

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 79, NUMBER 12

CONTENTS

MARCH 2009-15(II)

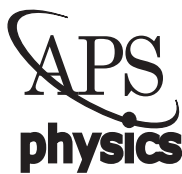
RAPID COMMUNICATIONS

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

- Direct observation of a repeatable change in electronic states with applied electric voltage pulses in the metal-insulator-metal structure (*4 pages*) 121101(R)
K. Azumi, K. Aoyama, S. Asanuma, Y. Uesu, and T. Katsufuji
- Optimal broadening of finite energy spectra in the numerical renormalization group: Application to dissipative dynamics in two-level systems (*4 pages*) 121102(R)
Axel Freyn and Serge Florens
- Insulating behavior with spin and charge order in the ionic Hubbard model (*4 pages*) 121103(R)
Krzysztof Byczuk, Michael Sekania, Walter Hofstetter, and Arno P. Kampf
- Negative refractive index due to chirality (*4 pages*) 121104(R)
Jiangfeng Zhou, Jianfeng Dong, Bingnan Wang, Thomas Koschny, Maria Kafesaki, and Costas M. Soukoulis

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

- Universal scaling in nonequilibrium transport through an Anderson impurity (*4 pages*) 121301(R)
Julián Rincón, A. A. Aligia, and K. Hallberg
- Observation of the orbital circular photogalvanic effect (*4 pages*) 121302(R)
P. Olbrich, S. A. Tarasenko, C. Reitmaier, J. Karch, D. Plohmann, Z. D. Kvon, and S. D. Ganichev
- Magneto-optical spectroscopy of excitons and trions in charge-tunable quantum dots (*4 pages*) 121303(R)
H. Sanada, T. Sogawa, H. Gotoh, Y. Tokura, H. Yamaguchi, H. Nakano, and H. Kamada
- Detector backaction on the self-consistent bound state in quantum point contacts (*4 pages*) 121304(R)
Y. Yoon, M.-G. Kang, T. Morimoto (森本崇弘), L. Mourokh, N. Aoki (青木伸之), J. L. Reno, J. P. Bird, and Y. Ochiai (落合勇一)
- Electronic exchange in quantum rings: Beyond the local-density approximation (*4 pages*) 121305(R)
E. Räsänen, S. Pittalis, C. R. Proetto, and E. K. U. Gross
- Dynamics of coupled spins in quantum dots with strong spin-orbit interaction (*4 pages*) 121306(R)
A. Pfund, I. Shorubalko, K. Ensslin, and R. Leturcq
- Rules of peak multiplicity and peak alignment in multiexcitonic spectra of (In,Ga)As quantum dots (*4 pages*) 121307(R)
Vladan Mlinar, Alberto Franceschetti, and Alex Zunger



Copyright 2009 by The American Physical Society



1098-0121(20090315)79:12;1-D

(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).

Optical anisotropy in [0001]-oriented $\text{Al}_x\text{Ga}_{1-x}\text{N}/\text{AlN}$ quantum wells ($x > 0.69$) (4 pages)	121308(R)
R. G. Banal, M. Funato, and Y. Kawakami	
☞ Spatially resolved low-frequency noise measured by atomic force microscopy (4 pages)	121309(R)
Lynda Cockins, Yoichi Miyahara, and Peter Grutter	
☞ Antiphased cyclotron-magnetoplasma mode in a quantum Hall system (4 pages)	121310(R)
L. V. Kulik, S. Dickmann, I. K. Drozdov, A. S. Zhuravlev, V. E. Kirpichev, I. V. Kukushkin, S. Schmult, and W. Dietsche	
Magnetotransport properties of individual InAs nanowires (4 pages)	121311(R)
Sajal Dhara, Hari S. Solanki, Vibhor Singh, Arjun Narayanan, Prajakta Chaudhari, Mahesh Gokhale, Arnab Bhattacharya, and Mandar M. Deshmukh	
Surface physics, nanoscale physics, low-dimensional systems	
☞ Micrometer-scale band mapping of single silver islands in real and reciprocal space (4 pages)	121401(R)
Y. Fujikawa, T. Sakurai, and R. M. Tromp	
Dynamics of Ag clusters on complex surfaces: Molecular dynamics simulations (4 pages)	121402(R)
S. Alkis, J. L. Krause, J. N. Fry, and H.-P. Cheng	
Superstructure in the termination of CoO(111) surfaces: Low-energy electron diffraction and scanning tunneling microscopy (4 pages)	121403(R)
W. Meyer, K. Biedermann, M. Gubo, L. Hammer, and K. Heinz	
Possible origins of defect-induced magnetic ordering in carbon-irradiated graphite (4 pages)	121404(R)
Hosik Lee (이호식), Yoshiyuki Miyamoto (宮本良之), and Jaejun Yu	

ARTICLES

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

Infrared spectra of the low-dimensional quantum magnet $\text{SrCu}_2(\text{BO}_3)_2$: Measurements and <i>ab initio</i> calculations (12 pages)	125101
C. C. Homes, S. V. Dordevic, A. Gozar, G. Blumberg, T. R��m, D. H��vonen, U. Nagel, A. D. LaForge, D. N. Basov, and H. Kageyama	
Glassy states in fermionic systems with strong disorder and interactions (8 pages)	125102
David J. Schwab and Sudip Chakravarty	
☞ Tailoring surfaces of one-dimensional magnetophotonic crystals: Optical Tamm state and Faraday rotation (5 pages)	125103
T. Goto, A. V. Baryshev, M. Inoue, A. V. Dorofeenko, A. M. Merzlikin, A. P. Vinogradov, A. A. Lisiansky, and A. B. Granovsky	
Design, theory, and measurement of a polarization-insensitive absorber for terahertz imaging (6 pages)	125104
N. I. Landy, C. M. Bingham, T. Tyler, N. Jokerst, D. R. Smith, and W. J. Padilla	
Dielectric response to the low-temperature magnetic defect structure and spin state transition in polycrystalline LaCoO_3 (8 pages)	125105
Rainer Schmidt, J. Wu, C. Leighton, and I. Terry	
Trial wave functions for $\nu = \frac{1}{2} + \frac{1}{2}$ quantum Hall bilayers (23 pages)	125106
Gunnar M��ller, Steven H. Simon, and Edward H. Rezayi	

(Continued)

Vanishing gap in LiF for electronic excitations by slow antiprotons (8 pages)	125107
Beate Solleder, Ludger Wirtz, and Joachim Burgdörfer	
Evolution of the electronic structure in partially filled skutterudites: $\text{Ca}_x\text{Co}_4\text{Sb}_{12}$ studied using NMR (6 pages)	125108
C. S. Lue and S. C. Chen	
Using Kohn-Sham density functional theory to describe charged excitations in finite systems (9 pages)	125109
Héctor Mera and Kurt Stokbro	
Nonequilibrium critical behavior for electron tunneling through quantum dots in an Aharonov-Bohm circuit (16 pages)	125110
Eran Sela and Ian Affleck	
Fermi surface dichotomy in systems with fluctuating order (11 pages)	125111
M. Grilli, G. Seibold, A. Di Ciolo, and J. Lorenzana	
Temperature-dependent Fermi surface of 2H-TaSe_2 driven by competing density wave order fluctuations (5 pages)	125112
D. S. Inosov, D. V. Evtushinsky, V. B. Zabolotnyy, A. A. Kordyuk, B. Büchner, R. Follath, H. Berger, and S. V. Borisenko	
Atomic, electronic, and ferroelectric properties of manganite RMnO_3 ($R=\text{Ho, Er, Tm, Lu}$) in hexagonal and orthorhombic phases (10 pages)	125113
Chung-Yuan Ren	
Electronic and magnetic structure of RScO_3 ($R=\text{Sm, Gd, Dy}$) from x-ray spectroscopies and first-principles calculations (9 pages)	125114
M. Raekers, K. Kuepper, S. Bartkowski, M. Prinz, A. V. Postnikov, K. Potzger, S. Zhou, A. Arulraj, N. Stüßer, R. Uecker, W. L. Yang, and M. Neumann	
Renormalized ϕ^6 model for quantum phase transitions in systems of itinerant fermions (12 pages)	125115
P. Jakubczyk	
Evidence for the formation of a Mott state in potassium-intercalated pentacene (8 pages)	125116
Monica F. Craciun, Gianluca Giovannetti, Sven Rogge, Geert Brocks, Alberto F. Morpurgo, and Jeroen van den Brink	
First-principles study of the optical properties of $\text{Mg}_x\text{Ti}_{1-x}\text{H}_2$ (8 pages)	125117
Michiel J. van Setten, Süleyman Er, Geert Brocks, Robert A. de Groot, and Gilles A. de Wijs	
Coupling-dependent rate of energy transfer from photoexcited Mott insulators to lattice vibrations (6 pages)	125118
Kenji Yonemitsu and Nobuya Maeshima	
Effective pathway of charge transfer in DNA duplex (5 pages)	125119
Seongjin Kim, Juyeon Yi, and Sun-Yong Hwang	
Optical conductivity in the t - J Holstein model (6 pages)	125120
L. Vidmar, J. Bonča, and S. Maekawa	
Kondo lattice effects and the collapse of lattice coherence in $\text{Yb}_{1-x}\text{Lu}_x\text{B}_{12}$ studied by hard x-ray photoelectron spectroscopy (8 pages)	125121
J. Yamaguchi, A. Sekiyama, S. Imada, H. Fujiwara, M. Yano, T. Miyamachi, G. Funabashi, M. Obara, A. Higashiya, K. Tamasaku, M. Yabashi, T. Ishikawa, F. Iga, T. Takabatake, and S. Suga	

(Continued)

Elastic properties and electrostructural correlations in ternary scandium-based cubic inverse perovskites: A first-principles study (9 pages)	125122
Maurizio Mattesini, Martin Magnuson, Ferenc Tasnádi, Carina Höglund, Igor A. Abrikosov, and Lars Hultman	
Majority-spin nonquasiparticle states in half-metallic ferrimagnet Mn ₂ VAl (5 pages)	125123
L. Chioncel, E. Arrigoni, M. I. Katsnelson, and A. I. Lichtenstein	
First-principles study for low-spin LaCoO ₃ with a structurally consistent Hubbard <i>U</i> (9 pages)	125124
Han Hsu, Koichiro Umemoto, Matteo Cococcioni, and Renata Wentzcovitch	
Finite-temperature semimetal-insulator transition on the honeycomb lattice (6 pages)	125125
Minh-Tien Tran and Kazuhiko Kuroki	
Spontaneous polarization and piezoelectricity in polar molecular crystals (6 pages)	125126
Ivo Borriello, Giovanni Cantele, Domenico Ninno, and Giuseppe Iadonisi	
Semiconductors I: bulk	
Electronic structure and magnetic properties of monoclinic β -Cu ₂ V ₂ O ₇ : A GGA+ <i>U</i> study (6 pages)	125201
Masatomo Yashima and Ryosuke O. Suzuki	
Microscopic picture of Co clustering in ZnO (6 pages)	125202
Diana Iușan, Mukul Kabir, Oscar Grânäs, Olle Eriksson, and Biplab Sanyal	
Hall-effect and resistivity measurements in CdTe and ZnTe at high pressure: Electronic structure of impurities in the zinc-blende phase and the semimetallic or metallic character of the high-pressure phases (6 pages)	125203
D. Errandonea, A. Segura, D. Martínez-García, and V. Muñoz-San Jose	
Room-temperature ferromagnetism in Li-doped <i>p</i> -type luminescent ZnO nanorods (7 pages)	125204
Santa Chawla, K. Jayanthi, and R. K. Kotnala	
Role of H ₂ O in the thermal annealing of the E' _γ center in amorphous silicon dioxide (8 pages)	125205
Laura Nuccio, Simonpietro Agnello, and Roberto Boscaino	
Electron-spin relaxation in bulk III-V semiconductors from a fully microscopic kinetic spin Bloch equation approach (21 pages)	125206
J. H. Jiang and M. W. Wu	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Torque and conventional spin Hall currents in two-dimensional spin-orbit coupled systems: Universal relation and hyperselection rule (10 pages)	125301
Tsung-Wei Chen and Guang-Yu Guo	
Experimental observation of strong light-matter coupling in ZnO microcavities: Influence of large excitonic absorption (5 pages)	125302
F. Médard, J. Zuniga-Perez, P. Disseix, M. Mihailovic, J. Leymarie, A. Vasson, F. Semond, E. Frayssinet, J. C. Moreno, M. Leroux, S. Faure, and T. Guillet	
Atomic processes during Cl supersaturation etching of Si(100)-(2×1) (5 pages)	125303
C. M. Aldao, Abhishek Agrawal, R. E. Butera, and J. H. Weaver	
Adsorption of atomic and molecular oxygen on 3C-SiC(111) and ($\bar{1}\bar{1}\bar{1}$) surfaces: A first-principles study (15 pages)	125304
Junjie Wang, Litong Zhang, Qingfeng Zeng, Gérard L. Vignoles, Laifei Cheng, and Alain Guette	

(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).

Extended Frenkel pairs and band alignment at metal-oxide interfaces (<i>8 pages</i>)	125305
O. Sharia, K. Tse, J. Robertson, and Alexander A. Demkov	
Fine structure and selection rules for excitonic transitions in silicon nanostructures (<i>5 pages</i>)	125306
M. Dovrat, Y. Shalibo, N. Arad, I. Popov, S.-T. Lee, and A. Sa'ar	
Transmission phase of quantum dots: Testing the role of population switching (<i>4 pages</i>)	125307
Moshe Goldstein, Richard Berkovits, Yuval Gefen, and Hans A. Weidenmüller	
Exciton-exciton interaction and biexciton formation in bilayer systems (<i>6 pages</i>)	125308
R. M. Lee, N. D. Drummond, and R. J. Needs	
Comparative study of clean and Bi-induced (2×4) reconstruction on the InP(001) surface (<i>11 pages</i>)	125309
A. Z. AlZahrani and G. P. Srivastava	
Semiclassical path integral approach for spin relaxations in narrow wires (<i>8 pages</i>)	125310
Cheng-Hung Chang, Jengjan Tsai, Hui-Fen Lo, and A. G. Mal'shukov	
Probing the excitation spectrum of polariton condensates (<i>6 pages</i>)	125311
Michiel Wouters and Iacopo Carusotto	
Interference effects in transport across a single incompressible strip at the edge of the fractional quantum Hall system (<i>7 pages</i>)	125312
E. V. Deviatov, B. Marquardt, A. Lorke, G. Biasiol, and L. Sorba	
Vertical distribution of nitrogen-vacancy centers in diamond formed by ion implantation and annealing (<i>8 pages</i>)	125313
Charles Santori, Paul E. Barclay, Kai-Mei C. Fu, and Raymond G. Beausoleil	
Interplay between weak localization of exciton-polaritons and the optical spin Hall effect (<i>5 pages</i>)	125314
T. C. H. Liew, C. Leyder, A. V. Kavokin, A. Amo, J. Lefrère, E. Giacobino, and A. Bramati	
Quantum Monte Carlo study of few-electron concentric double quantum rings (<i>8 pages</i>)	125315
Leonardo Colletti, Francesc Malet, Marti Pi, and Francesco Pederiva	
Hole-hole and electron-hole exchange interactions in single InAs/GaAs quantum dots (<i>6 pages</i>)	125316
T. Warming, E. Siebert, A. Schliwa, E. Stock, R. Zimmermann, and D. Bimberg	
Non-Markovian qubit dynamics in the presence of $1/f$ noise (<i>6 pages</i>)	125317
Guido Burkard	
Voltage-controlled nuclear polarization switching in a single $\text{In}_x\text{Ga}_{1-x}\text{As}$ quantum dot (<i>5 pages</i>)	125318
M. N. Makhonin, J. Skiba-Szymanska, M. S. Skolnick, H.-Y. Liu, M. Hopkinson, and A. I. Tartakovskii	
Localized magnetic states in Rashba dots (<i>7 pages</i>)	125319
Mircea Crisan, David Sánchez, Rosa López, Llorenç Serra, and Ioan Grosu	
Quantum Hall effect in a high-mobility two-dimensional electron gas on the surface of a cylinder (<i>7 pages</i>)	125320
K.-J. Friedland, A. Siddiki, R. Hey, H. Kostial, A. Riedel, and D. K. Maude	
Magnetic phase diagram of $\nu=2$ quantum Hall systems (<i>15 pages</i>)	125321
Kanako Yoshizawa and Kazuo Takayanagi	
Universal optical response of Si-Si bonds and its evolution from nanoparticles to bulk crystals (<i>6 pages</i>)	125322
J. C. Idrobo, A. Halabica, R. H. Magruder, III, R. F. Haglund, Jr., S. J. Pennycook, and S. T. Pantelides	
Amorphous nature of small CdS nanoparticles: Molecular dynamics simulations (<i>8 pages</i>)	125323
Chad E. Junkermeier, James P. Lewis, and Garnett W. Bryant	

(Continued)

Coherent diffraction imaging of a single epitaxial InAs nanowire using a focused x-ray beam (5 pages)	125324
A. Diaz, C. Mocuta, J. Stangl, B. Mandl, C. David, J. Vila-Comamala, V. Chamard, T. H. Metzger, and G. Bauer	
Anisotropic enhancement of piezoelectricity in the optical properties of laterally coupled InAs/GaAs self-assembled quantum dots (16 pages)	125325
Pilkung Moon, Euijoon Yoon, Weidong Sheng, and Jean-Pierre Leburton	
Electronic and phonon properties of BX(110) ($X=P, As, \text{ and } Sb$) and BeY(110) ($Y=S, Se, \text{ and } Te$) surfaces (13 pages)	125326
S. Bağcı, S. Duman, H. M. Tütüncü, and G. P. Srivastava	
Second hidden triplet-singlet crossover of charged excitons in n -doped (Cd,Mn)Te/(Cd,Mg)Te in ultra-high magnetic fields (7 pages)	125327
Y. Hirayama, E. Kojima, S. Takeyama, G. Karczewski, T. Wojtowicz, and J. Kossut	
Spectral and spatial transfer and diffusion of excitons in multiple quantum dot structures (14 pages)	125328
S. K. Lyo	
Atomistic pseudopotential calculations of thickness-fluctuation GaAs quantum dots (15 pages)	125329
Jun-Wei Luo, Gabriel Bester, and Alex Zunger	
Inversion-asymmetry-induced spin splitting observed in the quantum oscillatory magnetization of a two-dimensional electron system (9 pages)	125330
M. A. Wilde, D. Reuter, Ch. Heyn, A. D. Wieck, and D. Grundler	
Surface physics, nanoscale physics, low-dimensional systems	
Quantum site percolation on triangular lattice and the integer quantum Hall effect (9 pages)	125401
V. V. Mkhitarian and M. E. Raikh	
Moiré image patterns on double-walled carbon nanotubes observed by scanning tunneling microscopy (5 pages)	125402
Nobuyuki Fukui, Yuji Suwa, Hiromichi Yoshida, Toshiki Sugai, Seiji Heike, Masaaki Fujimori, Yasuhiko Terada, Tomihiro Hashizume, and Hisanori Shinohara	
Interplay between interference and Coulomb interaction in the ferromagnetic Anderson model with applied magnetic field (12 pages)	125403
Jonas Nyvold Pedersen, Dan Bohr, Andreas Wacker, Tomáš Novotný, Peter Schmitteckert, and Karsten Flensberg	
Activation and control of organolanthanide synthesis by supersonic molecular beams: Erbium-porphyrin test case (9 pages)	125404
Marco Nardi, Roberto Verucchi, Riccardo Tubino, and Salvatore Iannotta	
X-ray reflectometry characterization of porous silicon films prepared by a glancing-angle deposition method (8 pages)	125405
S. Asgharizadeh, M. Sutton, K. Robbie, and T. Brown	
Size-dependent elasticity of nanocrystalline titania (8 pages)	125406
Bin Chen, Hengzhong Zhang, K. A. Dunphy-Guzman, D. Spagnoli, M. B. Kruger, D. V. S. Muthu, M. Kunz, Sirine Fakra, J. Z. Hu, Q. Z. Guo, and Jillian F. Banfield	
Role of hybridization on the Schottky barrier height of carbon nanotube field effect transistors (6 pages)	125407
D. Casterman, M. M. De Souza, A. Tahraoui, C. Durkan, and W. I. Milne	

(Continued)

Carbon nanotube as a Cherenkov-type light emitter and free electron laser (<i>12 pages</i>)	125408
K. G. Batrakov, S. A. Maksimenko, P. P. Kuzhir, and C. Thomsen	
Bimodal distribution of neon nanobubbles in aluminum (<i>6 pages</i>)	125409
R. S. Dhaka and S. R. Barman	
Density functional theory examination of Pd(111) and Pd(100) under NO oxidation conditions (<i>7 pages</i>)	125410
Jelena Jelic and Randall J. Meyer	
Insights into few-layer epitaxial graphene growth on $4H$ -SiC(000 $\bar{1}$) substrates from STM studies (<i>10 pages</i>)	125411
Laura B. Biedermann, Michael L. Bolen, Michael A. Capano, Dmitry Zemlyanov, and Ronald G. Reifenberger	
Tilted and nontilted Ag overlayer on a Ni(111) substrate: Structure and energetics (<i>9 pages</i>)	125412
Carole Chambon, Jérôme Creuze, Alessandro Coati, Michèle Sauvage-Simkin, and Yves Garreau	
Continuum model for the long-range elastic interaction on stepped epitaxial surfaces in 2+1 dimensions (<i>15 pages</i>)	125413
Xiaohong Zhu, Haoyun Xu, and Yang Xiang	
Inner and outer edge states in graphene rings: A numerical investigation (<i>7 pages</i>)	125414
D. A. Bahamon, A. L. C. Pereira, and P. A. Schulz	
STM fluorescence of porphyrin enhanced by a strong plasmonic field and its nanoscale confinement in an STM cavity (<i>6 pages</i>)	125415
H. W. Liu, R. Nishitani, T. Z. Han, Y. Ie, Y. Aso, and H. Iwasaki	
Singular behavior of the Debye-Waller factor of graphene (<i>5 pages</i>)	125416
V. K. Tewary and B. Yang	
Cyclotron resonance of carbon-doped two-dimensional hole systems: From the magnetic quantum limit to low magnetic fields (<i>13 pages</i>)	125417
K. Rachor, T. E. Raab, D. Heitmann, C. Gerl, and W. Wegscheider	
Pt-incorporated anatase TiO ₂ (001) surface for solar cell applications: First-principles density functional theory calculations (<i>15 pages</i>)	125418
E. Mete, D. Uner, O. Gülseren, and Ş. Ellialtıoğlu	
Dynamic decomposition of aliphatic molecules on Al(111) from <i>ab initio</i> molecular dynamics (<i>14 pages</i>)	125419
Jun Zhong, Louis G. Hector, Jr., and James B. Adams	
Electronic properties of armchair graphene nanoribbons (<i>10 pages</i>)	125420
A. V. Rozhkov, S. Savel'ev, and Franco Nori	
Nearly perfect single-channel conduction in disordered armchair nanoribbons (<i>5 pages</i>)	125421
Masayuki Yamamoto, Yositake Takane, and Katsunori Wakabayashi	
Multiterminal spin-dependent transport in ballistic carbon nanotubes (<i>9 pages</i>)	125422
Audrey Cottet, Chéryl Feuillet-Palma, and Takis Kontos	
Size-dependent magnetic spin and orbital moments of Fe nanoparticles deposited onto Co/W(110) (<i>9 pages</i>)	125423
A. Kleibert, K.-H. Meiwes-Broer, and J. Bansmann	
Evidence of universality in the dynamical response of micromechanical diamond resonators at millikelvin temperatures (<i>5 pages</i>)	125424
Matthias Imboden and Pritiraj Mohanty	

(Continued)

Exciton-cyclotron resonance in two-dimensional structures in a strong perpendicular magnetic field and optical orientation conditions (18 pages)	125425
S. A. Moskalenko, M. A. Liberman, and I. V. Podlesny	
Group-theory analysis of electrons and phonons in N -layer graphene systems (8 pages)	125426
L. M. Malard, M. H. D. Guimarães, D. L. Mafra, M. S. C. Mazzoni, and A. Jorio	
Green's functions and impurity scattering in graphene (7 pages)	125427
Cristina Bena	
Adhesion of growing nanoparticles at a glance: Surface differential reflectivity spectroscopy and grazing incidence small angle x-ray scattering (8 pages)	125428
R. Lazzari, G. Renaud, C. Revenant, J. Jupille, and Y. Borensztein	
Strain-induced instability of spherical nanodiamond hydrocarbons: Effect of surface CH_n and charging (8 pages)	125429
Mehdi Heidari Saani, Tayeb Ghodselahi, and Keivan Esfarjani	
Modifying the electronic structure of semiconducting single-walled carbon nanotubes by Ar^+ ion irradiation (13 pages)	125430
Antti Tolvanen, Gilles Buchs, Pascal Ruffieux, Pierangelo Gröning, Oliver Gröning, and Arkady V. Krashenninikov	
Nanoengineering with dynamic atomic force microscopy: Lateral interchange of adatoms on a $\text{Ge}(111)\text{-c}(2 \times 8)$ surface (5 pages)	125431
Peter Dieška and Ivan Štich	
Effect of $c(2 \times 2)$ -CO overlayer on the phonons of $\text{Cu}(001)$: A first-principles study (8 pages)	125432
Marisol Alcántara Ortigoza, Rolf Heid, Klaus-Peter Bohnen, and Talat S. Rahman	
Deriving the complete molecular conformation of self-assembled alkanethiol molecules from sum-frequency generation vibrational spectra (12 pages)	125433
Bernard Bourguignon, Wanquan Zheng, Serge Carrez, Aimeric Ouvrard, Frédéric Fournier, and Henri Dubost	
 Density functional theory study of the initial oxidation of the $\text{Pt}(111)$ surface (13 pages)	125434
Jeffery M. Hawkins, Jason F. Weaver, and Aravind Asthagiri	
Density functional theory study of graphite oxide for different oxidation levels (8 pages)	125435
R. J. W. E. Lahaye, H. K. Jeong, C. Y. Park, and Y. H. Lee	
Mechanisms of ultrafast laser-induced deep-subwavelength gratings on graphite and diamond (9 pages)	125436
Min Huang, Fuli Zhao, Ya Cheng, Ningsheg Xu, and Zhizhan Xu	
 Dependence of electronic properties of epitaxial few-layer graphene on the number of layers investigated by photoelectron emission microscopy (7 pages)	125437
H. Hibino, H. Kageshima, M. Kotsugi, F. Maeda, F.-Z. Guo, and Y. Watanabe	
High-resolution angle-resolved photoemission studies of quasiparticle dynamics in graphite (8 pages)	125438
C. S. Leem, Chul Kim, S. R. Park, Min-Kook Kim, Hyoun Joon Choi, C. Kim, B. J. Kim, S. Johnston, T. Devereaux, T. Ohta, A. Bostwick, and E. Rotenberg	
Influence of the tip in near-field imaging of nanoparticle plasmonic modes: Weak and strong coupling regimes (5 pages)	125439
Aitzol García-Etxarri, Isabel Romero, F. Javier García de Abajo, Rainer Hillenbrand, and Javier Aizpurua	
Observable topological effects in molecular devices with Möbius topology (6 pages)	125440
Nan Zhao, H. Dong, Shuo Yang, and C. P. Sun	

(Continued)

Structure and thermodynamics of Fe ₅₅ , Co ₅₅ , and Ni ₅₅ clusters supported on a surface (7 pages)	125441
U. Sarkar and S. A. Blundell	
Phase transitions and molecular dynamics of <i>n</i> -hexadecanol confined in silicon nanochannels (12 pages)	125442
R. Berwanger, A. Henschel, K. Knorr, P. Huber, and R. Pelster	
 Gate-induced interlayer asymmetry in ABA-stacked trilayer graphene (5 pages)	125443
Mikito Koshino and Edward McCann	
Magnetic and transport properties of epitaxial films of SrRuO ₃ in the ultrathin limit (6 pages)	125444
Moty Schultz, Shahar Levy, James W. Reiner, and Lior Klein	

COMMENTS

Comment on “Electronic structure of spin- $\frac{1}{2}$ Heisenberg antiferromagnetic systems: Ba ₂ Cu(PO ₄) ₂ and Sr ₂ Cu(PO ₄) ₂ ” (3 pages)	127101
H. Rosner, M. Schmitt, D. Kasinathan, A. Ormeci, J. Richter, S.-L. Drechsler, and M. D. Johannes	
Reply to “Comment on ‘Electronic structure of spin- $\frac{1}{2}$ Heisenberg antiferromagnetic systems: Ba ₂ Cu(PO ₄) ₂ and Sr ₂ Cu(PO ₄) ₂ ’ ” (1 page)	127102
S. Salunke, M. A. H. Ahsan, R. Nath, A. V. Mahajan, and I. Dasgupta	

ERRATA

Publisher’s Note: Quantum theory of electron tunneling into intersubband cavity polariton states [Phys. Rev. B 79 , 075317 (2009)] (1 page)	129901(E)
Simone De Liberato and Cristiano Ciuti	
Erratum: Theory of resonant multiphonon Raman scattering in graphene [Phys. Rev. B 78 , 125418 (2008)] (1 page)	129902(E)
D. M. Basko	
Publisher’s Note: Overlap of Cu 3 <i>d</i> and F 2 <i>p</i> orbitals and low-energy excitations in KCuF ₃ studied by polarization-dependent x-ray absorption and emission spectroscopy [Phys. Rev. B 79 , 115120 (2009)] (1 page)	129903(E)
F. Bondino, M. Malvestuto, E. Magnano, M. Zangrando, M. Zacchigna, P. Ghigna, and F. Parmigiani	