PHYSICAL REVIEW B™

For editorial and subscription correspondence, please see inside front cover
(ISSN: 1098-0121)

PERIODICALS
Postmaster send address changes to:

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

THIRD SERIES, VOLUME 92, NUMBER 20 *CONTENTS* **NOVEMBER 2015-15(II)**

RAPID COMMUNICATIONS

Electronic structure and strongly correlated systems

Multicomponent fractional quantum Hall states with subband and spin degrees of freedom *(5 pages)* . . . . . 201101(R)
Yang Liu, S. Hasdemir, J. Shabani, M. Shayegan, L. N. Pfeiffer, K. W. West, and K. W. Baldwin

Towards the understanding of the origin of charge-current-induced spin voltage signals in the topological insulator Bi_2Se_3 *(5 pages)* . . . . . 201102(R)
E. K. de Vries, A. M. Kamerbeek, N. Koirala, M. Brahlek, M. Salehi, S. Oh, B. J. van Wees, and T. Banerjee

Charge ordering geometries in uniaxially strained $NbSe_2$ *(5 pages)* . . . . . 201103(R)
Felix Flicker and Jasper van Wezel

Exciton recombination in one-dimensional organic Mott insulators *(5 pages)* . . . . . 201104(R)
Zala Lenarčič, Martin Eckstein, and Peter Prelovšek

Variational Monte Carlo study of a gapless spin liquid in the spin-$\frac{1}{2}$ XXZ antiferromagnetic model on the kagome lattice *(5 pages)* . . . . . 201105(R)
Wen-Jun Hu, Shou-Shu Gong, Federico Becca, and D. N. Sheng

Non-Fermi-liquid scattering rates and anomalous band dispersion in ferropnictides *(6 pages)* . . . . . 201106(R)
J. Fink, A. Charnukha, E. D. L. Rienks, Z. H. Liu, S. Thirupathaiah, I. Avigo, F. Roth, H. S. Jeevan, P. Gegenwart, M. Roslova, I. Morozov, S. Wurmehl, U. Bovensiepen, S. Borisenko, M. Vojta, and B. Büchner

Spiraling Fermi arcs in Weyl materials *(5 pages)* . . . . . 201107(R)
Songci Li and A. V. Andreev

Anomalous charge and negative-charge-transfer insulating state in cuprate chain compound $KCuO_2$ *(5 pages)* . . . 201108(R)
D. Choudhury, P. Rivero, D. Meyers, X. Liu, Y. Cao, S. Middey, M. J. Whitaker, S. Barraza-Lopez, J. W. Freeland, M. Greenblatt, and J. Chakhalian

Ferromagnetic instability of interlayer floating electrons in the quasi-two-dimensional electride Y_2C *(4 pages)* . . . 201109(R)
Takeshi Inoshita, Noriaki Hamada, and Hideo Hosono

Excitations and the tangent space of projected entangled-pair states *(5 pages)* . . . . . 201111(R)
Laurens Vanderstraeten, Michaël Mariën, Frank Verstraete, and Jutho Haegeman

Structure symmetry determination and magnetic evolution in $Sr_2Ir_{1-x}Rh_xO_4$ *(5 pages)* . . . . . 201112(R)
Feng Ye, Xiaoping Wang, Christina Hoffmann, Jinchen Wang, Songxue Chi, Masaaki Matsuda, Bryan C. Chakoumakos, Jaime A. Fernandez-Baca, and G. Cao

Copyright 2015 by American Physical Society

(Continued)

1098-0121(20151115)92:20;1-V

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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

Hybridization gaps and antiferromagnetic gap in the Kondo semiconductors CeT_2Al_{10} (T = Fe and Os) observed by break-junction tunneling spectroscopy *(5 pages)* . . . . . 201113(R)
J. Kawabata, T. Ekino, Y. Yamada, Y. Sakai, A. Sugimoto, Y. Muro, and T. Takabatake

Metal-insulator transition in a weakly interacting disordered electron system *(5 pages)* . . . . . 201114(R)
C. E. Ekuma, S.-X. Yang, H. Terletska, K.-M. Tam, N. S. Vidhyadhiraja, J. Moreno, and M. Jarrell

Semiconductors I: bulk

Deterministic coherent writing of a long-lived semiconductor spin qubit using one ultrafast optical pulse *(5 pages)* 201201(R)
I. Schwartz, D. Cogan, E. R. Schmidgall, L. Gantz, Y. Don, M. Zieliński, and D. Gershoni

Ultrahigh exciton diffusion in intrinsic diamond *(5 pages)* . . . . . 201202(R)
Hikaru Morimoto, Yuji Hazama, Koichiro Tanaka, and Nobuko Naka

Spin-dependent direct gap emission in tensile-strained Ge films on Si substrates *(6 pages)* . . . . . 201203(R)
E. Vitiello, M. Virgilio, A. Giorgioni, J. Frigerio, E. Gatti, S. De Cesari, E. Bonera, E. Grilli, G. Isella, and F. Pezzoli

Extended antisite defects in tetrahedrally bonded semiconductors *(5 pages)* . . . . . 201204(R)
Paweł Zawadzki, Andriy Zakutayev, and Stephan Lany

Anharmonic stabilization and band gap renormalization in the perovskite $CsSnI_3$ *(5 pages)* . . . . . 201205(R)
Christopher E. Patrick, Karsten W. Jacobsen, and Kristian S. Thygesen

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

Multiple-frequency quantum beats of quantum confined exciton states *(5 pages)* . . . . . 201301(R)
A. V. Trifonov, I. Ya. Gerlovin, I. V. Ignatiev, I. A. Yugova, R. V. Cherbunin, Yu. P. Efimov, S. A. Eliseev, V. V. Petrov, V. A. Lovtcius, and A. V. Kavokin

Influence of interface coupling on the electronic properties of the Au/MoS_2 junction *(5 pages)* . . . . . 201302(R)
Matt Cook, Robert Palandech, Keith Doore, Zhipeng Ye, Gaihua Ye, Rui He, and Andrew J. Stollenwerk

GdN thin film: Chern insulating state on square lattice *(5 pages)* . . . . . 201303(R)
Zhi Li, Jinwoong Kim, Nicholas Kioussis, Shu-Yu Ning, Haibin Su, Toshiaki Iitaka, Takami Tohyama, Xinyu Yang, and Jiu-Xing Zhang

Coincidence of superparamagnetism and perfect quantization in the quantum anomalous Hall state *(5 pages)* . . . . 201304(R)
S. Grauer, S. Schreyeck, M. Winnerlein, K. Brunner, C. Gould, and L. W. Molenkamp

Direct optical state preparation of the dark exciton in a quantum dot *(5 pages)* . . . . . 201305(R)
S. Lüker, T. Kuhn, and D. E. Reiter

Surface physics, nanoscale physics, low-dimensional systems

Spin-orbit coupling and operation of multivalley spin qubits *(5 pages)* . . . . . 201401(R)
M. Veldhorst, R. Ruskov, C. H. Yang, J. C. C. Hwang, F. E. Hudson, M. E. Flatté, C. Tahan, K. M. Itoh, A. Morello, and A. S. Dzurak

Theory of intersubband resonance fluorescence *(5 pages)* . . . . . 201402(R)
Nathan Shammah and Simone De Liberato

Theory of the Dirac half metal and quantum anomalous Hall effect in Mn-intercalated epitaxial graphene *(5 pages)* 201403(R)
Yuanchang Li, Damien West, Huaqing Huang, Jia Li, S. B. Zhang, and Wenhui Duan

(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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

☞ Two-dimensional topological phases and electronic spectrum of Bi_2Se_3 thin films from GW calculations *(5 pages)* 201404(R)
Tobias Förster, Peter Krüger, and Michael Rohlfing

Perfect interferenceless absorption at infrared frequencies by a van der Waals crystal *(6 pages)* . . . . . 201405(R)
D. G. Baranov, J. H. Edgar, Tim Hoffman, Nabil Bassim, and Joshua D. Caldwell

Nonequilibrium spin texture within a thin layer below the surface of current-carrying topological insulator Bi_2Se_3: A first-principles quantum transport study *(5 pages)* . . . . . 201406(R)
Po-Hao Chang, Troels Markussen, Søren Smidstrup, Kurt Stokbro, and Branislav K. Nikolić

Helicons in Weyl semimetals *(5 pages)* . . . . . 201407(R)
Francesco M. D. Pellegrino, Mikhail I. Katsnelson, and Marco Polini

Landau quantization and Fermi velocity renormalization in twisted graphene bilayers *(6 pages)* . . . . . 201408(R)
Long-Jing Yin, Jia-Bin Qiao, Wen-Xiao Wang, Wei-Jie Zuo, Wei Yan, Rui Xu, Rui-Fen Dou, Jia-Cai Nie, and Lin He

☞ Tuning the electronic structure of monolayer graphene/MoS_2 van der Waals heterostructures via interlayer twist *(6 pages)* . . . . . 201409(R)
Wencan Jin, Po-Chun Yeh, Nader Zaki, Daniel Chenet, Ghidewon Arefe, Yufeng Hao, Alessandro Sala, Tevfik Onur Mentes, Jerry I. Dadap, Andrea Locatelli, James Hone, and Richard M. Osgood, Jr.

24-μm spin relaxation length in boron nitride encapsulated bilayer graphene *(5 pages)* . . . . . 201410(R)
J. Ingla-Aynés, M. H. D. Guimarães, R. J. Meijerink, P. J. Zomer, and B. J. van Wees

Ab initio molecular dynamics with simultaneous electron and phonon excitations: Application to the relaxation of hot atoms and molecules on metal surfaces *(5 pages)* . . . . . 201411(R)
D. Novko, M. Blanco-Rey, J. I. Juaristi, and M. Alducin

Lifting of the Landau level degeneracy in graphene devices in a tilted magnetic field *(5 pages)* . . . . . 201412(R)
F. Chiappini, S. Wiedmann, K. Novoselov, A. Mishchenko, A. K. Geim, J. C. Maan, and U. Zeitler

Structural evolution and optoelectronic applications of multilayer silicene *(6 pages)* . . . . . 201413(R)
Zhi-Xin Guo, Yue-Yu Zhang, Hongjun Xiang, Xin-Gao Gong, and Atsushi Oshiyama

Mapping potential energy landscape of a probing atom in a complex surface environment *(5 pages)* . . . . . 201414(R)
Fangfei Ming, Guohua Zhong, Qin Liu, Kedong Wang, and Xudong Xiao

ARTICLES

Electronic structure and strongly correlated systems

Correlation between lattice vibrations with charge, orbital, and spin ordering in the layered manganite $Pr_{0.5}Ca_{1.5}MnO_4$ *(9 pages)* 205101
I. P. Handayani, A. A. Nugroho, S. Riyadi, G. R. Blake, N. Mufti, T. T. M. Palstra, and P. H. M. van Loosdrecht

Intrinsic high electrical conductivity of stoichiometric $SrNbO_3$ epitaxial thin films *(5 pages)* 205102
Daichi Oka, Yasushi Hirose, Shoichiro Nakao, Tomoteru Fukumura, and Tetsuya Hasegawa

Finite-temperature charge transport in the one-dimensional Hubbard model *(12 pages)* 205103
F. Jin, R. Steinigeweg, F. Heidrich-Meisner, K. Michielsen, and H. De Raedt

(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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

☞ Metallic quantum critical points with finite BCS couplings *(11 pages)* 205104
S. Raghu, Gonzalo Torroba, and Huajia Wang

Bound excitons and many-body effects in x-ray absorption spectra of azobenzene-functionalized self-assembled monolayers *(7 pages)* 205105
Caterina Cocchi and Claudia Draxl

U(1) symmetry of the spin-orbit coupled Hubbard model on the kagome lattice *(5 pages)* 205106
Se Kwon Kim and Jiadong Zang

Physical properties and electronic structure of $Sr_2Cr_3As_2O_2$ containing CrO_2 and Cr_2As_2 square-planar lattices *(10 pages)* 205107
Hao Jiang, Jin-Ke Bao, Hui-Fei Zhai, Zhang-Tu Tang, Yun-Lei Sun, Yi Liu, Zhi-Cheng Wang, Hua Bai, Zhu-An Xu, and Guang-Han Cao

☞ *Ab initio* tight-binding Hamiltonian for transition metal dichalcogenides *(15 pages)* 205108
Shiang Fang, Rodrick Kuate Defo, Sharmila N. Shirodkar, Simon Lieu, Georgios A. Tritsaris, and Efthimios Kaxiras

Effects of stoichiometry and substitution in quasi-one-dimensional iron chalcogenide $BaFe_2S_3$ *(7 pages)* 205109
Yasuyuki Hirata, Sachiko Maki, Jun-ichi Yamaura, Touru Yamauchi, and Kenya Ohgushi

Study of multiband disordered systems using the typical medium dynamical cluster approximation *(9 pages)* 205111
Yi Zhang, Hanna Terletska, C. Moore, Chinedu Ekuma, Ka-Ming Tam, Tom Berlijn, Wei Ku, Juana Moreno, and Mark Jarrell

Doping asymmetry and striping in a three-orbital CuO_2 Hubbard model *(7 pages)* 205112
Steven R. White and D. J. Scalapino

☞ Transversal magnetoresistance in Weyl semimetals *(18 pages)* 205113
J. Klier, I. V. Gornyi, and A. D. Mirlin

Inverse order-disorder transition of charge stripes *(7 pages)* 205114
Shu-Han Lee, Yen-Chung Lai, Chao-Hung Du, Alexander F. Siegenfeld, Ying-Jer Kao, Peter D. Hatton, D. Prabhakaran, Yixi Su, and Di-Jing Huang

From flexoelectricity to absolute deformation potentials: The case of $SrTiO_3$ *(7 pages)* 205115
Massimiliano Stengel

Localization and spin transport in honeycomb structures with spin-orbit coupling *(7 pages)* 205116
S. L. A. de Queiroz

Momentum-dependent sign inversion of orbital order in superconducting FeSe *(5 pages)* 205117
Y. Suzuki, T. Shimojima, T. Sonobe, A. Nakamura, M. Sakano, H. Tsuji, J. Omachi, K. Yoshioka, M. Kuwata-Gonokami, T. Watashige, R. Kobayashi, S. Kasahara, T. Shibauchi, Y. Matsuda, Y. Yamakawa, H. Kontani, and K. Ishizaka

Converting normal insulators into topological insulators via tuning orbital levels *(6 pages)* 205118
Wu-Jun Shi, Junwei Liu, Yong Xu, Shi-Jie Xiong, Jian Wu, and Wenhui Duan

Theory of Curie temperature enhancement in electron-doped EuO *(9 pages)* 205119
Tobias Stollenwerk and Johann Kroha

(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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

Spontaneous polarization of composite fermions in the $n = 1$ Landau level of graphene *(13 pages)* 205120
Ajit C. Balram, Csaba Tőke, A. Wójs, and J. K. Jain

Interplay between disorder and inversion symmetry: Extreme enhancement of the mobility near the Weyl point in BiTeI *(13 pages)* 205121
M. Sasaki, Kyoung-Min Kim, A. Ohnishi, M. Kitaura, N. Tomita, V. A. Kulbachinskii, Ki-Seok Kim, and Heon-Jung Kim

Chiral magnetic conductivity in an interacting lattice model of parity-breaking Weyl semimetal *(17 pages)* 205122
P. V. Buividovich, M. Puhr, and S. N. Valgushev

Experimental consequences of quantum critical points at high temperatures *(8 pages)* 205123
D. C. Freitas, P. Rodière, M. Núñez, G. Garbarino, A. Sulpice, J. Marcus, F. Gay, M. A. Continentino, and M. Núñez-Regueiro

Electronic and magnetic properties of the cation vacancy defect in m-HfO_2 *(8 pages)* 205124
Keith P. McKenna and David Muñoz Ramo

Electron-phonon coupling and exchange-correlation effects in superconducting H_3S under high pressure *(5 pages)* 205125
Matej Komelj and Henry Krakauer

Optical spectra from molecules to crystals: Insight from many-body perturbation theory *(6 pages)* 205126
Caterina Cocchi and Claudia Draxl

Symmetry-protected local minima in infinite DMRG *(13 pages)* 205127
Robert N. C. Pfeifer

Haldane phase in one-dimensional topological Kondo insulators *(9 pages)* 205128
Alejandro Mezio, Alejandro M. Lobos, Ariel O. Dobry, and Claudio J. Gazza

Effect of electron correlations on the Fe_3Si and α-$FeSi_2$ band structure and optical properties *(14 pages)* 205129
Igor Sandalov, Natalia Zamkova, Vyacheslav Zhandun, Ivan Tarasov, Sergey Varnakov, Ivan Yakovlev, Leonid Solovyov, and Sergey Ovchinnikov

First-principles study of the large-gap three-dimensional topological insulators M_3Bi_2 (M = Ca, Sr, Ba) *(6 pages)* 205130
Ronghan Li, Qing Xie, Xiyue Cheng, Dianzhong Li, Yiyi Li, and Xing-Qiu Chen

$\mathbb{Z}_2$ gauge theory for valence bond solids on the kagome lattice *(16 pages)* 205131
Kyusung Hwang, Yejin Huh, and Yong Baek Kim

Screened moments and absence of ferromagnetism in FeAl *(7 pages)* 205132
A. Galler, C. Taranto, M. Wallerberger, M. Kaltak, G. Kresse, G. Sangiovanni, A. Toschi, and K. Held

Intrinsic large gap quantum anomalous Hall insulators in LaX(X = Br,Cl,I) *(8 pages)* 205133
Kapildeb Dolui, Sujay Ray, and Tanmoy Das

Electron-hole compensation effect between topologically trivial electrons and nontrivial holes in NbAs *(8 pages)* 205134
Yongkang Luo, N. J. Ghimire, M. Wartenbe, Hongchul Choi, M. Neupane, R. D. McDonald, E. D. Bauer, Jianxin Zhu, J. D. Thompson, and F. Ronning

Semiconductors I: bulk

Chiral magnetic effect in the absence of Weyl node *(5 pages)* 205201
Ming-Che Chang and Min-Fong Yang

(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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

Resonant optical alignment and orientation of Mn^{2+} spins in CdMnTe crystals *(5 pages)* 205202
K. A. Baryshnikov, L. Langer, I. A. Akimov, V. L. Korenev, Yu. G. Kusrayev, N. S. Averkiev, D. R. Yakovlev, and M. Bayer

Dynamically coupled plasmon-phonon modes in GaP: An indirect-gap polar semiconductor *(10 pages)* 205203
Kunie Ishioka, Kristina Brixius, Ulrich Höfer, Avinash Rustagi, Evan M. Thatcher, Christopher J. Stanton, and Hrvoje Petek

Thermoelectric properties of the unfilled skutterudite $FeSb_3$ from first principles and Seebeck local probes *(9 pages)* 205204
Sébastien Lemal, Ngoc Nguyen, Johannes de Boor, Philippe Ghosez, Julien Varignon, Benedikt Klobes, Raphaël P. Hermann, and Matthieu J. Verstraete

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

Digital direct electron imaging of energy-filtered electron backscatter diffraction patterns *(9 pages)* 205301
S. Vespucci, A. Winkelmann, G. Naresh-Kumar, K. P. Mingard, D. Maneuski, P. R. Edwards, A. P. Day, V. O'Shea, and C. Trager-Cowan

Strain-induced band alignment in wurtzite/zinc-blende InAs heterostructured nanowires *(9 pages)* 205302
Jaya Kumar Panda, Anushree Roy, Arup Chakraborty, Indra Dasgupta, Elena Hasanu, Daniele Ercolani, Lucia Sorba, and Mauro Gemmi

Symmetries and optical transitions of hexagonal quantum dots in GaAs/AlGaAs nanowires *(21 pages)* 205303
Guro K. Svendsen, Johannes Skaar, Helge Weman, and Marc-André Dupertuis

Nonequilibrium Bethe-Salpeter equation for transient photoabsorption spectroscopy *(13 pages)* 205304
E. Perfetto, D. Sangalli, A. Marini, and G. Stefanucci

Nondestructive three-dimensional imaging of crystal strain and rotations in an extended bonded semiconductor heterostructure *(11 pages)* 205305
A. I. Pateras, M. Allain, P. Godard, L. Largeau, G. Patriarche, A. Talneau, K. Pantzas, M. Burghammer, A. A. Minkevich, and V. Chamard

Two-dimensional topological insulator edge state backscattering by dephasing *(7 pages)* 205306
Sven Essert, Viktor Krueckl, and Klaus Richter

Tensor network trial states for chiral topological phases in two dimensions and a no-go theorem in any dimension *(15 pages)* 205307
J. Dubail and N. Read

Origin of and tuning the optical and fundamental band gaps in transparent conducting oxides: The case of $M_2O_3(M = \mathrm{Al,Ga,In})$ *(7 pages)* 205308
Fernando P. Sabino, Rafael Besse, Luiz Nunes Oliveira, Su-Huai Wei, and Juarez L. F. Da Silva

Controlling circular polarization of light emitted by quantum dots using chiral photonic crystal slabs *(10 pages)* 205309
S. V. Lobanov, S. G. Tikhodeev, N. A. Gippius, A. A. Maksimov, E. V. Filatov, I. I. Tartakovskii, V. D. Kulakovskii, T. Weiss, C. Schneider, J. Geßler, M. Kamp, and S. Höfling

Two-dimensional oxide topological insulator with iron-pnictide superconductor LiFeAs structure *(10 pages)* 205310
Qiunan Xu, Zhida Song, Simin Nie, Hongming Weng, Zhong Fang, and Xi Dai

(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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

Spin relaxation in a quantum well by phonon scatterings *(9 pages)* 205311
Hiroshi Akera, Hidekatsu Suzuura, and Yoshiyuki Egami

Blowup dynamics of coherently driven polariton condensates: Experiment *(6 pages)* 205312
S. S. Gavrilov, A. S. Brichkin, Ya. V. Grishina, C. Schneider, S. Höfling, and V. D. Kulakovskii

Crossover between localized states and pinned Wigner crystal in high-mobility n-GaAs/AlGaAs heterostructures near filling factor $\nu = 1$ *(6 pages)* 205313
I. L. Drichko, I. Yu. Smirnov, A. V. Suslov, L. N. Pfeiffer, K. W. West, and Y. M. Galperin

Surface physics, nanoscale physics, low-dimensional systems

Plasmonic phase-gradient metasurface for spontaneous emission control *(9 pages)* 205401
L. Langguth, A. H. Schokker, K. Guo, and A. F. Koenderink

Large-scale experimental and theoretical study of graphene grain boundary structures *(12 pages)* 205402
Colin Ophus, Ashivni Shekhawat, Haider Rasool, and Alex Zettl

Control of spin dynamics in a two-dimensional electron gas by electromagnetic dressing *(5 pages)* 205403
A. A. Pervishko, O. V. Kibis, S. Morina, and I. A. Shelykh

Theory of linear optical absorption in diamond-shaped graphene quantum dots *(14 pages)* 205404
Tista Basak, Himanshu Chakraborty, and Alok Shukla

Asymmetric and connected graphene dimers for a tunable plasmonic response *(7 pages)* 205405
G. Rosolen and B. Maes

Quantum theory of the emission spectrum from quantum dots coupled to structured photonic reservoirs and acoustic phonons *(22 pages)* 205406
Kaushik Roy-Choudhury and Stephen Hughes

Tunable electronic correlation effects in nanotube-light interactions *(10 pages)* 205407
Yuhei Miyauchi, Zhengyi Zhang, Mitsuhide Takekoshi, Yuh Tomio, Hidekatsu Suzuura, Vasili Perebeinos, Vikram V. Deshpande, Chenguang Lu, Stéphane Berciaud, Philip Kim, James Hone, and Tony F. Heinz

Quantum transport at the Dirac point: Mapping out the minimum conductivity from pristine to disordered graphene *(6 pages)* 205408
Redwan N. Sajjad, Frank Tseng, K. M. Masum Habib, and Avik W. Ghosh

Closing the proximity gap in a metallic Josephson junction between three superconductors *(6 pages)* 205409
C. Padurariu, T. Jonckheere, J. Rech, R. Mélin, D. Feinberg, T. Martin, and Yu. V. Nazarov

Casimir and van der Waals energy of anisotropic atomically thin metallic films *(7 pages)* 205410
G. L. Klimchitskaya and V. M. Mostepanenko

Midinfrared thermal emission properties of finite arrays of gold dipole nanoantennas *(9 pages)* 205411
M. Centini, A. Benedetti, M. C. Larciprete, A. Belardini, R. Li Voti, M. Bertolotti, and C. Sibilia

☙ Long distance coupling of resonant exchange qubits *(12 pages)* 205412
Maximilian Russ and Guido Burkard

Time-dependent density functional theory of high-intensity short-pulse laser irradiation on insulators *(6 pages)* 205413
S. A. Sato, K. Yabana, Y. Shinohara, T. Otobe, K.-M. Lee, and G. F. Bertsch

(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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

Ruderman-Kittel-Kasuya-Yosida interaction at finite temperature: Graphene and bilayer graphene *(12 pages)* 205414
N. Klier, S. Shallcross, S. Sharma, and O. Pankratov

Active magneto-optical control of spontaneous emission in graphene *(9 pages)* 205415
W. J. M. Kort-Kamp, B. Amorim, G. Bastos, F. A. Pinheiro, F. S. S. Rosa, N. M. R. Peres, and C. Farina

Conductance of a single electron transistor with a retarded dielectric layer in the gate capacitor *(13 pages)* 205416
O. G. Udalov, N. M. Chtchelkatchev, S. A. Fedorov, and I. S. Beloborodov

Solid-solid transitions in Pd-Pt nanoalloys *(9 pages)* 205417
Emanuele Panizon and Riccardo Ferrando

Binding energies of exciton complexes in transition metal dichalcogenide monolayers and effect of dielectric environment *(6 pages)* 205418
Ilkka Kylänpää and Hannu-Pekka Komsa

Nontrivial magnetoresistive behavior of a single-wall carbon nanotube with an attached molecular magnet *(12 pages)* 205419
Anna Płomińska and Ireneusz Weymann

Quantum dynamics of two quantum dots coupled through localized plasmons: An intuitive and accurate quantum optics approach using quasinormal modes *(13 pages)* 205420
Rong-Chun Ge and Stephen Hughes

Photoemission footprints of extrinsic plasmarons *(4 pages)* 205421
B. Hellsing and V. M. Silkin

Majorana zero modes choose Euler numbers as revealed by full counting statistics *(21 pages)* 205422
Dong E. Liu, Alex Levchenko, and Roman M. Lutchyn

Tunable unconventional Kondo effect on topological insulator surfaces *(14 pages)* 205423
L. Isaev, G. Ortiz, and I. Vekhter

Superconducting proximity effect in three-dimensional topological insulators in the presence of a magnetic field *(14 pages)* 205424
Pablo Burset, Bo Lu, Grigory Tkachov, Yukio Tanaka, Ewelina M. Hankiewicz, and Björn Trauzettel

Electronic structure of helicoidal graphene: Massless Dirac particles on a curved surface with a screw symmetry *(9 pages)* 205425
Masataka Watanabe, Hisato Komatsu, Naoto Tsuji, and Hideo Aoki

Excitations in a spin-polarized two-dimensional electron gas *(7 pages)* 205426
Dominik Kreil, Raphael Hobbiger, Jürgen T. Drachta, and Helga M. Böhm

Experimental and theoretical determination of σ bands on ("$2\sqrt{3} \times 2\sqrt{3}$") silicene grown on Ag(111) *(6 pages)* 205427
W. Wang, W. Olovsson, and R. I. G. Uhrberg

Microscopic view on Landau level broadening mechanisms in graphene *(11 pages)* 205428
Hannah Funk, Andreas Knorr, Florian Wendler, and Ermin Malic

Ferromagnetism and perfect spin filtering in transition-metal-doped graphyne nanoribbons *(6 pages)* 205429
Jinbo Pan, Shixuan Du, Yuyang Zhang, Lida Pan, Yanfang Zhang, Hong-Jun Gao, and Sokrates T. Pantelides

(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 92, NUMBER 20** **NOVEMBER 2015-15(II)**

Topological insulators are tunable waveguides for hyperbolic polaritons *(12 pages)* 205430
Jhih-Sheng Wu (吳致盛), D. N. Basov, and M. M. Fogler

Solvable four-state Landau-Zener model of two interacting qubits with path interference *(8 pages)* 205431
N. A. Sinitsyn

Cooperative phenomenon in a rippled graphene: Chiral spin guide *(8 pages)* 205432
M. Pudlak, K. N. Pichugin, and R. G. Nazmitdinov

Tunable magnetic interaction in hydrogenated epitaxial graphene modulated by the SiC substrate *(5 pages)* 205433
Pengcheng Chen, Yuanchang Li, and Wenhui Duan