

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
Suite 1NO1
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 80, NUMBER 16

CONTENTS

OCTOBER 2009-15(II)

RAPID COMMUNICATIONS

Electronic structure: wide-band, narrow-band, and strongly correlated systems

- Bulk $5f$ electronic states of the uranium monochalcogenide US as seen via soft x-ray photoemission
(4 pages) 161101(R)
Y. Takeda, T. Okane, T. Ohkochi, Y. Saitoh, H. Yamagami, A. Fujimori, and A. Ochiai
- Distribution of conductance for Anderson insulators: A theory with a single parameter (4 pages) 161102(R)
Andrew Douglas and K. A. Muttalib
- Dynamical mean-field theory of a correlated gap formation in plutonium monochalcogenides (4 pages) 161103(R)
M.-T. Suzuki and P. M. Oppeneer
- Continuous metal-insulator transition of the antiferromagnetic perovskite NaOsO_3 (4 pages) 161104(R)
Y. G. Shi, Y. F. Guo, S. Yu, M. Arai, A. A. Belik, A. Sato, K. Yamaura, E. Takayama-Muromachi,
H. F. Tian, H. X. Yang, J. Q. Li, T. Varga, J. F. Mitchell, and S. Okamoto
- Optical conductivity from cluster dynamical mean-field theory: Formalism and application to high-temperature
superconductors (4 pages) 161105(R)
Nan Lin, Emanuel Gull, and A. J. Millis
- Trapping of surface-plasmon polaritons in a graded Bragg structure: Frequency-dependent spatially separated
localization of the visible spectrum modes (4 pages) 161106(R)
Lin Chen, Guo Ping Wang, Qiaoqiang Gan, and Filbert J. Bartoli

Semiconductors I: bulk

- Magnetic circular dichroism in $\text{Ga}_x\text{Mn}_{1-x}\text{As}$: Theoretical evidence for and against an impurity band
(4 pages) 161201(R)
Marko Turek, Jens Siewert, and Jaroslav Fabian
- Unusual domain-wall motion in ferromagnetic semiconductor films with tetragonal anisotropy (4 pages) 161202(R)
C. Gourdon, V. Jeudy, A. Cēbers, A. Dourlat, Kh. Khazen, and A. Lemaître
- Full counting statistics of avalanche transport: An experiment (4 pages) 161203(R)
J. Gabelli and B. Reulet
- Examining the role of pseudopotentials in exact-exchange-based Kohn-Sham gaps (4 pages) 161204(R)
Adi Makmal, Rickard Armiento, Eberhard Engel, Leeor Kronik, and Stephan Kümmel
- Relevance of core-valence interaction for electronic structure calculations with exact exchange (4 pages) 161205(R)
E. Engel



Copyright 2009 by The American Physical Society



1098-0121(20091015)80:16;1-Z

(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).

☞ Hyperfine interactions and spin transport in ferromagnet-semiconductor heterostructures (<i>4 pages</i>)	161206(R)
M. K. Chan, Q. O. Hu, J. Zhang, T. Kondo, C. J. Palmstrøm, and P. A. Crowell	
☞ Ultrafast photoinduced structure phase transition in antimony single crystals (<i>4 pages</i>)	161207(R)
Daniele Fausti, Oleg V. Misochko, and Paul H. M. van Loosdrecht	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Response of nanocrystalline 3C silicon carbide to heavy-ion irradiation (<i>4 pages</i>)	161301(R)
W. Jiang, H. Wang, I. Kim, I.-T. Bae, G. Li, P. Nachimuthu, Z. Zhu, Y. Zhang, and W. J. Weber	
Emergent and reentrant fractional quantum Hall effect in trilayer systems in a tilted magnetic field (<i>4 pages</i>)	161302(R)
G. M. Gusev, S. Wiedmann, O. E. Raichev, A. K. Bakarov, and J. C. Portal	
Polarization phenomena in resonantly pumped disordered semiconductor microcavities (<i>4 pages</i>)	161303(R)
T. C. H. Liew and I. A. Shelykh	
Terahertz radiation in semiconductor quantum dots driven by gigahertz waves: The role of tailoring the quasienergy spectrum (<i>4 pages</i>)	161304(R)
Suqing Duan, Wei Zhang, Yan Xie, Weidong Chu, and Xian-geng Zhao	
Thermal effects in InP/(Ga,In)P quantum-dot single-photon emitters (<i>4 pages</i>)	161305(R)
A. K. Nowak, E. Gallardo, D. Sarkar, H. P. van der Meulen, J. M. Calleja, J. M. Ripalda, L. González, and Y. González	
☞ Exactly solved model for an electronic Mach-Zehnder interferometer (<i>4 pages</i>)	161306(R)
D. L. Kovrizhin and J. T. Chalker	
☞ In(Ga)As/GaAs quantum dots grown on a (111) surface as ideal sources of entangled photon pairs (<i>4 pages</i>)	161307(R)
Andrei Schliwa, Momme Winkelkemper, Anatol Lochmann, Erik Stock, and Dieter Bimberg	
Mode coupling and evolution in broken-symmetry plasmas (<i>4 pages</i>)	161308(R)
E. Ya. Sherman, R. M. Abrarov, and J. E. Sipe	
Measuring the entanglement between double quantum dot charge qubits (<i>4 pages</i>)	161309(R)
Clive Emary	
Temperature-dependent transport in a sixfold degenerate two-dimensional electron system on a H-Si(111) surface (<i>4 pages</i>)	161310(R)
Robert N. McFarland, Tomasz M. Kott, Luyan Sun, K. Eng, and B. E. Kane	
Local density of states in disordered two-dimensional electron gases at high magnetic field (<i>4 pages</i>)	161311(R)
Thierry Champel and Serge Florens	
Surface physics, nanoscale physics, low-dimensional systems	
Charge transfer and screening effects in polynes encapsulated inside single-wall carbon nanotubes (<i>4 pages</i>)	161401(R)
L. G. Moura, L. M. Malard, M. A. Carneiro, P. Venezuela, Rodrigo B. Capaz, D. Nishide, Y. Achiba, H. Shinohara, and M. A. Pimenta	
Artificial atoms in interacting graphene quantum dots (<i>4 pages</i>)	161402(R)
Wolfgang Häusler and Reinhold Egger	

(Continued)

Universality in size distributions of irreversibly grown epitaxial islands: Kinetic Monte Carlo simulations and the rate equations study (<i>4 pages</i>)	161403(R)
V. I. Tokar and H. Dreyssé	
Atomic configurations and energetics of vacancies in hexagonal boron nitride: First-principles total-energy calculations (<i>4 pages</i>)	161404(R)
Susumu Okada	
Subsurface excitations in a metal (<i>4 pages</i>)	161405(R)
M. P. Ray, R. E. Lake, C. E. Sosolik, L. B. Thomsen, G. Nielsen, I. Chorkendorff, and O. Hansen	
Correlation between charge inhomogeneities and structure in graphene and other electronic crystalline membranes (<i>4 pages</i>)	161406(R)
Doron Gazit	
Intermittency in second-harmonic radiation from plasmonic hot spots on rough silver films (<i>4 pages</i>)	161407(R)
Nicholas J. Borys, Manfred J. Walter, and John M. Lupton	
Non-Fermi-liquid behavior in neutral bilayer graphene (<i>4 pages</i>)	161408(R)
Yafis Barlas and Kun Yang	
Extending the time scale in molecular dynamics simulations: Propagation of ripples in graphene (<i>4 pages</i>)	161409(R)
V. K. Tewary	
Magnetoabsorption study of Landau levels in graphite (<i>4 pages</i>)	161410(R)
K.-C. Chuang, A. M. R. Baker, and R. J. Nicholas	
Optical absorption of diamond nanocrystals from <i>ab initio</i> density-functional calculations (<i>4 pages</i>)	161411(R)
Márton Vörös and Adam Gali	
Generalizing segregation and chemical ordering in bimetallic nanoclusters through atomistic view points (<i>4 pages</i>)	161412(R)
J. A. Reyes-Nava, J. L. Rodríguez-López, and U. Pal	

ARTICLES

Electronic structure: wide-band, narrow-band, and strongly correlated systems

Model for a photoinduced insulator-metal transition in a one-dimensional quarter-filled organic salt: Evidence for a nonadiabatic charge-phonon coupling (<i>6 pages</i>)	165101
J. D. Lee	
Low-energy effective theory of Fermi surface coupled with U(1) gauge field in 2+1 dimensions (<i>13 pages</i>)	165102
Sung-Sik Lee	
¹³ C NMR study on the charge-ordering salt α' -(BEDT-TTF) ₂ IBr ₂ (<i>6 pages</i>)	165103
Shinji Hirose and Atsushi Kawamoto	
Light scattering in a phonon gas (<i>25 pages</i>)	165104
Akitoshi Koreeda, Ryuta Takano, and Seishiro Saikan	
Nonlinear dynamics of spin and charge in spin-Calogero model (<i>18 pages</i>)	165105
Manas Kulkarni, Fabio Franchini, and Alexander G. Abanov	

(Continued)

Variational study of the antiferromagnetic insulating phase of V_2O_3 based on N th order muffin-tin-orbitals (7 pages)	165106
N. B. Perkins, S. Di Matteo, and C. R. Natoli	
☞ Lattice collapse and the magnetic phase diagram of $Sr_{1-x}Ca_xCo_2P_2$ (5 pages)	165107
Shuang Jia, A. J. Williams, P. W. Stephens, and R. J. Cava	
Angular dependence of x-ray absorption spectrum for field-aligned iron-based superconductors (4 pages)	165108
B. C. Chang, Y. B. You, T. J. Shiu, M. F. Tai, H. C. Ku, Y. Y. Hsu, L. Y. Jang, J. F. Lee, Z. Wei, K. Q. Ruan, and X. G. Li	
Calculation of properties of crystalline lithium hydride using correlated wave function theory (7 pages)	165109
S. J. Nolan, M. J. Gillan, D. Alfè, N. L. Allan, and F. R. Manby	
Unconventional metallic conduction in two-dimensional Hubbard-Wigner lattices (9 pages)	165110
S. Fratini and J. Merino	
First-principles calculations of the effect of pressure on the iron-based superconductor LaFeAsO (5 pages)	165111
Hiroki Nakamura and Masahiko Machida	
Orbital-free energy functional for electrons in two dimensions (5 pages)	165112
S. Pittalis and E. Räsänen	
Quantum phase transitions in a charge-coupled Bose-Fermi Anderson model (24 pages)	165113
Mengxing Cheng, Matthew T. Glossop, and Kevin Ingersent	
Electronic phase diagram of the layered cobalt oxide system Li_xCoO_2 ($0.0 \leq x \leq 1.0$) (9 pages)	165114
T. Motohashi, T. Ono, Y. Sugimoto, Y. Masubuchi, S. Kikkawa, R. Kanno, M. Karppinen, and H. Yamauchi	
Nesting between hole and electron pockets in $Ba(Fe_{1-x}Co_x)_2As_2$ ($x=0-0.3$) observed with angle-resolved photoemission (8 pages)	165115
V. Brouet, M. Marsi, B. Mansart, A. Nicolaou, A. Taleb-Ibrahimi, P. Le Fèvre, F. Bertran, F. Rullier-Albenque, A. Forget, and D. Colson	
☞ Multiscale quantum criticality: Pomeranchuk instability in isotropic metals (15 pages)	165116
Mario Zacharias, Peter Wölfle, and Markus Garst	
Variational matrix-product-state approach to quantum impurity models (7 pages)	165117
A. Weichselbaum, F. Verstraete, U. Schollwöck, J. I. Cirac, and Jan von Delft	
Hydrogen occupancy in the RNi_4Mg ($R=Y, La, Ce, \text{ and } Nd$) intermetallic compounds and hydrides (6 pages)	165118
Otto Hahn-Herrera, Andrea Aburto, and Emilio Orgaz	
Nuclear magnetism and electron order in interacting one-dimensional conductors (28 pages)	165119
Bernd Braunecker, Pascal Simon, and Daniel Loss	
Dominant parameters for the critical tunneling current in bilayer exciton condensates (6 pages)	165120
L. Tiemann, Y. Yoon, W. Dietsche, K. von Klitzing, and W. Wegscheider	
Method to construct transferable minimal basis sets for <i>ab initio</i> calculations (7 pages)	165121
Mohan Chen, Wei Fang, G.-Z. Sun, G.-C. Guo, and Lixin He	
☞ Cluster expansion method for multicomponent systems based on optimal selection of structures for density-functional theory calculations (7 pages)	165122
Atsuto Seko, Yukinori Koyama, and Isao Tanaka	

(Continued)

Site-resolved oxygen <i>K</i> -edge ELNES of the layered double perovskite $\text{La}_2\text{CuSnO}_6$ (6 pages)	165123
M. Haruta, H. Kurata, H. Komatsu, Y. Shimakawa, and S. Isoda	
Exact ground states and correlation functions of chain and ladder models of interacting hardcore bosons or spinless fermions (20 pages)	165124
Siew-Ann Cheong and Christopher L. Henley	
Spectral singularities in a non-Hermitian Friedrichs-Fano-Anderson model (13 pages)	165125
Stefano Longhi	
Finite-temperature exact diagonalization cluster dynamical mean-field study of the two-dimensional Hubbard model: Pseudogap, non-Fermi-liquid behavior, and particle-hole asymmetry (18 pages)	165126
Ansgar Liebsch and Ning-Hua Tong	
Effect of surface modes on photon traversal through stop bands of dielectric stacks (5 pages)	165127
Natalia Malkova, Garnett W. Bryant, Sergey Polyakov, and Alan Migdall	
Controlled cavity QED and single-photon emission using a photonic-crystal waveguide cavity system (7 pages)	165128
Peijun Yao and S. Hughes	
Fermionic multiscale entanglement renormalization ansatz (12 pages)	165129
Philippe Corboz and Guifré Vidal	
First-principles studies of a two-dimensional electron gas at the interface in ferroelectric oxide heterostructures (10 pages)	165130
Yong Wang, Manish K. Niranjana, S. S. Jaswal, and Evgeny Y. Tsymbal	
Linear independence of nearest-neighbor valence-bond states on the kagome lattice and construction of $SU(2)$ -invariant spin- $\frac{1}{2}$ Hamiltonian with a Sutherland-Rokhsar-Kivelson quantum liquid ground state (16 pages)	165131
Alexander Seidel	
Doping dependence of the chemical potential and surface electronic structure in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ and $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ using hard x-ray photoemission spectroscopy (16 pages)	165132
Kalobaran Maiti, Jörg Fink, Sanne de Jong, Mihaela Gorgoi, Chengtian Lin, Markus Raichle, Vladimir Hinkov, Michael Lambacher, Andreas Erb, and Mark S. Golden	
Semiconductors I: bulk	
II-VI oxides phase separate whereas the corresponding carbonates order: The stabilizing role of anionic groups (8 pages)	165201
J. A. Chan and Alex Zunger	
Theory of optical conductivity for dilute $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ (17 pages)	165202
Cătălin Pașcu Moca, Gergely Zaránd, and Mona Berciu	
Molecular dynamics simulations of lattice thermal conductivity of bismuth telluride using two-body interatomic potentials (6 pages)	165203
Bo Qiu and Xiulin Ruan	
Microscopic mechanism of the noncrystalline anisotropic magnetoresistance in $(\text{Ga,Mn})\text{As}$ (8 pages)	165204
Karel Výborný, Jan Kučera, Jairo Sinova, A. W. Rushforth, B. L. Gallagher, and T. Jungwirth	
Donor level of interstitial hydrogen in CdTe (6 pages)	165205
Vl. Kolkovsky, V. Kolkovsky, K. Bonde Nielsen, L. Dobaczewski, G. Karczewski, and A. Nylandsted Larsen	

(Continued)

Origin of <i>p</i> -type conduction in single-crystal CuAlO ₂ (8 pages)	165206
J. Tate, H. L. Ju, J. C. Moon, A. Zakutayev, A. P. Richard, J. Russell, and D. H. McIntyre	
Local redistribution of dopants and defects induced by annealing in polycrystalline compound semiconductors (9 pages)	165207
V. Consonni, G. Feuillet, J. P. Barnes, and F. Donatini	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Critical analysis of a variational method used to describe molecular electron transport (7 pages)	165301
Ioan Bâldea and Horst Köppel	
Transverse force generated by an electric field and transverse charge imbalance in spin-orbit coupled systems (10 pages)	165302
Tsung-Wei Chen, Hsiu-Chuan Hsu, and Guang-Yu Guo	
Quantum rings with time-dependent spin-orbit coupling: Spintronic Rabi oscillations and conductance properties (10 pages)	165303
Péter Földi, Mihály G. Benedict, Orsolya Kálmán, and F. M. Peeters	
Thermal boundary resistance predictions from molecular dynamics simulations and theoretical calculations (11 pages)	165304
E. S. Landry and A. J. H. McGaughey	
Electron-electron correlations in molecular tunnel junctions: A diagrammatic approach (8 pages)	165305
Yu. Dahnovsky	
Second harmonic generation from tetragonal centrosymmetric crystals (9 pages)	165306
Shengyuan A. Yang, Xiaoqin Li, Alan D. Bristow, and J. E. Sipe	
Conversion of bound excitons to free excitons by surface acoustic waves (5 pages)	165307
S. Völk, A. Wixforth, D. Reuter, A. D. Wieck, and J. Ebbecke	
Quantum chaos and critical behavior on a chip (7 pages)	165308
Neill Lambert, Yueh-nan Chen, Robert Johansson, and Franco Nori	
Scattering theory for quantum Hall anyons in a saddle point potential (5 pages)	165309
A. Matthews and N. R. Cooper	
Effective time-reversal symmetry breaking and energy spectra of graphene armchair rings (10 pages)	165310
Tianhuan Luo, A. P. Iyengar, H. A. Fertig, and L. Brey	
Adiabatic pumping in a double quantum dot structure with strong spin-orbit interaction (6 pages)	165311
F. Romeo and R. Citro	
Coulomb correlations of charged excitons in semiconductor quantum dots (7 pages)	165312
D. Y. Oberli, M. Byszewski, B. Chalupar, E. Pelucchi, A. Rudra, and E. Kapon	
Rising time of entanglement between scattering spins (6 pages)	165313
Francesco Ciccarello, Mauro Paternostro, G. Massimo Palma, and Michelangelo Zarcone	
Orbital Stark effect and quantum confinement transition of donors in silicon (10 pages)	165314
Rajib Rahman, G. P. Lansbergen, Seung H. Park, J. Verduijn, Gerhard Klimeck, S. Rogge, and Lloyd C. L. Hollenberg	
Magnetic anisotropy of singly Mn-doped InAs/GaAs quantum dots (6 pages)	165315
Olivier Krebs, Emile Benjamin, and Aristide Lemaître	

(Continued)

Numerical study of the topological Anderson insulator in HgTe/CdTe quantum wells (7 pages)	165316
Hua Jiang, Lei Wang, Qing-feng Sun, and X. C. Xie	
Spin relaxation of conduction electrons in (110)-grown quantum wells: A microscopic theory (5 pages)	165317
S. A. Tarasenko	
Multidimensional Fourier spectroscopy of semiconductors. I. Nonequilibrium Green function approach (29 pages)	165318
Kuljit S. Virk and J. E. Sipe	
Multidimensional Fourier spectroscopy of semiconductors. II. Decoherence effects (28 pages)	165319
Kuljit S. Virk and J. E. Sipe	
Spin edge states: An exact solution and oscillations of the spin current (5 pages)	165320
V. L. Grigoryan, A. Matos Abiague, and S. M. Badalyan	
Electron emission from conduction band of diamond with negative electron affinity (5 pages)	165321
H. Yamaguchi, T. Masuzawa, S. Nozue, Y. Kudo, I. Saito, J. Koe, M. Kudo, T. Yamada, Y. Takakuwa, and K. Okano	
Nanometer-resolution measurement and modeling of lateral variations of the effective work function at the bilayer Pt/Al/SiO ₂ interface (6 pages)	165322
W. Cai, K.-B. Park, and J. P. Pelz	
Thermal stability of ultrathin ZrO ₂ films and structure determination of ZrSi ₂ islands on Si(100) (7 pages)	165323
Frank Schönbohm, Christian Rolf Flüchter, Daniel Weier, Tobias Lühr, Ulf Berges, Sven Döring, and Carsten Westphal	
Bidentate chemisorption of acetic acid on a Si(001)-(2 × 1) surface: Experimental and theoretical investigations (5 pages)	165324
Masaru Shimomura, Takenori K. Kawaguchi, Yasuo Fukuda, Kenji Murakami, A. Z. AlZahrani, and G. P. Srivastava	
Anisotropic optical spin Hall effect in semiconductor microcavities (6 pages)	165325
A. Amo, T. C. H. Liew, C. Adrados, E. Giacobino, A. V. Kavokin, and A. Bramati	
Doping efficiency in freestanding silicon nanocrystals from the gas phase: Phosphorus incorporation and defect-induced compensation (10 pages)	165326
A. R. Stegner, R. N. Pereira, R. Lechner, K. Klein, H. Wiggers, M. Stutzmann, and M. S. Brandt	
Mechanisms of the microwave photoconductivity in two-dimensional electron systems with mixed disorder (9 pages)	165327
I. A. Dmitriev, M. Khodas, A. D. Mirlin, D. G. Polyakov, and M. G. Vavilov	
Bloch electron spontaneous emission from a single energy band in a classical ac field (15 pages)	165328
V. N. Sokolov, G. J. Iafrate, and J. B. Krieger	
Phase diagram of a spinor exciton-polariton condensate in a disordered microcavity in the presence of a magnetic field (5 pages)	165329
D. D. Solnyshkov, I. A. Shelykh, and G. Malpuech	
Quantum Hall quasielectron operators in conformal field theory (22 pages)	165330
T. H. Hansson, M. Hermanns, and S. Viefers	
Microwave-assisted transport in a single-donor silicon quantum dot (6 pages)	165331
Enrico Prati, Rossella Latempa, and Marco Fanciulli	

(Continued)

Para-ortho transition of artificial H_2 molecule in lateral quantum dots doped with magnetic impurities (5 pages)	165332
Ramin M. Abolfath	
Negative tunnel magnetoresistance and differential conductance in transport through double quantum dots (11 pages)	165333
Piotr Trocha, Ireneusz Weymann, and Józef Barnaś	
Role of segregation in InAs/GaAs quantum dot structures capped with a GaAsSb strain-reduction layer (12 pages)	165334
V. Haxha, I. Drouzas, J. M. Ulloa, M. Bozkurt, P. M. Koenraad, D. J. Mowbray, H. Y. Liu, M. J. Steer, M. Hopkinson, and M. A. Migliorato	
Surface physics, nanoscale physics, low-dimensional systems	
Localized and delocalized surface-plasmon-mediated light tunneling through monolayer hexagonal-close-packed metallic nanoshells (8 pages)	165401
Chaojun Tang, Zhenlin Wang, Weiyi Zhang, Shining Zhu, Naiben Ming, Gang Sun, and Ping Sheng	
Influence of the quantum confined Stark effect on photoluminescence spectra of PbTe nanodots embedded in a CdTe matrix (5 pages)	165402
R. Leitsmann and F. Bechstedt	
Compositional dependence of the bowing parameter for highly strained InGaAs/GaAs quantum wells (11 pages)	165403
T. K. Sharma, R. Jangir, S. Porwal, R. Kumar, Tapas Ganguli, M. Zorn, U. Zeimer, F. Bugge, M. Weyers, and S. M. Oak	
☞ Imaging the atomic orbitals of carbon atomic chains with field-emission electron microscopy (7 pages)	165404
I. M. Mikhailovskij, E. V. Sadanov, T. I. Mazilova, V. A. Ksenofontov, and O. A. Velicodnaja	
Multiband description of the optical properties of zincblende nitride quantum dots (9 pages)	165405
Stefan Schulz, Daniel Mourad, and Gerd Czycholl	
☞ Determination of the gate-tunable band gap and tight-binding parameters in bilayer graphene using infrared spectroscopy (12 pages)	165406
A. B. Kuzmenko, I. Crassee, D. van der Marel, P. Blake, and K. S. Novoselov	
Geometric and electronic structure of graphene bilayer edges (7 pages)	165407
Ji Feng, Liang Qi, Jian Yu Huang, and Ju Li	
Magnetic ordering of nanocluster ensembles promoted by electronic substrate-mediated interaction: <i>Ab initio</i> and kinetic Monte Carlo studies (7 pages)	165408
P. A. Ignatiev, N. N. Negulyaev, A. S. Smirnov, L. Niebergall, A. M. Saletsky, and V. S. Stepanyuk	
Trigonal warping and Berry's phase $N\pi$ in ABC-stacked multilayer graphene (8 pages)	165409
Mikito Koshino and Edward McCann	
Localized collective excitations in doped graphene in strong magnetic fields (5 pages)	165410
Andrea M. Fischer, Alexander B. Dzyubenko, and Rudolf A. Römer	
Green's function method for elimination of the spurious multipole interaction in the surface/interface slab model (7 pages)	165411
Ikutaro Hamada, Minoru Otani, Osamu Sugino, and Yoshitada Morikawa	

(Continued)

13-atom metallic clusters studied by density functional theory: Dependence on exchange-correlation approximations and pseudopotentials (10 pages)	165412
J. P. Chou, H. Y. T. Chen, C. R. Hsing, C. M. Chang, C. Cheng, and C. M. Wei	
Electron-electron interactions and doping dependence of the two-phonon Raman intensity in graphene (10 pages)	165413
D. M. Basko, S. Piscanec, and A. C. Ferrari	
Dispersion interactions between optically anisotropic cylinders at all separations: Retardation effects for insulating and semiconducting single-wall carbon nanotubes (10 pages)	165414
A. Šiber, R. F. Rajter, R. H. French, W. Y. Ching, V. A. Parsegian, and R. Podgornik	
Interfacial resistive oxide switch induced by reversible modification of defect structures (7 pages)	165415
S. Tsui, Y. Y. Xue, N. Das, Y. Q. Wang, and C. W. Chu	
Revivals, classical periodicity, and zitterbewegung of electron currents in monolayer graphene (5 pages)	165416
E. Romera and F. de los Santos	
High-field electrothermal transport in metallic carbon nanotubes (10 pages)	165417
Marcelo A. Kuroda and Jean-Pierre Leburton	
Exciton localization in polymers with static disorder (12 pages)	165418
William Barford and David Trembath	
Deconvolution of the electronic density of states of tip and sample from scanning tunneling spectroscopy data: Proof of principle (6 pages)	165419
B. Koslowski, H. Pfeifer, and P. Ziemann	
Classical theory for asymmetric in-plane atom surface scattering (15 pages)	165420
Eli Pollak, Jeremy M. Moix, and Salvador Miret-Artés	
☞ Sequential vortex hopping in an array of artificial pinning centers (7 pages)	165421
J. C. Keay, P. R. Larson, K. L. Hobbs, M. B. Johnson, J. R. Kirtley, O. M. Auslaender, and K. A. Moler	
Excitation and detection of surface acoustic phonon modes in Au/Al ₂ O ₃ multilayers (6 pages)	165422
A. Halabica, S. T. Pantelides, R. F. Haglund, Jr., R. H. Magruder, III, and A. Meldrum	
Thermoelectric power of Dirac fermions in graphene (6 pages)	165423
Xin-Zhong Yan, Yousef Romiah, and C. S. Ting	
1/N expansion in correlated graphene (7 pages)	165424
Valeri N. Kotov, Bruno Uchoa, and A. H. Castro Neto	
Structure of quantum dots as seen by excitonic spectroscopy versus structural characterization: Using theory to close the loop (7 pages)	165425
V. Mlinar, M. Bozkurt, J. M. Ulloa, M. Ediger, G. Bester, A. Badolato, P. M. Koenraad, R. J. Warburton, and A. Zunger	
Magnetotransport in iodine-doped single-walled carbon nanotubes (6 pages)	165426
Sejung Ahn, Yookyung Kim, Youngwoo Nam, Honam Yoo, Jihyun Park, Yungwoo Park, Zhiyong Wang, Zujin Shi, and Zhaoxia Jin	
Modeling of an ultrahigh-frequency resonator based on the relative vibrations of carbon nanotubes (8 pages)	165427
Elena Bichoutskaia, Andrei M. Popov, Yuriy E. Lozovik, Olga V. Ershova, Irina V. Lebedeva, and Andrei A. Knizhnik	

(Continued)

Spatially inhomogeneous inelastic electron tunneling in oxygen-ethylene complexes on Ag(110) resolved with a scanning tunneling microscope (5 pages)	165428
J. R. Hahn and W. Ho	
Supercritical Coulomb center and excitonic instability in graphene (14 pages)	165429
O. V. Gamayun, E. V. Gorbar, and V. P. Gusynin	
Strain and electric field modulation of the electronic structure of bilayer graphene (7 pages)	165430
B. R. K. Nanda and S. Satpathy	
Holey metal films: From extraordinary transmission to negative-index behavior (8 pages)	165431
A. Mary, Sergio G. Rodrigo, L. Martín-Moreno, and F. J. García-Vidal	
First-principles investigations of the dielectric properties of polypropylene/metal-oxide interfaces (11 pages)	165432
Liping Yu, V. Ranjan, M. Buongiorno Nardelli, and J. Bernholc	

COMMENTS

Comment on “Band structure engineering of graphene by strain: First-principles calculations” (3 pages)	167401
M. Farjam and H. Rafii-Tabar	
Reply to “Comment on ‘Band structure engineering of graphene by strain: First-principles calculations’ ” (2 pages)	167402
Gui Gui, Jin Li, and Jianxin Zhong	

ERRATA

Publisher’s Note: Optical properties of pseudobinary GeTe, Ge ₂ Sb ₂ Te ₅ , GeSb ₂ Te ₄ , GeSb ₄ Te ₇ , and Sb ₂ Te ₃ from ellipsometry and density functional theory [Phys. Rev. B 80 , 115209 (2009)] (1 page)	169901(E)
Jun-Woo Park, Seung Hwan Eom, Hosun Lee, Juarez L. F. Da Silva, Youn-Seon Kang, Tae-Yon Lee, and Yoon Ho Khang	
Publisher’s Note: Long-range Coulomb interactions and nanoscale electronic inhomogeneities in correlated oxides [Phys. Rev. B 80 , 125121 (2009)] (1 page)	169902(E)
Vijay B. Shenoy, Tribikram Gupta, H. R. Krishnamurthy, and T. V. Ramakrishnan	
Publisher’s Note: Nonlinear dynamics of spin and charge in spin-Calogero model [Phys. Rev. B 80 , 165105 (2009)] (1 page)	169903(E)
Manas Kulkarni, Fabio Franchini, and Alexander G. Abanov	
Erratum: Family of boron fullerenes: General constructing schemes, electron counting rule, and <i>ab initio</i> calculations [Phys. Rev. B 78 , 201401 (2008)] (1 page)	169904(E)
Qing-Bo Yan, Xian-Lei Sheng, Qing-Rong Zheng, Li-Zhi Zhang, and Gang Su	
Publisher’s Note: Numerical studies of variable-range hopping in one-dimensional systems [Phys. Rev. B 80 , 155435 (2009)] (1 page)	169905(E)
A. S. Rodin and M. M. Fogler	
Publisher’s Note: Localized collective excitations in doped graphene in strong magnetic fields [Phys. Rev. B 80 , 165410 (2009)] (1 page)	169906(E)
Andrea M. Fischer, Alexander B. Dzyubenko, and Rudolf A. Römer	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 80, NUMBER 16

OCTOBER 2009-15(II)

Publisher's Note: Continuous metal-insulator transition of the antiferromagnetic perovskite NaOsO ₃ [Phys. Rev. B 80 , 161104(R) (2009)] (<i>1 page</i>)	169907(E)
Y. G. Shi, Y. F. Guo, S. Yu, M. Arai, A. A. Belik, A. Sato, K. Yamaura, E. Takayama-Muromachi, H. F. Tian, H. X. Yang, J. Q. Li, T. Varga, J. F. Mitchell, and S. Okamoto	