

PHYSICAL REVIEW B

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 1098-0121)

PERIODICALS
Postmaster send address changes to:
APS Subscription Services
Suite 1N01
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 79, NUMBER 10

CONTENTS

MARCH 2009-1(II)

RAPID COMMUNICATIONS

Structure, structural phase transitions, mechanical properties, defects

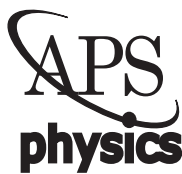
- Hydrogen bonding in ND₃ probed by neutron diffraction to 24 GPa (*4 pages*) 100101(R)
S. Ninet, F. Datchi, S. Klotz, G. Hamel, J. S. Loveday, and R. J. Nelmes
- Theoretical investigation of polarization-compensated II-IV/I-V perovskite superlattices (*4 pages*) 100102(R)
Éamonn D. Murray and David Vanderbilt
- Crystal-to-stripe reordering of sodium ions in Na_xCoO₂ ($x \geq 0.75$) (*4 pages*) 100103(R)
D. J. P. Morris, M. Roger, M. J. Gutmann, J. P. Goff, D. A. Tennant, D. Prabhakaran, A. T. Boothroyd,
E. Dudzik, R. Feyerherm, J.-U. Hoffmann, and K. Kiefer
- Thermal conductivity and heat capacity of the relaxor ferroelectric [PbMg_{1/3}Nb_{2/3}O₃]_{1-x}[PbTiO₃]_x
(*4 pages*) 100104(R)
Makoto Tachibana and Eiji Takayama-Muromachi
- Nature of the ferroelectric phase transition in multiferroic BiFeO₃ from first principles (*4 pages*) 100105(R)
Igor A. Kornev and L. Bellaiche
- Synthesis and characterization of multiferroic BiMn₇O₁₂ (*4 pages*) 100106(R)
F. Mezzadri, G. Calestani, M. Calicchio, E. Gilioli, F. Bolzoni, R. Cabassi, M. Marezio, and
A. Migliori
- Second-harmonic near-field imaging of ferroelectric domain structure of YMnO₃ (*4 pages*) 100107(R)
Catalin C. Neacsu, Bas B. van Aken, Manfred Fiebig, and Markus B. Raschke

Inhomogeneous, disordered, and partially ordered systems

- Ab initio* determination of ion traps and the dynamics of silver in silver-doped chalcogenide glass
(*4 pages*) 100201(R)
I. Chaudhuri, F. Inam, and D. A. Drabold

Magnetism

- High-pressure study of the magnetic phase transition in MnSi (*4 pages*) 100401(R)
Alla E. Petrova, Vladimir N. Krasnorussky, T. A. Lograsso, and Sergei M. Stishov
- Macrospin model to explain the absence of preswitching oscillations in magnetic tunnel junctions: Fieldlike
spin-transfer torque (*4 pages*) 100402(R)
Samir Garzon, Yaroslav Bazaliy, Richard A. Webb, Mark Covington, Shehzaad Kaka, and
Thomas M. Crawford



Copyright 2009 by The American Physical Society



1098-0121(20090301)79:10;1-M

(Continued)

 The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).

Oxygen-vacancy-induced ferromagnetism in CeO ₂ from first principles (<i>4 pages</i>)	100403(R)
Xiaoping Han, Jaichan Lee, and Han-Il Yoo	
Extrinsic anomalous Hall effect in charge and heat transport in pure iron, Fe _{0.997} Si _{0.003} , and Fe _{0.97} Co _{0.03} (<i>4 pages</i>)	100404(R)
Y. Shiomi, Y. Onose, and Y. Tokura	
Absence of temperature dependence of the valence-band spectrum of Co ₂ MnSi (<i>4 pages</i>)	100405(R)
K. Miyamoto, A. Kimura, Y. Miura, M. Shirai, M. Ye, Y. Cui, K. Shimada, H. Namatame, M. Taniguchi, Y. Takeda, Y. Saitoh, E. Ikenaga, S. Ueda, K. Kobayashi, and T. Kanomata	
Nonzero macroscopic magnetization in half-metallic antiferromagnets at finite temperatures (<i>4 pages</i>)	100406(R)
Ersoy Şaşıoğlu	
Magnetic ordering in EuRh ₂ As ₂ studied by x-ray resonant magnetic scattering (<i>4 pages</i>)	100407(R)
S. Nandi, A. Kreyssig, Y. Lee, Yogesh Singh, J. W. Kim, D. C. Johnston, B. N. Harmon, and A. I. Goldman	
Kondo cloud and spin-spin correlations around a partially screened magnetic impurity (<i>4 pages</i>)	100408(R)
László Borda, Markus Garst, and Johann Kroha	
☞ Bose-Einstein condensation of triplons in Ba ₃ Cr ₂ O ₈ (<i>4 pages</i>)	100409(R)
A. A. Aczel, Y. Kohama, M. Jaime, K. Ninios, H. B. Chan, L. Balicas, H. A. Dabkowska, and G. M. Luke	
Superfluidity and superconductivity	
Vortices in superconducting Ba(Fe _{0.93} Co _{0.07}) ₂ As ₂ studied via small-angle neutron scattering and Bitter decoration (<i>4 pages</i>)	100501(R)
M. R. Eskildsen, L. Ya. Vinnikov, T. D. Blasius, I. S. Veshchunov, T. M. Artemova, J. M. Densmore, C. D. Dewhurst, N. Ni, A. Kreyssig, S. L. Bud'ko, P. C. Canfield, and A. I. Goldman	
Charge ordering in La _{1.8-x} Eu _{0.2} Sr _x CuO ₄ studied by resonant soft x-ray diffraction (<i>4 pages</i>)	100502(R)
Jörg Fink, Enrico Schierle, Eugen Weschke, Jochen Geck, David Hawthorn, Viktor Soltwisch, Hiroki Wadati, Hsueh-Hung Wu, Hermann A. Dürr, Nadja Wizen, Bernd Büchner, and George A. Sawatzky	
Bose-Hubbard phase diagram with arbitrary integer filling (<i>4 pages</i>)	100503(R)
Niklas Teichmann, Dennis Hinrichs, Martin Holthaus, and André Eckardt	
Theory of viscoelastic behavior of solid ⁴ He (<i>4 pages</i>)	100504(R)
C.-D. Yoo and Alan T. Dorsey	
Non-Bardeen-Cooper-Schrieffer behavior of optical properties across the phase diagram of cuprate superconductors (<i>4 pages</i>)	100505(R)
E. Illes, E. J. Nicol, and J. P. Carbotte	
London penetration depth in single crystals of Ba(Fe _{1-x} Co _x) ₂ As ₂ spanning underdoped to overdoped compositions (<i>4 pages</i>)	100506(R)
R. T. Gordon, C. Martin, H. Kim, N. Ni, M. A. Tanatar, J. Schmalian, I. I. Mazin, S. L. Bud'ko, P. C. Canfield, and R. Prozorov	
Spectral properties of a partially spin-polarized one-dimensional Hubbard/Luttinger superfluid (<i>4 pages</i>)	100507(R)
Adrian E. Feiguin and David A. Huse	
☞ Synthesis and properties of superconducting <i>T'</i> -R ₂ CuO ₄ (<i>R</i> =Pr, Nd, Sm, Eu, Gd) (<i>4 pages</i>)	100508(R)
Osamu Matsumoto, Aya Utsuki, Akio Tsukada, Hideki Yamamoto, Takaaki Manabe, and Michio Naito	

(Continued)

Electrothermal feedback in superconducting nanowire single-photon detectors (<i>4 pages</i>)	100509(R)
Andrew J. Kerman, Joel K. W. Yang, Richard J. Molnar, Eric A. Dauler, and Karl K. Berggren	
Electron doping and superconductivity in the two-dimensional Hubbard model (<i>4 pages</i>)	100510(R)
D. Eichenberger and D. Baeriswyl	

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

Quantum-mechanical calculations of zircon to scheelite transition pathways in ZrSiO_4 (<i>11 pages</i>)	104101
M. Flórez, J. Contreras-García, J. M. Recio, and M. Marqués	
Indenter-angle-sensitive fracture modes and stress response at incipient plasticity (<i>6 pages</i>)	104102
Zicheng Pan, Hong Sun, and Changfeng Chen	
Electron energy loss spectroscopy and <i>ab initio</i> investigation of iron oxide nanomaterials grown by a hydrothermal process (<i>10 pages</i>)	104103
Shih-Yun Chen, Alexandre Gloter, Alberto Zobelli, Leeyih Wang, Cheng-Hsuan Chen, and Christian Colliex	
Residual stress estimation in ferroelectric PbTiO_3 thin films by Raman spectroscopy (<i>9 pages</i>)	104104
A. Bartasyte, S. Margueron, J. Kreisel, P. Bourson, O. Chaix-Pluchery, L. Rapenne-Homand, J. Santiso, C. Jimenez, A. Abrutis, F. Weiss, and M. D. Fontana	
Mechanisms for the formation of H_2 and O_2 from x-ray irradiated dense ice (<i>5 pages</i>)	104105
Yunfeng Liang and John S. Tse	
Biaxial strain effects on the structure and stability of self-interstitial clusters in silicon (<i>8 pages</i>)	104106
Robert J. Bondi, Sangheon Lee, and Gyeong S. Hwang	
Crystal structure and phonon instability of high-temperature $\beta\text{-Ca}(\text{BH}_4)_2$ (<i>9 pages</i>)	104107
Young-Su Lee, Yoonyoung Kim, Young Whan Cho, Daniel Shapiro, Chris Wolverton, and Vidvuds Ozoliņš	
Sign of the nonlinear dielectric susceptibility of amorphous and crystalline SrTiO_3 films (<i>10 pages</i>)	104108
S. Blonkowski, E. Defay, and X. Biquard	
Pressure-induced structural phase transitions in a two-dimensional system (<i>6 pages</i>)	104109
Pablo F. Damasceno, Luis Gustavo V. Gonçalves, José Pedro Rino, and Rita de Cássia M. T. de Oliveira	
First-principles elastic properties of $\alpha\text{-Pu}$ (<i>7 pages</i>)	104110
Per Söderlind and John E. Klepeis	
Broadband dielectric spectroscopy of phonons and polar nanoclusters in $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3\text{-35\%PbTiO}_3$ ceramics: Grain size effects (<i>12 pages</i>)	104111
V. Bovtun, S. Kamba, S. Veljko, D. Nuzhnyy, J. Kroupa, M. Savinov, P. Vaněk, J. Petzelt, J. Holc, M. Kosec, H. Amorín, and M. Alguero	
Nonrelativistic multiferrocity in the nonstoichiometric spin- $\frac{1}{2}$ spiral-chain cuprate LiCu_2O_2 (<i>5 pages</i>)	104112
A. S. Moskvina, Yu. D. Panov, and S.-L. Drechsler	
☞ Structural changes underlying the diffuse dielectric response in AgNbO_3 (<i>14 pages</i>)	104113
Igor Levin, Victor Krayzman, Joseph C. Woicik, Jenia Karapetrova, Thomas Proffen, Matthew G. Tucker, and Ian M. Reaney	
Modeling transformation paths of multiphase materials: The triple point of zirconia (<i>12 pages</i>)	104114
Patrick W. Dondl, Kai Hormann, and Johannes Zimmer	

(Continued)

Phonons in the cubic phase of $\text{Co}_3\text{B}_7\text{O}_{13}\text{X}$ ($\text{X}=\text{Cl}$, Br , and I) boracites (6 pages)	104115
J. Pascual, Jorge Íñiguez, M. N. Iliev, V. G. Hadjiev, and J. Meen	
Structure and electronic properties of epitaxial fluorite-type IrSi_2 on $\text{Si}(001)$ (9 pages)	104116
Ute Hörmann, Thilo Remmele, John E. Klepeis, Oleg Pankratov, Holger Grünleitner, Max Schulz, Meiken Falke, and Andrew Bleloch	
Inhomogeneous, disordered, and partially ordered systems	
Subsolidus phase relations in the $\text{CaCO}_3\text{--MgCO}_3$ system predicted from the excess enthalpies of supercell structures with single and double defects (9 pages)	104201
Victor L. Vinograd, Marcel H. F. Sluiter, and Björn Winkler	
Experimental signatures of spiky local density of states in quasicrystals (8 pages)	104202
Roland Widmer, Pierangelo Gröning, Michael Feuerbacher, and Oliver Gröning	
First-principles prediction of disordering tendencies in pyrochlore oxides (5 pages)	104203
Chao Jiang, C. R. Stanek, K. E. Sickafus, and B. P. Uberuaga	
Sound propagation in light-modulated carbon nanosponge suspensions (6 pages)	104204
W. Zhou, R. P. Tiwari, R. Annamalai, R. Sooryakumar, V. Subramaniam, and D. Stroud	
Relationship between defect density and charge carrier transport in amorphous and microcrystalline silicon (14 pages)	104205
Oleksandr Astakhov, Reinhard Carius, Friedhelm Finger, Yuri Petrusenko, Valery Borysenko, and Dmytro Barankov	
Experimental and <i>ab initio</i> structural studies of liquid Zr_2Ni (7 pages)	104206
S. G. Hao, M. J. Kramer, C. Z. Wang, K. M. Ho, S. Nandi, A. Kreyssig, A. I. Goldman, V. Wessels, K. K. Sahu, K. F. Kelton, R. W. Hyers, S. M. Canepari, and J. R. Rogers	
Early stages of $\alpha\text{--}\alpha'$ phase separation in Fe-Cr alloys: An atomistic study (9 pages)	104207
G. Bonny, D. Terentyev, L. Malerba, and D. Van Neck	
Dynamics, dynamical systems, lattice effects, quantum solids	
Dynamic critical behavior of model A in films: Zero-mode boundary conditions and expansion near four dimensions (23 pages)	104301
H. W. Diehl and H. Chamati	
Negative thermal expansion in crystals with the delafossite structure: An extended x-ray absorption fine structure study of CuScO_2 and CuLaO_2 (8 pages)	104302
S. I. Ahmed, G. Dalba, P. Fornasini, M. Vaccari, F. Rocca, A. Sanson, J. Li, and A. W. Sleight	
Dielectric properties of solids in the regular and split-charge equilibration formalisms (8 pages)	104303
Razvan A. Nistor and Martin H. Müser	
Effective semiempirical ansatz for computing anharmonic free energies (12 pages)	104304
Zhongqing Wu (吴忠庆) and Renata M. Wentzcovitch	
Kapitza conductance of silicon-amorphous polyethylene interfaces by molecular dynamics simulations (7 pages)	104305
Ming Hu, Pawel Keblinski, and Patrick K. Schelling	
Waveguiding and frequency selection of Lamb waves in a plate with a periodic stubbed surface (6 pages)	104306
Tzung-Chen Wu, Tsung-Tsong Wu, and Jin-Chen Hsu	

(Continued)

Magnetism

Ferro I phase and gadolinium (7 pages)	104401
J. F. Collingwood, S. B. Palmer, M. R. Lees, C. Edwards, J. A. Santos, J. B. Sousa, and D. C. Jiles	
Magnetic hysteresis of interface-biased flat iron dots (10 pages)	104402
G. O. G. Rebouças, A. S. W. T. Silva, Ana L. Dantas, R. E. Camley, and A. S. Carriço	
Shot noise of a ferromagnetic nanowire with a domain wall (6 pages)	104403
Babak Abdollahipour, Malek Zareyan, and Nazila Asaadi	
Magnetism of chromia from first-principles calculations (7 pages)	104404
Siqi Shi, A. L. Wysocki, and K. D. Belashchenko	
Temperature dependence of antiferromagnetic susceptibility in ferritin (7 pages)	104405
N. J. O. Silva, A. Millán, F. Palacio, E. Kampert, U. Zeitler, H. Rakoto, and V. S. Amaral	
Spin-polarized current-induced excitations in a coupled magnetic layer system (16 pages)	104406
D. Gusakova, D. Houssameddine, U. Ebels, B. Dieny, L. Buda-Prejbeanu, M. C. Cyrille, and B. Delaët	
Low-energy spectrum of a Tm-based double-decker complex (5 pages)	104407
N. Magnani, R. Caciuffo, E. Colineau, F. Wastin, A. Baraldi, E. Buffagni, R. Capelletti, S. Carretta, M. Mazzera, D. T. Adroja, M. Watanabe, and A. Nakamura	
Quantum transport and stochastic magnetization dynamics simulation on intrinsic spin torque switching asymmetry (5 pages)	104408
Xiaobin Wang, Wenzhong Zhu, and Dimitar Dimitrov	
Quantum critical behavior in the highly random system $\text{Ti}_{1-x}\text{K}_x\text{CuCl}_3$ probed by zero- and longitudinal-field muon spin relaxation measurements (5 pages)	104409
Takao Suzuki, Fumiko Yamada, Takayuki Kawamata, Isao Watanabe, Takayuki Goto, and Hidekazu Tanaka	
Dynamics of the Einstein–de Haas effect: Application to a magnetic cantilever (7 pages)	104410
Reem Jaafar, E. M. Chudnovsky, and D. A. Garanin	
Magnetization plateau of the classical Ising model on the Shastry-Sutherland lattice: A tensor renormalization-group approach (6 pages)	104411
Ming-Che Chang and Min-Fong Yang	
Diamond chains with multiple-spin exchange interactions (6 pages)	104412
N. B. Ivanov, J. Richter, and J. Schulenburg	
Observation of spin-glass-like behavior in SrRuO_3 epitaxial thin films (6 pages)	104413
R. Palai, H. Huhtinen, J. F. Scott, and R. S. Katiyar	
Magnetocaloric effect in spin-degenerated molecular nanomagnets (5 pages)	104414
M. Evangelisti, A. Candini, M. Affronte, E. Pasca, L. J. de Jongh, R. T. W. Scott, and E. K. Brechin	
Relaxation time of the nanomagnet Fe_4 (13 pages)	104415
E. Rastelli and A. Tassi	
Nonadiabatic spin-transfer torque in real materials (15 pages)	104416
Ion Garate, K. Gilmore, M. D. Stiles, and A. H. MacDonald	
Orientation and thickness dependence of magnetization at the interfaces of highly spin-polarized manganite thin films (7 pages)	104417
Rajesh V. Chopdekar, Elke Arenholz, and Y. Suzuki	

(Continued)

Ferromagnetism and electronic structure of TmB_2 (7 pages)	104418
T. Mori, T. Takimoto, A. Leithe-Jasper, R. Cardoso-Gil, W. Schnelle, G. Auffermann, H. Rosner, and Yu. Grin	
Numerically exact and approximate determination of energy eigenvalues for antiferromagnetic molecules using irreducible tensor operators and general point-group symmetries (9 pages)	104419
Roman Schnalle and Jürgen Schnack	
Selective heating mechanism of magnetic metal oxides by a microwave magnetic field (5 pages)	104420
Motohiko Tanaka, Hirohiko Kono, and Koji Maruyama	
☞ Spin dynamics of the frustrated easy-axis triangular antiferromagnet $2H\text{-AgNiO}_2$ explored by inelastic neutron scattering (14 pages)	104421
E. M. Wheeler, R. Coldea, E. Wawrzyńska, T. Sörgel, M. Jansen, M. M. Koza, J. Taylor, P. Adroguer, and N. Shannon	
Quantum spinodal phenomena (11 pages)	104422
Seiji Miyashita, Hans De Raedt, and Bernard Barbara	
Incoherent Landau-Zener-Stückelberg transitions in single-molecule magnets (15 pages)	104423
Avinash Vijayaraghavan and Anupam Garg	
☞ Critical behavior of the metallic triangular-lattice Heisenberg antiferromagnet PdCrO_2 (7 pages)	104424
Hiroshi Takatsu, Hideki Yoshizawa, Shingo Yonezawa, and Yoshiteru Maeno	
Strong magnetoelastic coupling in VOCl : Neutron and synchrotron powder x-ray diffraction study (6 pages)	104425
A. C. Komarek, T. Taetz, M. T. Fernández-Díaz, D. M. Trots, A. Möller, and M. Braden	
Localized $5f$ antiferromagnetism in cubic UIn_3 : ^{115}In -NMR/NQR study (7 pages)	104426
Hironori Sakai, Shinsaku Kambe, Yo Tokunaga, Hiroyuki Chudo, Yoshifumi Tokiwa, Dai Aoki, Yoshinori Haga, Yoshichika Ōnuki, and Hiroshi Yasuoka	
Magnetic, transport, and thermodynamic properties of CaMn_2O_4 single crystals (9 pages)	104427
B. D. White, J. A. Souza, C. Chiorescu, J. J. Neumeier, and J. L. Cohn	
Entanglement evolution of a spin-chain bath coupled to a quantum spin (5 pages)	104428
Zhi-Hui Wang, Bing-Shen Wang, and Zhao-Bin Su	
Quantum phase transition in the one-dimensional period-two and uniform compass model (5 pages)	104429
Ke-Wei Sun, Yu-Yu Zhang, and Qing-Hu Chen	
Complex magnetic phase in submonolayer Fe stripes on $\text{Pt}(997)$ (7 pages)	104430
J. Honolka, T. Y. Lee, K. Kuhnke, D. Repetto, V. Sessi, P. Wahl, A. Buchsbaum, P. Varga, S. Gardonio, C. Carbone, S. R. Krishnakumar, P. Gambardella, M. Komelj, R. Singer, M. Föhnle, K. Fauth, G. Schütz, A. Enders, and K. Kern	
Spin state and magnetic transformations in $\text{Sr}_{0.7}\text{Y}_{0.3}\text{CoO}_{2.62}$ at high pressures (5 pages)	104431
N. O. Golosova, D. P. Kozlenko, L. S. Dubrovinsky, O. A. Drozhzhin, S. Ya. Istomin, and B. N. Savenko	
Single-crystal growth, crystallography, magnetic susceptibility, heat capacity, and thermal expansion of the antiferromagnetic $S=1$ chain compound CaV_2O_4 (21 pages)	104432
A. Niazi, S. L. Bud'ko, D. L. Schlagel, J. Q. Yan, T. A. Lograsso, A. Kreyssig, S. Das, S. Nandi, A. I. Goldman, A. Honecker, R. W. McCallum, M. Reehuis, O. Pieper, B. Lake, and D. C. Johnston	
Spin-transfer torque in helical spin-density waves (7 pages)	104433
O. Wessely, B. Skubic, and L. Nordström	

(Continued)

Theoretical study of the torque curves in some magnetic multilayer systems (8 pages)	104434
A. Layadi	
Influence of the dynamic dipolar interaction on the current-induced core switch in vortex pairs (6 pages)	104435
Yaowen Liu, Zhiwei Hou, Sebastian Gliga, and Riccardo Hertel	
Order and phase nucleation in nonequilibrium nanocomposite Fe-Pt thin films with perpendicular magnetic anisotropy (6 pages)	104436
C. Clavero, J. R. Skuza, J. M. García-Martín, A. Cebollada, D. A. Walko, and R. A. Lukaszew	
Theory of magnetic-field-induced critical end point in BiMn_2O_5 (8 pages)	104437
Gun Sang Jeon, Jin-Hong Park, Jae Wook Kim, Kee Hoon Kim, and Jung Hoon Han	
Nonstationary magnetization dynamics driven by spin transfer torque (4 pages)	104438
G. Siracusano, G. Finocchio, A. La Corte, G. Consolo, L. Torres, and B. Azzerboni	
Superfluidity and superconductivity	
Synthesis, structural, and transport properties of the hole-doped superconductor $\text{Pr}_{1-x}\text{Sr}_x\text{FeAsO}$ (6 pages)	104501
Gang Mu, Bin Zeng, Xiyu Zhu, Fei Han, Peng Cheng, Bing Shen, and Hai-Hu Wen	
Insensitivity of d -wave pairing to disorder in the high-temperature cuprate superconductors (5 pages)	104502
A. F. Kemper, D. G. S. P. Doluweera, T. A. Maier, M. Jarrell, P. J. Hirschfeld, and H-P. Cheng	
Electronic, vibrational, and superconducting properties of CaBeSi : First-principles calculations (7 pages)	104503
C. Bersier, A. Floris, A. Sanna, G. Profeta, A. Continenza, E. K. U. Gross, and S. Massidda	
Evidence of quantum criticality in the phase diagram of $\text{K}_x\text{Sr}_{1-x}\text{Fe}_2\text{As}_2$ from measurements of transport and thermoelectricity (5 pages)	104504
Melissa Gooch, Bing Lv, Bernd Lorenz, Arnold M. Guloy, and Ching-Wu Chu	
Depinning and critical-current characteristics of topologically defected vortex lattices (6 pages)	104505
Paolo Moretti and M.-Carmen Miguel	
 Non-Meissner electrodynamics and knotted solitons in two-component superconductors (6 pages)	104506
Egor Babaev	
Phase dynamics in intrinsic Josephson junctions and their electrodynamics (13 pages)	104507
Shizeng Lin and Xiao Hu	
Second sound in an anisotropic quasiparticle system of superfluid ^4He (11 pages)	104508
I. N. Adamenko, K. E. Nemchenko, V. A. Slipko, and A. F. G. Wyatt	
Multiple-retrapping processes in the phase-diffusion regime of high- T_c intrinsic Josephson junctions (5 pages)	104509
Myung-Ho Bae, M. Sahu, Hu-Jong Lee, and A. Bezryadin	
Magnetic and metallic state at intermediate Hubbard U coupling in multiorbital models for undoped iron pnictides (16 pages)	104510
Rong Yu, Kien T. Trinh, Adriana Moreo, Maria Daghofer, José A. Riera, Stephan Haas, and Elbio Dagotto	
Origin of superconductivity in boron-doped silicon carbide from first principles (4 pages)	104511
Jesse Noffsinger, Feliciano Giustino, Steven G. Louie, and Marvin L. Cohen	
Phase transition in site-diluted Josephson junction arrays: A numerical study (7 pages)	104512
Jian-Ping Lv, Huan Liu, and Qing-Hu Chen	

(Continued)

Stationary transport in mesoscopic hybrid structures with contacts to superconducting and normal wires: A Green's function approach for multiterminal setups (<i>12 pages</i>)	104513
Liliana Arrachea	
Helium on planar and nanostructured alkali-metal surfaces (<i>11 pages</i>)	104514
F. Ancilotto, M. Barranco, E. S. Hernández, A. Hernando, and M. Pi	
Upper critical field and fluctuation conductivity in the critical regime of doped SmFeAsO (<i>6 pages</i>)	104515
I. Pallecchi, C. Fanciulli, M. Tropeano, A. Palenzona, M. Ferretti, A. Malagoli, A. Martinelli, I. Sheikin, M. Putti, and C. Ferdeghini	
Magnetic field induced modification of superfluid density and interplane spectral weight in YBa ₂ Cu ₃ O _y (<i>8 pages</i>)	104516
A. D. LaForge, W. J. Padilla, K. S. Burch, Z. Q. Li, A. A. Schafgans, Kouji Segawa, Yoichi Ando, and D. N. Basov	
Isotope effect in the Hubbard model with local phonons (<i>5 pages</i>)	104517
Alexandru Macridin and M. Jarrell	
Self-consistent microscopic calculations for nonlocal transport through nanoscale superconductors (<i>12 pages</i>)	104518
R. Mélin, F. S. Bergeret, and A. Levy Yeyati	
Effects of Ca substitution and the pseudogap on the magnetic properties of Y _{1-x} Ca _x Ba ₂ Cu ₃ O _{7-δ} (<i>8 pages</i>)	104519
S. H. Naqib, J. R. Cooper, and J. W. Loram	
Vortex matter in a hybrid superconducting/ferromagnetic nanostructure (<i>12 pages</i>)	104520
Q. H. Chen, C. Carballeira, and V. V. Moshchalkov	
Superconductivity at 23 K and low anisotropy in Rb-substituted BaFe ₂ As ₂ single crystals (<i>8 pages</i>)	104521
Z. Bukowski, S. Weyeneth, R. Puzniak, P. Moll, S. Katrych, N. D. Zhigadlo, J. Karpinski, H. Keller, and B. Batlogg	
In-phase electrodynamics and terahertz wave emission in extended intrinsic Josephson junctions (<i>12 pages</i>)	104522
Tomio Koyama, Hideki Matsumoto, Masahiko Machida, and Kazuo Kadowaki	
☞ Electronic interlayer coupling in the low-temperature tetragonal phase of La _{1.79} Eu _{0.2} Sr _{0.01} CuO ₄ (<i>8 pages</i>)	104523
M. Hücker	

COMMENTS

Comment on "On the theory of nuclear resonant forward scattering of synchrotron radiation" (<i>4 pages</i>)	106401
Gilbert R. Hoy and Jos Odeurs	

ERRATA

Erratum: Ferromagnetism and increased ionicity in epitaxially grown TbMnO ₃ films [Phys. Rev. B 79 , 014416 (2009)] (<i>1 page</i>)	109901(E)
D. Rubi, C. de Graaf, C. J. M. Daumont, D. Mannix, R. Broer, and B. Noheda	