

RAPID COMMUNICATIONS

Electronic structure and strongly correlated systems

- Berry curvature dipole in Weyl semimetal materials: An *ab initio* study (6 pages) 041101(R)
Yang Zhang, Yan Sun, and Binghai Yan
- Dispersive magnetic and electronic excitations in iridate perovskites probed by oxygen *K*-edge resonant inelastic x-ray scattering (6 pages) 041102(R)
Xingye Lu, Paul Olalde-Velasco, Yaobo Huang, Valentina Bisogni, Jonathan Pelliciari, Sara Fatale, Marcus Dantz, James G. Vale, E. C. Hunter, Johan Chang, Vladimir N. Strocov, R. S. Perry, Marco Grioni, D. F. McMorrow, Henrik M. Rønnow, and Thorsten Schmitt
- Extended phase diagram of $R\text{NiC}_2$ family: Linear scaling of the Peierls temperature (6 pages) 041103(R)
Marta Roman, Judyta Strychalska-Nowak, Tomasz Klimczuk, and Kamil K. Kolincio
- Magnetic and noncentrosymmetric Weyl fermion semimetals in the RAIGe family of compounds (R = rare earth) (7 pages) 041104(R)
Guoqing Chang, Bahadur Singh, Su-Yang Xu, Guang Bian, Shin-Ming Huang, Chuang-Han Hsu, Ilya Belopolski, Nasser Alidoust, Daniel S. Sanchez, Hao Zheng, Hong Lu, Xiao Zhang, Yi Bian, Tay-Rong Chang, Horng-Tay Jeng, Arun Bansil, Han Hsu, Shuang Jia, Titus Neupert, Hsin Lin, and M. Zahid Hasan
- Manipulating light-wave-controlled charges into a spin-asymmetric flow: Petahertz frequency control of spins (5 pages) 041105(R)
Youngjae Kim and J. D. Lee
- Topological Zak phase in strongly coupled LC circuits (5 pages) 041106(R)
Tal Goren, Kirill Plekhanov, Félicien Appas, and Karyn Le Hur
- Microscopic mechanism for the unusual antiferromagnetic order and the pressure-induced transition to ferromagnetism in USb_2 (7 pages) 041107(R)
Marcin M. Wysocki
- Steady-state Hall response and quantum geometry of driven-dissipative lattices (6 pages) 041108(R)
Tomoki Ozawa
- Edge insulating topological phases in a two-dimensional superconductor with long-range pairing (6 pages) 041109(R)
L. Lepori, D. Giuliano, and S. Paganelli
- Correlation function diagnostics for type-I fracton phases (5 pages) 041110(R)
Trithip Devakul, S. A. Parameswaran, and S. L. Sondhi



CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 97, NUMBER 4

JANUARY 2018-15(II)

Thermodynamic signature of Dirac electrons across a possible topological transition in ZrTe_5 (5 pages)	041111(R)
Nityan L. Nair, Philipp T. Dumitrescu, Sanyum Channa, Sinéad M. Griffin, Jeffrey B. Neaton, Andrew C. Potter, and James G. Analytis	
Soft antiphase tilt of oxygen octahedra in the hybrid improper multiferroic $\text{Ca}_3\text{Mn}_{1.9}\text{Ti}_{0.1}\text{O}_7$ (5 pages)	041112(R)
Feng Ye, Jinchun Wang, Jieming Sheng, C. Hoffmann, T. Gu, H. J. Xiang, Wei Tian, J. J. Molaison, A. M. dos Santos, M. Matsuda, B. C. Chakoumakos, J. A. Fernandez-Baca, X. Tong, Bin Gao, Jae Wook Kim, and S.-W. Cheong	
Existence of electron and hole pockets and partial gap opening in the correlated semimetal $\text{Ca}_3\text{Ru}_2\text{O}_7$ (5 pages)	041113(R)
Hui Xing, Libin Wen, Chenyi Shen, Jiaming He, Xinxin Cai, Jin Peng, Shun Wang, Mingliang Tian, Zhu-An Xu, Wei Ku, Zhiqiang Mao, and Ying Liu	
 Tunneling anisotropic magnetoresistance via molecular π orbitals of Pb dimers (5 pages)	041114(R)
Johannes Schöneberg, Paolo Ferriani, Stefan Heinze, Alexander Weismann, and Richard Berndt	
Efficient charge-spin conversion and magnetization switching through the Rashba effect at topological-insulator/Ag interfaces (5 pages)	041115(R)
Shuyuan Shi, Aizhu Wang, Yi Wang, Rajagopalan Ramaswamy, Lei Shen, Jisoo Moon, Dapeng Zhu, Jiawei Yu, Seongshik Oh, Yuanping Feng, and Hyunsoo Yang	
Appearance of the universal value e^2/h of the zero-bias conductance in a Weyl semimetal-superconductor junction (6 pages)	041116(R)
Song-Bo Zhang, Fabrizio Dolcini, Daniel Breunig, and Björn Trauzettel	
Compatible orders and fermion-induced emergent symmetry in Dirac systems (5 pages)	041117(R)
Lukas Janssen, Igor F. Herbut, and Michael M. Scherer	
Semiconductors I: bulk	
Direct observation of the lowest indirect exciton state in the bulk of hexagonal boron nitride (5 pages)	041201(R)
R. Schuster, C. Habenicht, M. Ahmad, M. Knupfer, and B. Büchner	
Landau levels with magnetic tunneling in a Weyl semimetal and magnetoconductance of a ballistic p - n junction (5 pages)	041202(R)
D. R. Saykin, K. S. Tikhonov, and Ya. I. Rodionov	
Flat band in disorder-driven non-Hermitian Weyl semimetals (5 pages)	041203(R)
A. A. Zyuzin and A. Yu. Zyuzin	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Spin temperature concept verified by optical magnetometry of nuclear spins (5 pages)	041301(R)
M. Vladimirova, S. Cronenberger, D. Scalbert, I. I. Ryzhov, V. S. Zapasskii, G. G. Kozlov, A. Lemaître, and K. V. Kavokin	
Quantum exciton-polariton networks through inverse four-wave mixing (5 pages)	041302(R)
T. C. H. Liew and Y. G. Rubo	
Crystal orientation dependence of the spin-orbit coupling in InAs nanowires (5 pages)	041303(R)
T. S. Jespersen, P. Krogstrup, A. M. Lunde, R. Tanta, T. Kanne, E. Johnson, and J. Nygård	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 97, NUMBER 4

JANUARY 2018-15(II)

Controllable continuous evolution of electronic states in a single quantum ring (<i>5 pages</i>)	041304(R)
Tapash Chakraborty, Aram Manaselyan, Manuk Barseghyan, and David Laroze	
Surface physics, nanoscale physics, low-dimensional systems	
Interband π -like plasmon in silicene grown on silver (<i>8 pages</i>)	041401(R)
A. Sindona, A. Cupolillo, F. Alessandro, M. Pisarra, D. C. Coello Fiallos, S. M. Osman, and L. S. Caputi	
Plasmon-exciton polaritons in two-dimensional semiconductor/metal interfaces (<i>6 pages</i>)	041402(R)
P. A. D. Gonçalves, L. P. Bertelsen, Sanshui Xiao, and N. Asger Mortensen	
Contributions of oxygen vacancies and titanium interstitials to band-gap states of reduced titania (<i>5 pages</i>)	041403(R)
Jingfeng Li, Rémi Lazzari, Stéphane Chenot, and Jacques Jupille	
Structural distortions in monolayers of binary semiconductors (<i>5 pages</i>)	041404(R)
Poonam Kumari, Saikat Debnath, and Priya Mahadevan	
Large valley splitting in monolayer WS ₂ by proximity coupling to an insulating antiferromagnetic substrate (<i>6 pages</i>)	041405(R)
Lei Xu, Ming Yang, Lei Shen, Jun Zhou, Tao Zhu, and Yuan Ping Feng	
Spectral correlations in Anderson insulating wires (<i>5 pages</i>)	041406(R)
M. Marinho and T. Micklitz	
Spin filtering via resonant reflection of relativistic surface states (<i>5 pages</i>)	041407(R)
I. A. Nechaev and E. E. Krasovskii	
Signatures of electronic nematicity in (111) LaAlO ₃ /SrTiO ₃ interfaces (<i>6 pages</i>)	041408(R)
S. Davis, Z. Huang, K. Han, Ariando, T. Venkatesan, and V. Chandrasekhar	
 Environmentally sensitive theory of electronic and optical transitions in atomically thin semiconductors (<i>6 pages</i>)	041409(R)
Yeongsu Cho and Timothy C. Berkelbach	
Dimensionality-driven orthorhombic MoTe ₂ at room temperature (<i>5 pages</i>)	041410(R)
Rui He, Shazhou Zhong, Hyun Ho Kim, Gaihua Ye, Zhipeng Ye, Logan Winford, Daniel McHaffie, Ivana Rilak, Fangchu Chen, Xuan Luo, Yuping Sun, and Adam W. Tsen	
Probing electron-hole components of subgap states in Coulomb blockaded Majorana islands (<i>5 pages</i>)	041411(R)
Esben Bork Hansen, Jeroen Danon, and Karsten Flensberg	
Emission noise and high frequency cut-off of the Kondo effect in a quantum dot (<i>5 pages</i>)	041412(R)
R. Delagrange, J. Basset, H. Bouchiat, and R. Deblock	
Coupling of charge, lattice, orbital, and spin degrees of freedom in charge density waves in 1T-TaS ₂ (<i>5 pages</i>)	041413(R)
Seho Yi, Zhenyu Zhang, and Jun-Hyung Cho	
Strain manipulation of Majorana fermions in graphene armchair nanoribbons (<i>6 pages</i>)	041414(R)
Zhen-Hua Wang, Eduardo V. Castro, and Hai-Qing Lin	
Dynamic current susceptibility as a probe of Majorana bound states in nanowire-based Josephson junctions (<i>5 pages</i>)	041415(R)
Mircea Trif, Olesia Dmytruk, Hélène Bouchiat, Ramón Aguado, and Pascal Simon	

(Continued)

Probing the energy reactance with adiabatically driven quantum dots (<i>6 pages</i>)	041416(R)
María Florencia Ludovico, Liliana Arrachea, Michael Moskalets, and David Sánchez	

ARTICLES

Electronic structure and strongly correlated systems

Quantum Monte Carlo study of the metal-to-insulator transition on a honeycomb lattice with $1/r$ interactions (<i>7 pages</i>)	045101
Li Chen and Lucas K. Wagner	
Structural and metal-insulator transitions in rhenium-based double perovskites via orbital ordering (<i>25 pages</i>) . . .	045102
Alex Taekyung Lee and Chris A. Marianetti	
Spin-1 two-impurity Kondo problem on a lattice (<i>13 pages</i>)	045103
A. Allerd, R. Žitko, and A. E. Feiguin	
Possible phases of the spin- $\frac{1}{2}$ XXZ model on a honeycomb lattice by boson-vortex duality (<i>6 pages</i>)	045104
Han Ma	
Kinetic theory of transport for inhomogeneous electron fluids (<i>25 pages</i>)	045105
Andrew Lucas and Sean A. Hartnoll	
Topological phases in the non-Hermitian Su-Schrieffer-Heeger model (<i>7 pages</i>)	045106
Simon Lieu	
Tunable magnetism and spin-polarized electronic transport in graphene mediated by molecular functionalization of extended defects (<i>7 pages</i>)	045107
J. B. de Oliveira, I. S. S. de Oliveira, J. E. Padilha, and R. H. Miwa	
Multiple crossovers and coherent states in a Mott-Peierls insulator (<i>15 pages</i>)	045108
O. Nájera, M. Civelli, V. Dobrosavljević, and M. J. Rozenberg	
Observation of a two-dimensional Fermi surface and Dirac dispersion in YbMnSb ₂ (<i>7 pages</i>)	045109
Robert Kealhofer, Sooyoung Jang, Sinéad M. Griffin, Caolan John, Katherine A. Benavides, Spencer Doyle, T. Helm, Philip J. W. Moll, Jeffrey B. Neaton, Julia Y. Chan, J. D. Denlinger, and James G. Analytis	
Dual roles of f electrons in mixing Al $3p$ character into d -orbital conduction bands for lanthanide and actinide dialuminides (<i>8 pages</i>)	045110
Alison B. Altman, C. D. Pemmaraju, Selim Alayoglu, John Arnold, Eric D. Bauer, Corwin H. Booth, Zachary Fisk, Joseph I. Pacold, David Prendergast, David K. Shuh, Tolek Tylicszczak, Jian Wang, and Stefan G. Minasian	
☞ Renormalization of tensor networks using graph-independent local truncations (<i>18 pages</i>)	045111
Markus Hauru, Clement Delcamp, and Sebastian Mizera	
Kondo hybridization and quantum criticality in β -YbAlB ₄ by laser ARPES (<i>7 pages</i>)	045112
Cédric Bareille, Shintaro Suzuki, Mitsuhiro Nakayama, Kenta Kuroda, Andriy H. Nevidomskyy, Yosuke Matsumoto, Satoru Nakatsuji, Takeshi Kondo, and Shik Shin	
☞ Universality of modular symmetries in two-dimensional magnetotransport (<i>20 pages</i>)	045113
K. S. Olsen, H. S. Limseth, and C. A. Lütken	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 97, NUMBER 4

JANUARY 2018-15(II)

Electrodynamic properties of an artificial heterostructured superconducting cuprate (5 pages)	045114
A. Perucchi, P. Di Pietro, S. Lupi, R. Sopracase, A. Tebano, G. Giovannetti, F. Petocchi, M. Capone, and D. Di Castro	
Improper magnetic ferroelectricity of nearly pure electronic nature in helicoidal spiral $\text{CaMn}_7\text{O}_{12}$ (7 pages)	045115
Jin Soo Lim, Diomedes Saldana-Greco, and Andrew M. Rappe	
Efficient electron open boundaries for simulating electrochemical cells (8 pages)	045116
Mario G. Zauchner, Andrew P. Horsfield, and Tchavdar N. Todorov	
Impact of the charge density wave state in the electrodynamic response of $\text{ZrTe}_{3-x}\text{Se}_x$: Optical evidence for a pseudogap phase (7 pages)	045117
M. Chinotti, J. Ethiraj, C. Mirri, Xiangde Zhu, Lijun Li, C. Petrovic, and L. Degiorgi	
Breakdown of single spin-fluid model in the heavily hole-doped superconductor CsFe_2As_2 (6 pages)	045118
D. Zhao, S. J. Li, N. Z. Wang, J. Li, D. W. Song, L. X. Zheng, L. P. Nie, X. G. Luo, T. Wu, and X. H. Chen	
Sequential structural and antiferromagnetic transitions in BaFe_2Se_3 under pressure (8 pages)	045119
Yang Zhang, Ling-Fang Lin, Jun-Jie Zhang, Elbio Dagotto, and Shuai Dong	
Topological flat Wannier-Stark bands (5 pages)	045120
A. R. Kolovsky, A. Ramachandran, and S. Flach	
<i>Ab initio</i> study of the Coulomb interaction in Nb_xCo clusters: Strong on-site versus weak nonlocal screening (8 pages)	045121
L. Peters, E. Şaşıoğlu, I. Mertig, and M. I. Katsnelson	
Probing the ionic dielectric constant contribution in the ferroelectric phase of the Fabre salts (7 pages)	045122
Mariano de Souza, Lucas Squillante, Cesar Sônego, Paulo Menegasso, Pascale Foury-Leylekian, and Jean-Paul Pouget	
Terahertz spectroscopic evidence of low-energy excitations in NdNiO_3 (7 pages)	045123
Rakesh Rana, Parul Pandey, V. Eswara Phanindra, S. S. Prabhu, and D. S. Rana	
Entanglement branching operator (9 pages)	045124
Kenji Harada	
Error estimates for extrapolations with matrix-product states (9 pages)	045125
C. Hubig, J. Haegeman, and U. Schollwöck	
Chern insulators in singular geometries (5 pages)	045126
Ai-Lei He, Wei-Wei Luo, Yi-Fei Wang, and Chang-De Gong	
Current cross-correlation in the Anderson impurity model with exchange interaction (13 pages)	045127
Rui Sakano, Akira Oguri, Yunori Nishikawa, and Eisuke Abe	
Direct observation of heavy quasiparticles in the Kondo-lattice compound CeIn_3 (7 pages)	045128
Yun Zhang, Wei Feng, Xia Lou, Tianlun Yu, Xiegang Zhu, Shiyong Tan, Bingkai Yuan, Yi Liu, Haiyan Lu, Donghua Xie, Qin Liu, Wen Zhang, Xuebing Luo, Yaobo Huang, Lizhu Luo, Zhengjun Zhang, Xinchun Lai, and Qiuyun Chen	
 Quantum multicriticality in disordered Weyl semimetals (21 pages)	045129
Xunlong Luo, Baolong Xu, Tomi Ohtsuki, and Ryuichi Shindou	

(Continued)

 Bulk characterization of topological crystalline insulators: Stability under interactions and relations to symmetry enriched $U(1)$ quantum spin liquids (<i>11 pages</i>) Liujun Zou	045130
Nonsymmorphic-symmetry-protected hourglass Dirac loop, nodal line, and Dirac point in bulk and monolayer $X_3\text{SiTe}_6$ ($X = \text{Ta}, \text{Nb}$) (<i>11 pages</i>) Si Li, Ying Liu, Shan-Shan Wang, Zhi-Ming Yu, Shan Guan, Xian-Lei Sheng, Yugui Yao, and Shengyuan A. Yang	045131
Engineering the Kondo state in two-dimensional semiconducting phosphorene (<i>8 pages</i>) Rohit Babar and Mukul Kabir	045132
Charge density wave states in tantalum dichalcogenides (<i>10 pages</i>) David C. Miller, Subhendra D. Mahanti, and Phillip M. Duxbury	045133
Evolution of ground-state wave function in CeCoIn_5 upon Cd or Sn doping (<i>6 pages</i>) K. Chen, F. Strigari, M. Sundermann, Z. Hu, Z. Fisk, E. D. Bauer, P. F. S. Rosa, J. L. Sarrao, J. D. Thompson, J. Herrero-Martin, E. Pellegrin, D. Betto, K. Kummer, A. Tanaka, S. Wirth, and A. Severing	045134
Viscosity of a multichannel one-dimensional Fermi gas (<i>4 pages</i>) Wade DeGottardi and K. A. Matveev	045135
Coupling of molecular motion and electronic state in the organic molecular dimer Mott insulator $\beta'-(\text{BEDT-TTF})_2\text{ICl}_2$ (<i>6 pages</i>) Masashi Sawada, Shuhei Fukuoka, and Atsushi Kawamoto	045136
Direct observation of double exchange in ferromagnetic $\text{La}_{0.7}\text{Sr}_{0.3}\text{CoO}_3$ by broadband ellipsometry (<i>5 pages</i>) P. Friš, D. Munzar, O. Caha, and A. Dubroka	045137
Competition among various charge-inhomogeneous states and d -wave superconducting state in Hubbard models on square lattices (<i>9 pages</i>) Kota Ido, Takahiro Ohgoe, and Masatoshi Imada	045138
Quantum tricritical point in the temperature-pressure-magnetic field phase diagram of CeTiGe_3 (<i>9 pages</i>) Udhara S. Kaluarachchi, Valentin Taufour, Sergey L. Bud'ko, and Paul C. Canfield	045139
Topological invariants for Floquet-Bloch systems with chiral, time-reversal, or particle-hole symmetry (<i>11 pages</i>) Bastian Hockendorf, Andreas Alvermann, and Holger Fehske	045140
Optical signatures of exciton polarons from diagrammatic Monte Carlo (<i>6 pages</i>) A. S. Mishchenko, G. De Filippis, V. Cataudella, N. Nagaosa, and H. Fehske	045141
Type-I and type-II topological nodal superconductors with s -wave interaction (<i>7 pages</i>) Beibing Huang, Xiaosen Yang, Ning Xu, and Ming Gong	045142
Direct observation of a surface resonance state and surface band inversion control in black phosphorus (<i>10 pages</i>) N. Ehlen, A. Sanna, B. V. Senkovskiy, L. Petaccia, A. V. Fedorov, G. Profeta, and A. Grüneis	045143
Width of the charge-transfer peak in the $\text{SU}(N)$ impurity Anderson model and its relevance to nonequilibrium transport (<i>11 pages</i>) J. Fernández, F. Lisandrini, P. Roura-Bas, C. Gazza, and A. A. Aligia	045144
Variational optimization algorithms for uniform matrix product states (<i>31 pages</i>) V. Zauner-Stauber, L. Vanderstraeten, M. T. Fishman, F. Verstraete, and J. Haegeman	045145

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 97, NUMBER 4

JANUARY 2018-15(II)

Finite-temperature dynamics of the Mott insulating Hubbard chain (9 pages)	045146
Alberto Nocera, Fabian H. L. Essler, and Adrian E. Feiguin	
Fate of dynamical phase transitions at finite temperatures and in open systems (8 pages)	045147
N. Sedlmayr, M. Fleischhauer, and J. Sirker	
Kondo effect with Weyl semimetal Fermi arcs (7 pages)	045148
Da Ma, Hua Chen, Haiwen Liu, and X. C. Xie	
Topologically invariant double Dirac states in bismuth-based perovskites: Consequence of ambivalent charge states and covalent bonding (16 pages)	045149
Bramhachari Khamari, Ravi Kashikar, and B. R. K. Nanda	
Doping and tilting on optics in noncentrosymmetric multi-Weyl semimetals (13 pages)	045150
S. P. Mukherjee and J. P. Carbotte	
Elemental chalcogens as a minimal model for combined charge and orbital order (5 pages)	045151
Ana Silva, Jans Henke, and Jasper van Wezel	
Quantum oscillations in insulators with neutral Fermi surfaces (18 pages)	045152
Inti Sodemann, Debanjan Chowdhury, and T. Senthil	
 Machine learning spatial geometry from entanglement features (13 pages)	045153
Yi-Zhuang You, Zhao Yang, and Xiao-Liang Qi	
Semiconductors I: bulk	
First-principles study of electron and hole mobilities of Si and GaAs (9 pages)	045201
Jinlong Ma, Arun S. Nissimagoudar, and Wu Li	
Four-phonon scattering reduces intrinsic thermal conductivity of graphene and the contributions from flexural phonons (12 pages)	045202
Tianli Feng and Xiulin Ruan	
Dangling bond defects in SiC: An <i>ab initio</i> study (7 pages)	045203
Blair R. Tuttle	
Continuous wave protocol for simultaneous polarization and optical detection of P1-center electron spin resonance (7 pages)	045204
E. J. Kamp, B. Carvajal, and N. Samarth	
Quasiballistic heat removal from small sources studied from first principles (8 pages)	045205
Bjorn Vermeersch and Natalio Mingo	
Photoluminescence excitation study of split-vacancy centers in diamond (8 pages)	045206
E. A. Ekimov, P. S. Sherin, V. S. Krivobok, S. G. Lyapin, V. A. Gavva, and M. V. Kondrin	
 Machine learning vortices at the Kosterlitz-Thouless transition (8 pages)	045207
Matthew J. S. Beach, Anna Golubeva, and Roger G. Melko	
Method to quantify the delocalization of electronic states in amorphous semiconductors and its application to assessing charge carrier mobility of <i>p</i> -type amorphous oxide semiconductors (10 pages)	045208
A. de Jamblinne de Meux, G. Pourtois, J. Genoe, and P. Heremans	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 97, NUMBER 4

JANUARY 2018-15(II)

Intrinsic and extrinsic electrical and thermal transport of bulk black phosphorus (<i>8 pages</i>)	045209
Sile Hu, Junsen Xiang, Meng Lv, Jiahao Zhang, Hengcan Zhao, Chunhong Li, Genfu Chen, Wenhong Wang, and Peijie Sun	
Trend reversal in the magnetic-field dependence of exciton spin-transfer rates in diluted magnetic semiconductors due to non-Markovian dynamics (<i>15 pages</i>)	045210
F. Ungar, M. Cygorek, and V. M. Axt	
Anomalous behavior of the excited state of the <i>A</i> exciton in bulk WS ₂ (<i>6 pages</i>)	045211
Vishwas Jindal, Sumi Bhuyan, Thorsten Deilmann, and Sandip Ghosh	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Ballistic electron channels including weakly protected topological states in delaminated bilayer graphene (<i>12 pages</i>)	045301
T. L. M. Lane, M. Anđelković, J. R. Wallbank, L. Covaci, F. M. Peeters, and V. I. Fal'ko	
Charge and spin control of ultrafast electron and hole dynamics in single CdSe/ZnSe quantum dots (<i>14 pages</i>)	045302
C. Hinz, P. Gumbsheimer, C. Traum, M. Holtkemper, B. Bauer, J. Haase, S. Mahapatra, A. Frey, K. Brunner, D. E. Reiter, T. Kuhn, D. V. Seletskiy, and A. Leitenstorfer	
Stable switching among high-order modes in polariton condensates (<i>9 pages</i>)	045303
Yongbao Sun, Yoseob Yoon, Saeed Khan, Li Ge, Mark Steger, Loren N. Pfeiffer, Ken West, Hakan E. Türeci, David W. Snoke, and Keith A. Nelson	
Reduced interface spin polarization by antiferromagnetically coupled Mn segregated to the Co ₂ MnSi/GaAs (001) interface (<i>11 pages</i>)	045304
Ashutosh Rath, Chockalingam Sivakumar, C. Sun, Sahil J. Patel, Jong Seok Jeong, J. Feng, G. Stecklein, Paul A. Crowell, Chris J. Palmstrøm, William H. Butler, and Paul M. Voyles	
Direct determination of the zero-field splitting for a single Co ²⁺ ion embedded in a CdTe/ZnTe quantum dot (<i>8 pages</i>)	045305
J. Kobak, A. Bogucki, T. Smoleński, M. Papaj, M. Koperski, M. Potemski, P. Kossacki, A. Golnik, and W. Pacuski	
Extended orbital modeling of spin qubits in double quantum dots (<i>13 pages</i>)	045306
Zack White and Guy Ramon	
Valley-selective optical Stark effect probed by Kerr rotation (<i>9 pages</i>)	045307
Trevor LaMountain, Hadallia Bergeron, Itamar Balla, Teodor K. Stanev, Mark C. Hersam, and Nathaniel P. Stern	
Anomalous helicity-dependent photocurrent in the topological insulator (Bi _{0.5} Sb _{0.5}) ₂ Te ₃ on a GaAs substrate (<i>9 pages</i>)	045308
Dong-Xia Qu, Xiaoyu Che, Xufeng Kou, Lei Pan, Jonathan Crowhurst, Michael R. Armstrong, Jonathan Dubois, Kang L. Wang, and George F. Chapline	
Surface physics, nanoscale physics, low-dimensional systems	
Dynamics of a quantum emitter resonantly coupled to both external field and localized surface plasmon (<i>6 pages</i>)	045401
Khachatur V. Nerkararyan, Torgom S. Yezekyan, and Sergey I. Bozhevolnyi	
Nonlinear, anisotropic, and giant photoconductivity in intrinsic and doped graphene (<i>5 pages</i>)	045402
Ashutosh Singh, Saikat Ghosh, and Amit Agarwal	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 97, NUMBER 4

JANUARY 2018-15(II)

Controlling conductivity by quantum well states in ultrathin Bi(111) films (<i>5 pages</i>)	045403
P. Kröger, D. Abdelbarey, M. Siemens, D. Lükermann, S. Sologub, H. Pfnür, and C. Tegenkamp	
Topological phase detection in Rashba nanowires with a quantum dot (<i>7 pages</i>)	045404
Denis Chevallier, Paweł Szumniak, Silas Hoffman, Daniel Loss, and Jelena Klinovaja	
A silicon-based single-electron interferometer coupled to a fermionic sea (<i>7 pages</i>)	045405
Anasua Chatterjee, Sergey N. Shevchenko, Sylvain Barraud, Rubén M. Otxoa, Franco Nori, John J. L. Morton, and M. Fernando Gonzalez-Zalba	
Higher-order Fermi-liquid corrections for an Anderson impurity away from half filling : Equilibrium properties (<i>17 pages</i>)	045406
Akira Oguri and A. C. Hewson	
 Bethe-Boltzmann hydrodynamics and spin transport in the XXZ chain (<i>13 pages</i>)	045407
Vir B. Bulchandani, Romain Vasseur, Christoph Karrasch, and Joel E. Moore	
Super-Planckian far-field radiative heat transfer (<i>11 pages</i>)	045408
V. Fernández-Hurtado, A. I. Fernández-Domínguez, J. Feist, F. J. García-Vidal, and J. C. Cuevas	
Unidirectional invisibility and $\mathcal{PT}$ symmetry with graphene (<i>8 pages</i>)	045409
Mustafa Sarisaman and Murat Tas	
Building topological quantum circuits: Majorana nanowire junctions (<i>8 pages</i>)	045410
Tudor D. Stanescu and Sankar Das Sarma	
Spin transport in two-layer-CVD-hBN/graphene/hBN heterostructures (<i>8 pages</i>)	045411
M. Gurram, S. Omar, S. Zihlmann, P. Makk, Q. C. Li, Y. F. Zhang, C. Schönenberger, and B. J. van Wees	
Fluctuational electrodynamics for nonlinear materials in and out of thermal equilibrium (<i>11 pages</i>)	045412
Heino Soo and Matthias Krüger	
Generating atomically sharp p - n junctions in graphene and testing quantum electron optics on the nanoscale (<i>7 pages</i>)	045413
Ke-Ke Bai, Jiao-Jiao Zhou, Yi-Cong Wei, Jia-Bin Qiao, Yi-Wen Liu, Hai-Wen Liu, Hua Jiang, and Lin He	
Spin transport in high-mobility graphene on WS ₂ substrate with electric-field tunable proximity spin-orbit interaction (<i>10 pages</i>)	045414
S. Omar and B. J. van Wees	
Majorana Kramers pairs in Rashba double nanowires with interactions and disorder (<i>22 pages</i>)	045415
Manisha Thakurathi, Pascal Simon, Ipsita Mandal, Jelena Klinovaja, and Daniel Loss	
 Illumination-induced nonequilibrium charge states in self-assembled quantum dots (<i>7 pages</i>)	045416
Sascha R. Valentin, Jonathan Schwinger, Pia Eickelmann, Patrick A. Labud, Andreas D. Wieck, Björn Sothmann, and Arne Ludwig	
Selective adsorption of toluene-3,4-dithiol on Si(553)-Au surfaces (<i>8 pages</i>)	045417
Svetlana Suchkova, Conor Hogan, Friedhelm Bechstedt, Eugen Speiser, and Norbert Esser	
Spin-selective electron transfer in a quantum dot array (<i>14 pages</i>)	045418
Shumpei Masuda, Kuan Yen Tan, and Mikio Nakahara	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 97, NUMBER 4

JANUARY 2018-15(II)

Renormalization of the Majorana bound state decay length in a perpendicular magnetic field (7 pages)	045419
M. P. Nowak and P. Wójcik	
Hidden edge Dirac point and robust quantum edge transport in InAs/GaSb quantum wells (8 pages)	045420
Chang-An Li, Song-Bo Zhang, and Shun-Qing Shen	
Andreev rectifier: A nonlocal conductance signature of topological phase transitions (11 pages)	045421
T. Ö. Rosdahl, A. Vuik, M. Kjaergaard, and A. R. Akhmerov	
Tuning topological phase transitions in hexagonal photonic lattices made of triangular rods (11 pages)	045422
Hsun-Chi Chan and Guang-Yu Guo	
Doubled Shapiro steps in a topological Josephson junction (6 pages)	045423
Yu-Hang Li, Juntao Song, Jie Liu, Hua Jiang, Qing-Feng Sun, and X. C. Xie	
Quasi-two-dimensional thermoelectricity in SnSe (9 pages)	045424
V. Tayari, B. V. Senkovskiy, D. Rybkovskiy, N. Ehlen, A. Fedorov, C.-Y. Chen, J. Avila, M. Asensio, A. Perucchi, P. di Pietro, L. Yashina, I. Fakih, N. Hemsworth, M. Petrescu, G. Gervais, A. Grüneis, and T. Szkopek	
Impact ionization and transport properties of hexagonal boron nitride in a constant-voltage measurement (9 pages)	045425
Yoshiaki Hattori, Takashi Taniguchi, Kenji Watanabe, and Kosuke Nagashio	
Approximate quasiparticle correction for calculations of the energy gap in two-dimensional materials (11 pages)	045426
I. Guilhon, D. S. Koda, L. G. Ferreira, M. Marques, and L. K. Teles	
van der Waals torque and force between anisotropic topological insulator slabs (9 pages)	045427
Bing-Sui Lu	
Polarization and plasmons in hot photoexcited graphene (11 pages)	045428
A. Freddie Page, Joachim M. Hamm, and Ortwin Hess	
Specularity of longitudinal acoustic phonons at rough surfaces (8 pages)	045429
Dhruv Gelda, Marc G. Ghossoub, Krishna Valavala, Jun Ma, Manjunath C. Rajagopal, and Sanjiv Sinha	
The $4\pi k_z$ periodicity in photoemission from graphite (6 pages)	045430
Fumihiko Matsui, Hiroaki Nishikawa, Hiroshi Daimon, Matthias Muntwiler, Masaru Takizawa, Hidetoshi Namba, and Thomas Greber	
Crosstalk error correction through dynamical decoupling of single-qubit gates in capacitively coupled singlet-triplet semiconductor spin qubits (17 pages)	045431
Donovan Buterakos, Robert E. Throckmorton, and S. Das Sarma	
Broadband and wide-angle nonreciprocity with a non-Hermitian metamaterial (6 pages)	045432
David R. Barton III, Hadiseh Alaeian, Mark Lawrence, and Jennifer Dionne	
Magnetic field assisted transmission of THz waves through a graphene layer combined with a periodically perforated metallic film (20 pages)	045433
Yu. V. Bludov, M. I. Vasilevskiy, and N. M. R. Peres	