

Influence of the substrate bands on the sp -levels topology of Ag films on Ge(111) (5 pages)	205418
P. Moras, D. Topwal, P. M. Sheverdyaeva, L. Ferrari, J. Fujii, G. Bihlmayer, S. Blügel, and C. Carbone	
Stopping of energetic cobalt clusters and formation of radiation damage in graphite (12 pages)	205419
Vladimir N. Popok, Saša Vučković, Juha Samela, Tommi T. Järvi, Kai Nordlund, and Eleanor E. B. Campbell	
Modeling charge-imbalanced NaNbO ₃ /SrTiO ₃ superlattices: Lattice relaxation and metallicity (12 pages)	205420
Riku Oja and Risto M. Nieminen	
Cooperative mechanism for anchoring highly polar molecules at an ionic surface (5 pages)	205421
J. Schütte, R. Bechstein, M. Rohlfing, M. Reichling, and A. Kühnle	
<i>Ab initio</i> thermodynamic study of the structure and chemical bonding of a β -Ni _{1-x} Al _x / α -Al ₂ O ₃ interface (12 pages)	205422
Hongtao Li, Jiwei Feng, Wenqing Zhang, Wan Jiang, Hui Gu, and John R. Smith	
Ballistic-Ohmic quantum Hall plateau transition in a graphene p - n junction (10 pages)	205423
Tony Low	
Time-resolved photoemission at the Si(100)-Ga surface using a femtosecond higher-harmonic laser source (8 pages)	205424
Andrea Melzer, Daniel Kampa, Jinxiong Wang, and Thomas Fauster	
Observation of the transition from image-potential states to resonances on argon-covered Cu(111) and Ag(111) by time-resolved two-photon photoemission (9 pages)	205425
A. Damm, K. Schubert, J. Gädde, and U. Höfer	
Effect of inserting Ni and Co layers on the quantum well states of a thin Cu film grown on Co/Cu(001) (7 pages)	205426
Y. Z. Wu, C. Won, J. Wu, Y. Xu, S. Wang, Ke Xia, E. Rotenberg, and Z. Q. Qiu	
Disentanglement of the electronic properties of metallicity-selected single-walled carbon nanotubes (5 pages)	205427
P. Ayala, Y. Miyata, K. De Blauwe, H. Shiozawa, Y. Feng, K. Yanagi, C. Kramberger, S. R. P. Silva, R. Follath, H. Kataura, and T. Pichler	
Optical properties of cluster-assembled nanoporous gold films (8 pages)	205428
F. Bisio, M. Palombo, M. Prato, O. Cavalleri, E. Barborini, S. Vinati, M. Franchi, L. Mattera, and M. Canepa	
Thermal expansion in single-walled carbon nanotubes and graphene: Nonequilibrium Green's function approach (7 pages)	205429
Jin-Wu Jiang, Jian-Sheng Wang, and Baowen Li	

ERRATA

Erratum: Real-time renormalization group in frequency space: A two-loop analysis of the nonequilibrium anisotropic Kondo model at finite magnetic field [Phys. Rev. B 80 , 045117 (2009)] (3 pages)	209901(E)
Herbert Schoeller and Frank Reininghaus	
Erratum: Critical analysis of a variational method used to describe molecular electron transport [Phys. Rev. B 80 , 165301 (2009)] (1 page)	209902(E)
Ioan Bâldea and Horst Köppel	

Capacitance of graphene nanoribbons (9 pages)	205402
A. A. Shylau, J. W. Kłos, and I. V. Zozoulenko	
Charge transfer satellite in Pr@C ₈₂ metallofullerene observed using resonant x-ray emission spectroscopy (5 pages)	205403
H. Yamaoka, H. Sugiyama, Y. Kubozono, A. Kotani, R. Nouchi, A. M. Vlaicu, H. Oohashi, T. Tochio, Y. Ito, and H. Yoshikawa	
Infrared optical properties of chromium nanoscale films with a phase transition (6 pages)	205404
Robert Lovrinčić and Annemarie Pucci	
Plasmon modes of spatially separated double-layer graphene (5 pages)	205405
E. H. Hwang and S. Das Sarma	
Atomic configuration, conductance, and tensile force of platinum wires of single-atom width (9 pages)	205406
Tokushi Kizuka and Kosuke Monna	
Nonlinear elastic behavior of graphene: <i>Ab initio</i> calculations to continuum description (8 pages)	205407
Xiaoding Wei, Benjamin Fragneaud, Chris A. Marianetti, and Jeffrey W. Kysar	
Equilibrium and time-dependent Josephson current in one-dimensional superconducting junctions (12 pages)	205408
Enrico Perfetto, Gianluca Stefanucci, and Michele Cini	
Second harmonic generation from an antiferromagnetic film in one-dimensional photonic crystals (12 pages)	205409
Sheng Zhou, Hua Li, Shu-Fang Fu, and Xuan-Zhang Wang	
Two-dimensional electronic and vibrational band structure of uniaxially strained graphene from <i>ab initio</i> calculations (4 pages)	205410
Marcel Mohr, Konstantinos Papagelis, Janina Maultzsch, and Christian Thomsen	
Ultrafast dynamics in metallic and semiconducting carbon nanotubes (5 pages)	205411
Larry Lüer, Guglielmo Lanzani, Jared Crochet, Tobias Hertel, Josh Holt, and Z. Valy Vardeny	
Complex metallic surface phases in the Al/Cu(111) system: An experimental and computational study (10 pages)	205412
T. Duguet, E. Gaudry, T. Deniozou, J. Ledieu, M. C. de Weerd, T. Belmonte, J. M. Dubois, and V. Fournée	
Quantum oscillations and decoherence due to electron-electron interaction in metallic networks and hollow cylinders (32 pages)	205413
Christophe Texier, Pierre Delplace, and Gilles Montambaux	
Azobenzene at coinage metal surfaces: Role of dispersive van der Waals interactions (10 pages)	205414
Erik R. McNellis, Jörg Meyer, and Karsten Reuter	
Dirac electrons in a Kronig-Penney potential: Dispersion relation and transmission periodic in the strength of the barriers (5 pages)	205415
M. Barbier, P. Vasilopoulos, and F. M. Peeters	
Photon absorption edge in superconductors and gapped one-dimensional systems (6 pages)	205416
V. V. Mkhitarian, E. G. Mishchenko, M. E. Raikh, and L. I. Glazman	
Antibonding plasmon mode coupling of an individual hole in a thin metallic film (4 pages)	205417
J. W. Lee, T. H. Park, Peter Nordlander, and Daniel M. Mittleman	

(Continued)

Nonlinear transport theory for negative-differential resistance states of two-dimensional electron systems in strong magnetic fields (7 pages)	205314
A. Kunold and M. Torres	
Bilayer quantum Hall system at $\nu_t=1$: Pseudospin models and in-plane magnetic field (8 pages)	205315
O. Tieleman, A. Lazarides, D. Makogon, and C. Morais Smith	
Role of electronic excitations in the energy loss of H_2^+ projectiles in high- κ materials (6 pages)	205316
S. M. Shubeita, R. C. Fadanelli, J. F. Dias, P. L. Grande, C. D. Denton, I. Abril, R. Garcia-Molina, and N. R. Arista	
Extended excitons and compact heliumlike biexcitons in type-II quantum dots (5 pages)	205317
Bhavtosh Bansal, S. Godefroo, M. Hayne, G. Medeiros-Ribeiro, and V. V. Moshchalkov	
Controlling and enhancing terahertz collective electron dynamics in superlattices by chaos-assisted miniband transport (5 pages)	205318
M. T. Greenaway, A. G. Balanov, E. Schöll, and T. M. Fromhold	
 Masses in graphenelike two-dimensional electronic systems: Topological defects in order parameters and their fractional exchange statistics (32 pages)	205319
Shinsei Ryu, Christopher Mudry, Chang-Yu Hou, and Claudio Chamon	
Terahertz photoresponse of a quantum Hall edge-channel diode (5 pages)	205320
Christian Notthoff, Kevin Rachor, Detlef Heitmann, and Axel Lorke	
Key role of the wetting layer in revealing the hidden path of Ge/Si(001) Stranski-Krastanow growth onset (9 pages)	205321
Moritz Brehm, Francesco Montalenti, Martyna Grydlik, Guglielmo Vastola, Herbert Lichtenberger, Nina Hrauda, Matthew J. Beck, Thomas Fromherz, Friedrich Schäffler, Leo Miglio, and Günther Bauer	
First-principles study of back-contact effects on CdTe thin-film solar cells (4 pages)	205322
Mao-Hua Du	
Intrinsic photoluminescence of adamantane in the ultraviolet spectral region (4 pages)	205323
Lasse Landt, Witoslaw Kielich, David Wolter, Matthias Staiger, Arno Ehresmann, Thomas Möller, and Christoph Bostedt	
Magnetodielectric coupling in nonmagnetic Au/GaAs:Si Schottky barriers (7 pages)	205324
S. Tongay, A. F. Hebard, Y. Hikita, and H. Y. Hwang	
Theoretical investigation of modulated currents in open nanostructures (10 pages)	205325
Valeriu Moldoveanu, Andrei Manolescu, and Vidar Gudmundsson	
Proposed entanglement beam splitter using a quantum-dot spin in a double-sided optical microcavity (7 pages)	205326
C. Y. Hu, W. J. Munro, J. L. O'Brien, and J. G. Rarity	
Intensified blinking, continuous memory loss, and fluorescence enhancement of interacting light-emission quantum dots (5 pages)	205327
J. D. Lee and S. Maenosono	
Arsenic defect complexes at SiO_2/Si interfaces: A density functional theory study (6 pages)	205328
Ning Kong, Taras A. Kirichenko, Gyeong S. Hwang, and Sanjay K. Banerjee	
Surface physics, nanoscale physics, low-dimensional systems	
Anomalous finite size effects on surface states in the topological insulator Bi_2Se_3 (5 pages)	205401
Jacob Linder, Takehito Yokoyama, and Asle Sudbø	

(Continued)

 Giant magnetoresistance in ferromagnet/organic semiconductor/ferromagnet heterojunctions (9 pages)	205207
Jung-Woo Yoo, H. W. Jang, V. N. Prigodin, C. Kao, C. B. Eom, and A. J. Epstein	
Optical properties of phosphorus-related point defects in silica fiber preforms (8 pages)	205208
Giusy Origlio, Fabrizio Messina, Marco Cannas, Roberto Boscaino, Sylvain Girard, Aziz Boukenter, and Youcef Ouerdane	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Change in the character of quasiparticles without gap collapse in a model of fractional quantum Hall effect (11 pages)	205301
Csaba Töke and Jainendra K. Jain	
Realizing singlet-triplet qubits in multivalley Si quantum dots (6 pages)	205302
Dimitrie Culcer, Łukasz Cywiński, Qiuzi Li, Xuedong Hu, and S. Das Sarma	
Measurement of the Knight field and local nuclear dipole-dipole field in an InGaAs/GaAs quantum dot ensemble (15 pages)	205303
T. Auer, R. Oulton, A. Bauschulte, D. R. Yakovlev, M. Bayer, S. Yu. Verbin, R. V. Cherbunin, D. Reuter, and A. D. Wieck	
Tunnel coupling in an ensemble of vertically aligned quantum dots at room temperature (10 pages)	205304
V. V. Nikolaev, N. S. Averkiev, M. M. Sobolev, I. M. Gadzhiyev, I. O. Bakshaev, M. S. Buyalo, and E. L. Portnoi	
Role of nonlinear effects in nanowire growth and crystal phase (8 pages)	205305
V. G. Dubrovskii, N. V. Sibirev, G. E. Cirlin, A. D. Bouravleuv, Yu. B. Samsonenko, D. L. Dheeraj, H. L. Zhou, C. Sartel, J. C. Harmand, G. Patriarche, and F. Glas	
De Haas-van Alphen effect and energy gaps of a correlated two-dimensional electron system in an AlAs two-valley pseudospin system (6 pages)	205306
T. Windisch, X. Huang, S. Dasgupta, B. Rupperecht, Ch. Heyn, M. Bichler, A. Fontcuberta i Morral, M. Grayson, G. Abstreiter, M. A. Wilde, and D. Grundler	
Delocalization-localization transition of plasmons in random (GaAs) _m (Al _{0.3} Ga _{0.7} As) ₆ superlattices (5 pages)	205307
Yu. A. Pusep, A. D. Rodrigues, and S. S. Sokolov	
Magnetism in tunable quantum rings (5 pages)	205308
G. Bårdsen, E. Tölö, and A. Harju	
Optical spin orientation in strained Ge/SiGe quantum wells: A tight-binding approach (8 pages)	205309
Michele Virgilio and Giuseppe Grosso	
Quantum criticality near the Stoner transition in a system of two tunnel-coupled quantum dots with spin-orbit coupling (9 pages)	205310
Oleksandr Zelyak and Ganpathy Murthy	
Internal electronic structure and fine structure of multiexcitons in semiconductor quantum dots (15 pages) . . .	205311
Vladan Mlinar and Alex Zunger	
Temperature dependence of the spectral band shape of CdSe nanodots and nanorods (5 pages)	205312
J. I. Climente, J. Planelles, and F. Rajadell	
Biexciton oscillator strength (12 pages)	205313
M. Combescot and O. Betbeder-Matibet	

(Continued)

Kondo screening cloud in the single-impurity Anderson model: A density matrix renormalization group study (8 pages)	205114
Andreas Holzner, Ian P. McCulloch, Ulrich Schollwöck, Jan von Delft, and Fabian Heidrich-Meisner	
Resonant cavitylike modes in dielectric photonic crystals made of collections of subwavelength cylinders (6 pages)	205115
Ruey-Lin Chern and Didier Felbacq	
Pressure-induced structural and electronic transitions in FeOOH from first principles (9 pages)	205116
Katrin Otte, Rossitza Pentcheva, Wolfgang W. Schmahl, and James R. Rustad	
Finite-temperature dynamics with the density-matrix renormalization group method (5 pages)	205117
J. Kokalj and P. Prelovšek	
Space-charge wave excitation by superposition of static and moving interference patterns (5 pages)	205118
B. Hilling, T. Schemme, K.-M. Voit, H.-J. Schmidt, and M. Imlau	
AB_2 Hubbard chains in the strong-coupling limit: Ferrimagnetism, Nagaoka and RVB states, phase separation, and Luttinger-liquid behavior (13 pages)	205119
M. H. Oliveira, E. P. Raposo, and M. D. Coutinho-Filho	
Infrared metafilms on a dielectric substrate (5 pages)	205120
Boubacar Kanté, Jean-Michel Lourtioz, and André de Lustrac	
Assessing common density functional approximations for the <i>ab initio</i> description of monovacancies in metals (10 pages)	205121
L. Delczeg, E. K. Delczeg-Czirjak, B. Johansson, and L. Vitos	
<i>Ab initio</i> calculations of ferroelectric instability in $PbTiO_3$ capacitors with symmetric and asymmetric electrode layers (8 pages)	205122
Yoshitaka Umeno, Jan Michael Albina, Bernd Meyer, and Christian Elsässer	
Semiconductors I: bulk	
Ferroelectric nature and real-space observations of domain motions in the organic charge-transfer compound tetrathiafulvalene- <i>p</i> -chloranil (7 pages)	205201
Hideo Kishida, Hisashi Takamatsu, Ken Fujinuma, and Hiroshi Okamoto	
Temperature-dependent resistivity of ferromagnetic $Ga_{1-x}Mn_xAs$: Interplay between impurity scattering and many-body effects (6 pages)	205202
F. V. Kyrychenko and C. A. Ullrich	
Γ_7 valence band symmetry related hole fine splitting of bound excitons in ZnO observed in magneto-optical studies (6 pages)	205203
Markus R. Wagner, Jan-Hindrik Schulze, Ronny Kirste, Munise Cobet, Axel Hoffmann, Christian Rauch, Anna V. Rodina, Bruno K. Meyer, Uwe Röder, and Klaus Thonke	
High-temperature ferromagnetism by means of oriented nanocolumns: Co clustering in (Zn,Co)O (6 pages)	205204
N. Jedrecy, H. J. von Bardeleben, and D. Demaille	
Manganese-hydrogen complexes in $Ga_{1-x}Mn_xN$ (10 pages)	205205
C. Bihler, U. Gerstmann, M. Hoeb, T. Graf, M. Gjukic, W. G. Schmidt, M. Stutzmann, and M. S. Brandt	
Electrical detection and magnetic-field control of spin states in phosphorus-doped silicon (6 pages)	205206
H. Morishita, L. S. Vlasenko, H. Tanaka, K. Semba, K. Sawano, Y. Shiraki, M. Eto, and K. M. Itoh	

(Continued)

Phonon localization and thermal rectification in asymmetric harmonic chains using a nonequilibrium Green's function formalism (<i>4 pages</i>)	201408(R)
Patrick E. Hopkins and Justin R. Serrano	

ARTICLES

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

Quantum Hall effect in bilayer graphene: Disorder effect and quantum phase transition (<i>5 pages</i>)	205101
R. Ma, L. Sheng, R. Shen, M. Liu, and D. N. Sheng	
Generalized Slater-Jastrow trial function: Application to the electron gas at high density (<i>14 pages</i>)	205102
James C. Porter	
Optimizing the thermoelectric efficiency of icosahedral quasicrystals and related complex alloys (<i>7 pages</i>)	205103
Enrique Maciá	
Highly efficient method for Kohn-Sham density functional calculations of 500–10 000 atom systems (<i>11 pages</i>)	205104
M. J. Rayson and P. R. Briddon	
Electronic stopping of low-energy H and He in Cu and Au investigated by time-of-flight low-energy ion scattering (<i>4 pages</i>)	205105
S. N. Markin, D. Primetzhofer, M. Spitz, and P. Bauer	
Ligand isotope structure of the optical ${}^7F_0 \rightarrow {}^5D_0$ transition in $\text{EuCl}_3 \cdot 6\text{H}_2\text{O}$ (<i>5 pages</i>)	205106
R. L. Ahlefeldt, A. Smith, and M. J. Sellars	
Effective Coulomb interactions within BEDT-TTF dimers (<i>9 pages</i>)	205107
Edan Scriven and B. J. Powell	
High-resolution hard x-ray photoemission investigation of $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ ($0.30 \leq x < 0.50$): Microscopic phase separation and surface electronic structure of a bilayer colossal magnetoresistance manganite (<i>7 pages</i>)	205108
S. de Jong, F. Massee, Y. Huang, M. Gorgoi, F. Schaefer, J. Fink, A. T. Boothroyd, D. Prabhakaran, J. B. Goedkoop, and M. S. Golden	
Pairing dynamics in strongly correlated superconductivity (<i>8 pages</i>)	205109
B. Kyung, D. Sénéchal, and A.-M. S. Tremblay	
Spin Coulomb drag in a spin-polarized Luttinger liquid (<i>10 pages</i>)	205110
P. Schlottmann	
Electronic structure and magnetic properties of $\text{Li}_2\text{ZrCuO}_4$: A spin- $\frac{1}{2}$ Heisenberg system close to a quantum critical point (<i>9 pages</i>)	205111
M. Schmitt, J. Málek, S.-L. Drechsler, and H. Rosner	
Valence-state transition in $\text{SrMn}_{1-x}\text{Mo}_x\text{O}_3$ ($0 \leq x \leq 0.5$) investigated by soft x-ray absorption spectroscopy (<i>5 pages</i>)	205112
Jieun Lee, Bongjae Kim, B. H. Kim, B. I. Min, S. Kolesnik, O. Chmaissem, J. Mais, B. Dabrowski, H. J. Shin, D. H. Kim, H. J. Lee, and J.-S. Kang	
Role of Si and Ge as impurities in ZnO (<i>5 pages</i>)	205113
J. L. Lyons, A. Janotti, and C. G. Van de Walle	

(Continued)