

PHYSICAL REVIEW B

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 0163-1829)

PERIODICALS
Postmaster send address changes to:
American Institute of Physics
Suite 1NO1
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 62, NUMBER 24

CONTENTS

15 DECEMBER 2000-II

RAPID COMMUNICATIONS

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

- Multiatomic resonant photoemission spectroscopy on CuO and NiO: Observation of antiresonant behavior R16 215
M. Finazzi, G. Ghiringhelli, O. Tjernberg, L. Duò, A. Tagliaferri, P. Ohresser, and N. B. Brookes
- Muffin-tin orbitals of arbitrary order R16 219
O. K. Andersen and T. Saha-Dasgupta
- Classical phase fluctuations in incommensurate Peierls chains R16 223
Lorenz Bartosch and Peter Kopietz
- Toward a systematic $1/d$ expansion: Two-particle properties R16 227
Gergely Zaránd, Daniel L. Cox, and Avraham Schiller
- Friedel oscillations and charge-density wave pinning in quasi-one-dimensional conductors: An x-ray diffraction study R16 231
S. Rouzière, S. Ravy, J.-P. Pouget, and S. Brazovskii
- Charge transport in π -conjugated polymers from extraction current transients R16 235
G. Juška, K. Arlauskas, M. Viliūnas, K. Genevičius, R. Österbacka, and H. Stubb
- Observation of short- and long-range hybridization of a buried Cu monolayer in Ni R16 239
O. Karis, M. Magnuson, T. Wiell, M. Weinelt, N. Wassdahl, A. Nilsson, N. Mårtensson, E. Holmström, A. M. N. Niklasson, and O. Eriksson
- Coexistence of charge-density waves, bond-order waves, and spin-density waves in quasi-one-dimensional charge-transfer salts R16 243
J. Riera and D. Poilblanc

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

- Parametric oscillation in a vertical microcavity: A ' μ OPO' R16 247
J. J. Baumberg, P. G. Savvidis, R. M. Stevenson, A. I. Tartakovskii, M. S. Skolnick, D. M. Whittaker, and J. S. Roberts
- Extrinsic structure changes by STM at 65 K on Si(001) R16 251
T. Mitsui and K. Takayanagi
- Reaction-diffusion model for thermal growth of silicon nitride films on Si R16 255
R. M. C. de Almeida and I. J. R. Baumvol
- Excitonic collapse of higher Landau level fractional quantum Hall effect R16 259
V. W. Scarola, Kwon Park, and J. K. Jain
- Microcavity polariton depopulation as evidence for stimulated scattering R16 263
P. Senellart, J. Bloch, B. Sermage, and J. Y. Marzin
- Theory of electrical spin injection: Tunnel contacts as a solution of the conductivity mismatch problem R16 267
E. I. Rashba



Out-of-equilibrium Kondo effect: Response to pulsed fields	R16 271
Avraham Schiller and Selman Hershfield	
Direction-resolved transport and possible many-body effects in one-dimensional thermopower	R16 275
N. J. Appleyard, J. T. Nicholls, M. Pepper, W. R. Tribe, M. Y. Simmons, and D. A. Ritchie	
Electrical compensation in CdTe and Cd _{0.9} Zn _{0.1} Te by intrinsic defects	R16 279
N. Krsmanovic, K. G. Lynn, M. H. Weber, R. Tjossem, Th. Gessmann, Cs. Szeles, E. E. Eissler, J. P. Flint, and H. L. Glass	
Evidence for a negative interband photoconductivity in arrays of Ge/Si type-II quantum dots	R16 283
A. I. Yakimov, A. V. Dvurechenskii, A. I. Nikiforov, O. P. Pchelyakov, and A. V. Nenashev	
Optical transitions in charged CdSe quantum dots	R16 287
Alberto Franceschetti and Alex Zunger	
Phase-coherence time saturation in mesoscopic systems: Wave-function collapse	R16 291
J. C. Flores	
Transmission through quantum networks	R16 294
Julien Vidal, Gilles Montambaux, and Benoit Douçot	
Coulomb blockade in the fractional quantum Hall effect regime	R16 298
Michael R. Geller and Daniel Loss	
Band offsets and stability of BeTe/ZnSe (100) heterojunctions	R16 302
Fabio Bernardini, Maria Peressi, and Vincenzo Fiorentini	
Attenuation of two-dimensional plasmons	R16 306
M. Yu. Reizer and V. M. Vinokur	
Radiative behavior of negatively charged excitons in CdTe-based quantum wells: A spectral and temporal analysis	R16 310
V. Ciulin, P. Kossacki, S. Haacke, J.-D. Ganière, B. Deveaud, A. Esser, M. Kutrowski, and T. Wojtowicz	
Anisotropy of electronic wave functions in self-aligned InAs dots on GaAs(001) studied by magnetic-field-dependent photoluminescence spectroscopy	R16 314
H. J. Zhu, M. Ramsteiner, K. H. Ploog, R. Zhang, R. Tsui, K. Shiralagi, and H. Goronkin	
Dependence of the luminescence energy in InGaN quantum-well structures on applied biaxial strain	R16 318
N. A. Shapiro, Y. Kim, H. Feick, E. R. Weber, P. Perlin, J. W. Yang, I. Akasaki, and H. Amano	
Direct observation of the excitonic ac Stark splitting in a quantum well	R16 322
Michele Saba, Francesco Quochi, Cristiano Ciuti, Denis Martin, Jean-Louis Staehli, Benoît Deveaud, Andrea Mura, and Giovanni Bongiovanni	
Validity of the bond-energy picture for the energetics at Si-SiO ₂ interfaces	R16 326
A. Bongiorno and Alfredo Pasquarello	

Surface physics, low-dimensional systems, and related topics

Photoinduced ultrafast electron injection from a surface attached molecule: Control of electronic and vibronic distributions via vibrational wave packets	R16 330
S. Ramakrishna, F. Willig, and V. May	
Scanning tunneling microscopy investigation of the TiO ₂ anatase (101) surface	R16 334
Wilhelm Hebenstreit, Nancy Ruzicky, Gregory S. Herman, Yufei Gao, and Ulrike Diebold	
Thickness dependence of the stability of the charge-ordered state in Pr _{0.5} Ca _{0.5} MnO ₃ thin films	R16 337
W. Prellier, Ch. Simon, A. M. Haghiri-Gosnet, B. Mercey, and B. Raveau	
Modification of surface-state dispersion upon Xe adsorption: A scanning tunneling microscope study	R16 341
Ji-Yong Park, U. D. Ham, S.-J. Kahng, Y. Kuk, K. Miyake, K. Hata, and H. Shigekawa	
Variable and reversible quantum structures on a single carbon nanotube	R16 345
Ç. Kılıç, S. Ciraci, O. Gülseren, and T. Yildirim	
Graphitic ribbons without hydrogen-termination: Electronic structures and stabilities	R16 349
Takazumi Kawai, Yoshiyuki Miyamoto, Osamu Sugino, and Yoshinori Koga	

Phase breaking in three-terminal contacted single-walled carbon nanotube bundles	R16 353
V. Krstić, S. Roth, and M. Burghard	
Electromagnetic energy transfer and switching in nanoparticle chain arrays below the diffraction limit	R16 356
Mark L. Brongersma, John W. Hartman, and Harry A. Atwater	
Size dependence of structural stability in nanocrystalline diamond	R16 360
S. Prawer, J. L. Peng, J. O. Orwa, J. C. McCallum, D. N. Jamieson, and L. A. Bursill	

ARTICLES

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

Origin of the derivative discontinuity in density functional theory	16 364
Zhixin Qian and Virajt Sahni	
Correlation mechanism of <i>f</i> -electron delocalization	16 370
U. Lundin, I. Sandalov, O. Eriksson, and B. Johansson	
Cutoff dependence of a configuration-interaction approach to the two-dimensional Hubbard model	16 378
Barry Friedman and Gregory Levine	
Successive opening of the Fermi surface in doped <i>N</i> -leg Hubbard ladders	16 383
Urs Ledermann, Karyn Le Hur, and T. M. Rice	
Implementation of the projector augmented-wave LDA+U method: Application to the electronic structure of NiO	16 392
O. Bengone, M. Alouani, P. Blöchl, and J. Hugel	
Density-functional embedding using a plane-wave basis	16 402
J. R. Trail and D. M. Bird	
Comparison of the convergence properties of linear-scaling electronic-structure schemes for nonorthogonal bases	16 412
Uwe Stephan	
Electronic structure of Bi ₂ Te ₃ studied by angle-resolved photoemission	16 425
V. A. Greanya, W. C. Tonjes, Rong Liu, C. G. Olson, D.-Y. Chung, and M. G. Kanatzidis	
Electronic structure of monoclinic TeMo ₅ O ₁₆ : Prediction of semiconducting behavior	16 430
Josep M. Oliva, Pablo Ordejón, and Enric Canadell	
Full-potential LAPW calculation of magnetic Compton profiles of Ni	16 435
Tunna Baruah, Rajendra R. Zope, and Anjali Kshirsagar	
Phonon anomalies due to strong electronic correlations in layered organic metals	16 442
Jaime Merino and Ross H. McKenzie	
Behavior of the thermopower in amorphous materials at the metal-insulator transition	16 446
C. Villagonzalo, R. A. Römer, M. Schreiber, and A. MacKinnon	
Quantum statistical theory of fluorescence of low density Frenkel excitons in a crystal slab	16 453
Chang-qi Cao, Hui Cao, and Yi-xi Liu	
Dynamical correlations in the electron gas	16 474
K. Sturm and A. Gusarov	
Bulk electronic structure of YbInCu ₄ from photoemission: A unique test of the single impurity model	16 492
D. P. Moore, J. J. Joyce, A. J. Arko, J. L. Sarrao, L. Morales, H. Hochst, and Y. D. Chuang	
Electronic excitations in shocked nitromethane	16 500
Evan J. Reed, J. D. Joannopoulos, and Laurence E. Fried	
Magneto-optical Kerr spectroscopy of platinum	16 510
L. Uba, S. Uba, V. N. Antonov, A. N. Yaresko, and R. Gontarz	
Optical properties and electronic structure of α' -Na _{1-x} Ca _x V ₂ O ₅	16 522
C. Presura, D. van der Marel, M. Dischner, C. Geibel, and R. K. Kremer	

High-resolution Compton scattering study of the electron momentum density in Al	16 528
T. Ohata, M. Itou, I. Matsumoto, Y. Sakurai, H. Kawata, N. Shiotani, S. Kaprzyk, P. E. Mijnders, and A. Bansil	
Spin-polarized electron liquid at arbitrary temperatures: Exchange-correlation energies, electron-distribution functions, and the static response functions	16 536
François Perrot and M. W. C. Dharma-wardana	

Semiconductors I: bulk

X-ray crystallographic study of the optically active semiconductor $(\text{Ga}_x\text{In}_{1-x})_2\text{Se}_3$	16 549
J. Ye, T. Hanada, Y. Nakamura, and O. Nittono	
Electronic structure of the neutral silicon vacancy in 4H and 6H SiC	16 555
Mt. Wagner, B. Magnusson, W. M. Chen, E. Janzén, E. Sörman, C. Hallin, and J. L. Lindström	
Evidence of metastability with athermal ionization from defect clusters in ion-damaged silicon	16 561
P. K. Giri and Y. N. Mohapatra	
Reflection of light and heavy holes from a linear potential barrier	16 566
Anatoli Polkovnikov and Robert A. Suris	
Magneto-optical studies of the 0.88-eV photoluminescence emission in electron-irradiated GaN	16 572
Mt. Wagner, I. A. Buyanova, N. Q. Thinh, W. M. Chen, B. Monemar, J. L. Lindström, H. Amano, and I. Akasaki	
Temperature dependence of the refractive index of diamond up to 925 K	16 578
T. Ruf, M. Cardona, C. S. J. Pickles, and R. Sussmann	
Electron g -factor for cubic $\text{Zn}_{1-x}\text{Cd}_x\text{Se}$ determined by spin-flip Raman scattering	16 582
O. Z. Karimov, D. Wolverson, J. J. Davies, S. I. Stepanov, T. Ruf, S. V. Ivanov, S. V. Sorokin, C. B. O'Donnell, and K. A. Prior	
ESR and optical evidence for a Ni vacancy center in CVD diamond	16 587
K. Iakoubovskii, A. Stesmans, B. Nouwen, and G. J. Adriaenssens	
Origin of emission from porous silicon: Temperature-dependence correlation with proton conductivity	16 595
Bingsuo Zou, Jianping Wang, Chao Liu, John Z. Zhang, and Mostafa A. El-Sayed	
Temperature dependence of the energy and broadening parameter of the fundamental band gap of GaSb and $\text{Ga}_{1-x}\text{In}_x\text{As}_y\text{Sb}_{1-y}/\text{GaSb}$ ($0.07 \leq x \leq 0.22$, $0.05 \leq y \leq 0.19$) quaternary alloys using infrared photorefectance	16 600
Martín Muñoz, Fred H. Pollak, M. B. Zakia, N. B. Patel, and J. L. Herrera-Pérez	
Raman intensity profiles of folded longitudinal phonon modes in SiC polytypes	16 605
S. Nakashima, H. Harima, T. Tomita, and T. Suemoto	
Theoretical study of the relative stability of structural phases in group-III nitrides at high pressures	16 612
Jorge Serrano, Angel Rubio, Eduardo Hernández, Alfonso Muñoz, and Andrés Mujica	
Nonlinear acoustic and microwave absorption in disordered semiconductors	16 624
M. Kirkengen and Y. M. Galperin	
Electrical properties of liquid Cd-Te alloys	16 632
A. Ben Moussa, B. Giordanengo, J. C. Humbert, H. Chaaba, M. Bestandji, and J. G. Gasser	
Positron annihilation at proton-induced defects in 6H-SiC/SiC and 6H-SiC/SiO ₂ /Si structures	16 638
M.-F. Barthe, L. Henry, C. Corbel, G. Blondiaux, K. Saarinen, P. Hautojärvi, E. Hugonnard, L. Di Cioccio, F. Letertre, and B. Ghyselen	
Quasi-one-dimensional transport in the extreme quantum limit of heavily doped n -InSb	16 645
S. S. Murzin, A. G. M. Jansen, and E. G. Haanappel	

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

Ge/Ag(111) semiconductor-on-metal growth: Formation of an Ag_2Ge surface alloy	16 653
H. Oughaddou, S. Sawaya, J. Goniakowski, B. Aufray, G. Le Lay, J. M. Gay, G. Tréglia, J. P. Bibérian, N. Barrett, C. Guillot, A. Mayne, and G. Dujardin	

Quantum dot self-assembly in growth of strained-layer thin films: A kinetic Monte Carlo study	16 657
K. E. Khor and S. Das Sarma	
Generalized surface, pseudosurface, and high-frequency pseudosurface acoustic waves on (001), (110), and (111) InSb	16 665
M. H. Kuok, S. C. Ng, V. L. Zhang, and S. J. Chua	
Tuning quantum dot properties by activated phase separation of an InGa(Al)As alloy grown on InAs stressors	16 671
M. V. Maximov, A. F. Tsatsul'nikov, B. V. Volovik, D. S. Sizov, Yu. M. Shernyakov, I. N. Kaiander, A. E. Zhukov, A. R. Kovsh, S. S. Mikhlin, V. M. Ustinov, Zh. I. Alferov, R. Heitz, V. A. Shchukin, N. N. Ledentsov, D. Bimberg, Yu. G. Musikhin, and W. Neumann	
Optimization of gain in intersubband quantum well lasers by supersymmetry	16 681
Stanko Tomić, Vitomir Milanović, and Zoran Ikonić	
Optical absorption and sideband generation in quantum wells driven by a terahertz electric field	16 686
A. V. Maslov and D. S. Citrin	
Mean parameter model for the Pekar-Fröhlich polaron in a multilayered heterostructure	16 692
M. A. Smondyrev, B. Gerlach, and M. O. Dzero	
Thermoelectric figure of merit of Bi/Pb _{1-x} Eu _x Te superlattices	16 703
T. Koga, O. Rabin, and M. S. Dresselhaus	
Self-consistent random-phase approximation for a two-dimensional electron gas: Kadanoff-Baym-Keldysh approach	16 707
Sergey V. Faleev and Mark I. Stockman	
Strain and band-edge alignment in single and multiple layers of self-assembled Ge/Si and GeSi/Si islands	16 715
O. G. Schmidt, K. Eberl, and Y. Rau	
Conductance fluctuations in a double-barrier resonant tunneling device	16 721
P. C. Main, T. J. Foster, P. McDonnell, L. Eaves, M. J. Gompertz, N. Mori, J. W. Sakai, M. Henini, and G. Hill	
Nonlinear operation of the Y-branch switch: Ballistic switching mode at room temperature	16 727
Katharina Hieke and Mikael Ulfward	
Electrostatics of quantum dots in high magnetic fields and single far-infrared photon detection	16 731
O. Astafiev, V. Antonov, T. Kutsuwa, and S. Komiyama	
Effects of spin-orbit coupling on the Peierls instability in one-dimensional mesoscopic rings threaded by a magnetic flux	16 744
Liangbin Hu, Huazhong Li, and Guangping He	
Parity and time-reversal anomaly in a semiconductor	16 751
Oleg Tchernyshyov	
Floating of extended states in a random magnetic field with a finite mean	16 756
K. Yakubo	
Envelope of commensurability magnetoresistance oscillation in unidirectional lateral superlattices	16 761
A. Endo, S. Katsumoto, and Y. Iye	
Electron mobility measurement in <i>n</i> -GaAs at low-temperature impurity breakdown	16 768
V. Novák, M. Cukr, D. Schowalter, and W. Prettl	
Enhanced shot noise from tunneling and space-charge positive feedback	16 773
A. Reklaitis and L. Reggiani	
Energy levels and far-infrared spectroscopy for two electrons in a nanoscopic semiconductor ring	16 777
Hui Hu, Jia-Lin Zhu, and Jia-Jiong Xiong	
Photocurrent spectroscopy of InAs/GaAs self-assembled quantum dots	16 784
P. W. Fry, I. E. Itskevich, S. R. Parnell, J. J. Finley, L. R. Wilson, K. L. Schumacher, D. J. Mowbray, M. S. Skolnick, M. Al-Khafaji, A. G. Cullis, M. Hopkinson, J. C. Clark, and G. Hill	
Magnetic field dependence of the carrier density and magnetization in a bismuth thin film	16 792
H. T. Chu and Dion D. Franket	

Megagauss magnetospectroscopy of EuS/PbS multi-quantum wells	16 798
I. Stolpe, N. Puhlmann, O. Portugall, M. von Ortenberg, W. Dobrowolski, A. Yu. Sipatov, and V. K. Dugaev	
Interplay between coherent and incoherent scattering in quantum well secondary emission	16 802
A. Thränhardt, S. Kuckenburg, A. Knorr, P. Thomas, and S. W. Koch	
Hydrogen elimination model of the formation of hydrogen bonding structures during the growth of hydrogenated amorphous silicon by plasma CVD	16 808
Akira Terakawa and Hiroyuki Matsunami	
Magneto-optical effects in quantum wells irradiated with light pulses	16 815
D. A. Contreras-Solorio, S. T. Pavlov, L. I. Korovin, and I. G. Lang	
Size-dependent photoluminescence from surface-oxidized Si nanocrystals in a weak confinement regime	16 820
Shinji Takeoka, Minoru Fujii, and Shinji Hayashi	
Luminescence properties and defects in GaN nanocolumns grown by molecular beam epitaxy	16 826
E. Calleja, M. A. Sánchez-García, F. J. Sánchez, F. Calle, F. B. Naranjo, E. Muñoz, U. Jahn, and K. Ploog	
Bright and dark triplet states of the negatively charged magnetoexcitons revealed in photoluminescence and time-resolved measurements	16 835
F. M. Munteanu, D. G. Rickel, C. H. Perry, Yongmin Kim, J. A. Simmons, and J. L. Reno	
Theory of exciton doublet structures and polarization relaxation in single quantum dots	16 840
T. Takagahara	
AlAs-monolayer dependence of the Γ -X coupling in GaAs-AlAs type-II heterostructures	16 856
C. Gourdon, D. Martins, P. Lavallard, E. L. Ivchenko, Yun-Lin Zheng, and R. Planel	
Polarization charge screening and indium surface segregation in (In,Ga)N/GaN single and multiple quantum wells	16 870
O. Mayrock, H.-J. Wünsche, and F. Henneberger	
Many-body effects on the optical spectra of InAs/GaAs quantum dots	16 881
R. Heitz, F. Guffarth, I. Mukhametzhanov, M. Grundmann, A. Madhukar, and D. Bimberg	
Dynamics of the cavity polariton in CdTe-based semiconductor microcavities: Evidence for a relaxation edge	16 886
Markus Müller, Joël Bleuse, and Régis André	
Measurement of the dielectric constant of amorphous CN_x films in the 0–45 eV energy range	16 893
Francesco Barreca, Angela Maria Mezzasalma, Guglielmo Mondio, Fortunato Neri, Sebastiano Trusso, and Cirino Vasi	
Theory of quasi-one-dimensional electron liquids with spin-orbit coupling	16 900
A. V. Moroz, K. V. Samokhin, and C. H. W. Barnes	
Coulomb drag between quantum wires	16 912
Rochus Klesse and Ady Stern	
Nondispersive trap-limited electron transport in macroporous GaP	16 926
A. L. Roest, P. E. de Jongh, and D. Vanmaekelbergh	
Scaling behavior in a quantum wire with scatterers	16 933
Daniel Boese, Markus Lischka, and L. E. Reichl	
Surface physics, low-dimensional systems, and related topics	
X-ray waveguides with multiple guiding layers	16 939
F. Pfeiffer, T. Salditt, P. Høghøj, I. Anderson, and N. Schell	
Dynamic force microscopy of copper surfaces: Atomic resolution and distance dependence of tip-sample interaction and tunneling current	16 944
Ch. Loppacher, M. Bammerlin, M. Guggisberg, S. Schär, R. Bennewitz, A. Baratoff, E. Meyer, and H.-J. Güntherodt	
Large deformation and amorphization of Ni nanowires under uniaxial strain: A molecular dynamics study	16 950
Paulo S. Branício and José-Pedro Rino	

Al ₇ CX (X=Li–Cs) clusters: Stability and the prospect for cluster materials	16 956
C. Ashman, S. N. Khanna, M. R. Pederson, and J. Kortus	
Column buckling of multiwalled carbon nanotubes with interlayer radial displacements	16 962
C. Q. Ru	
First-principles characterization of a heteroceramic interface: ZrO ₂ (001) deposited on an α -Al ₂ O ₃ (110 $\bar{2}$) substrate	16 968
A. Christensen and Emily A. Carter	
Structure of ultrathin films of Co on Cu(111) from normal-incidence x-ray standing wave and medium-energy ion scattering measurements	16 984
M. T. Butterfield, M. D. Crapper, T. C. Q. Noakes, P. Bailey, G. J. Jackson, and D. P. Woodruff	
First-principle study on reactions of diamond (100) surfaces with hydrogen and methyl radicals	16 995
Hiroyuki Tamura, Hui Zhou, Yoshihisa Hirano, Seiichi Takami, Momoji Kubo, Rodion V. Belosludov, Akira Miyamoto, Akira Imamura, Mikka N. Gamo, and Toshihiro Ando	
Morphological stability of nanostructures	17 004
M. V. Ramana Murty	
Surface lattice dynamics of Mg(0001)	17 012
Ismail, Ph. Hofmann, E. W. Plummer, Claudia Bungaro, and Winfried Kress	
<i>Ab initio</i> step and kink formation energies on Pb(111)	17 020
Peter J. Feibelman	
Theoretical studies of neutral and cationic selenium clusters	17 026
B.C. Pan, J.G. Han, Jinlong Yang, and Shihe Yang	
Phase transitions in monolayer hydrogen and deuterium on graphite	17 031
R. S. Morton, D. P. van der Werf, and P. C. Rice-Evans	
Wetting transitions of ⁴ He on alkali-metal surfaces from density-functional calculations	17 035
Francesco Ancilotto, Fabio Faccin, and Flavio Toigo	
Predicted properties and melting transition of krypton layers physisorbed onto Lennard-Jones spheres	17 043
M. W. Roth and M. K. Balasubramanya	
Molecular dynamics simulations of friction between an ordered organic monolayer and a rigid slider with an atomic-scale protuberance	17 055
Takuya Ohzono and Masamichi Fujihira	
Near-field optical study of mesoscopic Au periodic samples: Effect of the polarization and comparison between different imaging modes	17 072
L. Salomon, C. Charbonnier, F. de Fornel, P. M. Adam, P. Guérin, and F. Carcenac	
Electrons in image states near roughened metal surfaces	17 084
B. K. Clark, B. W. Gregory, and J. M. Standard	
Low-field negative magnetoresistance in double-layer structures	17 089
G. M. Minkov, A. V. Germanenko, O. E. Rut, O. I. Khrykin, V. I. Shashkin, and V. M. Danil'tsev	
Plasmon excitations in coated nanocrystalline diamond spheres	17 094
R. P. Fehlhaber and L. A. Bursill	
Magnetotransport measurements on freely suspended two-dimensional electron gases	17 103
R. H. Blick, F. G. Monzon, W. Wegscheider, M. Bichler, F. Stern, and M. L. Roukes	
Simulation of thermoelectric properties of bismuth telluride single crystalline films grown on Si and SiO ₂ surfaces	17 108
H. Kaddouri, S. Bénet, S. Charar, M. Makowaska-Janusik, J. C. Tedenac, and I. V. Kityk	
Electronic properties of carbon nanohorns studied by ESR	17 115
S. Garaj, L. Thien-Nga, R. Gaal, L. Forró, K. Takahashi, F. Kokai, M. Yudasaka, and S. Iijima	
Detection of high-energy adsorbate vibrational modes by atom-surface scattering	17 120
Yarong Tang, J. R. Manson, and K.-H. Rieder	
Ethylene adsorption on Si(100)2×1: A high-resolution photoemission study	17 128
M. P. Casaletto, R. Zanoni, M. Carbone, M. N. Piancastelli, L. Aballe, K. Weiss, and K. Horn	

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 62, NUMBER 24

15 DECEMBER 2000-II

Surface passivation in diamond nucleation	17 134
C. H. Lee, Z. D. Lin, N. G. Shang, L. S. Liao, I. Bello, N. Wang, and S. T. Lee	
Study of the stable structures of Ga ₄ As ₄ cluster using FP-LMTO MD method	17 138
Wei Zhao, Pei-lin Cao, Bao-xing Li, Bin Song, and Hirohide Nakamatsu	
Quantum size effect transition in percolating nanocomposite films	17 144
B. Raquet, M. Goiran, N. Nègre, J. Léotin, B. Aronzon, V. Rylkov, and E. Meilikhov	
Cumulative Author Index	17 151