

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 1N01
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 76, NUMBER 16

CONTENTS

OCTOBER 2007-15(II)

RAPID COMMUNICATIONS

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

- Phase diagram of hole doped two-leg Cu-O ladders (*4 pages*) 161101(R)
P. Chudzinski, M. Gabay, and T. Giamarchi
- Pressure-induced insulator to metal transition in amorphous SiO (*4 pages*) 161102(R)
A. Pesach, R. Shuker, and E. Sterer
- Efficient *ab initio* calculations of bound and continuum excitons in the absorption spectra of semiconductors and insulators (*4 pages*) 161103(R)
Francesco Sottile, Margherita Marsili, Valerio Olevano, and Lucia Reining
- Myriad phases of the checkerboard Hubbard model (*4 pages*) 161104(R)
Hong Yao, Wei-Feng Tsai, and Steven A. Kivelson

Semiconductors I: bulk

- Weak localization in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$: Evidence of impurity band transport (*4 pages*) 161201(R)
L. P. Rokhinson, Y. Lyanda-Geller, Z. Ge, S. Shen, X. Liu, M. Dobrowolska, and J. K. Furdyna
- Nanoscale ferromagnetism in nonmagnetic doped semiconductors (*4 pages*) 161202(R)
Erik Nielsen and R. N. Bhatt

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

- First-principles calculations of the temperature dependence of the band gap of Si nanocrystals (*4 pages*) 161301(R)
A. Franceschetti
- Landau levels analysis by using symmetry properties of mesoscopic Hall bars (*4 pages*) 161302(R)
B. Jouault, O. Couturaud, S. Bonifacie, D. Mailly, and C. Chaubet
- Calcium deposition on poly(*para*-phenylene vinylene): Molecular dynamics simulations (*4 pages*) 161303(R)
Ronaldo Giro and Marília J. Caldas
- Shift currents from symmetry reduction and Coulomb effects in (110)-orientated GaAs/ $\text{Al}_{0.3}\text{Ga}_{0.7}\text{As}$ quantum wells (*4 pages*) 161304(R)
Mark Bieler, Klaus Pierz, Uwe Siegner, and Philip Dawson
- Lorentz shear modulus of a two-dimensional electron gas at high magnetic field (*4 pages*) 161305(R)
I. V. Tokatly and G. Vignale



Copyright 2007 by The American Physical Society

(Continued)



1098-0121(20071015)76:16;1-K

Fluctuations and topological transitions of quantum Hall stripes: Nematics as anisotropic hexatics (4 pages)	161306(R)
A. M. Ettouhami, C. B. Doiron, and R. Côté	
In-plane magnetic-field-induced metal-insulator transition in (311)A GaAs two-dimensional hole systems probed by thermopower (4 pages)	161307(R)
S. Faniel, L. Moldovan, A. Vlad, E. Tutuc, N. Bishop, S. Melinte, M. Shayegan, and V. Bayot	
Spin-state mixing in InAs double quantum dots (4 pages)	161308(R)
A. Pfund, I. Shorubalko, K. Ensslin, and R. Leturcq	
Finite bias visibility of the electronic Mach-Zehnder interferometer (4 pages)	161309(R)
Preden Roulleau, F. Portier, D. C. Glatli, P. Roche, A. Cavanna, G. Faini, U. Gennser, and D. Mailly	
Pauli blocking versus electrostatic attenuation of optical transition intensities in charged PbSe quantum dots (4 pages)	161310(R)
J. M. An, A. Franceschetti, and Alex Zunger	

Surface physics, nanoscale physics, low-dimensional systems

Quantum rattling of molecular hydrogen in clathrate hydrate nanocavities (4 pages)	161401(R)
L. Ulivi, M. Celli, A. Giannasi, A. J. Ramirez-Cuesta, D. J. Bull, and M. Zoppi	
Dynamical core-hole screening in the x-ray absorption spectra of hydrogenated carbon nanotubes and graphene (4 pages)	161402(R)
O. Wessely, M. I. Katsnelson, A. Nilsson, A. Nikitin, H. Ogasawara, M. Odelius, B. Sanyal, and O. Eriksson	
Experimental evidence for two-dimensional magnetic order in proton bombarded graphite (4 pages)	161403(R)
J. Barzola-Ququia, P. Esquinazi, M. Rothermel, D. Spemann, T. Butz, and N. García	
Frequency-dependent counting statistics in interacting nanoscale conductors (4 pages)	161404(R)
C. Emary, D. Marcos, R. Aguado, and T. Brandes	
Four-probe measurements of carbon nanotubes with narrow metal contacts (4 pages)	161405(R)
A. Makarovski, A. Zhukov, J. Liu, and G. Finkelstein	
Electronic structure of heavily doped graphene: The role of foreign atom states (4 pages)	161406(R)
Matteo Calandra and Francesco Mauri	

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

Chemical bonding and many-body effects in site-specific x-ray photoelectron spectra of corundum V_2O_3 (6 pages)	165101
J. C. Woicik, M. Yekutieli, E. J. Nelson, N. Jacobson, P. Pfalzer, M. Klemm, S. Horn, and L. Kronik	
Light-induced absorption switching in a Nd^{3+} : $GdFe_3(BO_3)_4$ single crystal (7 pages)	165102
Ph. Goldner, O. Guillot-Noël, J. Petit, M. Popova, and L. Bezmaternykh	
Structure, stability, and electronic properties of $SrTiO_3/LaAlO_3$ and $SrTiO_3/SrRuO_3$ interfaces (12 pages) ...	165103
J.-M. Albina, M. Mrovec, B. Meyer, and C. Elsässer	
Susceptibility of a spinon Fermi surface coupled to a U(1) gauge field (5 pages)	165104
Cody P. Nave, Sung-Sik Lee, and Patrick A. Lee	

Transport properties of the quasi-one-dimensional barium ruthenates (<i>6 pages</i>)	165105
Y. Klein and I. Terasaki	
Quasiparticle self-consistent <i>GW</i> method: A basis for the independent-particle approximation (<i>24 pages</i>)	165106
Takao Kotani, Mark van Schilfgaarde, and Sergey V. Faleev	
Ultrafast electronic dynamics in the metal-insulator transition compound NdNiO ₃ (<i>5 pages</i>)	165107
P. Ruello, S. Zhang, P. Laffez, B. Perrin, and V. Gusev	
Electron-phonon interaction using Wannier functions (<i>19 pages</i>)	165108
Feliciano Giustino, Marvin L. Cohen, and Steven G. Louie	
Systematic improvement of the momentum average approximation for the Green's function of a Holstein polaron (<i>14 pages</i>)	165109
Mona Berciu and Glen L. Goodvin	
Gutzwiller description of non-magnetic Mott insulators: Dimer lattice model (<i>14 pages</i>)	165110
Michele Fabrizio	
Cooper channel and the singularities in the thermodynamics of a Fermi liquid (<i>5 pages</i>)	165111
Andrey V. Chubukov and Dmitrii L. Maslov	
Spectral density of an interacting dot coupled indirectly to conducting leads (<i>11 pages</i>)	165112
L. Vaugier, A. A. Aligia, and A. M. Lobos	
Bandwidth-controlled Mott transition in κ -(BEDT-TTF) ₂ Cu[N(CN) ₂]Br _x Cl _{1-x} : Optical studies of localized charge excitations (<i>12 pages</i>)	165113
Daniel Faltermeier, Jakob Barz, Michael Dumm, Martin Dressel, Natalia Drichko, Boris Petrov, Victor Semkin, Rema Vlasova, Cécile Mezière, and Patrick Batail	
Electronic structure of charge and spin stripe order in La _{2-x} Sr _x NiO ₄ ($x=\frac{1}{3}, \frac{1}{2}$) (<i>12 pages</i>)	165114
Susumu Yamamoto, Takeo Fujiwara, and Yasuhiro Hatsugai	
Angle-resolved photoemission study of the metal-insulator transition in bismuth cobaltates (<i>5 pages</i>)	165115
Z. Yusof, B. O. Wells, T. Valla, P. D. Johnson, A. V. Fedorov, Q. Li, S. M. Loureiro, and R. J. Cava	
Pairing and superfluid properties of dilute fermion gases at unitarity (<i>6 pages</i>)	165116
Vamsi K. Akkineni, D. M. Ceperley, and Nandini Trivedi	
Photonic band gaps in quasiperiodic photonic crystals with negative refractive index (<i>10 pages</i>)	165117
M. S. Vasconcelos, P. W. Mauriz, F. F. de Medeiros, and E. L. Albuquerque	
Thermoelectric effects in a strongly correlated model for Na _x CoO ₂ (<i>14 pages</i>)	165118
Michael R. Peterson, B. Sriram Shastry, and Jan O. Haerter	
Structural, magnetic, and electronic properties of the Co-Fe-Al oxide spinel system: Density-functional theory calculations (<i>9 pages</i>)	165119
Aron Walsh, Su-Huai Wei, Yanfa Yan, M. M. Al-Jassim, John A. Turner, Michael Woodhouse, and B. A. Parkinson	
Ising-type behavior in the antiferromagnetic phase of BaCoO ₃ from first principles (<i>6 pages</i>)	165120
V. Pardo, P. Blaha, R. Laskowski, D. Baldomir, J. Castro, K. Schwarz, and J. E. Arias	
Broadening effects due to alloy scattering in a quantum cascade laser (<i>6 pages</i>)	165121
N. Regnault, R. Ferreira, and G. Bastard	
Spin and orbital magnetic response in metals: Susceptibility and NMR shifts (<i>12 pages</i>)	165122
Mayeul d'Avezac, Nicola Marzari, and Francesco Mauri	

Negative principal refractive indices and accidental isotropy in two-dimensional photonic crystals with an asymmetrical unit cell (4 pages)	165123
G. Alagappan, X. W. Sun, and M. B. Yu	
Origin of the Verwey transition in magnetite: Group theory, electronic structure, and lattice dynamics study (16 pages)	165124
Przemysław Piekarczyk, Krzysztof Parlinski, and Andrzej M. Oleś	
Conditions of Tamm and Shockley state existence in chains of resonant cavities in a photonic crystal (8 pages)	165125
Jarosław Kłos	
Quasiparticle self-consistent <i>GW</i> method applied to localized 4 <i>f</i> electron systems (6 pages)	165126
Athanasios N. Chantis, Mark van Schilfgaarde, and Takao Kotani	
Unit cell for a lattice electrostatic potential (18 pages)	165127
I. V. Abarenkov	
Evolution of a band insulating phase from a correlated metallic phase (5 pages)	165128
Kalobaran Maiti, Ravi Shankar Singh, and V. R. R. Medicherla	
Statistical, collective, and critical phenomena of classical one-dimensional disordered Wigner lattices (13 pages)	165129
Shimul Akhanjee and Joseph Rudnick	
Hyperfine interactions in YAB:Ho ³⁺ : A high-resolution spectroscopy investigation (10 pages)	165130
A. Baraldi, R. Capelletti, M. Mazzera, N. Magnani, I. Földvári, and E. Beregi	
Multiple-interface coupling effects in local electron-energy-loss measurements of band gap energies (5 pages)	165131
M. Couillard, M. Kociak, O. Stéphan, G. A. Botton, and C. Colliex	
Anomalous properties of the band-edge states in large two-dimensional photonic quasicrystals (5 pages)	165132
Yun Lai, Zhao-Qing Zhang, Chi-Hou Chan, and Leung Tsang	
Semiconductors I: bulk	
Dependence of magnetic circular dichroism on doping and temperature in In _{1-x} Mn _x As epitaxial films (6 pages)	165201
P. T. Chiu and B. W. Wessels	
Native point defects in ZnO (22 pages)	165202
Anderson Janotti and Chris G. Van de Walle	
Fermi resonance in the Raman spectrum of the Se-vacancy breathing mode of MnGa ₂ Se ₄ (7 pages)	165203
P. Alonso-Gutiérrez and M. L. Sanjuán	
<i>Ab initio</i> studies of magnetism in transition-metal-doped silicon carbide (6 pages)	165204
Andrei V. Los, Andrei N. Timoshevskii, Victor F. Los, and Sergey A. Kalkuta	
Polarization-selective excitation of nitrogen vacancy centers in diamond (5 pages)	165205
Thiago P. Mayer Alegre, Charles Santori, Gilberto Medeiros-Ribeiro, and Raymond G. Beausoleil	
Ferromagnetism in chemically synthesized CeO ₂ nanoparticles by Ni doping (8 pages)	165206
A. Thurber, K. M. Reddy, V. Shutthanandan, M. H. Engelhard, C. Wang, J. Hays, and A. Punnoose	
Introduction and recovery of Ga and N sublattice defects in electron-irradiated GaN (10 pages)	165207
F. Tuomisto, V. Ranki, D. C. Look, and G. C. Farlow	

Low-temperature properties of diluted magnetic semiconductors: Spin waves (<i>10 pages</i>)	165208
W. Jacak, J. Krasnyj, L. Jacak, and S. D. Kaim	
Theoretical study of small silicon clusters in 4H-SiC (<i>6 pages</i>)	165209
T. Hornos, N. T. Son, E. Janzén, and A. Gali	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Weak antilocalization in high mobility $\text{Ga}_x\text{In}_{1-x}\text{As}/\text{InP}$ two-dimensional electron gases with strong spin-orbit coupling (<i>5 pages</i>)	165301
Vitaliy A. Guzenko, Thomas Schäpers, and Hilde Hardtdegen	
Anomalous Stark effect in semiconductor quantum dots (<i>7 pages</i>)	165302
Sandra Ritter, Paul Gartner, Norman Baer, and Frank Jahnke	
Multiphoton processes in driven mesoscopic systems (<i>6 pages</i>)	165303
Alessandro Silva and Vladimir E. Kravtsov	
Excitonic giant Zeeman effect in $\text{GaN}:\text{Mn}^{3+}$ (<i>6 pages</i>)	165304
W. Pacuski, D. Ferrand, J. Cibert, J. A. Gaj, A. Golnik, P. Kossacki, S. Marcet, E. Sarigiannidou, and H. Mariette	
Effect of <i>sp-d</i> exchange interaction on excitonic states in $\text{CdSe}/\text{ZnSe}/\text{Zn}_{1-x}\text{Mn}_x\text{Se}$ quantum dots (<i>10 pages</i>)	165305
E. A. Chekhovich, A. S. Brichkin, A. V. Chernenko, V. D. Kulakovskii, I. V. Sedova, S. V. Sorokin, and S. V. Ivanov	
Exchange effects on electron scattering through a quantum dot embedded in a two-dimensional semiconductor structure (<i>10 pages</i>)	165306
L. K. Castelano, G.-Q. Hai, and M.-T. Lee	
Topological insulators beyond the Brillouin zone via Chern parity (<i>11 pages</i>)	165307
Andrew M. Essin and J. E. Moore	
Nonadiabatic transport in a quantum dot turnstile (<i>10 pages</i>)	165308
Valeriu Moldoveanu, Vidar Gudmundsson, and Andrei Manolescu	
Transport properties of the two-dimensional electron gas in AlP quantum wells at zero temperature (<i>8 pages</i>)	165309
A. Gold and R. Marty	
Density matrix theory of transport and gain in quantum cascade lasers in a magnetic field (<i>15 pages</i>)	165310
Ivana Savić, Nenad Vukmirović, Zoran Ikonić, Dragan Indjin, Robert W. Kelsall, Paul Harrison, and Vitomir Milanović	
Charge-to-spin conversion of electron entanglement states and spin-interaction-free solid-state quantum computation (<i>5 pages</i>)	165311
Wei-Min Zhang, Yin-Zhong Wu, Chopin Soo, and Mang Feng	
Pair tunneling and shot noise through a single molecule in a strong electron-phonon coupling regime (<i>6 pages</i>)	165312
Myung-Joong Hwang, Mahn-Soo Choi, and Rosa López	
Semiclassical theory of the Ehrenfest-time dependence of quantum transport (<i>18 pages</i>)	165313
Piet W. Brouwer	

Renormalization of hole-hole interaction at decreasing Drude conductivity: Gated GaAs/In _x Ga _{1-x} As/GaAs heterostructures (7 pages)	165314
G. M. Minkov, A. V. Germanenko, O. E. Rut, A. A. Sherstobitov, and B. N. Zvonkov	
Dependence on the deposition conditions in the adsorption of C ₆ H ₈ molecules on a Si(100)-2×1 surface (8 pages)	165315
F. D'Amico, R. Gunnella, M. Shimomura, T. Abukawa, and S. Kono	
Real-time renormalization group and cutoff scales in nonequilibrium applied to an arbitrary quantum dot in the Coulomb blockade regime (15 pages)	165316
Thomas Korb, Frank Reininghaus, Herbert Schoeller, and Jürgen König	
Current blockade in classical single-electron nanomechanical resonator (7 pages)	165317
F. Pistolesi and S. Labarthe	
Systematic study of carrier correlations in the electron-hole recombination dynamics of quantum dots (8 pages)	165318
T. Berstermann, T. Auer, H. Kurtze, M. Schwab, D. R. Yakovlev, M. Bayer, J. Wiersig, C. Gies, F. Jahnke, D. Reuter, and A. D. Wieck	
Nonlinear evolution of a morphological instability in a strained epitaxial film (5 pages)	165319
Jean-Noël Aqua, Thomas Frisch, and Alberto Verga	
Ellipticity and the spurious solution problem of k · p envelope equations (9 pages)	165320
Ratko G. Veprek, Sebastian Steiger, and Bernd Witzigmann	
Frequency quenching of microwave-induced resistance oscillations in a high-mobility two-dimensional electron gas (6 pages)	165321
S. A. Studenikin, A. S. Sachrajda, J. A. Gupta, Z. R. Wasilewski, O. M. Fedorych, M. Byszewski, D. K. Maude, M. Potemski, M. Hilke, K. W. West, and L. N. Pfeiffer	
Two-electron states bound to interface defects in quantum cascade lasers subjected to a strong magnetic field (5 pages)	165322
R. Ferreira, G. Bastard, C. Sirtori, G. Strasser, and K. Unterrainer	
Visualization of quantum Hall edge channels through imaging of terahertz emission (6 pages)	165323
K. Ikushima, H. Sakuma, S. Komiyama, and K. Hirakawa	
Surface physics, nanoscale physics, low-dimensional systems	
Quantum pump effect in one-dimensional systems of Dirac fermions (8 pages)	165401
L. Arrachea, Carlos Naón, and Mariano Salvay	
Zero-bias anomaly in the tunneling density of states of graphene (5 pages)	165402
Eros Mariani, Leonid I. Glazman, Alex Kamenev, and Felix von Oppen	
Raman scattering as a tool for the evaluation of strain in GaN/AlN quantum dots: The effect of capping (6 pages)	165403
A. Cros, N. Garro, A. Cantarero, J. Coraux, H. Renevier, and B. Daudin	
Theoretical investigation of the effect of graphite interlayer spacing on hydrogen absorption (7 pages)	165404
Rachel S. Aga, C. L. Fu, Maja Krčmar, and James R. Morris	
Plastic bending and shape-memory effect of double-wall carbon nanotubes (7 pages)	165405
Hideki Mori, Shigenobu Ogata, Ju Li, Seiji Akita, and Yoshikazu Nakayama	
Scanning tunneling microscopy observation of Pb-induced superstructures on Si(557) (8 pages)	165406
Harumo Morikawa, Keun Su Kim, Duk Yong Jung, and Han Woong Yeom	

Energy analysis of size-dependent elastic properties of ZnO nanofilms using atomistic simulations (5 pages)	165407
Guoxin Cao and Xi Chen	
Modeling RHEED intensity oscillations in multilayer epitaxy: Determination of the Ehrlich-Schwoebel barrier in Ge(001) homoepitaxy (12 pages)	165408
Byungha Shin and Michael J. Aziz	
Charge inhomogeneities due to smooth ripples in graphene sheets (9 pages)	165409
Fernando de Juan, Alberto Cortijo, and María A. H. Vozmediano	
Plasmonic interactions between a metallic nanoshell and a thin metallic film (12 pages)	165410
F. Le, N. Z. Lwin, N. J. Halas, and P. Nordlander	
Influence of oxygen vacancies on the electronic structure of HfO ₂ films (5 pages)	165411
Deok-Yong Cho, Jae-Min Lee, S.-J. Oh, Hoyoung Jang, J.-Y. Kim, J.-H. Park, and A. Tanaka	
Magic silver cluster on a MgO(100) terrace with defects (6 pages)	165412
Giovanni Barcaro and Alessandro Fortunelli	
Formation of carbon nanotube semiconductor-metal intramolecular junctions by self-assembly of vacancy defects (5 pages)	165413
Gun-Do Lee, Cai-Zhuang Wang, Jaejun Yu, Euijoon Yoon, Nong-Moon Hwang, and Kai-Ming Ho	
Electronic structures, equilibrium geometries, and finite-temperature properties of Na _n ($n=39-55$) from first principles (8 pages)	165414
Shahab Zorriasatein, Mal-Soon Lee, and D. G. Kanhere	
Tamm plasmon-polaritons: Possible electromagnetic states at the interface of a metal and a dielectric Bragg mirror (5 pages)	165415
M. Kaliteevski, I. Iorsh, S. Brand, R. A. Abram, J. M. Chamberlain, A. V. Kavokin, and I. A. Shelykh	
Transmission through a biased graphene bilayer barrier (10 pages)	165416
Johan Nilsson, A. H. Castro Neto, F. Guinea, and N. M. R. Peres	
Image potential and field states at Ag(100) and Fe(110) surfaces (6 pages)	165417
A. Hanuschkin, D. Wortmann, and S. Blügel	
Coupled electron and phonon transport in one-dimensional atomic junctions (9 pages)	165418
J. T. Lü and Jian-Sheng Wang	
Friedel oscillations in the presence of transport currents in a nanowire (6 pages)	165419
Anna Gorczyca, Maciej M. Maška, and Marcin Mierzejewski	
Structural properties of silver nanowires from atomistic descriptions (5 pages)	165420
Jianming Jia, Daning Shi, Jijun Zhao, and Baolin Wang	
Origin of quasi-constant pre-exponential factors for adatom diffusion on Cu and Ag surfaces (10 pages)	165421
Handan Yildirim, Abdelkader Kara, and Talat S. Rahman	
Dislocation nucleation in bcc Ta single crystals studied by nanoindentation (6 pages)	165422
Monika M. Biener, Juergen Biener, Andrea M. Hodge, and Alex V. Hamza	
Preparation of long monatomic carbon chains: Molecular dynamics studies (4 pages)	165423
Yin Wang, Xi-Jing Ning, Zheng-Zhe Lin, Peng Li, and Jun Zhuang	

Polycrystalline domain structure of pentacene thin films epitaxially grown on a hydrogen-terminated Si(111) surface (10 pages)	165424
S. Nishikata, G. Sazaki, J. T. Sadowski, A. Al-Mahboob, T. Nishihara, Y. Fujikawa, S. Suto, T. Sakurai, and K. Nakajima	
Interaction of Lamb modes with two-level systems in amorphous nanoscopic membranes (8 pages)	165425
T. Kühn, D. V. Anghel, Y. M. Galperin, and M. Manninen	
Electron heating in metallic resistors at sub-Kelvin temperature (9 pages)	165426
B. Huard, H. Pothier, D. Esteve, and K. E. Nagaev	
SrTiO ₃ substrates capped with a GaAs monolayer: An <i>ab initio</i> study (12 pages)	165427
François Bottin and Fabio Finocchi	
Formation of Mn ₃ O ₄ (001) on MnO(001): Surface and interface structural stability (10 pages)	165428
Veronika Bayer, Raimund Podloucky, Cesare Franchini, Francesco Allegretti, Bo Xu, Georg Parteder, Michael G. Ramsey, Svetlozar Surnev, and Falko P. Netzer	
Electronic structure of potassium-doped La@C ₈₂ metallofullerene studied with photoelectron spectroscopy (7 pages)	165429
C. Ton-That, A. Dowd, A. G. Shard, V. R. Dhanak, A. Taninaka, H. Shinohara, and M. E. Welland	
Ablation of metallic targets by high-intensity ultrashort laser pulses (10 pages)	165430
Jianjun Yang, Youbo Zhao, Nan Zhang, Yanmei Liang, and Mingwei Wang	
Coupled surface-plasmon-like modes between metamaterial (4 pages)	165431
Alastair P. Hibbins, Matthew J. Lockyear, and J. Roy Sambles	
Quantum interference and Coulomb correlation effects in spin-polarized transport through two coupled quantum dots (9 pages)	165432
Piotr Trocha and Józef Barnaś	
Raman spectra of unfilled and filled carbon nanotubes: Theory (9 pages)	165433
S. Gayen, S. N. Behera, and S. M. Bose	
Threshold behavior in kinetic electron emission from oxide insulators (4 pages)	165434
Han Kook Kim, Tae Seung Kim, Jihwa Lee, and Sam K. Jo	
First-principles study of surface properties of LiFePO ₄ : Surface energy, structure, Wulff shape, and surface redox potential (11 pages)	165435
L. Wang, F. Zhou, Y. S. Meng, and G. Ceder	
Electronic structure at highly ordered organic/metal interfaces: Pentacene on Cu(110) (10 pages)	165436
H. Yamane, D. Yoshimura, E. Kawabe, R. Sumii, K. Kanai, Y. Ouchi, N. Ueno, and K. Seki	
Thermal fluctuations, stress relaxation, and actuation in carbon nanotube networks (6 pages)	165437
S. V. Ahir, E. M. Terentjev, S. X. Lu, and B. Panchapakesan	
Angle-resolved photoemission of ordered Pb/Ni(111) surface phases (5 pages)	165438
J. Libra, K. Veltruská, and V. Matolín	

COMMENTS

Comment on "Use of a variable-charge interatomic potential for atomistic simulations of bulk, oxygen vacancies, and surfaces of rutile TiO ₂ " (3 pages)	167401
B. S. Thomas and N. A. Marks	

Reply to “Comment on ‘Use of a variable-charge interatomic potential for atomistic simulations of bulk, oxygen vacancies, and surfaces of rutile TiO ₂ ’ ” (3 pages)	167402
A. Hallil, R. Tétot, F. Berthier, I. Braems, and J. Creuze	

ERRATA

Erratum: Bulk screening in core-level photoemission from Mott-Hubbard and charge-transfer systems [Phys. Rev. B 71 , 155102 (2005)] (2 pages)	169901(E)
M. Taguchi, A. Chainani, N. Kamakura, K. Horiba, Y. Takata, M. Yabashi, K. Tamasaku, Y. Nishino, D. Miwa, T. Ishikawa, S. Shin, E. Ikenaga, T. Yokoya, K. Kobayashi, T. Mochiku, K. Hirata, and K. Motoya	
Erratum: <i>Ab initio</i> calculation of the anomalous Hall conductivity by Wannier interpolation [Phys. Rev. B 74 , 195118 (2006)] (1 page)	169902(E)
Xinjie Wang, Jonathan R. Yates, Ivo Souza, and David Vanderbilt	
Erratum: Effects of strain, electric, and magnetic fields on lateral electron-spin transport in semiconductor epilayers [Phys. Rev. B 73 , 075306 (2006)] (1 page)	169903(E)
M. Hruška, Š. Kos, S. A. Crooker, A. Saxena, and D. L. Smith	