

PM
p59/r6

PHYSICAL REVIEW BTM

CONDENSED MATTER AND MATERIALS PHYSICS

Articles Published in OCTOBER 2014

15(II)

Published by
AMERICAN PHYSICAL SOCIETYTM

Volume 90

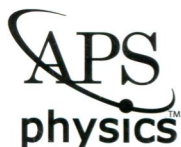
Third Series

Number 16

RAPID COMMUNICATIONS

Electronic structure and strongly correlated systems

- Energy transport in Heisenberg chains beyond the Luttinger liquid paradigm (5 pages) 161101(R)
Andrea De Luca, Jacopo Viti, Leonardo Mazza, and Davide Rossini
- Interband and polaronic excitations in YTiO_3 from first principles (5 pages) 161102(R)
Burak Himmetoglu, Anderson Janotti, Lars Bjaalie, and Chris G. Van de Walle
- ☞ Structural and magnetic dynamics in the magnetic shape-memory alloy Ni_2MnGa (5 pages) 161103(R)
S. O. Mariager, C. Dornes, J. A. Johnson, A. Ferrer, S. Grübel, T. Huber, A. Caviezel, S. L. Johnson,
T. Eichhorn, G. Jakob, H. J. Elmers, P. Beaud, C. Quitmann, and G. Ingold
- Interplay of spin-orbit and entropic effects in cerium (4 pages) 161104(R)
Nicola Lanatà, Yong-Xin Yao, Cai-Zhuang Wang, Kai-Ming Ho, and Gabriel Kotliar
- Thermopower analysis of the electronic structure around the metal-insulator transition
in $\text{V}_{1-x}\text{W}_x\text{O}_2$ (4 pages) 161105(R)
Takayoshi Katase, Kenji Endo, and Hiromichi Ohta
- Non-Fermi-liquid behavior at the onset of incommensurate $2k_F$ charge- or spin-density wave order
in two dimensions (5 pages) 161106(R)
Tobias Holder and Walter Metzner
- Pressure variation of Rashba spin splitting toward topological transition in the polar semiconductor BiTeI (5 pages) 161107(R)
T. Ideue, J. G. Checkelsky, M. S. Bahramy, H. Murakawa, Y. Kaneko, N. Nagaosa, and Y. Tokura
- Engineering relativistic effects in ferroelectric SnTe (5 pages) 161108(R)
E. Plekhanov, P. Barone, D. Di Sante, and S. Picozzi
- Thin line of a Rashba-type spin texture: Unoccupied surface resonance of $\text{TI/Si}(111)$ along $\bar{\Gamma}\bar{M}$ (5 pages) 161109(R)
Sebastian D. Stolwijk, Kazuyuki Sakamoto, Anke B. Schmidt, Peter Krüger, and Markus Donath
- Lattice-tuned magnetism of $\text{Ru}^{4+}(4d^4)$ ions in single crystals of the layered honeycomb ruthenates Li_2RuO_3
and Na_2RuO_3 (6 pages) 161110(R)
J. C. Wang, J. Terzic, T. F. Qi, Feng Ye, S. J. Yuan, S. Aswartham, S. V. Streltsov, D. I. Khomskii, R. K. Kaul,
and G. Cao
- ☞ Structurally unstable $A^{\text{III}}\text{BiO}_3$ perovskites are predicted to be topological insulators but their stable structural
forms are trivial band insulators (5 pages) 161111(R)
Giancarlo Trimarchi, Xiuwen Zhang, Arthur J. Freeman, and Alex Zunger



Semiconductors I: bulk

- Pairwise chemical interactions of charged transition-metal impurities in insulators (*5 pages*) 161201(R)
Takeshi Fujita and Hannes Raebiger
- Band inversion and the topological phase transition in (Pb,Sn)Se (*5 pages*) 161202(R)
B. M. Wojek, P. Dziawa, B. J. Kowalski, A. Szczerbakow, A. M. Black-Schaffer, M. H. Berntsen,
T. Balasubramanian, T. Story, and O. Tjernberg

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

- Hall field-induced resistance oscillations in a *p*-type Ge/SiGe quantum well (*4 pages*) 161301(R)
Q. Shi, Q. A. Ebner, and M. A. Zudov
- Exciton valley dynamics probed by Kerr rotation in WSe₂ monolayers (*5 pages*) 161302(R)
C. R. Zhu, K. Zhang, M. Glazov, B. Urbaszek, T. Amand, Z. W. Ji, B. L. Liu, and X. Marie
- An apparent metal-insulator transition in high-mobility two-dimensional InAs heterostructures (*5 pages*) 161303(R)
J. Shabani, S. Das Sarma, and C. J. Palmstrøm
- Wide-range optical spin orientation in Ge from near-infrared to visible light (*5 pages*) 161304(R)
C. Rinaldi, M. Cantoni, M. Marangoni, C. Manzoni, G. Cerullo, and R. Bertacco
- Stopping electrons with radio-frequency pulses in the quantum Hall regime (*4 pages*) 161305(R)
Benoit Gaury, Joseph Weston, and Xavier Waintal
- Experimental constraints and a possible quantum Hall state at $\nu = 5/2$ (*5 pages*) 161306(R)
Guang Yang and D. E. Feldman

Surface physics, nanoscale physics, low-dimensional systems

- Quantum Hall effect in polycrystalline graphene: The role of grain boundaries (*5 pages*) 161401(R)
Aron W. Cummings, Alessandro Cresti, and Stephan Roche
- Prediction of a Dirac state in monolayer TiB₂ (*5 pages*) 161402(R)
L. Z. Zhang, Z. F. Wang, S. X. Du, H.-J. Gao, and Feng Liu
- RKKY interaction and intervalley processes in *p*-doped transition-metal dichalcogenides (*5 pages*) 161403(R)
Diego Mastrogiuseppe, Nancy Sandler, and Sergio E. Ulloa
- Excited state entanglement in one-dimensional quantum critical systems: Extensivity and the role of microscopic details (*5 pages*) 161404(R)
T. Pálmai
- Nonlinear transport and noise thermometry in quasiclassical ballistic point contacts (*4 pages*) 161405(R)
E. S. Tikhonov, M. Yu. Melnikov, D. V. Shovkun, L. Sorba, G. Biasiol, and V. S. Khrapai
- Generation and morphing of plasmons in graphene superlattices (*5 pages*) 161406(R)
Andrea Tomadin, Francisco Guinea, and Marco Polini
- Ab initio* nanoplasmonics: The impact of atomic structure (*5 pages*) 161407(R)
Pu Zhang, Johannes Feist, Angel Rubio, Pablo García-González, and F. J. García-Vidal
- Percolation transitions in bilayer graphene encapsulated by hexagonal boron nitride (*5 pages*) 161408(R)
C. Cobaleda, S. Pezzini, A. Rodriguez, E. Diez, and V. Bellani

(Continued)

Giant bulk photovoltaic effect in thin ferroelectric BaTiO ₃ films (5 pages)	161409(R)
A. Zenkevich, Yu. Matveyev, K. Maksimova, R. Gaynutdinov, A. Tolstikhina, and V. Fridkin	
Plasmons on the edge of MoS ₂ nanostructures (5 pages)	161410(R)
Kirsten Andersen, Karsten W. Jacobsen, and Kristian S. Thygesen	
Quasiparticle renormalization in ABC graphene trilayers (4 pages)	161411(R)
Xu Dou, Akbar Jaefari, Yafis Barlas, and Bruno Uchoa	
Intrinsic magnetoresistance in metal films on ferromagnetic insulators (4 pages)	161412(R)
Vahram L. Grigoryan, Wei Guo, Gerrit E. W. Bauer, and Jiang Xiao (萧江)	
Spontaneous gap generation on the surface of weakly interacting topological insulators using nonmagnetic impurities (5 pages)	161413(R)
Annica M. Black-Schaffer and Dmitry Yudin	

ARTICLES

Electronic structure and strongly correlated systems

Impurities and Landau level mixing in a fractional quantum Hall state in a flat-band lattice model (8 pages)	165101
Topi Siro, Mikko Ervasti, and Ari Harju	
Existence of strong-pairing quantum Hall phase in bilayer cold-atom systems with dipolar interactions (7 pages)	165102
Yuhui Zhang, E. H. Rezayi, and Kun Yang	
Energy-independent total quantum transmission of electrons through nanodevices with correlated disorder (14 pages)	165103
M. A. Novotny	
Theoretical investigation of edge reconstruction in the $\nu = \frac{5}{2}$ and $\frac{7}{3}$ fractional quantum Hall states (17 pages)	165104
Yuhe Zhang, Ying-Hai Wu, Jimmy A. Hutasoit, and Jainendra K. Jain	
Cubic interaction parameters for t_{2g} Wannier orbitals (8 pages)	165105
T. Ribic, E. Assmann, A. Tóth, and K. Held	
☞ Stability of zero modes in parafermion chains (14 pages)	165106
Adam S. Jermyn, Roger S. K. Mong, Jason Alicea, and Paul Fendley	
Full counting statistics of persistent current (9 pages)	165107
A. Komnik and G. W. Langhanke	
Theoretical model for Rashba spin-orbit interaction in d electrons (9 pages)	165108
K. V. Shanavas, Z. S. Popović, and S. Satpathy	
X-ray-induced persistent photoconductivity in vanadium dioxide (6 pages)	165109
S. H. Dietze, M. J. Marsh, Siming Wang, J.-G. Ramírez, Z.-H. Cai, J. R. Mohanty, Ivan K. Schuller, and O. G. Shpyrko	
Effect of paramagnetic fluctuations on a Fermi-surface topological transition in two dimensions (5 pages)	165110
Sergey Slizovskiy, Joseph J. Betouras, Sam T. Carr, and Jorge Quintanilla	

(Continued)

Structural and magnetic characterization of iron oxyselenides $\text{Ce}_2\text{O}_2\text{Fe}_2\text{OSe}_2$ and $\text{Nd}_2\text{O}_2\text{Fe}_2\text{OSe}_2$ (7 pages)	165111
E. E. McCabe, A. S. Wills, L. Chapon, P. Manuel, and J. S. O. Evans	
Numerical evaluation of Green's functions based on the Chebyshev expansion (7 pages)	165112
A. Braun and P. Schmitteckert	
Thermoelectric transport properties of molybdenum from <i>ab initio</i> simulations (9 pages)	165113
Martin French and Thomas R. Mattsson	
Topology of crystalline insulators and superconductors (41 pages)	165114
Ken Shiozaki and Masatoshi Sato	
Thermoelectric properties of Weyl and Dirac semimetals (16 pages)	165115
Rex Lundgren, Pontus Laurell, and Gregory A. Fiete	
Thermopower of few-electron quantum dots with Kondo correlations (10 pages)	165116
LvZhou Ye, Dong Hou, Rulin Wang, Dewen Cao, Xiao Zheng, and YiJing Yan	
Reentrant insulating phases in the integer quantum Hall regime (5 pages)	165117
Talbot Knighton, Zhe Wu, Vinicio Tarquini, Jian Huang, L. N. Pfeiffer, and K. W. West	
Cotunneling spectroscopy and the properties of excited-state spin manifolds of Mn_{12} single molecule magnets (7 pages)	165118
Fatemeh Rostamzadeh Renani and George Kirczenow	
Effect of magnetoelastic coupling on spin-glass behavior in Heisenberg pyrochlore antiferromagnets with bond disorder (21 pages)	165119
Hiroshi Shinaoka, Yusuke Tomita, and Yukitoshi Motome	
Sign structure, electron fractionalization, and emergent gauge description of the Hubbard model (12 pages)	165120
Long Zhang and Zheng-Yu Weng	
Effects of 5 <i>d</i> electrons and spin-orbit interaction on the characteristics of bulk plasmons in lead (9 pages)	165121
X. Zubizarreta, V. M. Silkin, and E. V. Chulkov	
Effect of the iron valence in the two types of layers in $\text{LiFeO}_2\text{Fe}_2\text{Se}_2$ (8 pages)	165122
Christoph Heil, Lilia Boeri, Heinrich Sormann, Wolfgang von der Linden, and Markus Aichhorn	
Theory of the evolution of magnetic order in Fe_{1+y}Te compounds with increasing interstitial iron (13 pages)	165123
Samuel Ducatman, Rafael M. Fernandes, and Natalia B. Perkins	
Collapse of spin gap by Ru-site substitution in the antiferromagnetic Kondo semiconductor $\text{CeRu}_2\text{Al}_{10}$ (6 pages)	165124
H. Tanida, H. Nohara, M. Sera, T. Nishioka, M. Matsumura, and R. Kobayashi	
 Selectively localized Wannier functions (10 pages)	165125
Runzhi Wang, Emanuel A. Lazar, Hyowon Park, Andrew J. Millis, and Chris A. Marianetti	
Insights into the energy transfer mechanism in Ce^{3+} - Yb^{3+} codoped YAG phosphors (7 pages)	165126
D. C. Yu, F. T. Rabouw, W. Q. Boon, T. Kieboom, S. Ye, Q. Y. Zhang, and A. Meijerink	
NMR relaxation in the topological Kondo insulator SmB_6 (9 pages)	165127
P. Schlottmann	

(Continued)

Unified theory for perfect absorption in ultrathin absorptive films with constant tangential electric or magnetic fields (9 pages)	165128
Jie Luo, Sucheng Li, Bo Hou, and Yun Lai	
Dynamics of electrically polarized magnetic monopoles in spin ice (6 pages)	165129
Aranyak Sarkar and Soumik Mukhopadhyay	
Electronic structure, cohesive properties, and magnetism of SrRuO ₃ (11 pages)	165130
Oscar Grånäs, Igor Di Marco, Olle Eriksson, Lars Nordström, and Corina Etz	
Properties of Hartree-Fock solutions of the three-dimensional electron gas (7 pages)	165131
L. Baguet, F. Delyon, B. Bernu, and M. Holzmann	
Correlations of intra- and intermolecular dynamics and structure in liquid <i>para</i> -hydrogen (5 pages)	165132
Kim Hyeon-Deuk and Koji Ando	
Band-edge positions in <i>GW</i> : Effects of starting point and self-consistency (15 pages)	165133
Wei Chen and Alfredo Pasquarello	
Symmetry-protected topological phases, generalized Laughlin argument, and orientifolds (22 pages)	165134
Chang-Tse Hsieh, Olabode Mayodele Sule, Gil Young Cho, Shinsei Ryu, and Robert G. Leigh	
Textured electronic states of the triangular-lattice Hubbard model and Na _x CoO ₂ (6 pages)	165135
Kun Jiang, Sen Zhou, and Ziqiang Wang	
Rashba spin-orbit coupling in the Kane-Mele-Hubbard model (13 pages)	165136
Manuel Laubach, Johannes Reuther, Ronny Thomale, and Stephan Rachel	
Scenario for delocalization in translation-invariant systems (11 pages)	165137
Wojciech De Roeck and François Huveneers	
Asymmetry in band widening and quasiparticle lifetimes in SrVO ₃ : Competition between screened exchange and local correlations from combined <i>GW</i> and dynamical mean-field theory <i>GW</i> + DMFT (24 pages)	165138
Jan M. Tomczak, M. Casula, T. Miyake, and S. Biermann	
Band geometry of fractional topological insulators (7 pages)	165139
Rahul Roy	
Evidence of surface transport and weak antilocalization in a single crystal of the Bi ₂ Te ₂ Se topological insulator (6 pages)	165140
Chandra Shekhar, C. E. Viol Barbosa, Binghai Yan, Siham Ouardi, W. Schnelle, Gerhard H. Fecher, and Claudia Felser	
General behavior of chalcogenides of rare-earth metals in transition to the intermediate valence state under high pressures (5 pages)	165141
O. B. Tsiok, L. G. Khvostantsev, A. V. Golubkov, I. A. Smirnov, and V. V. Brazhkin	
Optoelectronic excitations and photovoltaic effect in strongly correlated materials (7 pages)	165142
John E. Coulter, Efstratios Manousakis, and Adam Gali	
Quantum anomalous Hall phase in (001) double-perovskite monolayers via intersite spin-orbit coupling (8 pages)	165143
Hongbin Zhang, Huaqing Huang, Kristjan Haule, and David Vanderbilt	

(Continued)

Quantum critical metals in $4 - \epsilon$ dimensions (<i>17 pages</i>)	165144
Gonzalo Torroba and Huajia Wang	
Spectral function of the $U \rightarrow \infty$ one-dimensional Hubbard model at finite temperature and the crossover to the spin-incoherent regime (<i>5 pages</i>)	165145
Mohammad Soltanieh-ha and Adrian E. Feiguin	
dc resistivity at the onset of spin density wave order in two-dimensional metals (<i>12 pages</i>)	165146
Aavishkar A. Patel and Subir Sachdev	
Semiconductors I: bulk	
Electronic structure, optical properties, and lattice dynamics of orthorhombic $\text{Cu}_2\text{CdGeS}_4$ and $\text{Cu}_2\text{CdSiS}_4$ semiconductors (<i>9 pages</i>)	165201
Alexander P. Litvinchuk, Volodymyr M. Dzhagan, Volodymyr O. Yukhymchuk, Mykhailo Ya. Valakh, Ivan S. Babichuk, Oleg V. Parasyuk, Lyudmyla V. Piskach, Ovidiu D. Gordan, and Dietrich R. T. Zahn	
Luminescence properties of magnetic polarons in EuTe: Theoretical description and experiments in magnetic fields up to 28 T (<i>9 pages</i>)	165202
A. B. Henriques, F. C. D. Moraes, G. D. Galgano, A. J. Meaney, P. C. M. Christianen, J. C. Maan, E. Abramof, and P. H. O. Rappl	
Resonant state due to Bi in the dilute bismide alloy $\text{GaAs}_{1-x}\text{Bi}_x$ (<i>7 pages</i>)	165203
R. S. Joshya, A. J. Ptak, R. France, A. Mascarenhas, and R. N. Kini	
Evidence for a shallow Cu acceptor in Si from infrared spectroscopy and photoconductivity (<i>4 pages</i>)	165204
S. T. Teklemichael, M. D. McCluskey, G. Buchowicz, O. D. Dubon, and E. E. Haller	
Impact of exact exchange in the description of the electronic structure of organic charge-transfer molecular crystals (<i>6 pages</i>)	165205
Alexandr Fonari, Christopher Sutton, Jean-Luc Brédas, and Veaceslav Coropceanu	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Anisotropic polaron localization and spontaneous symmetry breaking: Comparison of cation-site acceptors in GaN and ZnO (<i>6 pages</i>)	165301
Y. Y. Sun, Tesfaye A. Abteu, Peihong Zhang, and S. B. Zhang	
Microscopic model for intersubband gain from electrically pumped quantum-dot structures (<i>13 pages</i>)	165302
Stephan Michael, Weng W. Chow, and Hans Christian Schneider	
Imaging of double slit interference by scanning gate microscopy (<i>6 pages</i>)	165303
K. Kolasiński, B. Szafran, and M. P. Nowak	
Origin of the nonradiative decay of bound excitons in GaN nanowires (<i>9 pages</i>)	165304
Christian Hauswald, Pierre Corfdir, Johannes K. Zettler, Vladimir M. Kaganer, Karl K. Sabelfeld, Sergio Fernández-Garrido, Timur Flissikowski, Vincent Consonni, Tobias Gotschke, Holger T. Grahn, Lutz Geelhaar, and Oliver Brandt	
Cancelation of confinement effect by spin-orbit coupling in narrow strips of two-dimensional topological insulators (<i>5 pages</i>)	165305
Y. Takagaki	

(Continued)

Geometric and compositional influences on spin-orbit induced circulating currents in nanostructures (20 pages)	165306
J. van Bree, A. Yu. Silov, P. M. Koenraad, and M. E. Flatté	
Cooperative biexciton generation and destructive interference in coupled quantum dots using adiabatic rapid passage (10 pages)	165307
Nicolas Renaud and Ferdinand C. Grozema	
Pseudospin dynamics of exciton-polariton patterns in a coherently driven semiconductor microcavity (8 pages)	165308
Albrecht Werner, Oleg A. Egorov, and Falk Lederer	
Polar correlations and defect-induced ferroelectricity in cryogenic KTaO_3 (10 pages)	165309
Oktay Aktas, Sam Crossley, Michael A. Carpenter, and Ekhard K. H. Salje	
Surface physics, nanoscale physics, low-dimensional systems	
Current enhancement through a time-dependent constriction in fractional topological insulators (6 pages)	165401
G. Dolcetto, L. Vannucci, A. Braggio, R. Raimondi, and M. Sassetti	
Rippling transition from electron-induced condensation of curvature field in graphene (11 pages)	165402
J. González	
Suppression of contact-induced spin dephasing in graphene/MgO/Co spin-valve devices by successive oxygen treatments (11 pages)	165403
F. Volmer, M. Drögeler, E. Maynicke, N. von den Driesch, M. L. Boschen, G. Güntherodt, C. Stampfer, and B. Beschoten	
Graphene quantum dot on boron nitride: Dirac cone replica and Hofstadter butterfly (7 pages)	165404
L. A. Chizhova, F. Libisch, and J. Burgdörfer	
Interaction-induced backscattering in short quantum wires (8 pages)	165405
M.-T. Rieder, T. Micklitz, A. Levchenko, and K. A. Matveev	
Decomposition of coherent and incoherent phonon conduction in superlattices and random multilayers (9 pages)	165406
Yan Wang, Haoxiang Huang, and Xiulin Ruan	
First-principles calculations of energetics and electronic structure for reconstructed $\text{Si}(111)-(5 \times n)\text{-Au}$ surfaces (10 pages)	165407
K. Seino and F. Bechstedt	
☞ Plasmon losses due to electron-phonon scattering: The case of graphene encapsulated in hexagonal boron nitride (14 pages)	165408
Alessandro Principi, Matteo Carrega, Mark B. Lundberg, Achim Woessner, Frank H. L. Koppens, Giovanni Vignale, and Marco Polini	
Tunable large resonant absorption in a midinfrared graphene Salisbury screen (5 pages)	165409
Min Seok Jang (장민석), Victor W. Brar (韦小宝), Michelle C. Sherrott, Josue J. Lopez, Laura Kim (김보영), Seyoon Kim (김세윤), Mansoo Choi (최만수), and Harry A. Atwater	
Absence of Luttinger liquid behavior in Au-Ge wires: A high-resolution scanning tunneling microscopy and spectroscopy study (5 pages)	165410
Jewook Park, Kan Nakatsuji, Tae-Hwan Kim, Sun Kyu Song, Fumio Komori, and Han Woong Yeom	

(Continued)

Distribution of energy dissipated by a driven two-level system (<i>5 pages</i>)	165411
Philip Wollfarth, Alexander Shnirman, and Yasuhiro Utsumi	
Edge engineering of a topological Bi(111) bilayer (<i>8 pages</i>)	165412
Xiao Li (李晓), Haiwen Liu (刘海文), Hua Jiang (江华), Fa Wang (王堡), and Ji Feng (冯济)	
Theory of vibrationally assisted tunneling for hydroxyl monomer flipping on Cu(110) (<i>7 pages</i>)	165413
Alexander Gustafsson, Hiromu Ueba, and Magnus Paulsson	
Vacuum polarization of graphene with a supercritical Coulomb impurity: Low-energy universality and discrete scale invariance (<i>6 pages</i>)	165414
Yusuke Nishida	
Coulomb-driven terahertz-frequency intrinsic current oscillations in a double-barrier tunneling structure (<i>11 pages</i>)	165415
O. Jonasson and I. Knezevic	
Magnetothermopower and magnetoresistance of single Co-Ni/Cu multilayered nanowires (<i>11 pages</i>)	165416
Tim Böhnert, Anna Corinna Niemann, Ann-Kathrin Michel, Svenja Bäßler, Johannes Gooth, Bence G. Tóth, Katalin Neuróhr, László Péter, Imre Bakonyi, Victor Vega, Victor M. Prida, and Kornelius Nielsch	
Scaling and spatial analysis of the dielectric response of cadmium selenide nanowires (<i>6 pages</i>)	165417
Yosuke Kanai and Giancarlo Cicero	
Quantitative determination of a nano-object's atom density without atomic resolution (<i>5 pages</i>)	165418
Christopher Zaum, Jörg Meyer, Karsten Reuter, and Karina Morgenstern	
Direct epitaxial growth of subsurface Co nanoclusters (<i>9 pages</i>)	165419
T. Siahann, O. Kurnosikov, H. J. M. Swagten, and B. Koopmans	
Tuning photoinduced terahertz conductivity in monolayer graphene: Optical-pump terahertz-probe spectroscopy (<i>9 pages</i>)	165420
Srabani Kar, Dipti R. Mohapatra, Eric Freysz, and A. K. Sood	
Molecular dynamics simulation of the growth of Cu nanoclusters from Cu ions in a plasma (<i>6 pages</i>)	165421
Alexey A. Tal, E. Peter Müger, Igor A. Abrikosov, Nils Brenning, Iris Pilch, and Ulf Helmersson	
Real-time dynamics of spin-dependent transport through a double-quantum-dot Aharonov-Bohm interferometer with spin-orbit interaction (<i>16 pages</i>)	165422
Matisse Wei-Yuan Tu, Amnon Aharony, Wei-Min Zhang, and Ora Entin-Wohlman	
Diverse forms of bonding in two-dimensional Si allotropes: Nematic orbitals in the MoS ₂ structure (<i>5 pages</i>)	165423
Florian Gimbert, Chi-Cheng Lee, Rainer Friedlein, Antoine Fleurence, Yukiko Yamada-Takamura, and Taisuke Ozaki	
First-principles real-space study of electronic and optical excitations in rutile TiO ₂ nanocrystals (<i>11 pages</i>)	165424
Linda Hung, Kopinjol Baishya, and Serdar Ögüt	
Intramolecular bonds resolved on a semiconductor surface (<i>8 pages</i>)	165425
Adam Sweetman, Samuel P. Jarvis, Philipp Rahe, Neil R. Champness, Lev Kantorovich, and Philip Moriarty	
Imaging the buried MgO/Ag interface: Formation mechanism of the STM contrast (<i>12 pages</i>)	165426
Andrei Malashevich, Eric I. Altman, and Sohrab Ismail-Beigi	

(Continued)

Readout and dynamics of a qubit built on three quantum dots (12 pages)	165427
Jakub Luczak and Bogdan R. Buřka	
Experimental verification of reciprocity relations in quantum thermoelectric transport (6 pages)	165428
J. Matthews, F. Battista, D. Sánchez, P. Samuelsson, and H. Linke	
Noncollinear magnetic phases and edge states in graphene quantum Hall bars (5 pages)	165429
J. L. Lado and J. Fernández-Rossier	
Roton-maxon spectrum and instability for weakly interacting dipolar excitons in a semiconductor layer (9 pages)	165430
A. K. Fedorov, I. L. Kurbakov, and Yu. E. Lozovik	
Influence of edge and field effects on topological states of germanene nanoribbons from self-consistent calculations (7 pages)	165431
Lars Matthes and Friedhelm Bechstedt	
Electronic structure and magnetic properties of cobalt intercalated in graphene on Ir(111) (10 pages)	165432
H. Vita, St. Böttcher, P. Leicht, K. Horn, A. B. Shick, and F. Máca	
Second-harmonic generation in subwavelength graphene waveguides (5 pages)	165433
Daria Smirnova and Yuri S. Kivshar	
Magnetoresistance induced by rare strong scatterers in a high-mobility two-dimensional electron gas (5 pages)	165434
L. Bockhorn, I. V. Gornyi, D. Schuh, C. Reichl, W. Wegscheider, and R. J. Haug	
Half-integer quantum Hall effect of disordered Dirac fermions at a topological insulator surface (31 pages)	165435
E. J. König, P. M. Ostrovsky, I. V. Protopopov, I. V. Gornyi, I. S. Burmistrov, and A. D. Mirlin	
Hot-electron cooling by acoustic and optical phonons in monolayers of MoS ₂ and other transition-metal dichalcogenides (13 pages)	165436
Kristen Kaasbjerg, K. S. Bhargavi, and S. S. Kubakaddi	
Strain effects on the structural, magnetic, and thermodynamic properties of the Au(001)/Fe(001) interface from first principles (12 pages)	165437
Magali Benoit, Nicolas Combe, Anne Ponchet, Joseph Morillo, and Marie-José Casanove	
Point defects at cleaved Sr _{n+1} Ru _n O _{3n+1} (001) surfaces (6 pages)	165438
Bernhard Stöger, Marcel Hieckel, Florian Mittendorfer, Zhiming Wang, Michael Schmid, Gareth S. Parkinson, David Fobes, Jin Peng, John E. Ortmann, Andreas Limbeck, Zhiqiang Mao, Josef Redinger, and Ulrike Diebold	
Hole-spin dynamics and hole <i>g</i> -factor anisotropy in coupled quantum well systems (7 pages)	165439
C. Gradl, M. Kempf, D. Schuh, D. Bougeard, R. Winkler, C. Schüller, and T. Korn	
Valley- and spin-switch effects in molybdenum disulfide superconducting spin valve (13 pages)	165440
Leyla Majidi and Reza Asgari	
Dynamics of optically injected currents in carbon nanotubes (6 pages)	165441
L. L. Bonilla, M. Alvaro, M. Carretero, and E. Ya. Sherman	
Bulk transport through superconducting hybrid structures in HgTe quantum wells (9 pages)	165442
E. G. Novik, M. Guigou, and P. Recher	

(Continued)

COMMENTS

Comment on “Canonical magnetic insulators with isotropic magnetoelectric coupling” (3 pages).....	167101
J. M. Perez-Mato, Samuel V. Gallego, E. S. Tasci, L. Elcoro, and M. I. Aroyo	
Reply to “Comment on ‘Canonical magnetic insulators with isotropic magnetoelectric coupling’” (1 page).....	167102
Sinisa Coh and David Vanderbilt	
Comment on “Ideal strength and phonon instability in single-layer MoS ₂ ” (3 pages).....	167401
Ryan C. Cooper, Jeffrey W. Kysar, and Chris A. Marianetti	
Reply to “Comment on ‘Ideal strength and phonon instability in single-layer MoS ₂ ’” (3 pages).....	167402
Tianshu Li	