. Hwang, and Hongki Min

Phys. Rev. B 91, 035201 (2015) - Published 15 January 2015

Quantum transport in three-dimensional Weyl electron system in the presence of charged impurity scattering

Yuya Ominato and Mikito Koshino

Phys. Rev. B **91**, 035202 (2015) – Published 26 January 2015

Semiconductors II: surfaces, interfaces, microstructures, and related topics

Directly accessible entangling gates for capacitively coupled singlet-triplet qubits

F. A. Calderon-Vargas and J. P. Kestner

Phys. Rev. B 91, 035301 (2015) - Published 6 January 2015

GaN m-plane: Atomic structure, surface bands, and optical response

M. Landmann, E. Rauls, W. G. Schmidt, M. D. Neumann, E. Speiser, and N. Esser

Phys. Rev. B 91, 035302 (2015) - Published 7 January 2015

Intrinsic optical intersubband bistability in quantum well structures: Role of multiple reflections

Victor Bondarenko and Mirosław Załużny

Phys. Rev. B 91, 035303 (2015) - Published 8 January 2015

Role of charge separation mechanism and local disorder at hybrid solar cell interfaces

Philipp Ehrenreich, Thomas Pfadler, Francis Paquin, Laura-Isabelle Dion-Bertrand, Olivier Paré-Labrosse, Carlos Silva, Jonas Weickert, and Lukas Schmidt-Mende

Phys. Rev. B **91**, 035304 (2015) – Published 12 January 2015

Feedback control of nuclear spin bath of a single hole spin in a quantum dot

Hongliang Pang, Zhirui Gong, and Wang Yao

Phys. Rev. B **91**, 035305 (2015) – Published 12 January 2015

Numerically exact solution of the many emitter—cavity laser problem: Application to the fully quantized spaser emission

Marten Richter, Michael Gegg, T. Sverre Theuerholz, and Andreas Knorr

Phys. Rev. B **91**, 035306 (2015) – Published 13 January 2015

Rigorous theory of the radiative and gain characteristics of silicon and germanium lasing media

Hanging Wen and Enrico Bellotti

Phys. Rev. B **91**, 035307 (2015) – Published 14 January 2015

Photophysics of single nitrogen-vacancy centers in diamond nanocrystals

Martin Berthel, Oriane Mollet, Géraldine Dantelle, Thierry Gacoin, Serge Huant, and Aurélien Drezet

Phys. Rev. B 91, 035308 (2015) - Published 14 January 2015

Interstitial iron impurities at grain boundaries in silicon: A first-principles study

Benedikt Ziebarth, Matous Mrovec, Christian Elsässer, and Peter Gumbsch

Phys. Rev. B **91**, 035309 (2015) – Published 14 January 2015

Structure of the quantum spin Hall states in HgTe/CdTe and InAs/GaSb/AlSb quantum wells

P. C. Klipstein

Phys. Rev. B 91, 035310 (2015) - Published 20 January 2015

Topological states in  $\alpha$ -Sn and HgTe quantum wells: A comparison of ab initio results

Sebastian Küfner and Friedhelm Bechstedt

Phys. Rev. B 91, 035311 (2015) - Published 26 January 2015

All-electron topological insulator in InAs double wells

Sigurdur I. Erlingsson and J. Carlos Egues

Phys. Rev. B 91, 035312 (2015) - Published 30 January 2015

Ab initio studies of adatom- and vacancy-induced band bending in *Bi2Se3* 

Tobias Förster, Peter Krüger, and Michael Rohlfing

Phys. Rev. B 91, 035313 (2015) - Published 30 January 2015

Surface physics, nanoscale physics, low-dimensional systems

Lifetimes of metal nanowires with broken axial symmetry

Lan Gong, J. Bürki, Charles A. Stafford, and Daniel L. Stein

Phys. Rev. B **91**, 035401 (2015) – Published 5 January 2015

Optical generation and detection of pure valley current in monolayer transition-metal dichalcogenides

Wen-Yu Shan, Jianhui Zhou, and Di Xiao

Phys. Rev. B **91**, 035402 (2015) – Published 6 January 2015

Current-induced spin polarization at the surface of metallic films: A theorem and an ab initio calculation

I. V. Tokatly, E. E. Krasovskii, and Giovanni Vignale

Phys. Rev. B 91, 035403 (2015) - Published 7 January 2015

Induced fractional valley number in graphene with topological defects

Angel E. Obispo and Marcelo Hott

Phys. Rev. B 91, 035404 (2015) - Published 7 January 2015

Incommensurate double-walled carbon nanotubes as one-dimensional moiré crystals

Mikito Koshino, Pilkyung Moon, and Young-Woo Son

Phys. Rev. B 91, 035405 (2015) - Published 8 January 2015

Micron-scale ballistic thermal conduction and suppressed thermal conductivity in heterogeneously interfaced nanowires

Tzu-Kan Hsiao (蕭子綱), Bor-Woei Huang (黃柏瑋), Hsu-Kai Chang (張旭凱), Sz-Chian Liou (劉思謙), Ming-Wen Chu (朱明文), Si-Chen Lee (李嗣涔), and Chih-Wei Chang (張之威)

Phys. Rev. B 91, 035406 (2015) - Published 9 January 2015

Ordering and surface segregation in  $Co_{1-c}Pt_c$ nanoparticles: A theoretical study from surface alloys to nanoalloys

A. Lopes, G. Tréglia, C. Mottet, and B. Legrand

Phys. Rev. B 91, 035407 (2015) - Published 9 January 2015

Ab initio studies of Cs on GaAs (100) and (110) surfaces

Siddharth Karkare, Laurent Boulet, Arunima Singh, Richard Hennig, and Ivan Bazarov

Phys. Rev. B 91, 035408 (2015) - Published 12 January 2015

Extending the spectral range of CdSe/ZnSe quantum wells by strain engineering

A. Finke, M. Ruth, S. Scholz, A. Ludwig, A. D. Wieck, D. Reuter, and A. Pawlis

Phys. Rev. B **91**, 035409 (2015) – Published 12 January 2015

Direct probing of the stacking order and electronic spectrum of rhombohedral trilayer graphene with scanning tunneling microscopy

Rui Xu, Long-Jing Yin, Jia-Bin Qiao, Ke-Ke Bai, Jia-Cai Nie, and Lin He

Phys. Rev. B 91, 035410 (2015) - Published 12 January 2015

Spectral properties of superconducting microwave photonic crystals modeling Dirac billiards

B. Dietz, T. Klaus, M. Miski-Oglu, and A. Richter

Phys. Rev. B 91, 035411 (2015) - Published 12 January 2015

Generation of subsurface voids and a nanocrystalline surface layer in femtosecond laser irradiation of a single-crystal Ag target

Chengping Wu, Martin S. Christensen, Juha-Matti Savolainen, Peter Balling, and Leonid V. Zhigilei

Phys. Rev. B 91, 035413 (2015) - Published 12 January 2015

Hydrodynamics in graphene: Linear-response transport

B. N. Narozhny, I. V. Gornyi, M. Titov, M. Schütt, and A. D. Mirlin

Phys. Rev. B 91, 035414 (2015) - Published 12 January 2015

Charge oscillations and interaction between potassium adatoms on graphene studied by first-principles calculations

Xiaojie Liu, Cai-Zhuang Wang, Hai-Qing Lin, Kai Chang, Jian Chen, and Kai-Ming Ho

Phys. Rev. B 91, 035415 (2015) - Published 13 January 2015

Intrinsic thermal conductivity in monolayer graphene is ultimately upper limited: A direct estimation by atomistic simulations

Giuliana Barbarino, Claudio Melis, and Luciano Colombo

Phys. Rev. B 91, 035416 (2015) - Published 13 January 2015

Antiferromagnetic long-range spin ordering in Fe- and NiFe2doped BaTiO3 multiferroic layers

A. Barbier, T. Aghavnian, V. Badjeck, C. Mocuta, D. Stanescu, H. Magnan, C. L. Rountree, R. Belkhou, P. Ohresser, and N. Jedrecy

Phys. Rev. B 91, 035417 (2015) - Published 14 January 2015

Evolution of the electronic structure of CaO thin films following Mo interdiffusion at high temperature

Yi Cui, Yi Pan, Leandro Pascua, Hengshan Qiu, Christian Stiehler, Helmut Kuhlenbeck, Niklas Nilius, and Hans-Joachim Freund

Phys. Rev. B **91**, 035418 (2015) – Published 15 January 2015

Crystallization of silicon nanoclusters with inert gas temperature control

Junlei Zhao, Vidyadhar Singh, Panagiotis Grammatikopoulos, Cathal Cassidy, Kengo Aranishi, Mukhles Sowwan, Kai Nordlund, and Flyura Djurabekova

Phys. Rev. B 91, 035419 (2015) – Published 15 January 2015

Dimensional crossover in ultrathin buried conducting *SrVO3* layers

Q.-R. Li, M. Major, M. Baghaie Yazdi, W. Donner, V. H. Dao, B. Mercey, and U. Lüders

Phys. Rev. B **91**, 035420 (2015) – Published 15 January 2015

Electronic band structure of a TI/Sn atomic sandwich on Si(111)

D. V. Gruznev, L. V. Bondarenko, A. V. Matetskiy, A. Y. Tupchaya, A. A. Alekseev, C. R. Hsing, C. M. Wei, S. V. Eremeev, A. V. Zotov, and A. A. Saranin

Phys. Rev. B 91, 035421 (2015) - Published 16 January 2015

#### **Editors' Suggestion**

Nonlinear terahertz field-induced carrier dynamics in photoexcited epitaxial monolayer graphene

Hassan A. Hafez, Ibraheem Al-Naib, Marc M. Dignam, Yoshiaki Sekine, Katsuya Oguri, François Blanchard, David G. Cooke, Satoru Tanaka, Fumio Komori, Hiroki Hibino, and Tsuneyuki Ozaki

Phys. Rev. B 91, 035422 (2015) - Published 16 January 2015

Optical measurements on highly doped single-layer epitaxial graphene reveal that the photoexcitation of charge carriers leads to an enhancement of the THz transmission. In this paper, the results are explained in terms of the change in the carrier scattering rate due to the optical pump fluence and the THz electric field.

Magnetic properties of Dirac fermions in a buckled honeycomb lattice

C. J. Tabert, J. P. Carbotte, and E. J. Nicol

Phys. Rev. B 91, 035423 (2015) - Published 16 January 2015

Optical conductivity renormalization of graphene on SrTiO3 due to resonant excitonic effects mediated by  $Ti\ 3d$  orbitals

Pranjal Kumar Gogoi, Paolo E. Trevisanutto, Ming Yang, Iman Santoso, Teguh Citra Asmara, Aleksandrs Terentjevs, Fabio Della Sala, Mark B. H. Breese, T. Venkatesan, Yuan Ping Feng, Kian Ping Loh, Antonio H. Castro Neto, and Andrivo Rusydi

Phys. Rev. B 91, 035424 (2015) - Published 20 January 2015

Vacancy effects on electronic and transport properties of graphene nanoribbons

Hai-Yao Deng and Katsunori Wakabayashi

Phys. Rev. B 91, 035425 (2015) - Published 20 January 2015

Modulatable optical radiators and metasurfaces based on quantum nanoantennas

Pai-Yen Chen and Mohamed Farhat

Phys. Rev. B 91, 035426 (2015) - Published 20 January 2015

Minimal model of point contact Andreev reflection spectroscopy of multiband superconductors

F. Romeo and R. Citro

Phys. Rev. B **91**, 035427 (2015) – Published 20 January 2015

Transport regimes in nitrogen-doped carbon nanotubes: Perfect order, semirandom, and random disorder cases

Hafid Khalfoun, Aurélien Lherbier, Philippe Lambin, Luc Henrard, and Jean-Christophe Charlier

Phys. Rev. B 91, 035428 (2015) - Published 20 January 2015

Scattering of phonons by high-concentration isotopic impurities in ultrathin graphite

Michael Thompson Pettes, Mir Mohammad Sadeghi, Hengxing Ji, Insun Jo, Wei Wu, Rodney S. Ruoff, and Li Shi

Phys. Rev. B 91, 035429 (2015) - Published 21 January 2015

Two-qubit pulse gate for the three-electron double quantum dot qubit

Sebastian Mehl

Phys. Rev. B **91**, 035430 (2015) – Published 21 January 2015

Decay of dark and bright plasmonic modes in a metallic nanoparticle dimer

Adam Brandstetter-Kunc, Guillaume Weick, Dietmar Weinmann, and Rodolfo A. Jalabert

Phys. Rev. B 91, 035431 (2015) - Published 22 January 2015

Thermal boundary conductance accumulation and interfacial phonon transmission: Measurements and theory

Ramez Cheaito, John T. Gaskins, Matthew E. Caplan, Brian F. Donovan, Brian M. Foley, Ashutosh Giri, John C. Duda, Chester J. Szwejkowski, Costel Constantin, Harlan J. Brown-Shaklee, Jon F. Ihlefeld, and Patrick E. Hopkins

Phys. Rev. B 91, 035432 (2015) - Published 22 January 2015

Optically induced magnetic moments in symmetric graphene quantum dots

Eleftheria G. Kavousanaki and Keshav M. Dani

Phys. Rev. B 91, 035433 (2015) - Published 23 January 2015

Role of k-point sampling in the supercell approach to inelastic electron tunneling spectroscopy simulations of molecular monolayers

Giuseppe Foti, Daniel Sánchez-Portal, Andrés Arnau, and Thomas Frederiksen

Phys. Rev. B **91**, 035434 (2015) – Published 23 January 2015

Relevant perturbations at the spin quantum Hall transition

Shanthanu Bhardwaj, Ilya A. Gruzberg, and Victor Kagalovsky

Phys. Rev. B 91, 035435 (2015) - Published 26 January 2015

Stabilizing graphene-based organometallic sandwich structures through defect engineering

Pratibha Dev and Thomas L. Reinecke

Phys. Rev. B 91, 035436 (2015) - Published 26 January 2015

Spin density wave and superconducting properties of nanoparticle organic conductor assemblies

Laurel E. Winter, Eden Steven, James S. Brooks, Shermane Benjamin, Ju-Hyun Park, Dominique de Caro, Christophe Faulmann, Lydie Valade, Kane Jacob, Imane Chtioui, Belén Ballesteros, and Jordi Fraxedas

Phys. Rev. B 91, 035437 (2015) - Published 27 January 2015

Finding the right substrate support for magnetic superatom assembly from density functional calculations

Akansha Singh and Prasenjit Sen

Phys. Rev. B 91, 035438 (2015) - Published 28 January 2015

Atomistic analysis of the impact of alloy and well-width fluctuations on the electronic and optical properties of InGaN/GaN quantum wells

Stefan Schulz, Miguel A. Caro, Conor Coughlan, and Eoin P. O'Reilly

Phys. Rev. B **91**, 035439 (2015) – Published 28 January 2015

Many-body theory of the neutralization of strontium ions on gold surfaces

M. Pamperin, F. X. Bronold, and H. Fehske

Phys. Rev. B 91, 035440 (2015) - Published 29 January 2015

Edge states of moiré structures in graphite

E. Suárez Morell, P. Vargas, P. Häberle, Samuel A. Hevia, and Leonor Chico

Phys. Rev. B 91, 035441 (2015) - Published 29 January 2015

Probing transverse magnetic anisotropy by electronic transport through a singlemolecule magnet

M. Misiorny, E. Burzurí, R. Gaudenzi, K. Park, M. Leijnse, M. R. Wegewijs, J. Paaske, A. Cornia, and H. S. J. van der Zant

Phys. Rev. B 91, 035442 (2015) - Published 30 January 2015

Fano resonances in the conductance of graphene nanoribbons with side gates

M. D. Petrović and F. M. Peeters

Phys. Rev. B **91**, 035444 (2015) – Published 30 January 2015

Strongly anisotropic spin-orbit splitting in a two-dimensional electron gas

Matteo Michiardi, Marco Bianchi, Maciej Dendzik, Jill A. Miwa, Moritz Hoesch, Timur K. Kim, Peter Matzen, Jianli Mi, Martin Bremholm, Bo Brummerstedt Iversen, and Philip Hofmann

Phys. Rev. B 91, 035445 (2015) - Published 30 January 2015

## **ERRATA**

Publisher's Note: Origin of the band dispersion in a metal phthalocyanine crystal [Phys. Rev. B **90**, 245141 (2014)]

Susumu Yanagisawa, Kunihiko Yamauchi, Takeshi Inaoka, Tamio Oguchi, and Ikutaro Hamada

Phys. Rev. B **91**, 039901 (2015) – Published 6 January 2015

Erratum: Local density of states from constant-current tunneling spectra [Phys. Rev. B **80**, 125402 (2009)]

M. Ziegler, N. Néel, A. Sperl, J. Kröger, and R. Berndt

Phys. Rev. B 91, 039902 (2015) - Published 6 January 2015

Erratum: Spectroscopy and dynamics of unoccupied electronic states of the topological insulators  $Sb_2Te_3$  and  $Sb_2Te_2S$  [Phys. Rev. B **90**, 081106(R) (2014)]

J. Reimann, J. Güdde, K. Kuroda, E. V. Chulkov, and U. Höfer

Phys. Rev. B 91, 039903 (2015) - Published 8 January 2015

Erratum: Quantum theory of third-harmonic generation in graphene [Phys. Rev. B **90**, 241301(R) (2014)]

S. A. Mikhailov

Phys. Rev. B 91, 039904 (2015) - Published 9 January 2015

Erratum: Thermoelectric effects in graphene with local spin-orbit interaction [Phys. Rev. B **89**, 115422 (2014)]

M. I. Alomar and David Sánchez

Phys. Rev. B 91, 039905 (2015) - Published 9 January 2015

Erratum: Intrinsic phonon relaxation times from first-principles studies of the thermal conductivities of Si and Ge [Phys. Rev. B **81**, 085205 (2010)]

A. Ward and D. A. Broido

Phys. Rev. B **91**, 039906 (2015) – Published 15 January 2015

Erratum: Spatial and temporal propagation of Kondo correlations [Phys. Rev. B **90**, 045117 (2014)]

Benedikt Lechtenberg and Frithjof B. Anders

Phys. Rev. B 91, 039907 (2015) - Published 21 January 2015

Erratum: Kerr effect as evidence of gyrotropic order in the cuprates [Phys. Rev. B **87**, 115116 (2013)]

Pavan Hosur, A. Kapitulnik, S. A. Kivelson, J. Orenstein, S. Raghu, W. Cho, and A. Fried

Phys. Rev. B **91**, 039908 (2015) – Published 26 January 2015

Publisher's Note: Structure of the quantum spin Hall states in HgTe/CdTe and InAs/GaSb/AlSb quantum wells [Phys. Rev. B **91**, 035310 (2015)]

P. C. Klipstein

Phys. Rev. B **91**, 039909 (2015) – Published 30 January 2015

Erratum: Impact of ambient oxygen on the surface structure

of  $\alpha$ - $Cr_2O_3(0001)$  [Phys. Rev. B **81**, 205439 (2010)]

O. Bikondoa, W. Moritz, X. Torrelles, H. J. Kim, G. Thornton, and R. Lindsay

Phys. Rev. B **91**, 039910 (2015) – Published 30 January 2015