

## ERRATA

- Publisher's Note: Electronic structures of hexagonal  $RMnO_3$  ( $R=Gd, Tb, Dy, \text{ and } Ho$ ) thin films: Optical spectroscopy and first-principles calculations [Phys. Rev. B **77**, 045137 (2008)] (*1 page*) ..... 079901(E)  
 Woo Seok Choi, Dong Geun Kim, Sung Seok A. Seo, Soon Jae Moon, Daesu Lee, Jung Hyuk Lee, Ho Sik Lee, Deok-Yong Cho, Yun Sang Lee, Pattukkannu Murugavel, Jaejun Yu, and Tae W. Noh
- Erratum: Efficient dipole-dipole coupling of Mott-Wannier and Frenkel excitons in (Ga,In)N quantum well/polyfluorene semiconductor heterostructures [Phys. Rev. B **76**, 035344 (2007)] (*1 page*) ..... 079902(E)  
 G. Itskos, G. Heliotis, P. G. Lagoudakis, J. Lupton, N. P. Barradas, E. Alves, S. Pereira, I. M. Watson, M. D. Dawson, J. Feldmann, R. Murray, and D. D. C. Bradley
- Erratum: Calculating interaction between a highly charged high-speed ion and a solid surface [Phys. Rev. B **77**, 045433 (2008)] (*1 page*) ..... 079903(E)  
 Yoshiyuki Miyamoto and Hong Zhang
- Erratum: Structure of neutral aluminum clusters  $Al_n$  ( $2 \leq n \leq 23$ ): Genetic algorithm tight-binding calculations [Phys. Rev. B **73**, 125431 (2006)] (*1 page*) ..... 079904(E)  
 Feng-Chuan Chuang, C. Z. Wang, and K. H. Ho
- Publisher's Note: Paired composite-fermion wave functions [Phys. Rev. B **77**, 075319 (2008)] (*1 page*) ..... 079905(E)  
 G. Möller and S. H. Simon

|                                                                                                                                                                                           |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Highly rotational $C_{60}$ dynamics inside single-walled carbon nanotubes: NMR observations (6 pages) . . . . .                                                                           | 075421 |
| K. Matsuda, Y. Maniwa, and H. Kataura                                                                                                                                                     |        |
| Midgap states and charge inhomogeneities in corrugated graphene (8 pages) . . . . .                                                                                                       | 075422 |
| F. Guinea, M. I. Katsnelson, and M. A. H. Vozmediano                                                                                                                                      |        |
| Low-frequency resistance fluctuations in metal films under current stressing at low temperature<br>( $T < 0.3T_{\text{melting}}$ ) (9 pages) . . . . .                                    | 075423 |
| Achyut Bora and A. K. Raychaudhuri                                                                                                                                                        |        |
| Thermal boundary resistance and thermal conductivity of multiwalled carbon nanotubes (11 pages) . . . . .                                                                                 | 075424 |
| Ravi Prasher                                                                                                                                                                              |        |
| Atomistic calculations of interface elastic properties in noncoherent metallic bilayers (12 pages) . . . . .                                                                              | 075425 |
| Changwen Mi, Sukky Jun, Demitris A. Kouris, and Sung Youb Kim                                                                                                                             |        |
| First-principles investigation of Ag-Cu alloy surfaces in an oxidizing environment (9 pages) . . . . .                                                                                    | 075426 |
| Simone Piccinin, Catherine Stampfl, and Matthias Scheffler                                                                                                                                |        |
| Kinetic phase diagram for island nucleation and growth during homoepitaxy (6 pages) . . . . .                                                                                             | 075427 |
| P. A. Mulheran and M. Basham                                                                                                                                                              |        |
| Polarization of supported graphene by slowly moving charges (9 pages) . . . . .                                                                                                           | 075428 |
| I. Radović, Lj. Hadžievski, and Z. L. Mišković                                                                                                                                            |        |
| Structure and energetics of Ni and Au nanoclusters deposited on the (001), (110), and (111) surfaces of Au<br>and Ni: A molecular dynamics study (8 pages) . . . . .                      | 075429 |
| De Nyago Tafen and Laurent J. Lewis                                                                                                                                                       |        |
| Prediction of hidden multiferroic order in graphene zigzag ribbons (5 pages) . . . . .                                                                                                    | 075430 |
| J. Fernández-Rossier                                                                                                                                                                      |        |
| Electronic and optical properties of polyicosahedral Si nanostructures: A first-principles study (13 pages) . . . .                                                                       | 075431 |
| Kengo Nishio, Taisuke Ozaki, Tetsuya Morishita, Wataru Shinoda, and Masuhiro Mikami                                                                                                       |        |
| Temperature dependence of the structural parameters of gold nanoparticles investigated with EXAFS<br>(10 pages) . . . . .                                                                 | 075432 |
| T. Comaschi, A. Balerna, and S. Mobilio                                                                                                                                                   |        |
| Magnetic edge states in graphene in nonuniform magnetic fields (8 pages) . . . . .                                                                                                        | 075433 |
| Sunghun Park and H.-S. Sim                                                                                                                                                                |        |
| Shubnikov-de Haas effect in multiband quasi-two-dimensional metals (11 pages) . . . . .                                                                                                   | 075434 |
| I. O. Thomas, V. V. Kabanov, and A. S. Alexandrov                                                                                                                                         |        |
| Periodic trends in the geometric structures of 13-atom metal clusters (8 pages) . . . . .                                                                                                 | 075435 |
| Yan Sun, Min Zhang, and René Fournier                                                                                                                                                     |        |
| Enhanced dispersion interaction between quasi-one-dimensional conducting collinear structures (9 pages) . . . .                                                                           | 075436 |
| Angela White and John F. Dobson                                                                                                                                                           |        |
| Alloy surface segregation in reactive environments: First-principles atomistic thermodynamics study of<br>$Ag_3Pd(111)$ in oxygen atmospheres (12 pages) . . . . .                        | 075437 |
| John R. Kitchin, Karsten Reuter, and Matthias Scheffler                                                                                                                                   |        |
| Structural and magnetic isomers of $M(BN)_{36}$ and $M_4(BN)_{36}$ clusters ( $M = Ti, V, Cr, Mn, Fe, Co, Ni, Cu$ ): An<br><i>ab initio</i> density functional study (10 pages) . . . . . | 075438 |
| Sandeep Nigam, S. K. Kulshreshtha, and Chiranjib Majumder                                                                                                                                 |        |

|                                                                                                                                                                 |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Local coordination of Mn atoms at the Mn:Ge(111) interface from photoelectron diffraction experiments (7 pages) .....                                           | 075405 |
| A. Verdini, A. Cossaro, L. Floreano, A. Morgante, A. Goldoni, D. Ghidoni, A. Sepe, S. Pagliara, and L. Sangaletti                                               |        |
| Growth, atomic structure, and vibrational properties of MnO ultrathin films on Pt(111) (9 pages) .....                                                          | 075406 |
| Ch. Hagendorf, S. Sachert, B. Bochmann, K. Kostov, and W. Widdra                                                                                                |        |
| Surface structure and water adsorption on Fe <sub>3</sub> O <sub>4</sub> (111): Spin-density functional theory and on-site Coulomb interactions (5 pages) ..... | 075407 |
| M. E. Grillo, M. W. Finnis, and W. Ranke                                                                                                                        |        |
| Effect of absorption on terahertz surface plasmon polaritons propagating along periodically corrugated metal wires (7 pages) .....                              | 075408 |
| Linfang Shen, Xudong Chen, Yu Zhong, and Krishna Agarwal                                                                                                        |        |
| Correspondence between Andreev reflection and Klein tunneling in bipolar graphene (6 pages) .....                                                               | 075409 |
| C. W. J. Beenakker, A. R. Akhmerov, P. Recher, and J. Tworzydło                                                                                                 |        |
| Effect of particle size and surface structure on adsorption of O and OH on platinum nanoparticles: A first-principles study (9 pages) .....                     | 075410 |
| B. C. Han, C. R. Miranda, and G. Ceder                                                                                                                          |        |
| Interface effects in the Ni 2p x-ray photoelectron spectra of NiO thin films grown on oxide substrates (7 pages) .....                                          | 075411 |
| I. Preda, A. Gutiérrez, M. Abbate, F. Yubero, J. Méndez, L. Alvarez, and L. Soriano                                                                             |        |
| Influence of random roughness on the Casimir force at small separations (5 pages) .....                                                                         | 075412 |
| P. J. van Zwol, G. Palasantzas, and J. Th. M. De Hosson                                                                                                         |        |
| Microscopic thickness determination of thin graphite films formed on SiC from quantized oscillation in reflectivity of low-energy electrons (7 pages) .....     | 075413 |
| H. Hibino, H. Kageshima, F. Maeda, M. Nagase, Y. Kobayashi, and H. Yamaguchi                                                                                    |        |
| Using granular film to suppress charge leakage in a single-electron latch (7 pages) .....                                                                       | 075414 |
| Alexei O. Orlov, Xiangning Luo, Kameshwar K. Yadavalli, I. S. Beloborodov, and Gregory L. Snider                                                                |        |
| Hidden surface states on pristine and H-passivated Ni(111): Angle-resolved photoemission and density-functional calculations (8 pages) .....                    | 075415 |
| Jorge Lobo-Checa, Taichi Okuda, Matthias Hengsberger, Luc Patthey, Thomas Greber, Peter Blaha, and Jürg Osterwalder                                             |        |
| Valley polarization effects on localization in graphene Landau levels (5 pages) .....                                                                           | 075416 |
| A. L. C. Pereira and P. A. Schulz                                                                                                                               |        |
| Heat transport through plasmonic interactions in closely spaced metallic nanoparticle chains (10 pages) .....                                                   | 075417 |
| Philippe Ben-Abdallah, Karl Joulain, Jérémie Drevillon, and Clément Le Goff                                                                                     |        |
| Frequency- and electric-field-dependent conductivity of single-walled carbon nanotube networks of varying density (6 pages) .....                               | 075418 |
| Hua Xu, Shixiong Zhang, Steven M. Anlage, Liangbing Hu, and George Grüner                                                                                       |        |
| Static structure factor for graphene in a magnetic field (6 pages) .....                                                                                        | 075419 |
| K. Shizuya                                                                                                                                                      |        |
| Effect of disorder on a graphene p-n junction (6 pages) .....                                                                                                   | 075420 |
| M. M. Fogler, D. S. Novikov, L. I. Glazman, and B. I. Shklovskii                                                                                                |        |

|                                                                                                                                                           |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Anisotropic spatial structure of deep acceptor states in GaAs and GaP (7 pages) . . . . .                                                                 | 075328 |
| C. Çelebi, P. M. Koenraad, A. Yu. Silov, W. Van Roy, A. M. Monakhov, J.-M. Tang, and M. E. Flatté                                                         |        |
| Optical properties of free-standing GaAs semiconductor nanowires and their dependence on the growth direction (6 pages) . . . . .                         | 075329 |
| P. Redliński and F. M. Peeters                                                                                                                            |        |
| High harmonics generated in semiconductor nanostructures by the coupled dynamics of optical inter- and intraband excitations (6 pages) . . . . .          | 075330 |
| D. Golde, T. Meier, and S. W. Koch                                                                                                                        |        |
| Trapping Abelian anyons in fractional quantum Hall droplets (7 pages) . . . . .                                                                           | 075331 |
| Zi-Xiang Hu, Xin Wan, and Peter Schmitteckert                                                                                                             |        |
| Quantum interference of surface states in bismuth nanowires probed by the Aharonov-Bohm oscillatory behavior of the magnetoresistance (8 pages) . . . . . | 075332 |
| A. Nikolaeva, D. Gitsu, L. Konopko, M. J. Graf, and T. E. Huber                                                                                           |        |
| Synchrotron x-ray and optical studies of the structure of HgSe semiconductor nanoclusters confined in zeolite L and zeolite Y (10 pages) . . . . .        | 075333 |
| A. M. M. Abeykoon, M. Castro-Colin, E. V. Anokhina, M. N. Iliev, W. Donner, A. J. Jacobson, and S. C. Moss                                                |        |
| Gap theory of rectification in ballistic three-terminal conductors (8 pages) . . . . .                                                                    | 075334 |
| Andrew N. Jordan and Markus Büttiker                                                                                                                      |        |
| Revealing exciton-exciton couplings in semiconductors using multidimensional four-wave mixing signals (11 pages) . . . . .                                | 075335 |
| Lijun Yang and Shaul Mukamel                                                                                                                              |        |
| Symmetry of wurtzite nanostructures with the <i>c</i> -axis in the layer plane (7 pages) . . . . .                                                        | 075336 |
| P. Tronc and P. Vennéguès                                                                                                                                 |        |
| Entanglement of static and flying qubits in degenerate mesoscopic systems (10 pages) . . . . .                                                            | 075337 |
| M. Habgood, J. H. Jefferson, A. Ramšak, D. G. Pettifor, and G. A. D. Briggs                                                                               |        |
| Intermixing during growth of InAs self-assembled quantum dots in InP: A photoluminescence and tight-binding investigation (11 pages) . . . . .            | 075338 |
| C. Dion, P. Desjardins, N. Shtinkov, M. D. Robertson, F. Schiettekatte, P. J. Poole, and S. Raymond                                                       |        |
| Time-dependent approach to electron pumping in open quantum systems (14 pages) . . . . .                                                                  | 075339 |
| G. Stefanucci, S. Kurth, A. Rubio, and E. K. U. Gross                                                                                                     |        |
| <b>Surface physics, nanoscale physics, low-dimensional systems</b>                                                                                        |        |
| Influence of material properties on extraordinary optical transmission through hole arrays (8 pages) . . . . .                                            | 075401 |
| Sergio G. Rodrigo, F. J. García-Vidal, and L. Martín-Moreno                                                                                               |        |
| Huge negative differential conductance in Au-H <sub>2</sub> molecular nanojunctions (8 pages) . . . . .                                                   | 075402 |
| A. Halbritter, P. Makk, Sz. Csonka, and G. Mihály                                                                                                         |        |
| Energy-gap modulation of BN ribbons by transverse electric fields: First-principles calculations (5 pages) . . . . .                                      | 075403 |
| Zhuhua Zhang and Wanlin Guo                                                                                                                               |        |
| Antiferromagnetic ordering in one-dimensional dangling-bond wires on a hydrogen-terminated C(001) surface: A density-functional study (5 pages) . . . . . | 075404 |
| Jun-Hyung Cho and Jin-Ho Choi                                                                                                                             |        |

|                                                                                                                                                              |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Intersubband carrier scattering in $n$ - and $p$ -Si/SiGe quantum wells with diffuse interfaces (7 pages) . . . . .                                          | 075312 |
| A. Valavanis, Z. Ikonić, and R. W. Kelsall                                                                                                                   |        |
| Multiscale electrostatic analysis of silicon nanoelectromechanical systems (NEMS) via heterogeneous quantum models (13 pages) . . . . .                      | 075313 |
| Yang Xu and N. R. Aluru                                                                                                                                      |        |
| Near-field optical spectroscopy of GaAs/Al <sub>y</sub> Ga <sub>1-y</sub> As quantum dot pairs grown by high-temperature droplet epitaxy (7 pages) . . . . . | 075314 |
| Robert Pomraenke, Christoph Lienau, Yuriy I. Mazur, Zhiming M. Wang, Baolai Liang, Georgiy G. Tarasov, and Gregory J. Salamo                                 |        |
| Coherent defect-assisted multiphonon intraband carrier relaxation in semiconductor quantum dots (7 pages) . . . . .                                          | 075315 |
| A. N. Poddubny and S. V. Goupalov                                                                                                                            |        |
| Charge transport in PbSe nanocrystal arrays (8 pages) . . . . .                                                                                              | 075316 |
| T. S. Mentzel, V. J. Porter, S. Geyer, K. MacLean, M. G. Bawendi, and M. A. Kastner                                                                          |        |
| Optical investigations of quantum dot spin dynamics as a function of external electric and magnetic fields (15 pages) . . . . .                              | 075317 |
| Jan Dreiser, Mete Atatüre, Christophe Galland, Tina Müller, Antonio Badolato, and Atac Imamoglu                                                              |        |
| Spin relaxation due to the Bir-Aronov-Pikus mechanism in intrinsic and $p$ -type GaAs quantum wells from a fully microscopic approach (8 pages) . . . . .    | 075318 |
| J. Zhou and M. W. Wu                                                                                                                                         |        |
| Paired composite-fermion wave functions (5 pages) . . . . .                                                                                                  | 075319 |
| G. Möller and S. H. Simon                                                                                                                                    |        |
| Polarization kinetics of semiconductor microcavities investigated with a Boltzman approach (10 pages) . . . . .                                              | 075320 |
| Huy Thien Cao, T. D. Doan, D. B. Tran Thoai, and H. Haug                                                                                                     |        |
| Tailoring current flow patterns through molecular wires using shaped optical pulses (5 pages) . . . . .                                                      | 075321 |
| GuangQi Li, Sven Welack, Michael Schreiber, and Ulrich Kleinekathöfer                                                                                        |        |
| Dielectric quantification of conductivity limitations due to nanofiller size in conductive powders and nanocomposites (6 pages) . . . . .                    | 075322 |
| L. J. Huijbregts, H. B. Brom, J. C. M. Brokken-Zijp, W. E. Kleinjan, and M. A. J. Michels                                                                    |        |
| Berry-phase effects in transport through single Jahn-Teller molecules (8 pages) . . . . .                                                                    | 075323 |
| Maximilian G. Schultz, Tamara S. Nunner, and Felix von Oppen                                                                                                 |        |
| Strong and weak coupling limits in optics of quantum well excitons (13 pages) . . . . .                                                                      | 075324 |
| C. Creatore and A. L. Ivanov                                                                                                                                 |        |
| Quantum mechanical approach to decoherence and relaxation generated by fluctuating environment (15 pages) . . . . .                                          | 075325 |
| S. A. Gurvitz and D. Mozyrsky                                                                                                                                |        |
| Formation of a quasistationary state by scattering of wave packets on a finite lattice (11 pages) . . . . .                                                  | 075326 |
| Yu. G. Peisakhovich and A. A. Shtygashev                                                                                                                     |        |
| Formation of a quasistationary state by Gaussian wave packet scattering on a lattice of $N$ identical delta potentials (9 pages) . . . . .                   | 075327 |
| Yu. G. Peisakhovich and A. A. Shtygashev                                                                                                                     |        |

|                                                                                                                                                                                  |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| High temperature thermoelectric efficiency in $\text{Ba}_8\text{Ga}_{16}\text{Ge}_{30}$ (8 pages) . . . . .                                                                      | 075203 |
| Eric S. Toberer, M. Christensen, B. B. Iversen, and G. Jeffrey Snyder                                                                                                            |        |
| Time-dependent density-functional theory for ultrafast interband excitations (11 pages) . . . . .                                                                                | 075204 |
| V. Turkowski and C. A. Ullrich                                                                                                                                                   |        |
| <i>Ab initio</i> study of the band structures of different phases of higher manganese silicides (9 pages) . . . . .                                                              | 075205 |
| D. B. Migas, V. L. Shaposhnikov, A. B. Filonov, V. E. Borisenko, and N. N. Dorozhkin                                                                                             |        |
| Theory of high-density optical effects on polaritons in $\text{Cu}_2\text{O}$ : Bistability and optical hysteresis (7 pages) . . . .                                             | 075206 |
| Oleksiy Roslyak and Joseph L. Birman                                                                                                                                             |        |
| Modeling the compositional instability in wurtzite $\text{Ga}_{1-x}\text{In}_x\text{N}$ (13 pages) . . . . .                                                                     | 075207 |
| M. G. Ganchenkova, V. A. Borodin, K. Laaksonen, and R. M. Nieminen                                                                                                               |        |
| <i>Ab initio</i> investigation of boron diffusion paths in germanium (6 pages) . . . . .                                                                                         | 075208 |
| C. Janke, R. Jones, S. Öberg, and P. R. Briddon                                                                                                                                  |        |
| <b>Semiconductors II: surfaces, interfaces, microstructures, and related topics</b>                                                                                              |        |
| Donor-donor interaction mediated by cavity photons and its relation to interactions mediated by excitons and polaritons (7 pages) . . . . .                                      | 075301 |
| G. F. Quinteiro                                                                                                                                                                  |        |
| Current fluctuations in the transient regime: An exact formulation for mesoscopic systems (11 pages) . . . . .                                                                   | 075302 |
| Zimin Feng, Joseph Maciejko, Jian Wang, and Hong Guo                                                                                                                             |        |
| Spin filtering and spin Hall accumulation in an interferometric ballistic nanojunction with Rashba spin-orbit interaction (9 pages) . . . . .                                    | 075303 |
| S. Bellucci and P. Onorato                                                                                                                                                       |        |
| Theory of conserved spin current and its application to a two-dimensional hole gas (9 pages) . . . . .                                                                           | 075304 |
| Ping Zhang, Zhigang Wang, Junren Shi, Di Xiao, and Qian Niu                                                                                                                      |        |
| Shot noise and tunnel magnetoresistance in multilevel quantum dots: Effects of cotunneling (6 pages) . . . . .                                                                   | 075305 |
| I. Weymann and J. Barnás                                                                                                                                                         |        |
| Complex behavior of biexcitons in GaN quantum dots due to a giant built-in polarization field (5 pages) . . . .                                                                  | 075306 |
| D. Simeonov, A. Dussaigne, R. Butté, and N. Grandjean                                                                                                                            |        |
| Experimental studies of the fractional quantum Hall effect in the first excited Landau level (7 pages) . . . . .                                                                 | 075307 |
| W. Pan, J. S. Xia, H. L. Stormer, D. C. Tsui, C. Vicente, E. D. Adams, N. S. Sullivan, L. N. Pfeiffer, K. W. Baldwin, and K. W. West                                             |        |
| Band-edge photoluminescence and reflectivity of nonpolar $(11\bar{2}0)$ and semipolar $(11\bar{2}2)$ GaN formed by epitaxial lateral overgrowth on sapphire (10 pages) . . . . . | 075308 |
| T. Gühne, Z. Bougrioua, S. Laügt, M. Nemoz, P. Vennéguès, B. Vinter, and M. Leroux                                                                                               |        |
| Origin of complex impact craters on native oxide coated silicon surfaces (15 pages) . . . . .                                                                                    | 075309 |
| Juha Samela, Kai Nordlund, Vladimir N. Popok, and Eleanor E. B. Campbell                                                                                                         |        |
| Transient quantum evolution of two-dimensional electrons under photoexcitation of a deep center (7 pages) . . . . .                                                              | 075310 |
| F. T. Vasko, A. Hernandez-Cabrera, and P. Aceituno                                                                                                                               |        |
| Self-assembly and ordering mechanisms of Ge islands on prepatterned Si(001) (5 pages) . . . . .                                                                                  | 075311 |
| A. Pascale, I. Berbezier, A. Ronda, and P. C. Kelires                                                                                                                            |        |

|                                                                                                                                                                       |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Spectroscopic characterization of $\text{Er}^{3+}$ -doped $\text{Tl}_3\text{PbBr}_5$ for midinfrared laser applications (11 pages) . . . . .                          | 075122 |
| Alban Ferrier, Matias Velázquez, and Richard Moncorgé                                                                                                                 |        |
| Polarized reflectivity of $\beta\text{-Sr}_{0.17}\text{V}_2\text{O}_5$ (8 pages) . . . . .                                                                            | 075123 |
| V. Ta Phuoc, C. Sellier, E. Janod, and C. Marin                                                                                                                       |        |
| Electronic structure and properties of Li-insertion materials: $\text{Li}_2\text{RuO}_3$ and $\text{RuO}_2$ (8 pages) . . . . .                                       | 075124 |
| M. D. Johannes, A. M. Stux, and K. E. Swider-Lyons                                                                                                                    |        |
| Thermal near-field radiative transfer between two spheres (12 pages) . . . . .                                                                                        | 075125 |
| Arvind Narayanaswamy and Gang Chen                                                                                                                                    |        |
| Coupled phonon polaritons in a piezoelectric-piezomagnetic superlattice (7 pages) . . . . .                                                                           | 075126 |
| Jun Zhao, Ruo-Cheng Yin, Tian Fan, Ming-Hui Lu, Yan-Feng Chen, Yong-Yuan Zhu, Shi-Ning Zhu, and Nai-Ben Ming                                                          |        |
| Effects of Breit interaction on the $L_{2,3}$ x-ray absorption near-edge structures of 3d transition metals (7 pages) . . . . .                                       | 075127 |
| Hidekazu Ikeno and Isao Tanaka                                                                                                                                        |        |
| Strong-coupling analysis of $\text{QED}_3$ for excitation spectrum broadening in the undoped high-temperature superconductors (5 pages) . . . . .                     | 075128 |
| T. Morinari                                                                                                                                                           |        |
| Energy transfer to $\text{Gd}^{3+}$ from the self-trapped exciton in $\text{ScPO}_4\text{:Gd}^{3+}$ : Dynamics and application to quantum cutting (5 pages) . . . . . | 075129 |
| Y. Zhou, S. P. Feofilov, J. Y. Jeong, D. A. Keszler, and R. S. Meltzer                                                                                                |        |
| <i>Ab initio</i> Wannier-function-based correlated calculations of Born effective charges of crystalline $\text{Li}_2\text{O}$ and $\text{LiCl}$ (5 pages) . . . . .  | 075130 |
| Priya Sony and Alok Shukla                                                                                                                                            |        |
| One-particle spectral properties of the $t$ - $J$ - $V$ model on the triangular lattice near charge order (10 pages) . . . . .                                        | 075131 |
| M. Bejas, A. Greco, A. Muramatsu, and A. Foussats                                                                                                                     |        |
| Second harmonic generation in disordered media: Random resonators (8 pages) . . . . .                                                                                 | 075132 |
| Prabath Hewageegana and Vadym Apalkov                                                                                                                                 |        |
| Electron-phonon coupling and electron heat capacity of metals under conditions of strong electron-phonon nonequilibrium (17 pages) . . . . .                          | 075133 |
| Zhibin Lin, Leonid V. Zhigilei, and Vittorio Celli                                                                                                                    |        |
| Electronic structure at the $\text{C}_{60}$ /metal interface: An angle-resolved photoemission and first-principles study (8 pages) . . . . .                          | 075134 |
| A. Tamai, A. P. Seitsonen, F. Baumberger, M. Hengsberger, Z.-X. Shen, T. Greber, and J. Osterwalder                                                                   |        |
| Scaling of ac electrical conductivity of powders under compression (6 pages) . . . . .                                                                                | 075135 |
| M. Creyssels, E. Falcon, and B. Castaing                                                                                                                              |        |
| <b>Semiconductors I: bulk</b>                                                                                                                                         |        |
| Indirect generation of quadrupole polaritons from dark excitons in $\text{Cu}_2\text{O}$ (5 pages) . . . . .                                                          | 075201 |
| J. I. Jang, Y. Sun, and J. B. Ketterson                                                                                                                               |        |
| Consistent set of band parameters for the group-III nitrides $\text{AlN}$ , $\text{GaN}$ , and $\text{InN}$ (15 pages) . . . . .                                      | 075202 |
| Patrick Rinke, M. Winkelkemper, A. Qteish, D. Bimberg, J. Neugebauer, and M. Scheffler                                                                                |        |

|                                                                                                                                                                                    |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Symmetry-induced singularities of the dispersion surface curvature and high sensitivities of a photonic crystal (8 pages) .....                                                    | 075104 |
| Wei Jiang and Ray T. Chen                                                                                                                                                          |        |
| Convexity of the self-energy functional in the variational cluster approximation (12 pages) .....                                                                                  | 075105 |
| Andriy H. Nevidomskyy, David Sénéchal, and A.-M. S. Tremblay                                                                                                                       |        |
| Theory of extraordinary light transmission through arrays of subwavelength slits (12 pages) .....                                                                                  | 075106 |
| B. Sturman, E. Podivilov, and M. Gorkunov                                                                                                                                          |        |
| Cellular dynamical mean-field theory of the periodic Anderson model (7 pages) .....                                                                                                | 075107 |
| Lorenzo De Leo, Marcello Civelli, and Gabriel Kotliar                                                                                                                              |        |
| Theory of the orbital-selective Mott transition in ferromagnetic $\text{YTiO}_3$ under high pressure (5 pages) .....                                                               | 075108 |
| L. Craco, M. S. Laad, S. Leoni, and H. Rosner                                                                                                                                      |        |
| Quenching Bloch oscillations in a strongly correlated material: Nonequilibrium dynamical mean-field theory (12 pages) .....                                                        | 075109 |
| J. K. Freericks                                                                                                                                                                    |        |
| Bias voltage dependence on the vibronic electric current (14 pages) .....                                                                                                          | 075110 |
| Tomomi Shimazaki and Yoshihiro Asai                                                                                                                                                |        |
| <i>Ab initio</i> study of $\text{SrFe}_x\text{Ti}_{1-x}\text{O}_3$ : Jahn-Teller distortion and electronic structure (9 pages) .....                                               | 075111 |
| V. E. Alexandrov, J. Maier, and R. A. Evarestov                                                                                                                                    |        |
| Optimized norm-conserving Hartree-Fock pseudopotentials for plane-wave calculations (10 pages) .....                                                                               | 075112 |
| W. A. Al-Saidi, E. J. Walter, and A. M. Rappe                                                                                                                                      |        |
| $\text{KCrF}_3$ : Electronic structure and magnetic and orbital ordering from first principles (7 pages) .....                                                                     | 075113 |
| Gianluca Giovannetti, Serena Margadonna, and Jeroen van den Brink                                                                                                                  |        |
| Phase diagram of the anisotropic multichannel Kondo Hamiltonian revisited (15 pages) .....                                                                                         | 075114 |
| Avraham Schiller and Lorenzo De Leo                                                                                                                                                |        |
| Renormalization group flow of quartic perturbations in graphene: Strong coupling and large- $N$ limits (5 pages) .....                                                             | 075115 |
| Joaquín E. Drut and Dam Thanh Son                                                                                                                                                  |        |
| Single-particle dynamics in the vicinity of the Mott-Hubbard metal-to-insulator transition (20 pages) .....                                                                        | 075116 |
| Michał Karski, Carsten Raas, and Götz S. Uhrig                                                                                                                                     |        |
| Optical phase diagram of perovskite colossal magnetoresistance manganites near half doping (8 pages) .....                                                                         | 075117 |
| I. Kézsmárki, Y. Tomioka, S. Miyasaka, L. Demkó, Y. Okimoto, and Y. Tokura                                                                                                         |        |
| Cluster model and band structure calculations of $\text{V}_2\text{O}_5$ : Reduced $\text{V}^{5+}$ symmetry and many-body effects (6 pages) .....                                   | 075118 |
| R. J. O. Mossaneck, A. Mocellin, M. Abbate, B. G. Searle, P. T. Fonseca, and E. Morikawa                                                                                           |        |
| Magnetism and structure of $\text{Li}_x\text{CoO}_2$ and comparison to $\text{Na}_x\text{CoO}_2$ (12 pages) .....                                                                  | 075119 |
| J. T. Hertz, Q. Huang, T. McQueen, T. Klimczuk, J. W. G. Bos, L. Viciu, and R. J. Cava                                                                                             |        |
| Large electric-potential bias in an EDO-TTF tetramer as a major mechanism of charge ordering observed in its $\text{PF}_6$ salt: A density functional theory study (5 pages) ..... | 075120 |
| Kaoru Iwano and Yukihiko Shimoi                                                                                                                                                    |        |
| $\text{Nd}^{3+} \rightarrow \text{Yb}^{3+}$ resonant energy transfer in the ferroelectric $\text{Sr}_{0.6}\text{Ba}_{0.4}\text{Nb}_2\text{O}_6$ laser crystal (8 pages) .....      | 075121 |
| U. Caldiño, D. Jaque, E. Martín-Rodríguez, M. O. Ramírez, J. García Solé, A. Speghini, and M. Bettinelli                                                                           |        |

# CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 77, NUMBER 7

FEBRUARY 2008-15(I)

|                                                                                                                                                        |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Friedel oscillations of density of states in a one-dimensional Mott insulator and incommensurate charge-density wave or superconductor (4 pages) ..... | 073402 |
| A. M. Tsvelik                                                                                                                                          |        |
| Large electromechanical response in silicon nanowires predicted from first-principles electronic structure calculations (3 pages) .....                | 073403 |
| R. Rurali, X. Cartoixà, and D. S. Galvão                                                                                                               |        |
| Chemical doping-induced gap opening and spin polarization in graphene (4 pages) .....                                                                  | 073404 |
| I. Zanella, S. Guerini, S. B. Fagan, J. Mendes Filho, and A. G. Souza Filho                                                                            |        |
| Structure of an ultrathin aluminum oxide layer grown on a NiAl(110) substrate (4 pages) .....                                                          | 073405 |
| T. Nishimura, Y. Hoshino, T. Okazawa, and Y. Kido                                                                                                      |        |
| Low-energy nonresonant x-ray scattering of C <sub>60</sub> (4 pages) .....                                                                             | 073406 |
| Paul Chow and Barry Friedman                                                                                                                           |        |
| Modeling the destruction of realistic nanotube emitters: Relative role of charging and temperature (4 pages) .....                                     | 073407 |
| Savas Berber and David Tománek                                                                                                                         |        |
| Island formation without attractive interactions (4 pages) .....                                                                                       | 073408 |
| A. P. J. Jansen                                                                                                                                        |        |
| Self-assembly, structure, and electronic properties of a quasiperiodic lead monolayer (4 pages) .....                                                  | 073409 |
| J. Ledieu, L. Leung, L. H. Wearing, R. McGrath, T. A. Lograsso, D. Wu, and V. Fournée                                                                  |        |
| Characteristic vibrational modes of a single vacancy in a zigzag carbon nanotube (4 pages) .....                                                       | 073410 |
| H. Y. He and B. C. Pan                                                                                                                                 |        |
| Structural and electronic properties of the K/GaAs(110) surface (4 pages) .....                                                                        | 073411 |
| Nobuyuki Ishida and Kazuhisa Sueoka                                                                                                                    |        |
| Electron-electron interactions on the edge states of graphene: A many-body configuration interaction study (4 pages) .....                             | 073412 |
| Sudipta Dutta, S. Lakshmi, and Swapan K. Pati                                                                                                          |        |
| Controllable spin transport in ferromagnetic graphene junctions (4 pages) .....                                                                        | 073413 |
| Takehito Yokoyama                                                                                                                                      |        |
| Local transport gap in C <sub>60</sub> nanochains on a pentacene template (4 pages) .....                                                              | 073414 |
| D. B. Dougherty, W. Jin, W. G. Cullen, G. Dutton, J. E. Reutt-Robey, and S. W. Robey                                                                   |        |

## ARTICLES

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

|                                                                                                                    |        |
|--------------------------------------------------------------------------------------------------------------------|--------|
| Static screening and delocalization effects in the Hubbard-Anderson model (6 pages) .....                          | 075101 |
| Peter Henseler, Johann Kroha, and Boris Shapiro                                                                    |        |
| Tight-binding molecular dynamics simulations of radiation-induced fragmentation of C <sub>60</sub> (8 pages) ..... | 075102 |
| Lóránd Horváth and Titus A. Beu                                                                                    |        |
| Electrical and magnetic properties of hexagonal BaTiO <sub>3-δ</sub> (6 pages) .....                               | 075103 |
| T. Kolodiazny, A. A. Belik, S. C. Wimbush, and H. Haneda                                                           |        |

(Continued)