

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 96, NUMBER 4

JULY 2017-15(II)

Spin-dependent coupling between quantum dots and topological quantum wires (<i>17 pages</i>)	045440
Silas Hoffman, Denis Chevallier, Daniel Loss, and Jelena Klinovaja	
Long-time coherence in fourth-order spin correlation functions (<i>13 pages</i>)	045441
Nina Fröhling and Frithjof B. Anders	
Analytical description of the nonlinear plasmonic response in nanographene (<i>13 pages</i>)	045442
Joel D. Cox, Renwen Yu, and F. Javier García de Abajo	
 Symmetric operation of the resonant exchange qubit (<i>7 pages</i>)	045443
Filip K. Malinowski, Frederico Martins, Peter D. Nissen, Saeed Fallahi, Geoffrey C. Gardner, Michael J. Manfra, Charles M. Marcus, and Ferdinand Kuemmeth	

COMMENTS

Comment on “Electron-phonon coupling in two-dimensional silicene and germanene” (<i>4 pages</i>)	047401
M. E. Cifuentes-Quintal, O. de la Peña-Seaman, and R. de Coss	

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 96, NUMBER 4

JULY 2017-15(II)

Valley-selective Landau-Zener oscillations in semi-Dirac p - n junctions (6 pages)	045424
K. Saha, R. Nandkishore, and S. A. Parameswaran	
Impact of strain on the optical fingerprint of monolayer transition-metal dichalcogenides (7 pages)	045425
Maja Feierabend, Alexandre Morlet, Gunnar Berghäuser, and Ermin Malic	
Quasiguidded modes of opaline photonic crystals covered by $\text{Ge}_2\text{Sb}_2\text{Te}_5$ (7 pages)	045426
S. A. Dyakov, N. A. Gippius, M. M. Voronov, S. A. Yakovlev, A. B. Pevtsov, I. A. Akimov, and S. G. Tikhodeev	
Microscopic modeling of tunable graphene-based terahertz Landau-level lasers (11 pages)	045427
Samuel Brem, Florian Wendler, and Ermin Malic	
Semiclassical theory of spin-orbit torques in disordered multiband electron systems (9 pages)	045428
Cong Xiao and Qian Niu	
Charge-vibration interaction effects in normal-superconductor quantum dots (13 pages)	045429
P. Stadler, W. Belzig, and G. Rastelli	
Analysis of the Sn chain length fluctuations on $\text{Si}(100)2 \times 1$: An extraction of microscopic parameters (7 pages)	045430
M. Kučera, P. Kocán, P. Sobotík, K. Majer, and I. Ošťádal	
Noninvasive control of excitons in two-dimensional materials (9 pages)	045431
C. Steinke, D. Mourad, M. Rösner, M. Lorke, C. Gies, F. Jahnke, G. Czycholl, and T. O. Wehling	
Remote preparation of single-plasmon states (5 pages)	045432
Marie-Christine Dheur, Benjamin Vest, Éloïse Devaux, Alexandre Baron, Jean-Paul Hugonin, Jean-Jacques Greffet, Gaétan Messin, and François Marquier	
Coexistence of bulk and surface states probed by Shubnikov–de Haas oscillations in Bi_2Se_3 with high charge-carrier density (6 pages)	045433
E. K. de Vries, S. Pezzini, M. J. Meijer, N. Koirala, M. Salehi, J. Moon, S. Oh, S. Wiedmann, and T. Banerjee	
Electronic structure changes during the on-surface synthesis of nitrogen-doped chevron-shaped graphene nanoribbons (7 pages)	045434
Friedrich Maaß, Manuel Utecht, Stephan Stremlau, Marie Gille, Jutta Schwarz, Stefan Hecht, Tillmann Klamroth, and Petra Tegeder	
Fine structure of excitons in InAs quantum dots on GaAs(110) planar layers and nanowire facets (7 pages)	045435
Pierre Corfdir, Ryan B. Lewis, Lutz Geelhaar, and Oliver Brandt	
Quantum electron transport in magnetically entangled subbands (11 pages)	045436
William Mayer, Sergey Vitkalov, and A. A. Bykov	
Topological protection from exceptional points in Weyl and nodal-line semimetals (12 pages)	045437
J. González and R. A. Molina	
Second-harmonic generation in longitudinal epsilon-near-zero materials (6 pages)	045438
M. A. Vincenti, M. Kamandi, D. de Ceglia, C. Guclu, M. Scalora, and F. Capolino	
Nonlinear response of biased bilayer graphene at terahertz frequencies (13 pages)	045439
Riley McGouran and Marc M. Dignam	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 96, NUMBER 4

JULY 2017-15(II)

Doublon lifetimes in dissipative environments (<i>8 pages</i>)	045408
Miguel Bello, Gloria Platero, and Sigmund Kohler	
Thin randomly aligned hierarchical carbon nanotube arrays as ultrablack metamaterials (<i>6 pages</i>)	045409
Francesco De Nicola, Peter Hines, Maurizio De Crescenzi, and Nunzio Motta	
Influence of terrace widths on Au(111) reconstruction (<i>4 pages</i>)	045410
D. Chauraud, J. Durinck, M. Drouet, L. Vernisse, J. Bonneville, and C. Coupeau	
Lost surface waves in nonpiezoelectric solids (<i>11 pages</i>)	045411
Eugene A. Eliseev, Anna N. Morozovska, Maya D. Glinchuk, and Sergei V. Kalinin	
Geometric valley Hall effect and valley filtering through a singular Berry flux (<i>14 pages</i>)	045412
Hong-Ya Xu, Liang Huang, Danhong Huang, and Ying-Cheng Lai	
Anderson-Mott transition in a disordered Hubbard chain with correlated hopping (<i>7 pages</i>)	045413
Francesca Battista, Alberto Camjayi, and Liliana Arrachea	
 Inversion of the exciton built-in dipole moment in In(Ga)As quantum dots via nonlinear piezoelectric effect (<i>6 pages</i>)	045414
Johannes Aberl, Petr Klenovský, Johannes S. Wildmann, Javier Martín-Sánchez, Thomas Fromherz, Eugenio Zallo, Josef Humlíček, Armando Rastelli, and Rinaldo Trotta	
Tuning magnetic response of epitaxial iron-silicide nanoislands by controlled self-assembled growth (<i>11 pages</i>)	045415
I. Goldfarb, Y. Camus, M. Dascalu, F. Cesura, R. Chalasani, and A. Kohn	
Topological spin-singlet superconductors with underlying sublattice structure (<i>13 pages</i>)	045416
C. Dutreix	
Spectral imaging of topological edge states in plasmonic waveguide arrays (<i>6 pages</i>)	045417
Felix Bleckmann, Zlata Cherpakova, Stefan Linden, and Andrea Alberti	
Valley-polarized magnetoconductivity and particle-hole symmetry breaking in a periodically modulated α - T_3 lattice (<i>12 pages</i>)	045418
SK Firoz Islam and Paramita Dutta	
Adsorption sites of individual metal atoms on ultrathin MgO(100) films (<i>7 pages</i>)	045419
Edgar Fernandes, Fabio Donati, François Patthey, Srdjan Stavrić, Željko Šljivančanin, and Harald Brune	
Electron waiting times of a periodically driven single-electron turnstile (<i>10 pages</i>)	045420
Elina Potanina and Christian Flindt	
Observation of axisymmetric dark plasma excitations in a two-dimensional electron system (<i>4 pages</i>)	045421
V. M. Muravev, I. V. Andreev, V. N. Belyanin, S. I. Gubarev, and I. V. Kukushkin	
Spin and topological order in a periodically driven spin chain (<i>18 pages</i>)	045422
Angelo Russomanno, Bat-el Friedman, and Emanuele G. Dalla Torre	
Combined effect of doping and temperature on the anisotropy of low-energy plasmons in monolayer graphene (<i>9 pages</i>)	045423
Godfrey Gumbs, Antonios Balassis, and V. M. Silkin	

(Continued)

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

Spin precession and spin waves in a chiral electron gas: Beyond Larmor's theorem (14 pages)	045301
Shahrazad Karimi, Florent Baboux, Florent Perez, Carsten A. Ullrich, Grzegorz Karczewski, and Tomasz Wojtowicz	
 Impact of g -factors and valleys on spin qubits in a silicon double quantum dot (7 pages)	045302
J. C. C. Hwang, C. H. Yang, M. Veldhorst, N. Hendrickx, M. A. Fogarty, W. Huang, F. E. Hudson, A. Morello, and A. S. Dzurak	
Element-specific channels for the photoexcitation of V-doped TiO ₂ nanoparticles (6 pages)	045303
Giacomo Rossi, Marco Calizzi, Lucia Amidani, Andrea Migliori, Federico Boscherini, and Luca Pasquini	
Robust helical edge transport at $\nu = 0$ quantum Hall state (5 pages)	045304
G. M. Gusev, D. A. Kozlov, A. D. Levin, Z. D. Kvon, N. N. Mikhailov, and S. A. Dvoretzky	
Diffraction catastrophes and semiclassical quantum mechanics for Veselago lensing in graphene (5 pages)	045305
K. J. A. Reijnders and M. I. Katsnelson	
Theory and measurements of harmonic generation in semiconductor superlattices with applications in the 100 GHz to 1 THz range (5 pages)	045306
M. F. Pereira, J. P. Zubelli, D. Winge, A. Wacker, A. S. Rodrigues, V. Anfertev, and V. Vaks	
Quantum transport in Weyl semimetal thin films in the presence of spin-orbit coupled impurities (11 pages)	045307
Weizhe Edward Liu (刘玮哲), Ewelina M. Hankiewicz, and Dimitrie Culcer	
Electromagnetic field enhancement in Bloch surface waves (7 pages)	045308
Daniele Aurelio and Marco Liscidini	
Surface physics, nanoscale physics, low-dimensional systems	
Superconductor-graphene-superconductor Josephson junction in the quantum Hall regime (7 pages)	045401
Jie Liu, Haiwen Liu, Juntao Song, Qing-Feng Sun, and X. C. Xie	
Graphene-based amplification and tuning of near-field radiative heat transfer between dissimilar polar materials (8 pages)	045402
Riccardo Messina, Philippe Ben-Abdallah, Brahim Guizal, and Mauro Antezza	
Spin-polarized electric current in silicene nanoribbons induced by atomic adsorption (5 pages)	045403
C. Núñez, P. A. Orellana, L. Rosales, R. A. Römer, and F. Domínguez-Adame	
Computational design of a robust two-dimensional antiferromagnetic semiconductor (10 pages)	045404
Satyananda Chabungbam and Prasenjit Sen	
Quantum magnetotransport in bilayer MoS ₂ : Influence of perpendicular electric field (14 pages)	045405
M. Zubair, M. Tahir, P. Vasilopoulos, and K. Sabeeh	
Studying plasmonic resonance modes of hierarchical self-assembled meta-atoms based on their transfer matrix (14 pages)	045406
Ravi N. S. Suryadharma, Martin Fruhnert, Ivan Fernandez-Corbaton, and Carsten Rockstuhl	
Resonantly excited exciton dynamics in two-dimensional MoSe ₂ monolayers (11 pages)	045407
L. Scarpelli, F. Masia, E. M. Alexeev, F. Withers, A. I. Tartakovskii, K. S. Novoselov, and W. Langbein	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 96, NUMBER 4

JULY 2017-15(II)

Pressure dependence of dynamically screened Coulomb interactions in NiO: Effective Hubbard, Hund, intershell, and intersite components (<i>14 pages</i>)	045137
S. K. Panda, H. Jiang, and S. Biermann	
Critical eigenstates and their properties in one- and two-dimensional quasicrystals (<i>17 pages</i>)	045138
Nicolas Macé, Anuradha Jagannathan, Pavel Kalugin, Rémy Mosseri, and Frédéric Piéchon	
Quantum criticality and development of antiferromagnetic order in the quasikagome Kondo lattice $\text{CeRh}_{1-x}\text{Pd}_x\text{Sn}$ (<i>7 pages</i>)	045139
C. L. Yang, S. Tsuda, K. Umeo, Y. Yamane, T. Onimaru, T. Takabatake, N. Kikugawa, T. Terashima, and S. Uji	
Indicators of conformal field theory: Entanglement entropy and multiple-point correlators (<i>8 pages</i>)	045140
Pranay Patil, Ying Tang, Emanuel Katz, and Anders W. Sandvik	
Low-temperature microwave properties of biaxial YAlO_3 (<i>7 pages</i>)	045141
N. C. Carvalho, M. Goryachev, J. Krupka, P. Bushev, and M. E. Tobar	
Gauge-including projector augmented-wave NMR chemical shift calculations with DFT+ U (<i>10 pages</i>)	045142
Bi-Ching Shih and Jonathan R. Yates	
Strong-disorder approach for the Anderson localization transition (<i>5 pages</i>)	045143
H. Javan Mard, José A. Hoyos, E. Miranda, and V. Dobrosavljević	
Numerical treatment of spin systems with unrestricted spin length S : A functional renormalization group study (<i>13 pages</i>)	045144
M. L. Baez and J. Reuther	
Connection between Fermi contours of zero-field electrons and $\nu = \frac{1}{2}$ composite fermions in two-dimensional systems (<i>7 pages</i>)	045145
Matteo Ippoliti, Scott D. Geraedts, and R. N. Bhatt	
Semiconductors I: bulk	
✂ Closing the gap between spatial and spin dynamics of electrons at the metal-to-insulator transition (<i>7 pages</i>)	045201
J. G. Lonnemann, E. P. Rugeramigabo, M. Oestreich, and J. Hübner	
Tunability of room-temperature ferromagnetism in spintronic semiconductors through nonmagnetic atoms (<i>5 pages</i>)	045202
Brett Leedahl, Zahra Aboalizadeh, Kyle LeBlanc, and Alexander Moewes	
Nonisovalent Si-III-V and Si-II-VI alloys: Covalent, ionic, and mixed phases (<i>5 pages</i>)	045203
Joongoo Kang, Ji-Sang Park, Pauls Stradins, and Su-Huai Wei	
Impurity band effects on transport and thermoelectric properties of $\text{Fe}_{2-x}\text{Ni}_x\text{VAl}$ (<i>11 pages</i>)	045204
I. Knapp, B. Budinska, D. Milosavljevic, P. Heinrich, S. Khmelevskiy, R. Moser, R. Podloucky, P. Prenninger, and E. Bauer	
<i>Ab initio</i> approach to photostriction in classical ferroelectric materials (<i>14 pages</i>)	045205
Charles Paillard, Sergey Prosandeev, and L. Bellaiche	
Collective two-boson decay of excitons in a Bose-Einstein condensate and generation of coherent photon-phonon radiation (<i>6 pages</i>)	045206
H. K. Avetissian, A. K. Avetissian, G. F. Mkrtchian, and B. R. Avchyan	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 96, NUMBER 4

JULY 2017-15(II)

Excitation of surface plasmon polaritons on silicon with an intense femtosecond laser pulse (6 pages)	045122
Godai Miyaji, Masato Hagiya, and Kenzo Miyazaki	
Sensitivity of the entanglement spectrum to boundary conditions as a characterization of the phase transition from delocalization to localization (5 pages)	045123
Mohammad Pouranvari and Afshin Montakhab	
Self-consistent Dyson equation and self-energy functionals: An analysis and illustration on the example of the Hubbard atom (11 pages)	045124
Walter Tarantino, Pina Romaniello, J. A. Berger, and Lucia Reining	
Nonequilibrium steady states and transient dynamics of conventional superconductors under phonon driving (19 pages)	045125
Yuta Murakami, Naoto Tsuji, Martin Eckstein, and Philipp Werner	
Magnons in a two-dimensional transverse-field XXZ model (11 pages)	045126
Satyaki Kar, Keola Wierschem, and Pinaki Sengupta	
Nearly massless Dirac fermions and strong Zeeman splitting in the nodal-line semimetal ZrSiS probed by de Haas-van Alphen quantum oscillations (13 pages)	045127
Jin Hu, Zhijie Tang, Jinyu Liu, Yanglin Zhu, Jiang Wei, and Zhiqiang Mao	
Optimized contraction scheme for tensor-network states (7 pages)	045128
Z. Y. Xie, H. J. Liao, R. Z. Huang, H. D. Xie, J. Chen, Z. Y. Liu, and T. Xiang	
Analytical normalization of resonant states in photonic crystal slabs and periodic arrays of nanoantennas at oblique incidence (11 pages)	045129
T. Weiss, M. Schäferling, H. Giessen, N. A. Gippius, S. G. Tikhodeev, W. Langbein, and E. A. Muljarov	
Superconductivity without a hole pocket in electron-doped FeSe: Analysis beyond the Migdal-Eliashberg formalism (11 pages)	045130
Youichi Yamakawa and Hiroshi Kontani	
Realizing anomalous anyonic symmetries at the surfaces of three-dimensional gauge theories (14 pages)	045131
Lukasz Fidkowski and Ashvin Vishwanath	
Hall number across a van Hove singularity (16 pages)	045132
Akash V. Maharaj, Ilya Esterlis, Yi Zhang, B. J. Ramshaw, and S. A. Kivelson	
Evidence of Mott physics in iron pnictides from x-ray spectroscopy (8 pages)	045133
S. Lafuerza, H. Gretarsson, F. Hardy, T. Wolf, C. Meingast, G. Giovannetti, M. Capone, A. S. Sefat, Y.-J. Kim, P. Glatzel, and L. de' Medici	
Strongly interacting phases of metallic wires in strong magnetic field (22 pages)	045134
Daniel Bulmash, Chao-Ming Jian, and Xiao-Liang Qi	
Isolating Majorana fermions with finite Kitaev nanowires and temperature: Universality of the zero-bias conductance (8 pages)	045135
V. L. Campo Jr., L. S. Ricco, and A. C. Seridonio	
Cheshire charge in (3+1)-dimensional topological phases (17 pages)	045136
Dominic V. Else and Chetan Nayak	

(Continued)

Direct observation of how the heavy-fermion state develops in CeCoIn ₅ (10 pages)	045107
Q. Y. Chen, D. F. Xu, X. H. Niu, J. Jiang, R. Peng, H. C. Xu, C. H. P. Wen, Z. F. Ding, K. Huang, L. Shu, Y. J. Zhang, H. Lee, V. N. Strocov, M. Shi, F. Bisti, T. Schmitt, Y. B. Huang, P. Dudin, X. C. Lai, S. Kirchner, H. Q. Yuan, and D. L. Feng	
Site-specific spin crossover in Fe ₂ TiO ₄ post-spinel under high pressure up to nearly a megabar (11 pages)	045108
W. M. Xu, G. R. Hearne, S. Layek, D. Levy, J-P. Itié, M. P. Pasternak, G. Kh. Rozenberg, and E. Greenberg	
General degeneracy in density functional perturbation theory (6 pages)	045109
Mark C. Palenik and Brett I. Dunlap	
Phase competition and anomalous thermal evolution in high-temperature superconductors (12 pages)	045110
Zuo-Dong Yu, Yuan Zhou, Wei-Guo Yin, Hai-Qing Lin, and Chang-De Gong	
LDA+DMFT approach to core-level spectroscopy: Application to 3d transition metal compounds (9 pages)	045111
Atsushi Hariki, Takayuki Uozumi, and Jan Kuneš	
Chiral anomaly and longitudinal magnetotransport in type-II Weyl semimetals (6 pages)	045112
Girish Sharma, Pallab Goswami, and Sumanta Tewari	
Spin-polarized two-dimensional electron gas at GdTiO ₃ /SrTiO ₃ interfaces: Insight from first-principles calculations (8 pages)	045113
J. Betancourt, T. R. Paudel, E. Y. Tsymlal, and J. P. Velez	
Mechanism of the high transition temperature for the 1111-type iron-based superconductors RFeAsO (R = rare earth): Synergistic effects of local structures and 4f electrons (8 pages)	045114
Lifang Zhang, Junling Meng, Xiaojuan Liu, Fen Yao, Jian Meng, and Hongjie Zhang	
Nature of the magnetic phase transition in a Weyl semimetal (10 pages)	045115
Yu-Li Lee and Yu-Wen Lee	
Negative differential resistance in the Peierls insulating phases of TTF-TCNQ (7 pages)	045116
Daiki Tonouchi, Michio M. Matsushita, and Kunio Awaga	
Photoemission study of the electronic structure of the Kondo lattices Yb ₂ Pt ₆ X ₁₅ (X=Al, Ga) (7 pages)	045117
Awabakeli Rousuli, Shogo Nakamura, Hitoshi Sato, Takuya Ueda, Yuji Matsumoto, Shigeo Ohara, Eike F. Schwier, Toshiki Nagasaki, Kojiro Mimura, Hiroaki Anzai, Katsuya Ichiki, Shigenori Ueda, Kenya Shimada, Hirofumi Namatame, and Masaki Taniguchi	
Abrupt disappearance and re-emergence of the SU(4) and SU(2) Kondo effects due to population inversion (5 pages)	045118
Yaakov Kleorin and Yigal Meir	
Peculiar supersolid phases induced by frustrated tunneling in the extended Bose-Hubbard model (11 pages)	045119
Shao-Jun Dong, Wenyan Liu, Xiang-Fa Zhou, Guang-Can Guo, Zheng-Wei Zhou, Yong-Jian Han, and Lixin He	
Impact of antiferromagnetism on the optical properties of rare-earth nickelates (5 pages)	045120
J. Ruppen, J. Teyssier, I. Ardizzone, O. E. Peil, S. Catalano, M. Gibert, J.-M. Triscone, A. Georges, and D. van der Marel	
Coexistence of topological nodal lines, Weyl points, and triply degenerate points in TaS (8 pages)	045121
Jian-Peng Sun, Dong Zhang, and Kai Chang	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 96, NUMBER 4

JULY 2017-15(II)

Field-induced quantum criticality in the Kitaev system α -RuCl ₃ (5 pages)	041405(R)
A. U. B. Wolter, L. T. Corredor, L. Janssen, K. Nenkov, S. Schönecker, S.-H. Do, K.-Y. Choi, R. Albrecht, J. Hunger, T. Doert, M. Vojta, and B. Büchner	
Fresnel coefficients and Fabry-Perot formula for spatially dispersive metallic layers (5 pages)	041406(R)
Armel Pitelet, Émilien Mallet, Emmanuel Centeno, and Antoine Moreau	
Solvent fluctuations and nuclear quantum effects modulate the molecular hyperpolarizability of water (6 pages)	041407(R)
Chungwen Liang, Gabriele Tocci, David M. Wilkins, Andrea Grisafi, Sylvie Roke, and Michele Ceriotti	
Topological photonics: From crystals to particles (5 pages)	041408(R)
Gleb Siroki, Paloma A. Huidobro, and Vincenzo Giannini	
Strong electron-hole symmetric Rashba spin-orbit coupling in graphene/monolayer transition metal dichalcogenide heterostructures (5 pages)	041409(R)
Bowen Yang, Mark Lohmann, David Barroso, Ingrid Liao, Zhisheng Lin, Yawen Liu, Ludwig Bartels, Kenji Watanabe, Takashi Taniguchi, and Jing Shi	
Voltage-controllable colossal magnetocrystalline anisotropy in single-layer transition metal dichalcogenides (5 pages)	041410(R)
Xuelei Sui, Tao Hu, Jianfeng Wang, Bing-Lin Gu, Wenhui Duan, and Mao-sheng Miao	
Simulations of twisted bilayer orthorhombic black phosphorus (6 pages)	041411(R)
Douxing Pan, Tzu-Chiang Wang, Wende Xiao, Dongmei Hu, and Yugui Yao	

ARTICLES

Electronic structure and strongly correlated systems

Semimetallic bands derived from interlayer electrons in the quasi-two-dimensional electride Y ₂ C (5 pages)	045101
Koji Horiba, Ryu Yukawa, Taichi Mitsushashi, Miho Kitamura, Takeshi Inoshita, Noriaki Hamada, Shigeki Otani, Naoki Ohashi, Sachiko Maki, Jun-ichi Yamaura, Hideo Hosono, Youichi Murakami, and Hiroshi Kumigashira	
 Composite Weyl nodes stabilized by screw symmetry with and without time-reversal invariance (15 pages)	045102
Stepan S. Tsirkin, Ivo Souza, and David Vanderbilt	
Phase boundaries of power-law Anderson and Kondo models: A poor man's scaling study (15 pages)	045103
Mengxing Cheng, Tathagata Chowdhury, Aaron Mohammed, and Kevin Ingersent	
Quantum hydrodynamic modeling of edge modes in chiral Berry plasmons (6 pages)	045104
Ya Zhang, Feng Zhai, Bin Guo, Lin Yi, and Wei Jiang	
Electric current induced ultrafast demagnetization (9 pages)	045105
Richard B. Wilson, Yang Yang, Jon Gorchon, Charles-Henri Lambert, Sayeef Salahuddin, and Jeffrey Bokor	
Hard x-ray photoemission study of the temperature-induced valence transition system EuNi ₂ (Si _{1-x} Ge _x) ₂ (7 pages)	045106
Katsuya Ichiki, Kojiro Mimura, Hiroaki Anzai, Takayuki Uozumi, Hitoshi Sato, Yuki Utsumi, Shigenori Ueda, Akihiro Mitsuda, Hirofumi Wada, Yukihiro Taguchi, Kenya Shimada, Hirofumi Namatame, and Masaki Taniguchi	

(Continued)

Semiconductors I: bulk

Nontrivial Berry phase and type-II Dirac transport in the layered material PdTe ₂ (7 pages)	041201(R)
Fucong Fei, Xiangyan Bo, Rui Wang, Bin Wu, Juan Jiang, Dongzhi Fu, Ming Gao, Hao Zheng, Yulin Chen, Xuefeng Wang, Haijun Bu, Fengqi Song, Xiangang Wan, Baigeng Wang, and Guanghou Wang	
Topological semimetals carrying arbitrary Hopf numbers: Fermi surface topologies of a Hopf link, Solomon's knot, trefoil knot, and other linked nodal varieties (5 pages)	041202(R)
Motohiko Ezawa	
Photoinduced blinking in a solid-state quantum system (5 pages)	041203(R)
Amanuel M. Berhane, Carlo Bradac, and Igor Aharonovich	
Anomalous anisotropic exciton temperature dependence in rutile TiO ₂ (5 pages)	041204(R)
Edoardo Baldini, Adriel Dominguez, Letizia Chiodo, Evgeniia Sheveleva, Meghdad Yazdi-Rizi, Christian Bernhard, Angel Rubio, and Majed Chergui	
Photoinduced topological phase transition from a crossing-line nodal semimetal to a multiple-Weyl semimetal (5 pages)	041205(R)
Motohiko Ezawa	
Floquet multi-Weyl points in crossing-nodal-line semimetals (6 pages)	041206(R)
Zhongbo Yan and Zhong Wang	

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

Electrical and optical switching in the bistable regime of an electrically injected polariton laser (5 pages)	041301(R)
M. Klaas, H. Sigurdsson, T. C. H. Liew, S. Klemmt, M. Amthor, F. Hartmann, L. Worschech, C. Schneider, and S. Höfling	
Disorder-dependent valley properties in monolayer WSe ₂ (5 pages)	041302(R)
Kha Tran, Akshay Singh, Joe Seifert, Yiping Wang, Kai Hao, Jing-Kai Huang, Lain-Jong Li, Takashi Taniguchi, Kenji Watanabe, and Xiaoqin Li	
Determining the nature of excitonic dephasing in high-quality GaN/AlGaIn quantum wells through time-resolved and spectrally resolved four-wave mixing spectroscopy (5 pages)	041303(R)
M. Gallart, M. Ziegler, O. Crégut, E. Feltn, J.-F. Carlin, R. Butté, N. Grandjean, B. Hönerlage, and P. Gilliot	

Surface physics, nanoscale physics, low-dimensional systems

Spin and charge signatures of topological superconductivity in Rashba nanowires (5 pages)	041401(R)
Paweł Szumniak, Denis Chevallier, Daniel Loss, and Jelena Klinovaja	
Band splitting of quantum wells of thin Ag films on Sn/Si(111) $\sqrt{3} \times \sqrt{3}$ (6 pages)	041402(R)
H. M. Zhang, L. J. Holleboom, and L. S. O. Johansson	
Charge and spin transport on graphene grain boundaries in a quantizing magnetic field (5 pages)	041403(R)
Madeleine Phillips and E. J. Mele	
Localized exciton modes and high quantum efficiency of a quantum emitter close to a MoS ₂ nanodisk (5 pages)	041404(R)
Vasilios D. Karanikolas and Emmanuel Paspalakis	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 96, NUMBER 4

JULY 2017-15(II)

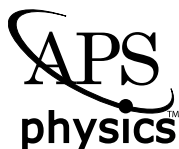
Spin susceptibility of the topological superconductor UPt_3 from polarized neutron diffraction (5 pages)	041111(R)
W. J. Gannon, W. P. Halperin, M. R. Eskildsen, Pengcheng Dai, U. B. Hansen, K. Lefmann, and A. Stunault	
Antibonding ground state of adatom molecules in bulk Dirac semimetals (5 pages)	041112(R)
Y. Marques, A. E. Obispo, L. S. Ricco, M. de Souza, I. A. Shelykh, and A. C. Seridonio	
☞ Interacting nodal-line semimetal: Proximity effect and spontaneous symmetry breaking (5 pages)	041113(R)
Bitan Roy	
Encrypting Majorana fermion qubits as bound states in the continuum (5 pages)	041114(R)
L. H. Guessi, F. A. Dessotti, Y. Marques, L. S. Ricco, G. M. Pereira, P. Menegasso, M. de Souza, and A. C. Seridonio	
Thermal transport in a one-dimensional $\mathbb{Z}_2$ spin liquid (5 pages)	041115(R)
Alexandros Metavitsiadis and Wolfram Brenig	
Quantum phase transition detected through one-dimensional ballistic conductance (5 pages)	041116(R)
Abolfazl Bayat, Sanjeev Kumar, Michael Pepper, and Sougato Bose	
☞ Role of commensurability of spin order for optical magnetoelectric effect with electromagnons in multiferroic YMn_2O_5 (5 pages)	041117(R)
R. Masuda, Y. Kaneko, Y. Yamasaki, Y. Tokura, and Y. Takahashi	
Effects of domain walls in quantum anomalous Hall insulator/superconductor heterostructures (5 pages)	041118(R)
Chui-Zhen Chen, James Jun He, Dong-Hui Xu, and K. T. Law	
Self-learning quantum Monte Carlo method in interacting fermion systems (5 pages)	041119(R)
Xiao Yan Xu, Yang Qi, Junwei Liu, Liang Fu, and Zi Yang Meng	
Three-dimensional band structure of LaSb and CeSb : Absence of band inversion (5 pages)	041120(R)
H. Oinuma, S. Souma, D. Takane, T. Nakamura, K. Nakayama, T. Mitsuhashi, K. Horiba, H. Kumigashira, M. Yoshida, A. Ochiai, T. Takahashi, and T. Sato	
Two-dimensional electron systems in ATiO_3 perovskites ($A=\text{Ca, Ba, Sr}$): Control of orbital hybridization and energy order (6 pages)	041121(R)
T. C. Rödel, M. Vivek, F. Fortuna, P. Le Fèvre, F. Bertran, R. Weht, J. Goniakowski, M. Gabay, and A. F. Santander-Syro	
☞ Effect of $\text{SU}(2)$ symmetry on many-body localization and thermalization (6 pages)	041122(R)
Ivan V. Protopopov, Wen Wei Ho, and Dmitry A. Abanin	
Coulomb blockade in fractional topological superconductors (5 pages)	041123(R)
Younghyun Kim, David J. Clarke, and Roman M. Lutchyn	
Coherent coupling of individual quantum dots measured with phase-referenced two-dimensional spectroscopy: Photon echo versus double quantum coherence (6 pages)	041124(R)
Valentin Delmonte, Judith F. Specht, Tomasz Jakubczyk, Sven Höfling, Martin Kamp, Christian Schneider, Wolfgang Langbein, Gilles Nogues, Marten Richter, and Jacek Kasprzak	
Role of finite-size effects in the critical behavior of itinerant fermions (5 pages)	041125(R)
Avraham Klein and Andrey Chubukov	
Emergent Weyl nodes and Fermi arcs in a Floquet Weyl semimetal (7 pages)	041126(R)
Leda Bucciantini, Sthitadhi Roy, Sota Kitamura, and Takashi Oka	

(Continued)

RAPID COMMUNICATIONS

Electronic structure and strongly correlated systems

- Landau-level spectroscopy of massive Dirac fermions in single-crystalline ZrTe₅ thin flakes (5 pages) 041101(R)
Y. Jiang, Z. L. Dun, H. D. Zhou, Z. Lu, K.-W. Chen, S. Moon, T. Besara, T. M. Siegrist, R. E. Baumbach,
D. Smirnov, and Z. Jiang
- Topological semimetals with a double-helix nodal link (5 pages) 041102(R)
Wei Chen, Hai-Zhou Lu, and Jing-Min Hou
- Nodal-link semimetals (8 pages) 041103(R)
Zhongbo Yan, Ren Bi, Huitao Shen, Ling Lu, Shou-Cheng Zhang, and Zhong Wang
- Strong correlation effects on surfaces of topological insulators via holography (5 pages) 041104(R)
Yunseok Seo, Geunho Song, and Sang-Jin Sin
- Controlling Feynman diagrammatic expansions: Physical nature of the pseudogap in the two-dimensional
Hubbard model (5 pages) 041105(R)
Wei Wu, Michel Ferrero, Antoine Georges, and Evgeny Kozik
- Evolution of the remnant Fermi-surface state in the lightly doped correlated spin-orbit insulator
Sr_{2-x}La_xIrO₄ (5 pages) 041106(R)
K. Terashima, M. Sunagawa, H. Fujiwara, T. Fukura, M. Fujii, K. Okada, K. Horigane, K. Kobayashi,
R. Horie, J. Akimitsu, E. Golias, D. Marchenko, A. Varykhalov, N. L. Saini, T. Wakita, Y. Muraoka,
and T. Yokoya
- Onset of quantum criticality in the topological-to-nematic transition in a two-dimensional electron gas
at filling factor $\nu = 5/2$ (5 pages) 041107(R)
K. A. Schreiber, N. Samkharadze, G. C. Gardner, Rudro R. Biswas, M. J. Manfra, and G. A. Csáthy
- Direct visualization of a two-dimensional topological insulator in the single-layer 1T'-WTe₂ (5 pages) 041108(R)
Zhen-Yu Jia, Ye-Heng Song, Xiang-Bing Li, Kejing Ran, Pengchao Lu, Hui-Jun Zheng, Xin-Yang Zhu,
Zhi-Qiang Shi, Jian Sun, Jinsheng Wen, Dingyu Xing, and Shao-Chun Li
- Realistic quantum critical point in one-dimensional two-impurity models (5 pages) 041109(R)
Benedikt Lechtenberg, Fabian Eickhoff, and Frithjof B. Anders
- Giant planar Hall effect in topological metals (5 pages) 041110(R)
A. A. Burkov



Copyright 2017 by American Physical Society



2469-9950(20170715)96:4;1-2

(Continued)

Selected for a Viewpoint in *Physics*. Please visit <http://physics.aps.org/>.

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).