PHYSICAL REVIEW B™

For editorial and subscription correspondence, please see inside front cover
(ISSN: 2469-9950)

PERIODICALS
Postmaster send address changes to:

APS Subscription Services
P.O. Box 41
Annapolis Junction, MD 20701

THIRD SERIES, VOLUME 94, NUMBER 11 *CONTENTS* **SEPTEMBER 2016-15(I)**

ARTICLES

Electronic structure and strongly correlated systems

Photoinduced ultrafast charge-order melting: Charge-order inversion and nonthermal effects *(9 pages)* 115101
Michel van Veenendaal

Boltzmann transport calculation of collinear spin transport on short timescales *(7 pages)* 115102
Dennis M. Nenno, Steffen Kaltenborn, and Hans Christian Schneider

Three-dimensional electronic structures and the metal-insulator transition in Ruddlesden-Popper iridates *(10 pages)* 115103
A. Yamasaki, H. Fujiwara, S. Tachibana, D. Iwasaki, Y. Higashino, C. Yoshimi, K. Nakagawa, Y. Nakatani, K. Yamagami, H. Aratani, O. Kirilmaz, M. Sing, R. Claessen, H. Watanabe, T. Shirakawa, S. Yunoki, A. Naitoh, K. Takase, J. Matsuno, H. Takagi, A. Sekiyama, and Y. Saitoh

Composite particle theory of three-dimensional gapped fermionic phases: Fractional topological insulators and charge-loop excitation symmetry *(23 pages)* 115104
Peng Ye, Taylor L. Hughes, Joseph Maciejko, and Eduardo Fradkin

Competing pairing channels in the doped honeycomb lattice Hubbard model *(7 pages)* 115105
Xiao Yan Xu, Stefan Wessel, and Zi Yang Meng

Quantum mechanics of Drude oscillators with full Coulomb interaction *(5 pages)* 115106
M. Sadhukhan and Frederick R. Manby

Electronic stopping for protons and α particles from first-principles electron dynamics: The case of silicon carbide *(8 pages)* 115107
Dillon C. Yost and Yosuke Kanai

Degenerate density perturbation theory *(14 pages)* 115108
Mark C. Palenik and Brett I. Dunlap

Raman and crystal field studies of Tb-O bonds in $TbMn_2O_5$ *(8 pages)* 115109
S. Mansouri, S. Jandl, M. Balli, J. Laverdière, P. Fournier, and D. Z. Dimitrov

Dissipationless conductance in a topological coaxial cable *(5 pages)* 115110
Thomas Schuster, Thomas Iadecola, Claudio Chamon, Roman Jackiw, and So-Young Pi

Exchange field effect in the crystal-field ground state of $CeMAl_4Si_2$ *(6 pages)* 115111
K. Chen, F. Strigari, M. Sundermann, S. Agrestini, N. J. Ghimire, S.-Z. Lin, C. D. Batista, E. D. Bauer, J. D. Thompson, E. Otero, A. Tanaka, and A. Severing

Copyright 2016 by American Physical Society

(Continued)

2469-9950(20160915)94:11;1-Q

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 94, NUMBER 11** **SEPTEMBER 2016-15(I)**

Electronic quasiparticles in the quantum dimer model: Density matrix renormalization group results *(7 pages)* . . . 115112
Junhyun Lee, Subir Sachdev, and Steven R. White

Dimensional decoupling at continuous quantum critical Mott transitions *(16 pages)* 115113
Liujun Zou and T. Senthil

Theory of the dynamical thermal conductivity of metals *(12 pages)* 115114
Pankaj Bhalla, Pradeep Kumar, Nabyendu Das, and Navinder Singh

Discrete spin structures and commuting projector models for two-dimensional fermionic symmetry-protected topological phases *(11 pages)* 115115
Nicolas Tarantino and Lukasz Fidkowski

Universal behavior of the Shannon mutual information in nonintegrable self-dual quantum chains *(11 pages)* 115116
F. C. Alcaraz

Two-site fluctuations and multipolar intersite exchange interactions in strongly correlated systems *(13 pages)* 115117
L. V. Pourovskii

Energy spectrum of pristine and compressed black phosphorus in the presence of a magnetic field *(8 pages)* 115118
Z. T. Jiang, Z. T. Lv, and X. D. Zhang

One-step approach to ARPES from strongly correlated solids: A Mott-Hubbard system *(15 pages)* 115119
R. O. Kuzian and E. E. Krasovskii

Finite-volume energy spectrum, fractionalized strings, and low-energy effective field theory for the quantum dimer model on the square lattice *(15 pages)* 115120
D. Banerjee, M. Bögli, C. P. Hofmann, F.-J. Jiang, P. Widmer, and U.-J. Wiese

Itinerant magnetic phases and quantum Lifshitz transitions in a three-dimensional repulsively interacting Fermi gas with spin-orbit coupling *(13 pages)* 115121
Shang-Shun Zhang, Jinwu Ye, and Wu-Ming Liu

Probing the coupling between a doublon excitation and the charge-density wave in TaS_2 by ultrafast optical spectroscopy *(7 pages)* 115122
Andreas Mann, Edoardo Baldini, Ahmad Odeh, Arnaud Magrez, Helmuth Berger, and Fabrizio Carbone

Metal-insulator transition and pseudogap in $Bi_{1.76}Pb_{0.35}Sr_{1.89}CuO_{6+\delta}$ high-T_c cuprates *(5 pages)* 115123
M. Miyazaki, R. Kadono, M. Hiraishi, A. Koda, K. M. Kojima, Y. Fukunaga, Y. Tanabe, T. Adachi, and Y. Koike

Interaction-driven topological superconductivity in one dimension *(15 pages)* 115124
Arbel Haim, Konrad Wölms, Erez Berg, Yuval Oreg, and Karsten Flensberg

Topological conformal defects with tensor networks *(24 pages)* 115125
Markus Hauru, Glen Evenbly, Wen Wei Ho, Davide Gaiotto, and Guifre Vidal

Damping of the collective amplitude mode in superconductors with strong electron-phonon coupling *(7 pages)* 115126
Yuta Murakami, Philipp Werner, Naoto Tsuji, and Hideo Aoki

Ising anyons in frustration-free Majorana-dimer models *(18 pages)* 115127
Brayden Ware, Jun Ho Son, Meng Cheng, Ryan V. Mishmash, Jason Alicea, and Bela Bauer

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 94, NUMBER 11** **SEPTEMBER 2016-15(I)**

Synthesizing Majorana zero-energy modes in a periodically gated quantum wire *(15 pages)* 115128
Mariana Malard, George I. Japaridze, and Henrik Johannesson

Magnetic-field-induced spin crossover of Y-doped $Pr_{0.7}Ca_{0.3}CoO_3$ *(8 pages)* 115129
Akihiko Ikeda, Suyeon Lee, Taku T. Terashima, Yasuhiro H. Matsuda, Masashi Tokunaga, and Tomoyuki Naito

Hidden-fermion representation of self-energy in pseudogap and superconducting states of the two-dimensional Hubbard model *(14 pages)* 115130
Shiro Sakai, Marcello Civelli, and Masatoshi Imada

Strain-controlled spin splitting in the conduction band of monolayer WS_2 *(6 pages)* 115131
Moh. Adhib Ulil Absor, Hiroki Kotaka, Fumiyuki Ishii, and Mineo Saito

First-principles DFT+U investigation of charged states of defects and fission gas atoms in CeO_2 *(12 pages)* 115132
Lei Shi, Emerson Vathonne, Vincent Oison, Michel Freyss, and Roland Hayn

Shot noise in NS junctions with a Weyl superconductor *(6 pages)* 115133
A. Golub

Nonperturbative emergence of non-Fermi-liquid behavior in $d = 2$ quantum critical metals *(13 pages)* 115134
Balazs Meszena, Petter Säterskog, Andrey Bagrov, and Koenraad Schalm

Influence of Fröhlich polaron coupling on renormalized electron bands in polar semiconductors: Results for zinc-blende GaN *(8 pages)* 115135
Jean Paul Nery and Philip B. Allen

Quantum-statistical approach to electromagnetic wave propagation and dissipation inside dielectric media and nanophotonic and plasmonic waveguides *(18 pages)* 115136
Konstantin G. Zloshchastiev

Quantum phases of interacting electrons in three-dimensional dirty Dirac semimetals *(25 pages)* 115137
Bitan Roy and Sankar Das Sarma

Superconducting instability in non-Fermi liquids *(15 pages)* 115138
Ipsita Mandal

Signatures of broken parity and time-reversal symmetry in generalized string-net models *(18 pages)* 115139
Ethan Lake and Yong-Shi Wu

Quantization of states and strain-induced transformation of charge-density waves in the quasi-one-dimensional conductor TaS_3 *(7 pages)* 115140
S. G. Zybtsev and V. Ya. Pokrovskii

Dirac topological insulator in the d_{z^2} manifold of a honeycomb oxide *(7 pages)* 115141
J. L. Lado and V. Pardo

Quantum impurity in a Luttinger liquid: Exact solution of the Kane-Fisher model *(14 pages)* 115142
Colin Rylands and Natan Andrei

Driving force for martensitic transformation in $Ni_2Mn_{1+x}Sn_{1-x}$ *(5 pages)* 115143
Soumyadipta Pal, Sagar Sarkar, S. K. Pandey, Chhayabrita Maji, and Priya Mahadevan

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 94, NUMBER 11** **SEPTEMBER 2016-15(I)**

Benchmark tests of a strongly constrained semilocal functional with a long-range dispersion correction *(11 pages)* 115144
J. G. Brandenburg, J. E. Bates, J. Sun, and J. P. Perdew

Floquet topological phases coupled to environments and the induced photocurrent *(11 pages)* 115145
Szabolcs Vajna, Baruch Horovitz, Balázs Dóra, and Gergely Zaránd

Temperature-induced orbital selective localization and coherent-incoherent crossover in single-layer FeSe/Nb:$BaTiO_3$/$KTaO_3$ *(6 pages)* 115146
Y. J. Pu, Z. C. Huang, H. C. Xu, D. F. Xu, Q. Song, C. H. P. Wen, R. Peng, and D. L. Feng

Spin density wave order, topological order, and Fermi surface reconstruction *(15 pages)* 115147
Subir Sachdev, Erez Berg, Shubhayu Chatterjee, and Yoni Schattner

First-principles DFT+DMFT calculations of structural properties of actinides: Role of Hund's exchange, spin-orbit coupling, and crystal structure *(14 pages)* 115148
Bernard Amadon

Calculating branching ratio and spin-orbit coupling from first principles: A formalism and its application to iridates *(5 pages)* 115149
Jae-Hoon Sim, Hongkee Yoon, Sang Hyeon Park, and Myung Joon Han

Classification of trivial spin-1 tensor network states on a square lattice *(16 pages)* 115150
Hyunyong Lee and Jung Hoon Han

Comparative angle-resolved photoemission spectroscopy study of $CaRuO_3$ and $SrRuO_3$ thin films: Pronounced spectral weight transfer and possible precursor of lower Hubbard band *(6 pages)* 115151
H. F. Yang, C. C. Fan, Z. T. Liu, Q. Yao, M. Y. Li, J. S. Liu, M. H. Jiang, and D. W. Shen

Pulse excitation to continuous-wave excitation in a low-dimensional interacting quantum system *(8 pages)* 115152
Atsushi Ono, Hiroshi Hashimoto, and Sumio Ishihara

Distinctive orbital anisotropy observed in the nematic state of a FeSe thin film *(8 pages)* 115153
Y. Zhang, M. Yi, Z.-K. Liu, W. Li, J. J. Lee, R. G. Moore, M. Hashimoto, M. Nakajima, H. Eisaki, S.-K. Mo, Z. Hussain, T. P. Devereaux, Z.-X. Shen, and D. H. Lu

Functional renormalization group study of orbital fluctuation mediated superconductivity: Impact of the electron-boson coupling vertex corrections *(9 pages)* 115155
Rina Tazai, Youichi Yamakawa, Masahisa Tsuchiizu, and Hiroshi Kontani

Matrix product purifications for canonical ensembles and quantum number distributions *(9 pages)* 115157
Thomas Barthel

Anatomy of fermionic entanglement and criticality in Kitaev spin liquids *(17 pages)* 115158
K. Meichanetzidis, M. Cirio, J. K. Pachos, and V. Lahtinen

Orbital order from the on-site orbital attraction *(14 pages)* 115159
M. Khodas and A. V. Chubukov

Role of boundary conditions, topology, and disorder in the chiral magnetic effect in Weyl semimetals *(10 pages)* 115160
Yahya Alavirad and Jay D. Sau

Interaction-induced topological and magnetic phases in the Hofstadter-Hubbard model *(9 pages)* 115161
Pramod Kumar, Thomas Mertz, and Walter Hofstetter

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 94, NUMBER 11** **SEPTEMBER 2016-15(I)**

Conductance in inhomogeneous quantum wires: Luttinger liquid predictions and quantum Monte Carlo results *(12 pages)* 115162
D. Morath, N. Sedlmayr, J. Sirker, and S. Eggert

Effect of delithiation on the dimer transition of the honeycomb-lattice ruthenate $Li_{2-x}RuO_3$ *(8 pages)* 115163
Marco-Polo Jimenez-Segura, Atsutoshi Ikeda, Simon A. J. Kimber, Carlotta Giacobbe, Shingo Yonezawa, and Yoshiteru Maeno

High-order harmonic generation in solids: A unifying approach *(9 pages)* 115164
Tran Trung Luu and Hans Jakob Wörner

Signature of enhanced spin-orbit interaction in the magnetoresistance of $LaTiO_3/SrTiO_3$ interfaces on δ doping *(7 pages)* 115165
Shubhankar Das, Z. Hossain, and R. C. Budhani

Majorana wave-function oscillations, fermion parity switches, and disorder in Kitaev chains *(19 pages)* 115166
Suraj S. Hegde and Smitha Vishveshwara

Time-domain pumping a quantum-critical charge density wave ordered material *(11 pages)* 115167
O. P. Matveev, A. M. Shvaika, T. P. Devereaux, and J. K. Freericks

Semiconductors I: bulk

K-dependent exchange interaction of the $1S$ orthoexciton in Cu_2O *(10 pages)* 115201
Frank Schweiner, Jörg Main, Günter Wunner, and Christoph Uihlein

Vibrational spectra and nonlinear optical coefficients of rhombohedral $CsGeX_3$ halide compounds with $X=$ I, Br, Cl *(9 pages)* 115202
Ling-yi Huang and Walter R. L. Lambrecht

Low phonon conductivity of layered BiCuOS, BiCuOSe, and BiCuOTe from first principles *(7 pages)* 115203
Hyo Seok Ji, Atsushi Togo, Massoud Kaviany, Isao Tanaka, and Ji Hoon Shim

Tight-binding theory of NMR shifts in topological insulators Bi_2Se_3 and Bi_2Te_3 *(19 pages)* 115204
Samuel Boutin, Jorge Ramírez-Ruiz, and Ion Garate

Thermal transport in van der Waals solids from first-principles calculations *(11 pages)* 115205
Daniel O. Lindroth and Paul Erhart

Picosecond charge transport in rutile at high carrier densities studied by transient terahertz spectroscopy *(9 pages)* 115206
V. Zajac, H. Němec, and P. Kužel

Isolated hydrogen configurations in zirconia as seen by muon spin spectroscopy and *ab initio* calculations *(11 pages)* 115207
R. B. L. Vieira, R. C. Vilão, A. G. Marinopoulos, P. M. Gordo, J. A. Paixão, H. V. Alberto, J. M. Gil, A. Weidinger, R. L. Lichti, B. Baker, P. W. Mengyan, and J. S. Lord

Theory of electron-plasmon coupling in semiconductors *(7 pages)* 115208
Fabio Caruso and Feliciano Giustino

Optical emission related to basal-plane stacking faults in m-plane $Zn_{1-x}Mg_xO$ epilayers for $0 \leqslant x \leqslant 0.1$ *(9 pages)* 115209
Wan-Hsien Lin, Pierre Corfdir, Uwe Jahn, and Holger T. Grahn

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B THIRD SERIES, VOLUME 94, NUMBER 11 SEPTEMBER 2016-15(I)

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

Plasmons in tunnel-coupled graphene layers: Backward waves with quantum cascade gain *(12 pages)* 115301
D. Svintsov, Zh. Devizorova, T. Otsuji, and V. Ryzhii

Effective approach for accurately calculating individual energy of polar heterojunction interfaces *(6 pages)* 115302
Toru Akiyama, Harunobu Nakane, Kohji Nakamura, and Tomonori Ito

Dynamical calculation of third-harmonic generation in a semiconductor quantum well *(8 pages)* 115303
Stefano Guazzotti, Andreas Pusch, Doris E. Reiter, and Ortwin Hess

Pairing instabilities of Dirac composite fermions *(8 pages)* 115304
M. V. Milovanović, M. Dimitrijević Ćirić, and V. Juričić

Effect of a skin-deep surface zone on the formation of a two-dimensional electron gas at a semiconductor surface *(10 pages)* 115305
Natalia Olszowska, Jakub Lis, Piotr Ciochon, Łukasz Walczak, Enrique G. Michel, and Jacek J. Kolodziej

Effect of extended confinement on the structure of edge channels in the quantum anomalous Hall effect *(8 pages)* 115306
Z. Yue and M. E. Raikh

Optical spectroscopy of single beryllium acceptors in GaAs/AlGaAs quantum well *(5 pages)* 115307
P. V. Petrov, I. A. Kokurin, G. V. Klimko, S. V. Ivanov, Yu. L. Iványov, P. M. Koenraad, A. Yu. Silov, and N. S. Averkiev

Cavity effect on a biexciton in a CuCl microcavity *(5 pages)* 115308
Yasuyoshi Mitsumori, Shimpei Matsuura, Shoichi Uchiyama, Keiichi Edamatsu, and Masaaki Nakayama

Magnetophonon oscillations of thermoelectric power and combined resonance in two-subband electron systems *(7 pages)* 115309
A. D. Levin, G. M. Gusev, O. E. Raichev, and A. K. Bakarov

Spin splitting of electron states in lattice-mismatched (110)-oriented quantum wells *(6 pages)* 115310
M. O. Nestoklon, S. A. Tarasenko, R. Benchamekh, and P. Voisin

Decoherence and relaxation of a single electron in a one-dimensional conductor *(9 pages)* 115311
A. Marguerite, C. Cabart, C. Wahl, B. Roussel, V. Freulon, D. Ferraro, Ch. Grenier, J.-M. Berroir, B. Plaçais, T. Jonckheere, J. Rech, T. Martin, P. Degiovanni, A. Cavanna, Y. Jin, and G. Fève

Universal charge and current on magnetic domain walls in Weyl semimetals *(7 pages)* 115312
Yasufumi Araki, Akihide Yoshida, and Kentaro Nomura

Electron-hole interactions in coupled InAs-GaSb quantum dots based on nanowire crystal phase templates *(7 pages)* 115313
Malin Nilsson, Luna Namazi, Sebastian Lehmann, Martin Leijnse, Kimberly A. Dick, and Claes Thelander

Three-layer model for the surface second-harmonic generation yield including multiple reflections *(12 pages)* . . . 115314
Sean M. Anderson and Bernardo S. Mendoza

Surface physics, nanoscale physics, low-dimensional systems

Plasma wave instabilities in nonequilibrium graphene *(9 pages)* 115401
Chinta M. Aryal, Ben Yu-Kuang Hu, and Antti-Pekka Jauho

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 94, NUMBER 11** **SEPTEMBER 2016-15(I)**

Giant frequency-selective near-field energy transfer in active–passive structures *(10 pages)* 115402
Chinmay Khandekar, Weiliang Jin, Owen D. Miller, Adi Pick, and Alejandro W. Rodriguez

Universal power-law decay of electron-electron interactions due to nonlinear screening in a Josephson junction array *(9 pages)* 115403
Daniel Otten, Sebastian Rubbert, Jascha Ulrich, and Fabian Hassler

Dissipative long-range entanglement generation between electronic spins *(17 pages)* 115404
M. Benito, M. J. A. Schuetz, J. I. Cirac, G. Platero, and G. Giedke

Full range of proximity effect probed with superconductor/graphene/superconductor junctions *(7 pages)* 115405
Chuan Li, S. Guéron, A. Chepelianskii, and H. Bouchiat

Theory of ballistic quantum transport in the presence of localized defects *(12 pages)* 115406
K. Kolasiński, A. Mreńca-Kolasińska, and B. Szafran

Topological spin Meissner effect in spinor exciton-polariton condensate: Constant amplitude solutions, half-vortices, and symmetry breaking *(17 pages)* 115407
Dmitry R. Gulevich, Dmitry V. Skryabin, Alexander P. Alodjants, and Ivan A. Shelykh

Dynamics of the metal-insulator transition of donor-doped $SrTiO_3$ *(19 pages)* 115408
René Meyer, Alexander F. Zurhelle, Roger A. De Souza, Rainer Waser, and Felix Gunkel

Screening of a charged impurity in graphene in a magnetic field *(9 pages)* 115409
O. O. Sobol, P. K. Pyatkovskiy, E. V. Gorbar, and V. P. Gusynin

Constitutive parameter retrieval for uniaxial metamaterials with spatial dispersion *(9 pages)* 115410
Achiles F. Mota, Augusto Martins, John Weiner, Fernando L. Teixeira, and Ben-Hur V. Borges

Positron surface state as a spectroscopic probe for characterizing surfaces of topological insulator materials *(9 pages)* 115411
Vincent Callewaert, K. Shastry, Rolando Saniz, Ilja Makkonen, Bernardo Barbiellini, Badih A. Assaf, Donald Heiman, Jagadeesh S. Moodera, Bart Partoens, Arun Bansil, and A. H. Weiss

Rashba splitting in an image potential state investigated by circular dichroism two-photon photoemission spectroscopy *(9 pages)* 115412
T. Nakazawa, N. Takagi, Maki Kawai, H. Ishida, and R. Arafune

Nanoscale mechanical actuation and near-field read-out of photonic crystal molecules *(6 pages)* 115413
M. Petruzzella, F. La China, F. Intonti, N. Caselli, M. De Pas, F. W. M. van Otten, M. Gurioli, and A. Fiore

Nonlinear thermoelectric efficiency of superlattice-structured nanowires *(7 pages)* 115414
Hossein Karbaschi, John Lovén, Klara Courteaut, Andreas Wacker, and Martin Leijnse

Wiedemann-Franz-type relation between shot noise and thermal conduction of Majorana surface states in a three-dimensional topological superconductor *(10 pages)* 115415
N. V. Gnezdilov, M. Diez, M. J. Pacholski, and C. W. J. Beenakker

Non-Kondo many-body physics in a Majorana-based Kondo type system *(7 pages)* 115416
Ian J. van Beek and Bernd Braunecker

Thermal effects on the Wigner localization and Friedel oscillations in many-electron nanowires *(6 pages)* 115417
I. Kylänpää, F. Cavaliere, N. Traverso Ziani, M. Sassetti, and E. Räsänen

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 94, NUMBER 11** **SEPTEMBER 2016-15(I)**

Distance- and spin-resolved spectroscopy of iridium atoms on an iron bilayer *(6 pages)* 115418
Johannes Schöneberg, Nuala Mai Caffrey, Paolo Ferriani, Stefan Heinze, and Richard Berndt

Interference evidence for Rashba-type spin splitting on a semimetallic WTe_2 surface *(7 pages)* 115419
Qing Li, Jiaqiang Yan, Biao Yang, Yunyi Zang, Junjie Zhang, Ke He, Menghao Wu, Yanfei Zhao, David Mandrus, Jian Wang, Qikun Xue, Lifeng Chi, David J. Singh, and Minghu Pan

Phonon transport in silicon nanowires: The reduced group velocity and surface-roughness scattering *(5 pages)* . . . 115420
Liyan Zhu, Baowen Li, and Wu Li

Frequency shift, damping, and tunneling current coupling with quartz tuning forks in noncontact atomic force microscopy *(15 pages)* 115421
Laurent Nony, Franck Bocquet, Franck Para, and Christian Loppacher

Probing molecular spin clusters by local measurements *(7 pages)* 115422
Filippo Troiani and Matteo G. A. Paris

Josephson effect in topological superconducting rings coupled to a microwave cavity *(7 pages)* 115423
Olesia Dmytruk, Mircea Trif, and Pascal Simon

Controlling local currents in molecular junctions *(15 pages)* 115424
Hari Kumar Yadalam and Upendra Harbola

Mitigating valley-driven localization in atomically thin dopant chains in Si *(9 pages)* 115425
Amintor Dusko, A. L. Saraiva, and Belita Koiller

Disorder-sensitive pump-probe measurements on $Nd_{1.83}Ce_{0.17}CuO_{4\pm\delta}$ films *(8 pages)* 115426
Adolfo Avella, Carmela Buonavolontà, Anita Guarino, Massimo Valentino, Antonio Leo, Gaia Grimaldi, Corrado de Lisio, Angela Nigro, and Giampiero Pepe

Insight into the collective vibrational modes driving ultralow thermal conductivity of perovskite solar cells *(10 pages)* 115427
Sheng-Ying Yue, Xiaoliang Zhang, Guangzhao Qin, Jiayue Yang, and Ming Hu

Optical absorption and transmission in a molybdenum disulfide monolayer *(11 pages)* 115428
Zoran Rukelj, Antonio Štrkalj, and Vito Despoja

Electrified magnetic catalysis in three-dimensional topological insulators *(16 pages)* 115429
E. V. Gorbar, V. A. Miransky, I. A. Shovkovy, and P. O. Sukhachov

Detecting Majorana nonlocality using strongly coupled Majorana bound states *(5 pages)* 115430
S. Rubbert and A. R. Akhmerov

Strongly enhanced Rashba splittings in an oxide heterostructure: A tantalate monolayer on $BaHfO_3$ *(9 pages)* 115431
Minsung Kim, Jisoon Ihm, and Suk Bum Chung

Ab initio tensorial electronic friction for molecules on metal surfaces: Nonadiabatic vibrational relaxation *(15 pages)* 115432
Reinhard J. Maurer, Mikhail Askerka, Victor S. Batista, and John C. Tully

How to control spin-Seebeck current in a metal-quantum dot-magnetic insulator junction *(9 pages)* 115433
Lei Gu, Hua-Hua Fu, and Ruqian Wu

(Continued)

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 94, NUMBER 11** **SEPTEMBER 2016-15(I)**

Excitonic fine structure and binding energies of excitonic complexes in single InAs quantum dashes *(10 pages)* 115434
P. Mrowiński, M. Zieliński, M. Świderski, J. Misiewicz, A. Somers, J. P. Reithmaier, S. Höfling, and G. Sęk

Observation of nonsinusoidal current-phase relation in graphene Josephson junctions *(7 pages)* 115435
C. D. English, D. R. Hamilton, C. Chialvo, I. C. Moraru, N. Mason, and D. J. Van Harlingen

Effective mass of elementary excitations in Galilean-invariant integrable models *(5 pages)* 115436
K. A. Matveev and M. Pustilnik

Kagome lattice from an exciton-polariton perspective *(7 pages)* 115437
D. R. Gulevich, D. Yudin, I. V. Iorsh, and I. A. Shelykh

Strain-induced chiral symmetry breaking leads to large Dirac cone splitting in graphene/graphane heterostructure *(8 pages)* 115438
Deya Das, Swastibrata Bhattacharyya, Enrique Muñoz, and Abhishek K. Singh

Interplay between anisotropy and spatial dispersion in metamaterial waveguides *(9 pages)* 115439
K. L. Koshelev and A. A. Bogdanov

Measuring the reactivity of a silicon-terminated probe *(7 pages)* 115440
Adam Sweetman, Julian Stirling, Samuel Paul Jarvis, Philipp Rahe, and Philip Moriarty

Scaling approach to tight-binding transport in realistic graphene devices: The case of transverse magnetic focusing *(11 pages)* 115441
M. Beconcini, S. Valentini, R. Krishna Kumar, G. H. Auton, A. K. Geim, L. A. Ponomarenko, M. Polini, and F. Taddei

COMMENTS

Comment on "Orientation dependence of the optical spectra in graphene at high frequencies" *(4 pages)* 117401
Huy-Viet Nguyen and V. Hung Nguyen

ERRATA

Erratum: Quantum superconducting criticality in graphene and topological insulators [Phys. Rev. B **87**, 041401(R) (2013)] *(2 pages)* . . . . . 119901(E)
Bitan Roy, Vladimir Juričić, and Igor F. Herbut

Erratum: Spin-orbit interaction driven collective electron-hole excitations in a noncentrosymmetric nodal loop Weyl semimetal [Phys. Rev. B **92**, 115149 (2015)] *(1 page)* . . . . . 119902(E)
Kyo-Hoon Ahn, Kwan-Woo Lee, and Warren E. Pickett

Publisher's Note: Nature and topology of the low-energy states in $ZrTe_5$ [Phys. Rev. B **94**, 081101(R) (2016)] *(1 page)* . . . . . 119903(E)
L. Moreschini, J. C. Johannsen, H. Berger, J. Denlinger, C. Jozwiak, E. Rotenberg, K. S. Kim, A. Bostwick, and M. Grioni

Publisher's Note: Electronic band structure of Mg-IV-N_2 compounds in the quasiparticle-self-consistent GW approximation [Phys. Rev. B **94**, 125201 (2016)] *(1 page)* . . . . . 119904(E)
Atchara Punya Jaroenjittichai and Walter R. L. Lambrecht