

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 86, NUMBER 12

SEPTEMBER 2012-15(II)

Polarization dependence and surface sensitivity of linear and nonlinear photoemission from Bi/Cu(111) (<i>8 pages</i>)	125447
A. Akin Ünal, Aimo Winkelmann, Christian Tusche, Francesco Bisio, Martin Ellguth, Cheng-Tien Chiang, Jürgen Henk, and Jürgen Kirschner	
Coulomb drag in graphene–boron nitride heterostructures: Effect of virtual phonon exchange (<i>7 pages</i>)	125448
Bruno Amorim, Jürgen Schiefele, Fernando Sols, and Francisco Guinea	
Radiation effects on the electronic properties of bilayer graphene (<i>5 pages</i>)	125449
Eric Suárez Morell and Luis E. F. Foa Torres	
Edge magnetoplasmons and the optical excitations in graphene disks (<i>5 pages</i>)	125450
Weihua Wang, S. Peter Apell, and Jari M. Kinaret	
Signatures of Wigner correlations in the conductance of a one-dimensional quantum dot coupled to an AFM tip (<i>12 pages</i>)	125451
N. Traverso Ziani, F. Cavaliere, and M. Sassetti	
Dipole-dipole interaction between a quantum dot and a graphene nanodisk (<i>10 pages</i>)	125452
Joel D. Cox, Mahi R. Singh, Godfrey Gumbs, Miguel A. Anton, and Fernando Carreno	

COMMENTS

Comment on “Accurate and fast numerical solution of Poisson’s equation for arbitrary, space-filling Voronoi polyhedra: Near-field corrections revisited” (<i>2 pages</i>)	127101
A. Gonis and X.-G. Zhang	
Reply to “Comment on ‘Accurate and fast numerical solution of Poisson’s equation for arbitrary, space-filling Voronoi polyhedra: Near-field corrections revisited’ ” (<i>1 page</i>)	127102
Aftab Alam, Brian G. Wilson, and D. D. Johnson	

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 86, NUMBER 12

SEPTEMBER 2012-15(II)

Hybrid density functional study of small Rh_n ($n = 2-15$) clusters (6 pages)	125430
Juarez L. F. Da Silva, Maurício J. Piotrowski, and F. Aguilera-Granja	
Charge impurity as a localization center for singlet excitons in single-wall nanotubes (8 pages)	125431
Benjamin O. Tayo and Slava V. Rotkin	
Anomalous friction in suspended graphene (5 pages)	125432
A. Smolyanitsky and J. P. Killgore	
Tuning the adatom-surface and interadatom interactions in hydrogenated graphene by charge doping (7 pages)	125433
Liang Feng Huang, Teng Fei Cao, Peng Lai Gong, Zhi Zeng, and Chao Zhang	
Electrically tunable plasma excitations in AA-stacked multilayer graphene (7 pages)	125434
Ming-Fa Lin, Ying-Chih Chuang, and Jhao-Ying Wu	
Confined electronic states and their modulations in graphene nanorings (9 pages)	125435
Jia-Lin Zhu, Xingyuan Wang, and Ning Yang	
Atomic-scale friction in graphene oxide: An interfacial interaction perspective from first-principles calculations (9 pages)	125436
Lin-Feng Wang, Tian-Bao Ma, Yuan-Zhong Hu, and Hui Wang	
Band-gap modulation in hydrogenated graphene/boron nitride heterostructures: The role of heterogeneous interface (8 pages)	125437
X. F. Chen, J. S. Lian, and Q. Jiang	
Absence of gapped broken inversion symmetry phase of electrons in bilayer graphene under the renormalized ring-diagram approximation (8 pages)	125438
Xin-Zhong Yan and C. S. Ting	
Coexistence and competition of nematic and gapped states in bilayer graphene (7 pages)	125439
E. V. Gorbar, V. P. Gusynin, V. A. Miransky, and I. A. Shovkovy	
Nonlinear magnetization of graphene (7 pages)	125440
Sergey Slizovskiy and Joseph J. Betouras	
Detection of symmetry-protected topological phases in one dimension (13 pages)	125441
Frank Pollmann and Ari M. Turner	
Dynamic polarization of graphene by external correlated charges (17 pages)	125442
I. Radović, D. Borka, and Z. L. Mišković	
Electron-phonon mediated heat flow in disordered graphene (14 pages)	125443
Wei Chen and Aashish A. Clerk	
Lifetime reduction of surface states at Cu, Ag, and Au(111) caused by impurity scattering (12 pages)	125444
Swantje Heers, Phivos Mavropoulos, Samir Lounis, Rudolf Zeller, and Stefan Blügel	
Confinement-dependent ferromagnetism in Mn-doped InAs quantum dots embedded in InP nanowires (4 pages)	125445
Erika N. Lima and Tome M. Schmidt	
Nonequilibrium transport response from equilibrium transport theory (4 pages)	125446
V. M. García-Suárez and J. Ferrer	

(Continued)

Zone folding effect in Raman <i>G</i> -band intensity of twisted bilayer graphene (6 pages)	125414
Kentaro Sato, Riichiro Saito, Chunxiao Cong, Ting Yu, and Mildred S. Dresselhaus	
Quantum oscillations of spin polarization in a GaAs/AlGaAs double quantum well (7 pages)	125415
L. Fernandes dos Santos, Yu. A. Pusep, L. Villegas-Lelovsky, V. Lopez-Richard, G. E. Marques, G. M. Gusev, D. Smirnov, and A. K. Bakarov	
Structure and composition of linear TiO _x nanostructures on SrTiO ₃ (001) (6 pages)	125416
Matthew S. J. Marshall, Andres E. Becerra-Toledo, David J. Payne, Russell G. Egdell, Laurence D. Marks, and Martin R. Castell	
Optical response of carbon nanotubes functionalized with (free-base, Zn) porphyrins, and phthalocyanines: A DFT study (6 pages)	125417
J. D. Correa and W. Orellana	
Computational study of the thermal conductivity in defective carbon nanostructures (5 pages)	125418
Zacharias G. Fthenakis and David Tománek	
Optical redshift in the Raman scattering spectra of Fe-doped multiwalled carbon nanotubes: Experiment and theory (6 pages)	125419
G. M. Bhalariao, M. K. Singh, A. K. Sinha, and Haranath Ghosh	
Strain-induced ferromagnetism in zigzag edge graphene nanoribbon with a topological line defect (7 pages)	125420
Ting Hu, Jian Zhou, Jinming Dong, and Yoshiyuki Kawazoe	
Ellipsometry and spectroscopy on 1.55 μm emitting Ge islands in Si for photonic applications (9 pages)	125421
V. M. Lavchiev, U. Schade, G. Hesser, G. Chen, and W. Jantsch	
Phase diagram of insulating crystal and quantum Hall states in ABC-stacked trilayer graphene (14 pages)	125422
R. Côté, Maxime Rondeau, Anne-Marie Gagnon, and Yafis Barlas	
Endstates in multichannel spinless <i>p</i> -wave superconducting wires (10 pages)	125423
M.-T. Rieder, G. Kells, M. Duckheim, D. Meidan, and P. W. Brouwer	
Microscopic model of a phononic refrigerator (9 pages)	125424
Liliana Arrachea, Eduardo R. Mucciolo, Claudio Chamon, and Rodrigo B. Capaz	
Electron and hole Hong-Ou-Mandel interferometry (5 pages)	125425
T. Jonckheere, J. Rech, C. Wahl, and T. Martin	
Buffer layer limited conductivity in epitaxial graphene on the Si face of SiC (5 pages)	125426
N. Ray, S. Shallcross, S. Hensel, and O. Pankratov	
Interplay between quantum size effect and strain effect on growth of nanoscale metal thin films (5 pages)	125427
Miao Liu, Yong Han, Lin Tang, Jin-Feng Jia, Qi-Kun Xue, and Feng Liu	
Resonant harmonic generation and collective spin rotations in electrically driven quantum dots (5 pages)	125428
M. P. Nowak, B. Szafran, and F. M. Peeters	
Structural determination of a highly stable metal-organic framework with possible application to interim radioactive waste scavenging: Hf-UiO-66 (11 pages)	125429
Søren Jakobsen, Diego Gianolio, David S. Wragg, Merete Hellner Nilsen, Hermann Emerich, Silvia Bordiga, Carlo Lamberti, Unni Olsbye, Mats Tilset, and Karl Petter Lillerud	

(Continued)

Finite-frequency noise properties of the nonequilibrium Anderson impurity model (<i>7 pages</i>)	125324
Christoph P. Orth, Daniel F. Urban, and Andreas Komnik	
Surface physics, nanoscale physics, low-dimensional systems	
Fermi surface of Mo(112) and indirect interaction between adsorbed atoms (<i>8 pages</i>)	125401
Ivan N. Yakovkin, Keisuke Fukutani, Hirokazu Hayashi, Jian Jiang, Taiki Horike, Yorito Nagata, Takafumi Habuchi, Daisuke Hirayama, Hideaki Iwasawa, Kenya Shimada, Ya. B. Losovyj, and Peter A. Dowben	
Quantum Hall states in graphene from strain-induced nonuniform magnetic fields (<i>6 pages</i>)	125402
Yichen Chang, Tameem Albash, and Stephan Haas	
Intraband conductivity response in graphene observed using ultrafast infrared-pump visible-probe spectroscopy (<i>7 pages</i>)	125403
K. M. Dani, J. Lee, R. Sharma, A. D. Mohite, C. M. Galande, P. M. Ajayan, A. M. Dattelbaum, H. Htoon, A. J. Taylor, and R. P. Prasankumar	
Collective edge modes of a quantum Hall ferromagnet in graphene (<i>7 pages</i>)	125404
V. Mazo, H. A. Fertig, and E. Shimshoni	
Index theorem for topological heterostructure systems (<i>7 pages</i>)	125405
Ken Shiozaki, Takahiro Fukui, and Satoshi Fujimoto	
Unconventional metallicity and giant thermopower in a strongly interacting two-dimensional electron system (<i>7 pages</i>)	125406
Vijay Narayan, Michael Pepper, Jonathan Griffiths, Harvey Beere, Francois Sfigakis, Geb Jones, Dave Ritchie, and Arindam Ghosh	
Spatiotemporal dynamics in optical energy transfer on the nanoscale and its application to constraint satisfaction problems (<i>10 pages</i>)	125407
Makoto Naruse, Masashi Aono, Song-Ju Kim, Tadashi Kawazoe, Wataru Nomura, Hirokazu Hori, Masahiko Hara, and Motoichi Ohtsu	
Hyperfine-induced decay in triple quantum dots (<i>5 pages</i>)	125408
Thaddeus D. Ladd	
Anomalous length dependence of conductance of aromatic nanoribbons with amine anchoring groups (<i>7 pages</i>)	125409
Ante Bilić and Stefano Sanvito	
Polarization-dependent methanol adsorption on lithium niobate Z-cut surfaces (<i>6 pages</i>)	125410
A. Riefer, S. Sanna, and W. G. Schmidt	
Bias asymmetry in the conductance profile of magnetic ions on surfaces probed by scanning tunneling microscopy (<i>11 pages</i>)	125411
Aaron Hurley, Nadjib Baadji, and Stefano Sanvito	
Environment effect on cross-polarized excitons in carbon nanotubes (<i>12 pages</i>)	125412
Seiji Uryu and Tsuneya Ando	
Numerical studies of confined states in rotated bilayers of graphene (<i>7 pages</i>)	125413
G. Trambly de Laissardière, D. Mayou, and L. Magaud	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 86, NUMBER 12

SEPTEMBER 2012-15(II)

Generic picture of the emission properties of III-nitride polariton laser diodes: Steady state and current modulation response (<i>11 pages</i>)	125308
Ivan Iorsh, Marlene Glauser, Georg Rossbach, Jacques Levrat, Munise Cobet, Raphaël Butté, Nicolas Grandjean, Mikhail A. Kaliteevski, Richard A. Abram, and Alexey V. Kavokin	
Dielectric response of epitaxially strained CoFe_2O_4 spinel thin films (<i>7 pages</i>)	125309
Diego Gutiérrez, Michael Foerster, Ignasi Fina, Josep Fontcuberta, Daniel Fritsch, and Claude Ederer	
Tuning biexciton binding and antibinding in core/shell quantum dots (<i>9 pages</i>)	125310
Peter G. McDonald, Edward J. Tyrrell, John Shumway, Jason M. Smith, and Ian Galbraith	
Fermi liquid approach to the quantum RC circuit: Renormalization group analysis of the Anderson and Coulomb blockade models (<i>19 pages</i>)	125311
Michele Filippone and Christophe Mora	
Magnetic-field-induced Fabry-Pérot resonances in helical edge states (<i>5 pages</i>)	125312
Abhiram Soori, Sourin Das, and Sumathi Rao	
Mn_5Ge_3 film formation on $\text{Ge}(111)c(2 \times 8)$ (<i>7 pages</i>)	125313
J. Hirvonen Grytzeli, H. M. Zhang, and L. S. O. Johansson	
Polaritonic spectroscopy of intersubband transitions (<i>14 pages</i>)	125314
Y. Todorov, L. Tosetto, A. Delteil, A. Vasanelli, C. Sirtori, A. M. Andrews, and G. Strasser	
Acoustic magnetoplasmons in a two-dimensional electron system with a smooth edge (<i>6 pages</i>)	125315
I. V. Andreev, V. M. Muravev, D. V. Smetnev, and I. V. Kukushkin	
Gaffnian holonomy through the coherent state method (<i>12 pages</i>)	125316
John Flavin, Ronny Thomale, and Alexander Seidel	
Dynamical decoupling of a singlet-triplet qubit afflicted by a charge fluctuator (<i>17 pages</i>)	125317
Guy Ramon	
Energy scaling of compositional disorder in $\text{Ga}(\text{N,P,As})/\text{GaP}$ quantum well structures (<i>8 pages</i>)	125318
K. Jandieri, M. K. Shakfa, S. Liebich, M. Zimprich, B. Kunert, C. Karcher, A. Chernikov, K. Volz, W. Stolz, M. Koch, S. Chatterjee, W. Heimbrod, F. Gebhard, and S. D. Baranovskii	
Quantum nanostructures in strongly spin-orbit coupled two-dimensional systems (<i>5 pages</i>)	125319
Emmanuel I. Rashba	
Electron and hole spins in $\text{InP}/(\text{Ga,In})\text{P}$ self-assembled quantum dots (<i>6 pages</i>)	125320
M. Syperek, D. R. Yakovlev, I. A. Yugova, J. Misiewicz, M. Jetter, M. Schulz, P. Michler, and M. Bayer	
Finger-gate manipulated quantum transport in a semiconductor narrow constriction with spin-orbit interactions and Zeeman effect (<i>9 pages</i>)	125321
Chi-Shung Tang, Shu-Yu Chang, and Shun-Jen Cheng	
Quantum beats due to excitonic ground-state splitting in colloidal quantum dots (<i>5 pages</i>)	125322
J. Bylsma, P. Dey, J. Paul, S. Hoogland, E. H. Sargent, J. M. Luther, M. C. Beard, and D. Karauskaj	
☞ Symmetries and weak localization and antilocalization of Dirac fermions in HgTe quantum wells (<i>12 pages</i>)	125323
P. M. Ostrovsky, I. V. Gornyi, and A. D. Mirlin	

(Continued)

Semiconductors I: bulk

Displacement current induced by spin resonance in air-treated conjugated polymer diodes (<i>5 pages</i>)	125201
Katsuichi Kanemoto, Hidenobu Matsuoka, Yujiro Ueda, Keisuke Takemoto, Keiji Kimura, and Hideki Hashimoto	
Pressure effects on the electronic and optical properties of AWO_4 wolframites ($A = \text{Cd, Mg, Mn, and Zn}$): The distinctive behavior of multiferroic $MnWO_4$ (<i>9 pages</i>)	125202
J. Ruiz-Fuertes, S. López-Moreno, J. López-Solano, D. Errandonea, A. Segura, R. Lacomba-Perales, A. Muñoz, S. Radescu, P. Rodríguez-Hernández, M. Gospodinov, L. L. Nagornaya, and C. Y. Tu	
Speeding up the solution of the Bethe-Salpeter equation by a double-grid method and Wannier interpolation (<i>5 pages</i>)	125203
David Kammerlander, Silvana Botti, Miguel A. L. Marques, Andrea Marini, and Claudio Attaccalite	
All-optical control of the spin state in the NV^- center in diamond (<i>7 pages</i>)	125204
Florian Hilser and Guido Burkard	
Hydrogen-induced defects in ion-implanted Si (<i>8 pages</i>)	125205
S. Socher, E. V. Lavrov, and J. Weber	
Stability and diffusion of interstitial and substitutional Mn in GaAs of different doping types (<i>8 pages</i>)	125206
L. M. C. Pereira, U. Wahl, S. Decoster, J. G. Correia, L. M. Amorim, M. R. da Silva, J. P. Araújo, and A. Vantomme	
Magneto-orbital effect without spin-orbit interactions in a noncentrosymmetric zeolite-templated carbon structure (<i>5 pages</i>)	125207
Takashi Koretsune, Ryotaro Arita, and Hideo Aoki	

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

Scattering matrix approach to interacting electron transport (<i>10 pages</i>)	125301
D. Oehri, A. V. Lebedev, G. B. Lesovik, and G. Blatter	
Radiative exciton recombination and defect luminescence observed in single silicon nanocrystals (<i>11 pages</i>)	125302
Torsten Schmidt, Alexey I. Chizhik, Anna M. Chizhik, Karsten Potrick, Alfred J. Meixner, and Friedrich Huisken	
Spin-orbit scattering in quantum diffusion of massive Dirac fermions (<i>9 pages</i>)	125303
Wen-Yu Shan, Hai-Zhou Lu, and Shun-Qing Shen	
Energy spectrum reconstruction at the edge of a two-dimensional electron system with strong spin-orbit coupling (<i>6 pages</i>)	125304
A. Kononov, G. Biasiol, L. Sorba, and E. V. Deviatov	
Composition and crystallography dependence of the work function: Experiment and calculations of Pt-Al alloys (<i>9 pages</i>)	125305
Lior Kornblum, Pini Shekhter, Yair Slovatzky, Yaron Amouyal, and Moshe Eizenberg	
Current fluctuations in noncollinear single-electron spin-valve transistors (<i>11 pages</i>)	125306
Stephan Lindebaum and Jürgen König	
Electronic properties of STM-constructed dangling-bond dimer lines on a $\text{Ge}(001)-(2 \times 1)\text{:H}$ surface (<i>9 pages</i>)	125307
Marek Kolmer, Szymon Godlewski, Hiroyo Kawai, Bartosz Such, Franciszek Krok, Mark Saeys, Christian Joachim, and Marek Szymonski	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 86, NUMBER 12

SEPTEMBER 2012-15(II)

Demonstration of enhanced broadband unidirectional electromagnetic radiation enabled by a subwavelength profile leaky anisotropic zero-index metamaterial coating (7 pages)	125131
Zhi Hao Jiang, Qi Wu, and Douglas H. Werner	
Snapshots of Anderson localization beyond the ensemble average (4 pages)	125132
Ramy G. S. El-Dardiry, Sanli Faez, and Ad Lagendijk	
Thermoelectric efficiency in the space-charge-limited transport regime in semiconductors (5 pages)	125133
François Léonard	
Phase diagram and critical points of a double quantum dot (16 pages)	125134
Y. Nishikawa, D. J. G. Crow, and A. C. Hewson	
Effects of electronic correlation, physical structure, and surface termination on the electronic structure of V_2O_3 nanowires (12 pages)	125135
Amanda L. Tiano, Jing-bin Li, Eli Sutter, Stanislaus S. Wong, and M.-V. Fernández-Serra	
<i>Ab initio</i> study of metastable layered perovskites $R_2Ti_2O_7$ ($R = Sm$ and Gd) (7 pages)	125136
Adlane Sayede, Emilie Bruyer, and Michael Springborg	
Robust topological surface states in Sb_2Te_3 layers as seen from the weak antilocalization effect (7 pages)	125137
Y. Takagaki, A. Giussani, K. Perumal, R. Calarco, and K.-J. Friedland	
Magnetic behavior near the boundary of $4f$ delocalization in ferromagnetic $CeRu_2Ge_2$ and paramagnetic $CeRu_2Si_2$ observed by $Ce M_{4,5}$ XAS and XMCD (11 pages)	125138
T. Okane, Y. Takeda, H. Yamagami, A. Fujimori, Y. Matsumoto, N. Kimura, T. Komatsubara, and H. Aoki	
Pseudopotential-based first-principles approach to the magneto-optical Kerr effect: From metals to the inclusion of local fields and excitonic effects (8 pages)	125139
Davide Sangalli, Andrea Marini, and Alberto Debernardi	
Singular behavior of Anderson-localized wave functions for a two-site model (6 pages)	125140
Sonika Johri and R. N. Bhatt	
μ SR investigation of magnetically ordered states in the A -site ordered perovskite manganites $RBaMn_2O_6$ ($R = Y$ and La) (8 pages)	125141
Y. Kawasaki, T. Minami, M. Izumi, Y. Kishimoto, T. Ohno, K. H. Satoh, A. Koda, R. Kadono, J. L. Gavilano, H. Luetkens, T. Nakajima, and Y. Ueda	
Orbital structures in spinel vanadates AV_2O_4 ($A = Fe, Mn$) (8 pages)	125142
Y. Nii, H. Sagayama, T. Arima, S. Aoyagi, R. Sakai, S. Maki, E. Nishibori, H. Sawa, K. Sugimoto, H. Ohsumi, and M. Takata	
Anderson localization at large disorder (4 pages)	125143
László Ujfalusi and Imre Varga	
Surface waves at microwave frequencies excited on a zigzag metasurface (4 pages)	125144
Helen J. Rance, Thomas J. Constant, Alastair P. Hibbins, and J. Roy Sambles	
Spin and holographic metals (9 pages)	125145
Victor Alexandrov and Piers Coleman	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 86, NUMBER 12

SEPTEMBER 2012-15(II)

Local electronic correlation at the two-particle level (<i>26 pages</i>)	125114
G. Rohringer, A. Valli, and A. Toschi	
Electronic properties of lanthanide oxides from the <i>GW</i> perspective (<i>13 pages</i>)	125115
Hong Jiang, Patrick Rinke, and Matthias Scheffler	
First-principles calculations of the electronic and phonon properties of APt_3P ($A = \text{Ca, Sr, and La}$): Evidence for a charge-density-wave instability and a soft phonon (<i>5 pages</i>)	125116
Hui Chen, Xiaofeng Xu, Chao Cao, and Jianhui Dai	
Interplay of localized and itinerant character of Ru ions: $\text{Ti}_2\text{Ru}_2\text{O}_7$ versus $\text{Hg}_2\text{Ru}_2\text{O}_7$ (<i>6 pages</i>)	125117
Santu Baidya, Soumyajit Sarkar, T. Saha-Dasgupta, and D. D. Sarma	
Diffusive high-temperature transport in the one-dimensional Hubbard model (<i>6 pages</i>)	125118
Tomaž Prosen and Marko Žnidarič	
☞ Theory and classification of interacting integer topological phases in two dimensions: A Chern-Simons approach (<i>28 pages</i>)	125119
Yuan-Ming Lu and Ashvin Vishwanath	
Unwinding of a one-dimensional topological superconductor (<i>6 pages</i>)	125120
Achim Rosch	
☞ Theory of the SrTiO_3 surface state two-dimensional electron gas (<i>8 pages</i>)	125121
Guru Khalsa and A. H. MacDonald	
Magnetism in $\text{La}_2\text{O}_3(\text{Fe}_{1-x}\text{Mn}_x)_2\text{Se}_2$ tuned by Fe/Mn ratio (<i>7 pages</i>)	125122
Hechang Lei (雷和畅), Emil S. Bozin, A. Llobet, V. Ivanovski, V. Koteski, J. Belosevic-Cavor, B. Cekic, and C. Petrovic	
Pressure-induced Co^{2+} photoluminescence quenching in MgAl_2O_4 (<i>8 pages</i>)	125123
Lucie Nataf, Fernando Rodríguez, and Rafael Valiente	
Microscopic origin of the linear temperature increase of the magnetic susceptibility of BaFe_2As_2 (<i>7 pages</i>)	125124
S. L. Skornyakov, V. I. Anisimov, and D. Vollhardt	
Band structure of gold from many-body perturbation theory (<i>9 pages</i>)	125125
T. Rangel, D. Kecik, P. E. Trevisanutto, G.-M. Rignanese, H. Van Swygenhoven, and V. Olevano	
Origin of the heavy fermion behavior in $\text{Ca}_{2-x}\text{Sr}_x\text{RuO}_4$: Roles of Coulomb interaction and the rotation of RuO_6 octahedra (<i>15 pages</i>)	125126
Naoya Arakawa and Masao Ogata	
e_g -level splitting in a layered perovskite manganite as revealed by charge modulation spectroscopy (<i>5 pages</i>)	125127
Masao Nakamura, Masashi Kawasaki, and Yoshinori Tokura	
Probing orbital fluctuations in RVO_3 ($R = \text{Y, Gd, or Ce}$) by ellipsometry (<i>6 pages</i>)	125128
J. Reul, A. A. Nugroho, T. T. M. Palstra, and M. Grüninger	
☞ Type-II Bose-Mott insulators (<i>14 pages</i>)	125129
Aron J. Beekman and Jan Zaanen	
Time-dependent density functional theory on a lattice (<i>11 pages</i>)	125130
M. Farzanehpour and I. V. Tokatly	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 86, NUMBER 12

SEPTEMBER 2012-15(II)

Quantum plasmonics: Symmetry-dependent plasmon-molecule coupling and quantized photoconductances (5 pages)	121410(R)
Peng Song, Sheng Meng, Peter Nordlander, and Shiwu Gao	
Hydrogen-induced reversal of spin alignment in graphene supported on Ni(111) surface (5 pages)	121411(R)
Niharika Joshi, Nirmalya Ballav, and Prasenjit Ghosh	

ARTICLES

Electronic structure and strongly correlated systems

Gapless edge states of background field theory and translation-symmetric $\mathbb{Z}_2$ spin liquids (10 pages)	125101
Gil Young Cho, Yuan-Ming Lu, and Joel E. Moore	
Magnetic dipole and electric quadrupole transitions in the trivalent lanthanide series: Calculated emission rates and oscillator strengths (10 pages)	125102
Christopher M. Dodson and Rashid Zia	
Resonant inelastic x-ray scattering in a Mott insulator (13 pages)	125103
Nandan Pakhira, J. K. Freericks, and A. M. Shvaika	
Valence instability of YbCu_2Si_2 through its magnetic quantum critical point (5 pages)	125104
A. Fernandez-Pañella, V. Balédent, D. Braithwaite, L. Paolasini, R. Verbeni, G. Lapertot, and J.-P. Rueff	
Spin-orbit tuned metal-insulator transitions in single-crystal $\text{Sr}_2\text{Ir}_{1-x}\text{Rh}_x\text{O}_4$ ($0 \leq x \leq 1$) (6 pages)	125105
T. F. Qi, O. B. Korneta, L. Li, K. Butrouna, V. S. Cao, Xiangang Wan, P. Schlottmann, R. K. Kaul, and G. Cao	
Spin-state transition in $\text{Pr}_{0.5}\text{Ca}_{0.5}\text{CoO}_3$ analyzed by x-ray absorption and emission spectroscopies (6 pages)	125106
J. Herrero-Martín, J. L. García-Muñoz, K. Kvashnina, E. Gallo, G. Subías, J. A. Alonso, and A. J. Barón-González	
Quantum criticality with multiple dynamics (6 pages)	125107
Tobias Meng, Achim Rosch, and Markus Garst	
Probing the localized to itinerant behavior of the 4 <i>f</i> electron in $\text{CeIn}_{3-x}\text{Sn}_x$ by Gd^{3+} electron spin resonance (8 pages)	125108
E. M. Bittar, C. Adriano, C. Giles, C. Rettori, Z. Fisk, and P. G. Pagliuso	
Interplay between many-body effects and charge transfers in Cr_2AlC bulk plasmon excitation (5 pages)	125109
V. Mauchamp, M. Bugnet, P. Chartier, T. Cabioc'h, M. Jaouen, J. Vinson, K. Jorissen, and J. J. Rehr	
Reversible modulation and ultrafast dynamics of terahertz resonances in strongly photoexcited metamaterials (6 pages)	125110
I. Chatzakis, L. Luo, J. Wang, N.-H. Shen, T. Koschny, J. Zhou, and C. M. Soukoulis	
Nonequilibrium particle and energy currents in quantum chains connected to mesoscopic Fermi reservoirs (5 pages)	125111
Shigeru Ajisaka, Felipe Barra, Carlos Mejía-Monasterio, and Tomaž Prosen	
Quantum breathing mode of interacting particles in a one-dimensional harmonic trap (12 pages)	125112
Jan Willem Abraham, Karsten Balzer, David Hochstuhl, and Michael Bonitz	
Enhanced perturbative continuous unitary transformations (27 pages)	125113
H. Krull, N. A. Drescher, and G. S. Uhrig	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 86, NUMBER 12

SEPTEMBER 2012-15(II)

Low-energy silicon allotropes with strong absorption in the visible for photovoltaic applications (<i>5 pages</i>)	121204(R)
Silvana Botti, José A. Flores-Livas, Maximilian Amsler, Stefan Goedecker, and Miguel A. L. Marques	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Y-junction splitting spin states of a moving quantum dot (<i>4 pages</i>)	121301(R)
Tuukka Hiltunen and Ari Harju	
Transport and scattering in inhomogeneous quantum wires (<i>5 pages</i>)	121302(R)
N. Sedlmayr, J. Ohst, I. Affleck, J. Sirker, and S. Eggert	
Landau-Zener-Stückelberg interferometry of a single electron charge qubit (<i>5 pages</i>)	121303(R)
J. Stehlik, Y. Dovzhenko, J. R. Petta, J. R. Johansson, F. Nori, H. Lu, and A. C. Gossard	
Anomalous quantum diffusion and the topological metal (<i>4 pages</i>)	121304(R)
Chushun Tian	
Enhanced spontaneous optical emission from inhomogeneous ensembles of quantum dots is induced by short-range coupling (<i>4 pages</i>)	121305(R)
Michał Kozub, Łukasz Pawicki, and Paweł Machnikowski	
Surface physics, nanoscale physics, low-dimensional systems	
Modulation of a surface plasmon-polariton resonance by subterahertz diffracted coherent phonons (<i>5 pages</i>)	121401(R)
C. Brüggemann, A. V. Akimov, B. A. Glavin, V. I. Belotelov, I. A. Akimov, J. Jäger, S. Kasture, A. V. Gopal, A. S. Vengurlekar, D. R. Yakovlev, A. J. Kent, and M. Bayer	
Spin versus charge-density-wave order in graphenelike systems (<i>5 pages</i>)	121402(R)
Y. Araki and G. W. Semenoff	
Spin-polarized edge modes and snake states in HgTe/CdTe quantum wells under an antisymmetric magnetic field (<i>4 pages</i>)	121403(R)
Ying-Tao Zhang, Feng Zhai, Zhenhua Qiao, and Qing-Feng Sun	
Temperature evolution of infrared- and Raman-active phonons in graphite (<i>4 pages</i>)	121404(R)
P. Giura, N. Bonini, G. Creff, J. B. Brubach, P. Roy, and M. Lazzeri	
Enhancement of Coulomb drag in double-layer graphene structures by plasmons and dielectric background inhomogeneity (<i>4 pages</i>)	121405(R)
S. M. Badalyan and F. M. Peeters	
Highly ordered nanoscale patterns produced by masked ion bombardment of a moving solid surface (<i>5 pages</i>) . . .	121406(R)
Martin P. Gelfand and R. Mark Bradley	
van der Waals interactions mediating the cohesion of fullerenes on graphene (<i>5 pages</i>)	121407(R)
M. Švec, P. Merino, Y. J. Dappe, C. González, E. Abad, P. Jelínek, and J. A. Martín-Gago	
Insulating behavior of an amorphous graphene membrane (<i>5 pages</i>)	121408(R)
Dinh Van Tuan, Avishek Kumar, Stephan Roche, Frank Ortmann, M. F. Thorpe, and Pablo Ordejon	
Charged impurity scattering in top-gated graphene nanostructures (<i>4 pages</i>)	121409(R)
Zhun-Yong Ong and Massimo V. Fischetti	

(Continued)

RAPID COMMUNICATIONS

Electronic structure and strongly correlated systems

- Majorana edge modes of topological exciton condensate with superconductors (*4 pages*) 121101(R)
Babak Seradjeh
- Topological insulator phase in halide perovskite structures (*5 pages*) 121102(R)
Hosub Jin, Jino Im, and Arthur J. Freeman
- Magnetic-field instability of Majorana modes in multiband semiconductor wires (*5 pages*) 121103(R)
Jong Soo Lim, Llorenç Serra, Rosa López, and Ramón Aguado
- Magnetotransport effects in polar versus non-polar SrTiO₃ based heterostructures (*5 pages*) 121104(R)
E. Flekser, M. Ben Shalom, M. Kim, C. Bell, Y. Hikita, H. Y. Hwang, and Y. Dagan
- Sublattice interference in the kagome Hubbard model (*4 pages*) 121105(R)
Maximilian L. Kiesel and Ronny Thomale
- Renormalization group approach for the scattering off a single Rashba impurity in a helical liquid (*4 pages*) 121106(R)
François Crépin, Jan Carl Budich, Fabrizio Dolcini, Patrik Recher, and Björn Trauzettel
- Orbital symmetry reconstruction and strong mass renormalization in the two-dimensional electron gas at the surface of KTaO₃ (*6 pages*) 121107(R)
A. F. Santander-Syro, C. Bareille, F. Fortuna, O. Copie, M. Gabay, F. Bertran, A. Taleb-Ibrahimi, P. Le Fèvre, G. Herranz, N. Reyren, M. Bibes, A. Barthélémy, P. Lecoeur, J. Guevara, and M. J. Rozenberg
- Graphene hyperlens for terahertz radiation (*5 pages*) 121108(R)
Andrei Andryieuski, Andrei V. Lavrinenko, and Dmitry N. Chigrin

Semiconductors I: bulk

- Native defects in second-generation topological insulators: Effect of spin-orbit interaction on Bi₂Se₃ (*4 pages*) ... 121201(R)
D. West, Y. Y. Sun, Han Wang, Junhyeok Bang, and S. B. Zhang
- Enhanced metrology using preferential orientation of nitrogen-vacancy centers in diamond (*5 pages*) 121202(R)
L. M. Pham, N. Bar-Gill, D. Le Sage, C. Belthangady, A. Stacey, M. Markham, D. J. Twitchen, M. D. Lukin, and R. L. Walsworth
- Zinc vacancy and oxygen interstitial in ZnO revealed by sequential annealing and electron irradiation (*5 pages*) 121203(R)
K. E. Knutsen, A. Galeckas, A. Zubiaga, F. Tuomisto, G. C. Farlow, B. G. Svensson, and A. Yu. Kuznetsov

