

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 66, NUMBER 2

CONTENTS

1 JULY 2002-II

Announcement: Change in Printing Schedule to Synchronize Online and Print Journals i

RAPID COMMUNICATIONS

Structure, structural phase transitions, mechanical properties, defects, etc.

- Switchable mirrors for visualization and control of hydrogen diffusion in transition metals (*4 pages*) 020101(R)
A. Remhof, S. J. van der Molen, A. Antosik, A. Dobrowolska, N. J. Koeman, and R. Griessen
- Tomographic-like reconstruction of the percolation cluster as a phase transition (*4 pages*) 020102(R)
Nira Shimoni, Doron Azulai, Isaac Balberg, and Oded Millo

Dynamics, dynamical systems, lattice effects, quantum solids, etc.

- Self-trapping of polarons in the Rashba-Pekar model (*4 pages*) 020301(R)
A. S. Mishchenko, N. Nagaosa, N. V. Prokof'ev, A. Sakamoto, and B. V. Svistunov
- Effect of the electron-phonon interaction on the shift and attenuation of optical phonons (*4 pages*) 020302(R)
L. A. Falkovsky
- Patterning and ordering in driven alloys with coupled conserved and nonconserved order parameters
(*4 pages*) 020303(R)
Ji-wen Liu and Pascal Bellon

Magnetism

- Itinerant ferromagnetism and quantum criticality in Sc_3In (*4 pages*) 020401(R)
A. Aguayo and D. J. Singh
- Evidence for a low-spin to intermediate-spin state transition in LaCoO_3 (*4 pages*) 020402(R)
C. Zobel, M. Kriener, D. Bruns, J. Baier, M. Grüninger, T. Lorenz, P. Reutler, and A. Revcolevschi
- Ballistic magnetoresistance over 3000% in Ni nanocontacts at room temperature (*3 pages*) 020403(R)
Harsh Deep Chopra and Susan Z. Hua
- Self-assembled one-dimensional magnetic Ising chains: $\text{Co/Ru}(0001)$ (*4 pages*) 020404(R)
Dongqi Li, Chengtao Yu, J. Pearson, and S. D. Bader
- Impurity-induced antiferromagnetic ordering in the spin gap system TlCuCl_3 (*4 pages*) 020405(R)
Akira Oosawa, Toshio Ono, and Hidekazu Tanaka
- Electronic structure of metallic antiperovskite compound GaCMn_3 (*4 pages*) 020406(R)
J. H. Shim, S. K. Kwon, and B. I. Min
- Cooperative Jahn-Teller transition and resonant x-ray scattering in thin film LaMnO_3 (*4 pages*) 020407(R)
J. H. Song, J. H. Park, K.-B. Lee, J. M. Lee, and Y. H. Jeong
- Temperature dependence of the Hall response in doped antiferromagnets (*4 pages*) 020408(R)
Darko Veberič and Peter Prelovšek



Metamagnetism and giant magnetoresistance of the rare-earth intermetallic compounds $R_2\text{Ni}_2\text{Pb}$ ($R = \text{Er, Ho, Dy}$) (4 pages)	020409(R)
Aravind D. Chinchure, E. Muñoz Sandoval, and J. A. Mydosh	

Superfluidity and superconductivity

Antiferromagnetic ordering in a 90 K copper oxide superconductor (4 pages)	020501(R)
J. A. Hodges, Y. Sidis, P. Bourges, I. Mirebeau, M. Hennion, and X. Chaud	
Enhanced superconductivity in metallic oxides near the metal-insulator transition (4 pages)	020502(R)
M. S. Osofsky, R. J. Soulen, Jr., J. H. Claassen, G. Trotter, H. Kim, and J. Horwitz	
Thermopower in the strongly overdoped region of single-layer $\text{Bi}_2\text{Sr}_2\text{CuO}_{6+\delta}$ superconductor (4 pages)	020503(R)
Z. Konstantinović, G. Le Bras, A. Forget, D. Colson, F. Jean, G. Collin, M. Ocio, and C. Ayache	
Composite spin and orbital triplet superconductivity formed out of a non-Fermi-liquid phase (4 pages)	020504(R)
Frithjof B. Anders	
Re-entrant superconductivity in the superconductor/ferromagnet V/Fe layered system (4 pages)	020505(R)
I. A. Garifullin, D. A. Tikhonov, N. N. Garif'yanov, L. Lazar, Yu. V. Goryunov, S. Ya. Khlebnikov, L. R. Tagirov, K. Westerholt, and H. Zabel	
Mg as a main source for the diverse magnetotransport properties of MgB_2 (4 pages)	020506(R)
K. H. Kim, J. B. Betts, M. Jaime, A. H. Lacerda, G. S. Boebinger, C. U. Jung, Heon-Jung Kim, Min-Seok Park, and Sung-Ik Lee	
Observation of a controllable π junction in a 3-terminal Josephson device (4 pages)	020507(R)
Jian Huang, F. Pierre, Tero T. Heikkilä, Frank K. Wilhelm, and Norman O. Birge	
Uniaxial strain effect in a strongly correlated two-dimensional system $\beta'-(\text{CH}_3)_4\text{As}[\text{Pd}(\text{dmit})_2]_2$ (4 pages)	020508(R)
Reizo Kato, Naoya Tajima, Masafumi Tamura, and Jun-Ichi Yamaura	
Macroscopic anisotropy in superconductors with anisotropic gaps (4 pages)	020509(R)
V. G. Kogan	
Femtosecond quasiparticle relaxation dynamics and probe polarization anisotropy in $\text{YSr}_x\text{Ba}_{2-x}\text{Cu}_4\text{O}_8$ ($x = 0, 0.4$) (4 pages)	020510(R)
D. Dvorsek, V. V. Kabanov, J. Demsar, S. M. Kazakov, J. Karpinski, and D. Mihailovic	
Thermodynamic properties of the d -density-wave order in cuprates (4 pages)	020511(R)
Congjun Wu and W. Vincent Liu	
Order-disorder phase transition in NbSe_2 : Absence of amorphous vortex matter (4 pages)	020512(R)
Yanina Fasano, M. Menghini, F. de la Cruz, Y. Paltiel, Y. Myasoedov, E. Zeldov, M. J. Higgins, and S. Bhattacharya	
First-principles calculation of the superconducting transition in MgB_2 within the anisotropic Eliashberg formalism (4 pages)	020513(R)
Hyoung Joon Choi, David Roundy, Hong Sun, Marvin L. Cohen, and Steven G. Louie	

ARTICLES**Structure, structural phase transitions, mechanical properties, defects, etc.**

Atomic mechanism for dislocation emission from nanosized grain boundaries (8 pages)	024101
H. Van Swygenhoven, P. M. Derlet, and A. Hasnaoui	
Generalized continuum theory for ferroelectric thin films (5 pages)	024102
Tianquan Lü and Wenwu Cao	
In situ x-ray diffraction and Raman spectroscopy of pressure-induced phase transformation in spinel Zn_2TiO_4 (6 pages)	024103
Zhongwu Wang, S. K. Saxena, and C. S. Zha	

Domain pattern formation and kinetics on ferroelectric surfaces under thermal cycling using scanning force microscopy (7 pages)	024104
V. Likodimos, M. Labardi, and M. Allegrini	
Differentiability breaking and Schwarz theorem violation in an aging material (9 pages)	024105
P. Doussineau and A. L. Levelut	
Cascade overlap and amorphization in 3C-SiC: Defect accumulation, topological features, and disordering (10 pages)	024106
F. Gao and W. J. Weber	
Triplet states at an O vacancy in α -quartz (9 pages)	024107
J. Lægsgaard	
Asymmetry and long-range character of lattice deformation by neutral oxygen vacancy in α -quartz (14 pages)	024108
Vladimir B. Sulimov, Peter V. Sushko, Arthur H. Edwards, Alexander L. Shluger, and A. Marshall Stoneham	
Molecular dynamics study of vibrational entropy in bcc and hcp zirconium (6 pages)	024109
Udomsilp Pinsook	
Effect of band filling on the pressure-induced structural transition in Mo-Re alloys (5 pages)	024110
E. A. Smirnova, R. Ahuja, Yu. Kh. Vekilov, B. Johansson, Y. K. Vohra, and I. A. Abrikosov	
Effect of neutron irradiation on hardening in MgO crystals (6 pages)	024111
D. Cáceres, I. Vergara, R. González, and Y. Chen	
Effect of pressure and substitution for Yb on the first-order valence transition in YbInCu ₄ (8 pages)	024112
W. Zhang, N. Sato, K. Yoshimura, A. Mitsuda, T. Goto, and K. Kosuge	
Pressure instability of bcc iron (6 pages)	024113
Hong Ma, S. L. Qiu, and P. M. Marcus	
Oxygen and vacancies in silver: A density-functional study in the local density and generalized gradient approximations (5 pages)	024114
Jean-Paul Crocombette, Henri de Monestrol, and F. Willaime	
Unexpected value of transition pressure in the ionic layered BaFI compound observed by Raman scattering (5 pages)	024115
F. Decremps, M. Gauthier, J.-C. Chervin, M. Fischer, and A. Polian	
Space-time evolution of electron cascades in diamond (9 pages)	024116
Beata Ziaja, Abraham Szöke, David van der Spoel, and Janos Hajdu	
Microstructural strain energy of α -uranium determined by calorimetry and neutron diffractometry (7 pages)	024117
M. E. Manley, B. Fultz, D. W. Brown, B. Clausen, A. C. Lawson, J. C. Cooley, W. L. Hults, R. J. Hanrahan, Jr., J. L. Smith, and D. J. Thoma	
Void nucleation at elevated temperatures under cascade-damage irradiation (10 pages)	024118
A. A. Semenov and C. H. Woo	

Inhomogeneous, disordered, and partially ordered systems

Screened Coulomb interactions in metallic alloys. I. Universal screening in the atomic-sphere approximation (15 pages)	024201
A. V. Ruban and H. L. Skriver	
Screened Coulomb interactions in metallic alloys. II. Screening beyond the single-site and atomic-sphere approximations (12 pages)	024202
A. V. Ruban, S. I. Simak, P. A. Korzhavyi, and H. L. Skriver	
Effect of low-energy dynamics on anomalous vibrational amplitudes in vitreous silica (6 pages)	024203
Mitsutaka Nakamura, Masatoshi Arai, Yasuhiro Inamura, Toshiya Otomo, and S. M. Bennington	
Merging of the acoustic branch with the boson peak in densified silica glass (6 pages)	024204
M. Foret, R. Vacher, E. Courtens, and G. Monaco	

Energy threshold for flow in a model glass at $T=0$ (7 pages)	024205
David J. Webb	
Site occupancy change of hydrogen in Nb-Mo alloys with Mo concentration (7 pages)	024206
Eiichi Yagi, Shigetoshi Koike, Takehiko Matsumoto, Teruo Urai, Norio Tajima, and Kiyoshi Ogiwara	
Microscopic and macroscopic parameters of energy transfer between Tm^{3+} ions in fluorindogallate glasses (7 pages)	024207
D. F. de Sousa and L. A. O. Nunes	
Dynamics, dynamical systems, lattice effects, quantum solids, etc.	
Molecular dynamics calculation of the thermal conductivity of superlattices (7 pages)	024301
Brian C. Daly, Humphrey J. Maris, K. Imamura, and S. Tamura	
Neutron spin-echo spectroscopy for diffusion in crystalline solids (7 pages)	024302
M. Kaisermayr, M. Rennhofer, G. Vogl, C. Pappas, and S. Longeville	
Scattering of elastic waves by a periodic monolayer of spheres (7 pages)	024303
R. Sainidou, N. Stefanou, I. E. Psarobas, and A. Modinos	
Theory of polymer breaking under tension (13 pages)	024304
Rosabella Puthur and K. L. Sebastian	
Optical absorption spectra of the Holstein molecular crystal for weak and intermediate electronic coupling (18 pages)	024305
M. Hoffmann and Z. G. Soos	
Vibrational properties of a regular helical Se chain (13 pages)	024306
Kazuma Nakamura and Atsushi Ikawa	
Magnetism	
Spectroscopic evidence for a charge-density-wave condensate in a charge-ordered manganite: Observation of a collective excitation mode in $\text{Pr}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ by using THz time-domain spectroscopy (8 pages)	024401
Noriaki Kida and Masayoshi Tonouchi	
X-ray magnetic circular dichroism study of spin reorientation transitions of magnetic thin films induced by surface chemisorption (6 pages)	024402
Daiju Matsumura, Toshihiko Yokoyama, Kenta Amemiya, Soichiro Kitagawa, and Toshiaki Ohta	
Validity of the Lieb-Mattis theorem in the J_1 - J_2 Heisenberg model (5 pages)	024403
Yong-Jun Liu, Yung-Chung Chen, Min-Fong Yang, and Chang-De Gong	
Model for spin-polarized transport in perovskite manganite bicrystal grain boundaries (5 pages)	024404
R. Gunnarsson, A. Kadigrobov, and Z. Ivanov	
Magnetic moment and anisotropy at the Fe/ZnSe(001) interface studied by conversion electron Mössbauer spectroscopy (5 pages)	024405
F. Gustavsson, E. Nordström, V. H. Etgens, M. Eddrief, E. Sjöstedt, R. Wäppling, and J.-M. George	
Quantum spin models with exact dimer ground states (8 pages)	024406
Brijesh Kumar	
Properties of Haldane excitations and multiparticle states in the antiferromagnetic spin-1 chain compound CsNiCl_3 (13 pages)	024407
M. Kenzelmann, R. A. Cowley, W. J. L. Buyers, Z. Tun, R. Coldea, and M. Enderle	
Dynamic surface critical behavior of isotropic Heisenberg ferromagnets: Boundary conditions, renormalized field theory, and computer simulation results (19 pages)	024408
H. W. Diehl, M. Krech, and H. Karl	
Evidence of strong antiferromagnetic coupling between localized and itinerant electrons in ferromagnetic $\text{Sr}_2\text{FeMoO}_6$ (5 pages)	024409
M. Tovar, M. T. Causa, A. Butera, J. Navarro, B. Martínez, J. Fontcuberta, and M. C. G. Passeggi	
Frequency-dependent dynamics of domain walls in yttrium iron garnet (12 pages)	024410
C. Torres, Ó. Alejos, J. M. Muñoz, P. Hernández-Gómez, and C. de Francisco	

Néel probability and spin correlations in some nonmagnetic and nondegenerate states of the hexanuclear antiferromagnetic ring Fe_6 : Application of algebraic combinatorics to finite Heisenberg spin systems (13 pages)	024411
Wojciech Florek and Sylwia Bucikiewicz	
Quantum criticalities in a two-leg antiferromagnetic $S = \frac{1}{2}$ ladder induced by a staggered magnetic field (28 pages)	024412
Y.-J. Wang, F. H. L. Essler, M. Fabrizio, and A. A. Nersesyan	
Chemical-order-dependent magnetic anisotropy and exchange stiffness constant of FePt (001) epitaxial films (9 pages)	024413
S. Okamoto, N. Kikuchi, O. Kitakami, T. Miyazaki, Y. Shimada, and K. Fukamichi	
Magneto-optical characterization of ferromagnetic ultrathin multilayers in terms of surface susceptibility tensors (12 pages)	024414
R. Atkinson and N. F. Kubrakov	
Generalized Shastri-Sutherland models in three and higher dimensions (5 pages)	024415
Naveen Surendran and R. Shankar	
Ballistic spin injection and detection in Fe/semiconductor/Fe junctions (12 pages)	024416
Phivos Mavropoulos, Olaf Wunnicke, and Peter H. Dederichs	
Surface and bulk contributions in magnetic linear dichroism in the angular dependence from ferromagnetic transition metals (8 pages)	024417
Francesco Bruno, Giancarlo Panaccione, Alberto Verdini, Roberto Gotter, Luca Floreano, Piero Torelli, Maurizio Sacchi, Fausto Sirotti, Alberto Morgante, and Giorgio Rossi	
Classical percolation transition in the diluted two-dimensional $S = \frac{1}{2}$ Heisenberg antiferromagnet (17 pages) ...	024418
Anders W. Sandvik	
Anisotropy of ultrathin ferromagnetic films and the spin reorientation transition (6 pages)	024419
K. D. Usadel and A. Hucht	
MnO_6 distortion and spin ordering in $\text{Nd}_{1-x}\text{Sr}_x\text{MnO}_3$ ($x = 0.55$ and 0.65) (6 pages)	024420
Sh. Xu, Y. Moritomo, A. Machida, K. Ohoyama, K. Kato, and A. Nakamura	
Current-current correlations in a CuO_3 model system (9 pages)	024421
Bhargavi Srinivasan and Marie-Bernadette Lepetit	
Classical Heisenberg antiferromagnet away from the pyrochlore lattice limit: Entropic versus energetic selection (5 pages)	024422
C. Pinettes, B. Canals, and C. Lacroix	
Magnetic force microscopy study of electron-beam-patterned soft permalloy particles: Technique and magnetization behavior (7 pages)	024423
Xiaobin Zhu, P. Grütter, V. Metlushko, and B. Ilic	
Lattice and magnetic properties of ErVO_4 and ErPO_4 (7 pages)	024424
Y. Hirano, S. Skanthakumar, C.-K. Loong, N. Wakabayashi, and L. A. Boatner	
Role of the dimerized gap due to anion ordering in spin-density wave phase of $(\text{TMTSF})_2\text{ClO}_4$ at high magnetic fields (5 pages)	024425
N. Matsunaga, A. Ayari, P. Monceau, A. Ishikawa, K. Nomura, M. Watanabe, J. Yamada, and S. Nakatsuji	
Critical local-moment fluctuations in the Bose-Fermi Kondo model (15 pages)	024426
Lijun Zhu and Qimiao Si	
Quantum phase transitions in the Bose-Fermi Kondo model (12 pages)	024427
Gergely Zaránd and Eugene Demler	
Antiferromagnetic order in the two-dimensional spin system $\text{Cu}_3\text{B}_2\text{O}_6$ (6 pages)	024428
Hiroya Sakurai, Noriko Tsuboi, Masaki Kato, Kazuyoshi Yoshimura, Koji Kosuge, Akihiro Mitsuda, Hiroyuki Mitamura, and Tsuneaki Goto	

Ferromagnetism in oriented graphite samples (10 pages)	024429
P. Esquinazi, A. Setzer, R. Höhne, C. Semmelhack, Y. Kopelevich, D. Spemann, T. Butz, B. Kohlstrunk, and M. Lösche	
Crackling noise, power spectra, and disorder-induced critical scaling (11 pages)	024430
A. Travesset, R. A. White, and K. A. Dahmen	
Kondo effect and STM spectra through ferromagnetic nanoclusters (17 pages)	024431
Gregory A. Fiete, Gergely Zarand, Bertrand I. Halperin, and Yuval Oreg	
High magnetic field transport measurements of charge-ordered $\text{Pr}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$ strained thin films (5 pages)	024432
W. Prellier, E. Rauwel Buzin, Ch. Simon, B. Mercey, M. Hervieu, S. de Brion, and G. Chouteau	
Electron-magnon scattering and magnetic resistivity in 3d ferromagnets (11 pages)	024433
B. Raquet, M. Viret, E. Sondergard, O. Cespedes, and R. Mamy	
Orbital state and metal-insulator transition in $\text{Ca}_{2-x}\text{Sr}_x\text{RuO}_4$ studied by model Hartree-Fock calculations (4 pages)	024434
M. Kurokawa and T. Mizokawa	
X-ray resonant magnetic scattering study of the magnetic coupling in Co/Pt nanolines and its evolution under magnetic field (9 pages)	024435
K. Chesnel, M. Belakhovsky, S. Landis, J. C. Toussaint, S. P. Collins, G. van der Laan, E. Dudzik, and S. S. Dhesi	
Spin transport in inhomogeneous magnetic fields: A proposal for Stern-Gerlach-like experiments with conduction electrons (7 pages)	024436
Jaroslav Fabian and S. Das Sarma	
Mapping domain disorder in exchange-biased magnetic multilayers (8 pages)	024437
C. H. Marrows, S. Langridge, M. Ali, A. T. Hindmarch, D. T. Dekadjevi, S. Foster, and B. J. Hickey	

Superfluidity and superconductivity

Néel transition, spin fluctuations, and pseudogap in underdoped cuprates by a Lorentz invariant four-fermion model in 2+1 dimensions (5 pages)	024501
Manuel Reenders	
Superconducting properties of strongly underdoped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ single crystals (6 pages)	024502
M. Li, C. J. van der Beek, M. Konczykowski, A. A. Menovsky, and P. H. Kes	
Magnetic-superconducting phase diagram of $\text{Eu}_{2-x}\text{Ce}_x\text{RuSr}_2\text{Cu}_2\text{O}_{10-\delta}$ (6 pages)	024503
I. Felner, U. Asaf, and E. Galstyan	
Evolution of a colloidal critical state in an optical pinning potential landscape (7 pages)	024504
Pamela T. Korda, Gabriel C. Spalding, and David G. Grier	
Neutron scattering search for static magnetism in oxygen-ordered $\text{YBa}_2\text{Cu}_3\text{O}_{6.5}$ (6 pages)	024505
C. Stock, W. J. L. Buyers, Z. Tun, R. Liang, D. Peets, D. Bonn, W. N. Hardy, and L. Taillefer	
Flux phase as a dynamic Jahn-Teller phase: Berryonic matter in the cuprates (20 pages)	024506
R. S. Markiewicz and C. Kusko	
Doping dependence of anisotropic resistivities in the trilayered superconductor $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$ (5 pages)	024507
Takenori Fujii, Ichiro Terasaki, Takao Watanabe, and Azusa Matsuda	
Planar ^{17}O NMR study of $\text{Pr}_y\text{Y}_{1-y}\text{Ba}_2\text{Cu}_3\text{O}_{6+x}$ (7 pages)	024508
W. A. MacFarlane, J. Bobroff, P. Mendels, L. Cyrot, H. Alloul, N. Blanchard, G. Collin, and J.-F. Marucco	
Electrodynamic response of current-biased elementary cubic networks of Josephson junctions (7 pages)	024509
R. De Luca and F. Romeo	
Pseudogap and spectral function from superconducting fluctuations to the bosonic limit (16 pages)	024510
A. Perali, P. Pieri, G. C. Strinati, and C. Castellani	

Dynamic transition and resonance in current-driven arrays of Josephson junctions (7 pages)	024511
Gun Sang Jeon, Jong Soo Lim, Hyun Jin Kim, and M. Y. Choi	
Symmetry of the order parameter in superconducting ZrZn_2 (6 pages)	024512
K. V. Samokhin and M. B. Walker	
Charge fluctuation between even and odd states of a superconducting island (8 pages)	024513
Yasuhiro Utsumi, Hiroshi Imamura, Masahiko Hayashi, and Hiromichi Ebisawa	
Local density of states for the corner geometry interface of d -wave superconductors within the extended Hubbard model (8 pages)	024514
N. Stefanakis	
Vortex structure of thin mesoscopic disks in the presence of an inhomogeneous magnetic field (19 pages)	024515
M. V. Milošević, S. V. Yampolskii, and F. M. Peeters	
Calculation of the hysteretic force between a superconductor and a magnet (11 pages)	024516
M. J. Qin, G. Li, H. K. Liu, S. X. Dou, and E. H. Brandt	
Coupled mesoscopic superconductors: Ginzburg-Landau theory (14 pages)	024517
B. J. Baelus, S. V. Yampolskii, and F. M. Peeters	
Role of the Zhang-Rice-like exciton in optical absorption spectra of CuGeO_3 and $\text{CuGe}_{1-x}\text{Si}_x\text{O}_3$ single crystals (5 pages)	024518
S. Pagliara, F. Parmigiani, P. Galinetto, A. Revcolevschi, and G. Samoggia	
Core-hole screening response in two-dimensional cuprates: A high-resolution x-ray photoemission study (13 pages)	024519
A. Koitzsch, J. Fink, M. S. Golden, K. Karlsson, O. Jepsen, O. Gunnarsson, L. L. Miller, H. Eisaki, S. Uchida, G. Yang, and S. Abell	
Effect of Co doping on the electronic structure of MgCNi_3 (5 pages)	024520
I. R. Shein, A. L. Ivanovskii, E. Z. Kurmaev, A. Moewes, S. Chiuzbian, L. D. Finkelstein, M. Neumann, Z. A. Ren, and G. C. Che	
Fermi surfaces of diborides: MgB_2 and ZrB_2 (6 pages)	024521
H. Rosner, J. M. An, W. E. Pickett, and S.-L. Drechsler	
Vortices in artificial potentials: Simulations of double bitter decorations (11 pages)	024522
M. F. Laguna, P. S. Cornaglia, and C. A. Balseiro	
Strong pinning in high-temperature superconducting films (10 pages)	024523
C. J. van der Beek, M. Konczykowski, A. Abal'oshev, I. Abal'osheva, P. Gierlowski, S. J. Lewandowski, M. V. Indenbom, and S. Barbanera	

ERRATA

Erratum: Magnetoelectric effects in bilayers and multilayers of magnetostrictive and piezoelectric perovskite oxides [Phys. Rev. B 65 , 134402 (2002)] (1 page)	029901(E)
G. Srinivasan, E. T. Rasmussen, B. J. Levin, and R. Hayes	
Erratum: Magnetoelectric bilayer and multilayer structures of magnetostrictive and piezoelectric oxides [Phys. Rev. B 64 , 214408 (2001)] (1 page)	029902(E)
G. Srinivasan, E. T. Rasmussen, J. Gallegos, R. Srinivasan, Yu. I. Bokhan, and V. M. Laletin	

Cumulative Author Index	iii
-------------------------------	-----