

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 85, NUMBER 11

MARCH 2012-15(I)

Effects of chemical functionalization on electronic transport in carbon nanobuds (<i>9 pages</i>)	115446
P. Havu, A. Sillanpää, N. Runeberg, J. Tarus, E. T. Seppälä, and R. M. Nieminen	
Molecular-dynamics study of the viscous to inertial crossover in nanodroplet coalescence (<i>10 pages</i>)	115447
Jean-Christophe Pothier and Laurent J. Lewis	
Energetics and electronic properties of twisted single-walled carbon nanotubes (<i>4 pages</i>)	115448
Koichiro Kato, Takashi Koretsune, and Susumu Saito	
Dual-interface gratings for broadband absorption enhancement in thin-film solar cells (<i>8 pages</i>)	115449
Aimi Abass, Khai Q. Le, Andrea Alù, Marc Burgelman, and Bjorn Maes	
Correlation between surface rumpling and structural phase transformation in SrTiO ₃ (<i>6 pages</i>)	115450
Surendra Singh, Te-Yu Chien(簡德宇), J. R. Guest, and M. R. Fitzsimmons	
Dominant phonon wave vectors and strain-induced splitting of the 2D Raman mode of graphene (<i>5 pages</i>)	115451
Rohit Narula, Nicola Bonini, Nicola Marzari, and Stephanie Reich	

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 85, NUMBER 11

MARCH 2012-15(I)

First-principles investigation of hyperfine interactions for nuclear spin entanglement in photoexcited fullerenes (7 pages)	115430
Vasileia Filidou, Davide Ceresoli, John J. L. Morton, and Feliciano Giustino	
Energy gaps in graphene nanomeshes (5 pages)	115431
William Oswald and Zhigang Wu	
Lattice-corrected strain-induced vector potentials in graphene (6 pages)	115432
Alexander L. Kitt, Vitor M. Pereira, Anna K. Swan, and Bennett B. Goldberg	
Bloch-Zener oscillations in graphene and topological insulators (6 pages)	115433
Viktor Krueckl and Klaus Richter	
Impact of step defects on surface states of topological insulators (5 pages)	115434
Degang Zhang and C. S. Ting	
Raman scattering from molecular conduction junctions: Charge transfer mechanism (12 pages)	115435
Michal Oren, Michael Galperin, and Abraham Nitzan	
First-principles study of high-conductance DNA sequencing with carbon nanotube electrodes (13 pages)	115436
X. Chen, I. Rungger, C. D. Pemmaraju, U. Schwingenschlögl, and S. Sanvito	
Infrared spectrum of single-walled boron nitride nanotubes (9 pages)	115437
B. Fakrach, A. Rahmani, H. Chadli, K. Sbai, M. Bentaleb, J.-L. Bantignies, and J.-L. Sauvajol	
Graphene-based photodetector with two cavities (9 pages)	115438
Aires Ferreira, N. M. R. Peres, R. M. Ribeiro, and T. Stauber	
Microscopic theory of quantum anomalous Hall effect in graphene (10 pages)	115439
Zhenhua Qiao, Hua Jiang, Xiao Li, Yugui Yao, and Qian Niu	
Current-induced switching in transport through anisotropic magnetic molecules (13 pages)	115440
Niels Bode, Liliana Arrachea, Gustavo S. Lozano, Tamara S. Nunner, and Felix von Oppen	
Bulk and surface characterization of In ₂ O ₃ (001) single crystals (11 pages)	115441
Daniel R. Hagleitner, Manfred Menhart, Peter Jacobson, Sara Blomberg, Karina Schulte, Edvin Lundgren, Markus Kubicek, Jürgen Fleig, Frank Kubel, Christoph Puls, Andreas Limbeck, Herbert Hutter, Lynn A. Boatner, Michael Schmid, and Ulrike Diebold	
Behavior of a magnetic impurity in graphene in the presence of a vacancy (5 pages)	115442
F. M. Hu, J. E. Gubernatis, Hai-Qing Lin, Yan-Chao Li, and R. M. Nieminen	
Creation of particle-hole superposition states in graphene at multiphoton resonant excitation by laser radiation (10 pages)	115443
H. K. Avetissian, A. K. Avetissian, G. F. Mkrtchian, and Kh. V. Sedrakian	
Crossover from two- to three-dimensional gold particle shapes on CaO films of different thicknesses (8 pages) ...	115444
Xiang Shao, Niklas Nilius, and Hans-Joachim Freund	
Mechanism for reversed photoemission core-level shifts of oxidized Ag (5 pages)	115445
Henrik Grönbeck, Simon Klacar, Natalia M. Martin, Anders Hellman, Edvin Lundgren, and Jesper N. Andersen	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 85, NUMBER 11

MARCH 2012-15(I)

	Submersion of potassium clusters in helium nanodroplets (<i>5 pages</i>)	115414
	Lukas An der Lan, Peter Bartl, Christian Leidlmair, Harald Schöbel, Stephan Denifl, Tilmann D. Märk, Andrew M. Ellis, and Paul Scheier	
	Smooth gauge for topological insulators (<i>11 pages</i>)	115415
	Alexey A. Soluyanov and David Vanderbilt	
	Charge fluctuations in single-electron tunneling oscillations (<i>11 pages</i>)	115416
	C. Negri and F. Pistolesi	
	First-principles theoretical investigation of monoatomic and dimer Mn adsorption on noble metal (111) surfaces (<i>14 pages</i>)	115417
	Francisco Muñoz, Aldo H. Romero, Jose Mejía-López, and J. L. Morán-López	
	Symmetry classification of energy bands in graphene (<i>5 pages</i>)	115418
	E. Kogan and V. U. Nazarov	
	Producing ripple topographies by ion bombardment with codeposition of impurities: A curvature-dependent sputter yield is not required (<i>6 pages</i>)	115419
	R. Mark Bradley	
	Lifetime of magnetic excitations in supported ferromagnetic and antiferromagnetic spin- $\frac{1}{2}$ Heisenberg chains (<i>11 pages</i>)	115420
	J. P. Gauyacq and N. Lorente	
	Avoiding metallic walls: Use of modal superposition in plasmonic waveguides to reduce propagation loss (<i>5 pages</i>)	115421
	Francisco J. Rodríguez-Fortuño and Nader Engheta	
	Channeling of low-energy ions on hydrogen-covered single-crystal surfaces (<i>11 pages</i>)	115422
	Robert D. Kolasinski, Norman C. Bartelt, Josh A. Whaley, and Thomas E. Felter	
	Theory of spin-orbit coupling in bilayer graphene (<i>14 pages</i>)	115423
	S. Konschuh, M. Gmitra, D. Kochan, and J. Fabian	
	Ferromagnetic order of nuclear spins coupled to conduction electrons: A combined effect of electron-electron and spin-orbit interactions (<i>19 pages</i>)	115424
	Robert Andrzej Żak, Dmitrii L. Maslov, and Daniel Loss	
	Tunneling induced transparency and slow light in quantum dot molecules (<i>7 pages</i>)	115425
	H. S. Borges, L. Sanz, J. M. Villas-Bôas, O. O. Diniz Neto, and A. M. Alcalde	
	Surface relaxation of topological insulators: Influence on the electronic structure (<i>4 pages</i>)	115426
	N. Fukui, T. Hirahara, T. Shirasawa, T. Takahashi, K. Kobayashi, and S. Hasegawa	
	Coherent field emission image of graphene predicted with a microscopic theory (<i>9 pages</i>)	115427
	Zhibing Li, Ningsheng Xu, and H. J. Kreuzer	
	Correlation length and unusual corrections to entanglement entropy (<i>10 pages</i>)	115428
	Elisa Ercolessi, Stefano Evangelisti, Fabio Franchini, and Francesco Ravanini	
	Optical response of a metallic nanoparticle immersed in a medium with optical gain (<i>5 pages</i>)	115429
	Alessandro Veltri and Ashod Aradian	

(Continued)

 Selected for a Viewpoint in *Physics*. Please visit <http://physics.aps.org/>.

 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).

Optically controlled phase gate for two spin qubits in coupled quantum dots (<i>6 pages</i>)	115319
Li-Bo Chen, L. J. Sham, and Edo Waks	
Optimal thermoelectric figure of merit in $\text{Bi}_2\text{Te}_3/\text{Sb}_2\text{Te}_3$ quantum dot nanocomposites (<i>11 pages</i>)	115320
Jun Zhou, Yuanyuan Wang, Jeff Sharp, and Ronggui Yang	
 Real-space entanglement spectrum of quantum Hall systems (<i>5 pages</i>)	115321
J. Dubail, N. Read, and E. H. Rezayi	
Surface physics, nanoscale physics, low-dimensional systems	
Light transport through disordered layers of dense gallium arsenide submicron particles (<i>11 pages</i>)	115401
T. van der Beek, P. Barthelemy, P. M. Johnson, D. S. Wiersma, and A. Lagendijk	
Electromagnetic cloaking of cylindrical objects by multilayer or uniform dielectric claddings (<i>7 pages</i>)	115402
Constantinos A. Valagiannopoulos and Pekka Alitalo	
Energy relaxation for hot Dirac fermions in graphene and breakdown of the quantum Hall effect (<i>6 pages</i>)	115403
A. M. R. Baker, J. A. Alexander-Webber, T. Altebaeumer, and R. J. Nicholas	
Fermi-level pinning can determine polarity in semiconductor nanorods (<i>8 pages</i>)	115404
Philip W. Avraam, Nicholas D. M. Hine, Paul Tangney, and Peter D. Haynes	
Magnetic structure of hydrogen-induced defects on graphene (<i>10 pages</i>)	115405
J. O. Sofo, Gonzalo Usaj, P. S. Cornaglia, A. M. Suarez, A. D. Hernández-Nieves, and C. A. Balseiro	
One-dimensional physics in transition-metal nanowires: Renormalization group and bosonization analysis (<i>15 pages</i>)	115406
Jun-ichi Okamoto and A. J. Millis	
Dangling bonds and magnetism of grain boundaries in graphene (<i>10 pages</i>)	115407
M. A. Akhukov, A. Fasolino, Y. N. Gornostyrev, and M. I. Katsnelson	
Field-induced quantum Hall ferromagnetism in suspended bilayer graphene (<i>6 pages</i>)	115408
H. J. van Elferen, A. Veligura, E. V. Kurganova, U. Zeitler, J. C. Maan, N. Tombros, I. J. Vera-Marun, and B. J. van Wees	
Transport calculations based on density functional theory, Friedel's sum rule, and the Kondo effect (<i>5 pages</i>)	115409
Philipp Tröster, Peter Schmitteckert, and Ferdinand Evers	
Polarization dependence of x-ray absorption spectra in graphene (<i>8 pages</i>)	115410
M. T. Chowdhury, R. Saito, and M. S. Dresselhaus	
Selective focusing of electrons and holes in a graphene-based superconducting lens (<i>6 pages</i>)	115411
S. Gómez, P. Buset, W. J. Herrera, and A. Levy Yeyati	
Equilibrium-reduced density matrix formulation: Influence of noise, disorder, and temperature on localization in excitonic systems (<i>14 pages</i>)	115412
Jeremy M. Moix, Yang Zhao, and Jianshu Cao	
Optical phonon modes in ordered core-shell CdSe/CdS nanorod arrays (<i>6 pages</i>)	115413
Andrea Giugni, Gobind Das, Alessandro Alabastri, Remo Proietti Zaccaria, Marco Zanella, Isabella Franchini, Enzo Di Fabrizio, and Roman Krahne	

(Continued)

Excited-state spectroscopy of single lateral self-assembled InGaAs quantum dot molecules (<i>6 pages</i>)	115304
M. Heldmaier, M. Seible, C. Hermannstädter, M. Witzany, R. Roßbach, M. Jetter, P. Michler, L. Wang, A. Rastelli, and O. G. Schmidt	
Role of anisotropy in the Förster energy transfer from a semiconductor quantum well to an organic crystalline overlayer (<i>6 pages</i>)	115305
S. Kawka and G. C. La Rocca	
Intrinsic spin swapping (<i>6 pages</i>)	115306
Severin Sadjina, Arne Brataas, and A. G. Mal'shukov	
Electronic bound states in the continuum above (Ga,In)(As,N)/(Al,Ga)As quantum wells (<i>8 pages</i>)	115307
Asaf Albo, Dan Fekete, and Gad Bahir	
Model anisotropic quantum Hall states (<i>9 pages</i>)	115308
R.-Z. Qiu, F. D. M. Haldane, Xin Wan, Kun Yang, and Su Yi	
Polaron master equation theory of the quantum-dot Mollow triplet in a semiconductor cavity-QED system (<i>13 pages</i>)	115309
C. Roy and S. Hughes	
Diffusion of nuclear spin polarization in a quantum Hall electron system (<i>5 pages</i>)	115310
T. Nakajima and S. Komiyama	
Polarization fluctuation dominated electrical transport processes of polymer-based ferroelectric field effect transistors (<i>9 pages</i>)	115311
Satyaprasad P Senanayak, S. Guha, and K. S. Narayan	
Quantum lifetime of two-dimensional electrons in a magnetic field (<i>7 pages</i>)	115312
Scott Dietrich, Sergey Vitkalov, D. V. Dmitriev, and A. A. Bykov	
Quadrupolar spectra of nuclear spins in strained $\text{In}_x\text{Ga}_{1-x}\text{As}$ quantum dots (<i>12 pages</i>)	115313
Ceyhun Bulutay	
Weak antilocalization and electron-electron interaction effects in Cu-doped Bi_2Se_3 films (<i>5 pages</i>)	115314
Y. Takagaki, B. Jenichen, U. Jahn, M. Ramsteiner, and K.-J. Friedland	
Spin dynamics of dark polariton solitons (<i>5 pages</i>)	115315
Albrecht Werner, Oleg A. Egorov, and Falk Lederer	
Signatures of quantum phase transitions in parallel quantum dots: Crossover from local moment to underscreened spin-1 Kondo physics (<i>6 pages</i>)	115316
Arturo Wong, W. Brian Lane, Luis G. G. V. Dias da Silva, Kevin Ingersent, Nancy Sandler, and Sergio E. Ulloa	
Phonon-limited mobility in <i>n</i> -type single-layer MoS_2 from first principles (<i>16 pages</i>)	115317
Kristen Kaasbjerg, Kristian S. Thygesen, and Karsten W. Jacobsen	
Role of interband and photoinduced absorption in the nonlinear refraction and absorption of resonantly excited PbS quantum dots around 1550 nm (<i>11 pages</i>)	115318
Abdoulghafar Omari, Iwan Moreels, Francesco Masia, Wolfgang Langbein, Paola Borri, Dries Van Thourhout, Pascal Kockaert, and Zeger Hens	

(Continued)

Ferrimagnetism in Fe-rich NbFe ₂ (5 pages)	115137
T. D. Haynes, I. Maskery, M. W. Butchers, J. A. Duffy, J. W. Taylor, S. R. Giblin, C. Utfeld, J. Laverock, S. B. Dugdale, Y. Sakurai, M. Itou, C. Pfleiderer, M. Hirschberger, A. Neubauer, W. Duncan, and F. M. Grosche	
Optical properties of metamaterials: Influence of electric multipoles, magnetoelectric coupling, and spatial dispersion (8 pages)	115138
N. Guth, B. Gallas, J. Rivory, J. Grand, A. Ourir, G. Guida, R. Abdeddaim, C. Jouvaud, and J. de Rosny	
Semiconductors I: bulk	
☞ Spin-orbit coupling and its effects in organic solids (18 pages)	115201
Z. G. Yu	
Magnetic field and nanostructuring effects on the thermoelectric performance of bismuth (6 pages)	115202
Adrian Popescu, Lilia M. Woods, and George S. Nolas	
Interference mechanism of magnetoresistance in variable-range hopping conduction: The effect of paramagnetic electron spins and continuous spectrum of scatterer energies (13 pages)	115203
A. V. Shumilin and V. I. Kozub	
Interface-driven phase separation in multifunctional materials: The case of the ferromagnetic semiconductor GeMn (10 pages)	115204
Emmanuel Arras, Frédéric Lançon, Ivetta Slipukhina, Éric Prestat, Mauro Rovezzi, Samuel Tardif, Andrey Titov, Pascale Bayle-Guillemaud, Francesco d'Acapito, André Barski, Vincent Favre-Nicolin, Matthieu Jamet, Joël Cibert, and Pascal Pochet	
☞ Efficiency and rate of spontaneous emission in organic electroluminescent devices (21 pages)	115205
Mauro Furno, Rico Meerheim, Simone Hofmann, Björn Lüssem, and Karl Leo	
Analytical bond-order potential for the cadmium telluride binary system (19 pages)	115206
D. K. Ward, X. W. Zhou, B. M. Wong, F. P. Doty, and J. A. Zimmerman	
Impurity scattering in the bulk of topological insulators (6 pages)	115207
Cheung Chan and Tai-Kai Ng	
Lattice thermal conductivity of (Bi _{1-x} Sb _x) ₂ Te ₃ alloys with embedded nanoparticles (7 pages)	115208
N. A. Katcho, N. Mingo, and D. A. Broido	
Semiconductors II: surfaces, interfaces, microstructures, and related topics	
Transformation of the Ag(111) surface state due to molecule-surface interaction with ordered organic molecular monolayers (8 pages)	115301
N. L. Zaitsev, I. A. Nechaev, P. M. Echenique, and E. V. Chulkov	
Theoretical model obtained in momentum space for charge transport in a system consisting of noninteracting polarons (7 pages)	115302
F. Marsusi and J. Sabbaghzadeh	
Decoherence and dynamical decoupling control of nitrogen vacancy center electron spins in nuclear spin baths (18 pages)	115303
Nan Zhao, Sai-Wah Ho, and Ren-Bao Liu	

(Continued)

Distribution of cations in wurtzitic $\text{In}_x\text{Ga}_{1-x}\text{N}$ and $\text{In}_x\text{Al}_{1-x}\text{N}$ alloys: Consequences for energetics and quasiparticle electronic structures (<i>14 pages</i>)	115121
Luiz Cláudio de Carvalho, André Schleife, Jürgen Furthmüller, and Friedhelm Bechstedt	
Gaussian charge-transfer charge distributions for non-self-consistent electronic structure calculations (<i>8 pages</i>)	115122
M. Marsman, G. Jordan, L.-E. Hintzsche, Y.-S. Kim, and G. Kresse	
Spin accumulation encoded in electronic noise for mesoscopic billiards with finite tunneling rates (<i>7 pages</i>)	115123
J. G. G. S. Ramos, A. L. R. Barbosa, D. Bazeia, and M. S. Hussein	
Asymptotic behavior of the Kohn-Sham exchange potential at a metal surface (<i>13 pages</i>)	115124
Zhixin Qian	
Effects of Eu doping on SmB_6 single crystals (<i>5 pages</i>)	115125
Sunmog Yeo, Kimyung Song, Namjung Hur, Z. Fisk, and Pedro Schlottmann	
Distinguishing Coulomb and electron-phonon interactions for massless Dirac fermions (<i>11 pages</i>)	115126
J. P. F. LeBlanc, Jungseek Hwang, and J. P. Carbotte	
Nature of the hole states in Li-doped NiO (<i>5 pages</i>)	115127
Hungru Chen and John H. Harding	
Competing orders in Na_xCoO_2 from strong correlations on a two-particle level (<i>5 pages</i>)	115128
Lewin Boehnke and Frank Lechermann	
 Role of nonlocal exchange in the electronic structure of correlated oxides (<i>10 pages</i>)	115129
Federico Iori, Matteo Gatti, and Angel Rubio	
Bethe ansatz and ordinary differential equation correspondence for degenerate Gaudin models (<i>9 pages</i>)	115130
Omar El Araby, Vladimir Gritsev, and Alexandre Faribault	
Mean free path of a suddenly created fast electron moving in a degenerate electron gas (<i>4 pages</i>)	115131
I. Nagy and P. M. Echenique	
 Quantum phase transitions in the Kane-Mele-Hubbard model (<i>12 pages</i>)	115132
M. Hohenadler, Z. Y. Meng, T. C. Lang, S. Wessel, A. Muramatsu, and F. F. Assaad	
Structural and electronic properties of the two-dimensional superconductor CuS with $1\frac{1}{3}$ -valent copper (<i>5 pages</i>)	115133
I. I. Mazin	
Coherent potential approximation as a voltage probe (<i>8 pages</i>)	115134
M. Ye. Zhuravlev, A. V. Vedyayev, K. D. Belashchenko, and E. Y. Tsymbal	
Real-space Green's function calculations of Compton profiles (<i>10 pages</i>)	115135
Brian A. Mattern, Gerald T. Seidler, Joshua J. Kas, Joseph I. Pacold, and John J. Rehr	
Atomic and itinerant effects at the transition-metal x-ray absorption K pre-edge exemplified in the case of V_2O_3 (<i>9 pages</i>)	115136
P. Hansmann, M. W. Haverkort, A. Toschi, G. Sangiovanni, F. Rodolakis, J. P. Rueff, M. Marsi, and K. Held	

(Continued)

Semimetal and Topological Insulator in Perovskite Iridates (<i>6 pages</i>)	115105
Jean-Michel Carter, V. Vijay Shankar, M. Ahsan Zeb, and Hae-Young Kee	
Hole polaron formation and migration in olivine phosphate materials (<i>6 pages</i>)	115106
M. D. Johannes, Khang Hoang, J. L. Allen, and K. Gaskell	
Revisiting the Yb electronic structure with low-energy photoemission spectroscopy (<i>8 pages</i>)	115108
F. Offi, P. Vilmercati, L. Petaccia, S. Gorovikov, A. Ruocco, M. I. Trioni, A. Rizzo, A. Goldoni, G. Stefani, G. Panaccione, and S. Iacobucci	
Bulk Fermi surface and momentum density in heavily doped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ using high-resolution Compton scattering and positron annihilation spectroscopies (<i>8 pages</i>)	115109
W. Al-Sawai, B. Barbiellini, Y. Sakurai, M. Itou, P. E. Mijnders, R. S. Markiewicz, S. Kaprzyk, S. Wakimoto, M. Fujita, S. Basak, H. Lin, Yung Jui Wang, S. W. H. Eijt, H. Schut, K. Yamada, and A. Bansil	
Topological charge pumping effect by the magnetization dynamics on the surface of three-dimensional topological insulators (<i>6 pages</i>)	115110
Hiroaki T. Ueda, Akihito Takeuchi, Gen Tatara, and Takehito Yokoyama	
Spectroscopic investigations of $\text{Eu}^{3+}:\text{Y}_2\text{SiO}_5$ for quantum memory applications (<i>10 pages</i>)	115111
B. Lauritzen, N. Timoney, N. Gisin, M. Afzelius, H. de Riedmatten, Y. Sun, R. M. Macfarlane, and R. L. Cone	
Kondo-Anderson transitions (<i>16 pages</i>)	115112
S. Kettmann, E. R. Mucciolo, I. Varga, and K. Slevin	
 Numerical renormalization group for the sub-Ohmic spin-boson model: A conspiracy of errors (<i>8 pages</i>)	115113
Matthias Vojta	
Prediction of optical properties of F centers in oxides from quasiparticle excitations (<i>4 pages</i>)	115114
Sergio Tosoni, Daniel Fernandez Hevia, Jesús Perez Peña, and Francesc Illas	
Diffusion Monte Carlo for fermions with replica reduction (<i>6 pages</i>)	115115
Myung-Hoon Chung and D. P. Landau	
Integrability in anyonic quantum spin chains via a composite height model (<i>22 pages</i>)	115116
Paata Kakashvili and Eddy Ardonne	
Quantum criticality for extended nodes on a Bethe lattice in the large connectivity limit (<i>8 pages</i>)	115117
James M. Murray, Adrian Del Maestro, and Zlatko Tešanović	
Magnetic properties of PdAs_2O_6 : A dilute spin system with an unusually high Néel temperature (<i>8 pages</i>)	115118
M. Reehuis, T. Saha-Dasgupta, D. Orosel, J. Nuss, B. Rahaman, B. Keimer, O. K. Andersen, and M. Jansen	
Wick theorem for general initial states (<i>8 pages</i>)	115119
R. van Leeuwen and G. Stefanucci	
High-resolution photoelectron spectroscopy study of Kondo metals: SmSn_3 and $\text{Sm}_{0.9}\text{La}_{0.1}\text{Sn}_3$ (<i>7 pages</i>)	115120
Hitoshi Yamaoka, Patrik Thunström, Ignace Jarrige, Kenya Shimada, Naohito Tsujii, Masashi Arita, Hideaki Iwasawa, Hirokazu Hayashi, Jian Jiang, Takafumi Habuchi, Daisuke Hirayama, Hirofumi Namatame, Masaki Taniguchi, Urara Murao, Shingo Hosoya, Akira Tamaki, and Hideaki Kitazawa	

(Continued)

BRIEF REPORTS

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

- Photoassisted Fowler-Nordheim-like tunneling from passivated GaAs microcantilevers (*4 pages*) 113301
D. Paget, A. C. H. Rowe, S. Arscott, and E. Peytavit
- Kinetics of *a*-Si:H bulk defect and *a*-Si:H/*c*-Si interface-state reduction (*4 pages*) 113302
Stefaan De Wolf, Christophe Ballif, and Michio Kondo

Surface physics, nanoscale physics, low-dimensional systems

- Selection rules for Raman-active electronic excitations in carbon nanotubes (*5 pages*) 113401
Oleksiy Kashuba and Vladimir I. Fal'ko
- Laterally nanostructured cobalt oxide films on Ir(100) (*4 pages*) 113402
Matthias Gubo, Lutz Hammer, and Klaus Heinz
- Resonant Rayleigh scattering as a probe of spin polarization in a two-dimensional electron system (*4 pages*) 113403
L. V. Kulik, K. Ovchinnikov, A. S. Zhuravlev, V. E. Bisti, I. V. Kukushkin, S. Schmolt, and W. Dietsche
- Field ionization detection of helium using a planar array of carbon nanotubes (*5 pages*) 113404
K. M. O'Donnell, A. Fahy, M. Barr, W. Allison, and P. C. Dastoor

ARTICLES

Electronic structure and strongly correlated systems

- Thermoluminescence investigation of donor (Ce^{3+} , Pr^{3+} , Tb^{3+}) acceptor (Eu^{3+} , Yb^{3+}) pairs in $\text{Y}_3\text{Al}_5\text{O}_{12}$ (*7 pages*) 115101
Fangtian You, Adrie J. J. Bos, Qiufeng Shi, Shihua Huang, and Pieter Dorenbos
- Critical surface band gap of repulsive Casimir interaction between three-dimensional topological insulators at finite temperature (*7 pages*) 115102
Liang Chen and Shaolong Wan
- Efficient treatment of the high-frequency tail of the self-energy function and its relevance for multiorbital models (*7 pages*) 115103
Gang Li and Werner Hanke
- Correcting density functional theory for accurate predictions of compound enthalpies of formation: Fitted elemental-phase reference energies (*12 pages*) 115104
Vladan Stevanović, Stephan Lany, Xiuwen Zhang, and Alex Zunger

