

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 82, NUMBER 9

CONTENTS

SEPTEMBER 2010-1(I)

BRIEF REPORTS

Structure, structural phase transitions, mechanical properties, defects

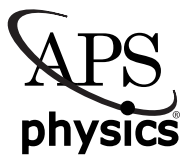
- Al_2O_3 as a metallic glass at 300 GPa (*4 pages*) 092101
W. J. Nellis
- Lowering of the spatial symmetry at the $\gamma \rightarrow \alpha$ phase transition in cerium (*4 pages*) 092102
A. V. Tsvyashchenko, A. V. Nikolaev, A. I. Velichkov, A. V. Salamatina, L. N. Fomicheva,
G. K. Rysany, A. A. Sorokin, O. I. Kochetov, M. Budzynski, and K. H. Michel
- Decomposition of perovskite FeTiO_3 into wüstite $\text{Fe}_{1-x}\text{Ti}_{0.5x}\text{O}$ and orthorhombic FeTi_3O_7 at high pressure
(*4 pages*) 092103
D. Nishio-Hamane, T. Yagi, M. Ohshiro, K. Niwa, T. Okada, and Y. Seto

Inhomogeneous, disordered, and partially ordered systems

- Thermal conductivity in amorphous ices from molecular dynamics (*4 pages*) 092201
Niall J. English, John S. Tse, and Rory Gallagher
- Giant Hall effect in nonmagnetic Mo/SnO₂ granular films (*4 pages*) 092202
Ya-Nan Wu, Zhi-Qing Li, and Juhn-Jong Lin
- Simplified derivation of the Bethe-ansatz equations for the Dicke model (*2 pages*) 092203
Oleksandr Tsyplatyev, Jan von Delft, and Daniel Loss

Magnetism

- Ground-state functional for quantum spin chains with bond defects (*4 pages*) 092401
Poliana H. Penteado and Valter L. Líbero
- Temperature dependence of tunneling magnetoresistance in epitaxial magnetic tunnel junctions using a
 Co_2FeAl Heusler alloy electrode (*4 pages*) 092402
Wenhong Wang, Hiroaki Sukegawa, and Koichiro Inomata
- Origin of magnetic freezing in pyrochlore $\text{Y}_2\text{Mo}_2\text{O}_7$ (*4 pages*) 092403
Oren Ofer, Amit Keren, Jason S. Gardner, Yang Ren, and W. A. MacFarlane
- Iron substitution in NdCoAsO : Crystal structure and magnetic phase diagram (*4 pages*) 092404
Michael A. McGuire, Athena S. Sefat, Brian C. Sales, and David Mandrus



Copyright 2010 by The American Physical Society



1098-0121(20100901)82:9;1-E

(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).

Influence of misfit dislocations on the magnetoresistance of MgO-based epitaxial magnetic tunnel junctions (4 pages)	092405
F. Bonell, S. Andrieu, C. Tiusan, F. Montaigne, E. Snoeck, B. Belhadji, L. Calmels, F. Bertran, P. Le Fèvre, and A. Taleb-Ibrahimi	

Superfluidity and superconductivity

Equivalence of the channel-corrected- T -matrix and anomalous-propagator approaches to condensation (4 pages)	092501
K. Morawetz	

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

Symmetry and strain analysis of structural phase transitions in $\text{Pr}_{0.48}\text{Ca}_{0.52}\text{MnO}_3$ (18 pages)	094101
Michael A. Carpenter, Ruth E. A. McKnight, Christopher J. Howard, and Kevin S. Knight	
Hydrogen interaction with point defects in tungsten (5 pages)	094102
K. Heinola, T. Ahlgren, K. Nordlund, and J. Keinonen	
Temperature dependence of the pressure-induced amorphization of ice I_h studied by high-pressure neutron diffraction to 30 K (4 pages)	094103
Thierry Strässle, Andrin Caviezel, Balasubramanian Padmanabhan, Vladimir Yu. Pomjakushin, and Stefan Klotz	
Structural properties and electronic structure of $\text{HfO}_2\text{-ZrO}_2$ composite films (7 pages)	094104
Deok-Yong Cho, Hyung-Suk Jung, and Cheol Seong Hwang	
Hysteresis in kinking nonlinear elastic solids and the Preisach-Mayergoyz model (10 pages)	094105
A. G. Zhou (周爱国), S. Basu, G. Friedman, P. Finkel, O. Yeheskel, and M. W. Barsoum	
Interplay of defect cluster and the stability of xenon in uranium dioxide from density functional calculations (9 pages)	094106
Hua Y. Geng, Ying Chen, Yasunori Kaneta, Motoyasu Kinoshita, and Q. Wu	
Stability of simple cubic calcium at high pressure: A first-principles study (8 pages)	094107
Yansun Yao, Roman Martoňák, Serguei Patchkovskii, and Dennis D. Klug	
Bond mobility mechanism in grain boundary embrittlement: First-principles tensile tests of Fe with a P-segregated $\Sigma 3$ grain boundary (5 pages)	094108
Motohiro Yuasa and Mamoru Mabuchi	
Anisotropic lattice dynamics of FePt L_{10} thin films (4 pages)	094109
S. Couet, M. Sternik, B. Laenens, A. Siegel, K. Parlinski, N. Planckaert, F. Gröstlinger, A. I. Chumakov, R. Rüffer, B. Sepiol, K. Temst, and A. Vantomme	
Defects in carbon implanted silicon calculated by classical potentials and first-principles methods (6 pages)	094110
F. Zirkelbach, B. Stritzker, K. Nordlund, J. K. N. Lindner, W. G. Schmidt, and E. Rauls	
Energy transport analysis in ultrashort pulse laser ablation through combined molecular dynamics and Monte Carlo simulation (12 pages)	094111
Wenqian Hu, Yung C. Shin, and Galen King	
Theoretical investigation of intermediate phases between Li_2NH and LiNH_2 (6 pages)	094112
Feng Zhang, Yan Wang, and M. Y. Chou	

(Continued)

High-frequency polarization switching of a thin ferroelectric film (8 pages)	094113
J.-G. Caputo, A. I. Maimistov, E. D. Mishina, E. V. Kazantseva, and V. M. Mukhortov	
Ferroelectric dead layer driven by a polar interface (10 pages)	094114
Y. Wang, M. K. Niranjana, K. Janicka, J. P. Velev, M. Ye. Zhuravlev, S. S. Jaswal, and E. Y. Tsybal	
Contribution of space charges to the polarization of ferroelectric superlattices and its effect on dielectric properties (7 pages)	094115
M. B. Okatan, I. B. Misirlioglu, and S. P. Alpay	
Crystal structure prediction via particle-swarm optimization (8 pages)	094116
Yanchao Wang, Jian Lv, Li Zhu, and Yanming Ma	
Effect of cell size on the energetics of vacancies in aluminum studied via orbital-free density functional theory (5 pages)	094117
Balachandran Radhakrishnan and Vikram Gavini	
Microstructure from ferroelastic transitions using strain pseudospin clock models in two and three dimensions: A local mean-field analysis (14 pages)	094118
Romain Vasseur, Turab Lookman, and Subodh R. Shenoy	
Design of three-dimensional solid-state boron oxide networks: <i>Ab initio</i> calculations using density functional theory (4 pages)	094119
Frederik Claeyssens, Neil L. Allan, Nicholas C. Norman, and Christopher A. Russell	
Inhomogeneous, disordered, and partially ordered systems	
First-principles study of the elastic properties of In-Tl random alloys (8 pages)	094201
Chun-Mei Li, Qing-Miao Hu, Rui Yang, Börje Johansson, and Levente Vitos	
Random-manifold to random-periodic depinning of an elastic interface (17 pages)	094202
S. Bustingorry, A. B. Kolton, and T. Giamarchi	
Two-dimensional electron systems beyond the diffusive regime (7 pages)	094203
P. Markoš	
Transparency and long-ranged fluctuations: The case of glass ceramics (5 pages)	094204
M. Mattarelli, G. Gasperi, M. Montagna, and P. Verrocchio	
Rayleigh scattering, long-time tails, and the harmonic spectrum of topologically disordered systems (7 pages)	094205
Carl Ganter and Walter Schirmacher	
Dynamics, dynamical systems, lattice effects	
Light and stable triplet bipolarons on square and triangular lattices (21 pages)	094301
J. P. Hague and P. E. Kornilovitch	
Two types of excited electron dynamics in zinc oxide (8 pages)	094302
V. P. Zhukov, P. M. Echenique, and E. V. Chulkov	
Phonon anomalies in α -uranium (9 pages)	094303
Xiaodong Yang and Peter S. Riseborough	
Accurate numerical verification of the instanton method for macroscopic quantum tunneling: Dynamics of phase slips (14 pages)	094304
Ippei Danshita and Anatoli Polkovnikov	

(Continued)

Molecular dynamics with quantum fluctuations (<i>6 pages</i>)	094305
Ionuț Georgescu and Vladimir A. Mandelshtam	
Acoustic transmission line metamaterial with negative/zero/positive refractive index (<i>11 pages</i>)	094306
Frédéric Bongard, Hervé Lissek, and Juan R. Mosig	
Vibrational spectrum of reidite ZrSiO_4 from first principles (<i>9 pages</i>)	094307
Mikhail B. Smirnov, Sergey V. Sukhomlinov, and Konstantin S. Smirnov	
Dirac point and edge states in a microwave realization of tight-binding graphene-like structures (<i>4 pages</i>)	094308
U. Kuhl, S. Barkhofen, T. Tudorovskiy, H.-J. Stöckmann, T. Hossain, L. de Forges de Parny, and F. Mortessagne	
Inelastic neutron scattering, lattice dynamics, and high-pressure phase stability of zircon-structured lanthanide orthophosphates (<i>8 pages</i>)	094309
Preyoshi P. Bose, R. Mittal, S. L. Chaplot, C.-K. Loong, and L. A. Boatner	
Magnetism	
Spin correlations in the geometrically frustrated RBaCo_4O_7 antiferromagnets: Mean-field approach and Monte Carlo simulations (<i>11 pages</i>)	094401
D. D. Khalyavin, P. Manuel, J. F. Mitchell, and L. C. Chapon	
Interparticle interaction and crossover in critical lines on field-temperature plane in $\text{Pr}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$ nanoparticles (<i>9 pages</i>)	094402
A. K. Pramanik and A. Banerjee	
Symmetry analysis of magneto-optical effects: The case of x-ray diffraction and x-ray absorption at the transition metal $L_{2,3}$ edge (<i>14 pages</i>)	094403
M. W. Haverkort, N. Hollmann, I. P. Krug, and A. Tanaka	
Magnetoelastic coupling in the frustrated antiferromagnetic triangular lattice CuMnO_2 (<i>5 pages</i>)	094404
C. Vecchini, M. Poienar, F. Damay, O. Adamopoulos, A. Daoud-Aladine, A. Lappas, J. M. Perez-Mato, L. C. Chapon, and C. Martin	
Large magnetothermal conductivity of HoMnO_3 single crystals and its relation to the magnetic-field-induced transitions of magnetic structure (<i>5 pages</i>)	094405
X. M. Wang, C. Fan, Z. Y. Zhao, W. Tao, X. G. Liu, W. P. Ke, X. Zhao, and X. F. Sun	
Unusual signatures of the ferromagnetic transition in the heavy fermion compound $\text{UMn}_2\text{Al}_{20}$ (<i>5 pages</i>)	094406
C. H. Wang, J. M. Lawrence, E. D. Bauer, K. Kothapalli, J. S. Gardner, F. Ronning, K. Gofryk, J. D. Thompson, H. Nakotte, and F. Trouw	
Magnetic and electronic properties of the ferromagnetic Kondo-lattice system Np_2PdGa_3 (<i>11 pages</i>)	094407
V. H. Tran, J.-C. Griveau, R. Eloirdi, W. Miiller, and E. Colineau	
Evolution of the magnetic field–temperature phase diagram in $\text{UAs}_{1-x}\text{Se}_x$ (<i>10 pages</i>)	094408
Tomasz Plackowski, Marcin Matusiak, and Jozef Sznajd	
Magnetic anisotropy of Fe and Co ultrathin films deposited on Rh(111) and Pt(111) substrates: An experimental and first-principles investigation (<i>23 pages</i>)	094409
Anne Lehnert, Samuel Dennler, Piotr Błoński, Stefano Rusponi, Markus Etzkorn, Géraud Moulas, Peter Bencok, Pietro Gambardella, Harald Brune, and Jürgen Hafner	

(Continued)

Magnetic structure of the zigzag chain family $\text{Na}_x\text{Ca}_{1-x}\text{V}_2\text{O}_4$ determined by muon-spin rotation (6 pages)	094410
Oren Ofer, Yutaka Ikeda, Tatsuo Goko, Martin Månsson, Jun Sugiyama, Eduardo J. Ansaldo, Jess H. Brewer, Kim H. Chow, and Hiroya Sakurai	
Nonresonant x-ray magnetic scattering on rare-earth iron borates $\text{RFe}_3(\text{BO}_3)_4$ (10 pages)	094411
J. E. Hamann-Borrero, M. Philipp, O. Kataeva, M. v. Zimmermann, J. Geck, R. Klingeler, A. Vasiliev, L. Bezmaternykh, B. Büchner, and C. Hess	
Two- and three-dimensional magnetic correlations in the spin- $\frac{1}{2}$ square-lattice system $\text{Zn}_2\text{VO}(\text{PO}_4)_2$ (6 pages)	094412
S. M. Yusuf, A. K. Bera, N. S. Kini, I. Mirebeau, and S. Petit	
Magnetic ground state of pyrochlore oxides close to metal-insulator boundary probed by muon spin rotation (11 pages)	094413
M. Miyazaki, R. Kadono, K. H. Satoh, M. Hiraishi, S. Takeshita, A. Koda, A. Yamamoto, and H. Takagi	
Domain wall dynamics during the devitrification of $\text{Fe}_{73.5}\text{CuNb}_3\text{Si}_{11.5}\text{B}_{11}$ magnetic microwires (8 pages)	094414
J. Olivera, R. Varga, V. M. Prida, M. L. Sanchez, B. Hernando, and A. Zhukov	
Interlayer exchange coupling beyond the proximity force approximation (8 pages)	094415
Ching-Hao Chang and Tzay-Ming Hong	
Low-energy magnetic excitation spectrum of the unconventional ferromagnet CeRh_3B_2 (6 pages)	094416
S. Raymond, J. Panarin, F. Givord, A. P. Murani, J. X. Boucherle, and P. Lejay	
Flexomagnetic effect in frustrated triangular magnetic structures (6 pages)	094417
Pavel Lukashev and Renat F. Sabirianov	
Strong magnetoelastic coupling in orthorhombic $\text{Eu}_{1-x}\text{Y}_x\text{MnO}_3$ manganite (9 pages)	094418
J. Agostinho Moreira, A. Almeida, W. S. Ferreira, J. P. Araújo, A. M. Pereira, M. R. Chaves, M. M. R. Costa, V. A. Khomchenko, J. Kreisel, D. Chernyshov, S. M. F. Vilela, and P. B. Tavares	
Shape-dependent depinning of a domain wall by a magnetic field and a spin-polarized current (8 pages)	094419
N. Logoboy, B. Ya. Shapiro, and E. B. Sonin	
Current-induced switching and magnetoresistance of noncollinear bulk magnetic structures (4 pages)	094420
A. Kalitsov, M. Chshiev, B. Canals, and C. Lacroix	
Ultralow blocking temperature and breakdown of the giant spin model in Er^{3+} -doped nanoparticles (8 pages)	094421
W. Van den Heuvel, V. K. Tikhomirov, D. Kirilenko, N. Schildermans, L. F. Chibotaru, J. Vanacken, P. Gredin, M. Mortier, G. van Tendeloo, and V. V. Moshchalkov	
Ferrimagnetism of the magnetoelectric compound Cu_2OSeO_3 probed by ^{77}Se NMR (10 pages)	094422
M. Belesi, I. Rousochatzakis, H. C. Wu, H. Berger, I. V. Shvets, F. Mila, and J. P. Ansermet	
Temperature evolution of self-organized stripe domains in ultrathin Fe films on $\text{MnAs/GaAs}(001)$ (9 pages)	094423
C. Helman, J. Milano, S. Tacchi, M. Madami, G. Carlotti, G. Gubbiotti, G. Alejandro, M. Marangolo, D. Demaille, V. H. Etgens, and M. G. Pini	
Persistence of the valence bond glass state in the double perovskites $\text{Ba}_{2-x}\text{Sr}_x\text{YMoO}_6$ (5 pages)	094424
A. C. McLaughlin, M. A. de Vries, and J.-W. G. Bos	
Magnetic-field control of the electric polarization in BiMnO_3 (5 pages)	094425
I. V. Solovyev and Z. V. Pchelkina	

(Continued)

Magnetic ordering and dense Kondo behavior in EuFe_2P_2 (8 pages)	094426
Chunmu Feng, Zhi Ren, Shenggao Xu, Shuai Jiang, Zhu'an Xu, Guanghan Cao, I. Nowik, I. Felner, Kazuyuki Matsubayashi, and Yoshiya Uwatoko	
Magnetic interactions in spin-glasslike $\text{Ge}_{1-x-y}\text{Sn}_x\text{Mn}_y\text{Te}$ dilute magnetic semiconductors (7 pages)	094427
L. Kilanski, R. Szymczak, W. Dobrowolski, K. Szalowski, V. E. Slynko, and E. I. Slynko	
Magnetic excitations in the XY -pyrochlore antiferromagnet $\text{Er}_2\text{Ti}_2\text{O}_7$ (6 pages)	094428
S. S. Sosin, L. A. Prozorova, M. R. Lees, G. Balakrishnan, and O. A. Petrenko	
Skyrmion lattice in a two-dimensional chiral magnet (9 pages)	094429
Jung Hoon Han, Jiadong Zang, Zhihua Yang, Jin-Hong Park, and Naoto Nagaosa	
Anisotropic spin dynamics in the frustrated chain $\text{Ca}_3\text{Co}_2\text{O}_6$ detected by single-crystal ^{59}Co NMR (8 pages)	094430
Yasuhiro Shimizu, Munehisa Horibe, Hiroshi Nanba, Tsuyoshi Takami, and Masayuki Itoh	
Observation of large- D magnetic phase in $\text{Sr}_3\text{NiPtO}_6$ (7 pages)	094431
S. Chattopadhyay, Deepti Jain, V. Ganesan, S. Giri, and S. Majumdar	
Exchange bias: Dependence on the properties of the ferromagnetic interface layer (7 pages)	094432
K. D. Usadel and R. L. Stamps	
Remanent magnetization in CoO antiferromagnetic nanoparticles (8 pages)	094433
N. J. O. Silva, A. Millán, F. Palacio, M. Martins, T. Trindade, I. Puente-Orench, and J. Campo	
Spin-transfer-torque resonant switching and injection locking in the presence of a weak external microwave field for spin valves with perpendicular materials (8 pages)	094434
Mario Carpentieri, Giovanni Finocchio, Bruno Azzerboni, and Luis Torres	
First-principles theoretical studies of half-metallic ferromagnetism in CrTe (8 pages)	094435
Y. Liu, S. K. Bose, and J. Kudrnovský	
Magnetic response of cobalt nanowires with diameter below 5 nm (9 pages)	094436
P. Schio, F. Vidal, Y. Zheng, J. Milano, E. Fonda, D. Demaille, B. Vodungbo, J. Varalda, A. J. A. de Oliveira, and V. H. Etgens	
Neutron diffraction investigation of the crystal and magnetic structures in KCrF_3 perovskite (5 pages)	094437
Y. Xiao, Y. Su, H.-F. Li, C. M. N. Kumar, R. Mittal, J. Persson, A. Senyshyn, K. Gross, and Th. Brueckel	
Magnetic and electronic characterization of highly Co-doped ZnO : An annealing study at the solubility limit (7 pages)	094438
R. Knut, J. M. Wikberg, K. Lashgari, V. A. Coleman, G. Westin, P. Svedlindh, and O. Karis	
Three-dimensional Ising behavior of antiferromagnetic Bi_2CuO_4 (6 pages)	094439
B. D. White, W. M. Pätzold, and J. J. Neumeier	
Evidence of active role played by the nonmagnetic element Sr in magnetostructural coupling in SrRuO_3 (6 pages)	094440
Debdutta Lahiri, T. Shibata, S. Chattopadhyay, Sudipta Kanungo, T. Saha-Dasgupta, R. S. Singh, Surinder M. Sharma, and Kalobaran Maiti	
Spin and charge dynamics ruled by antiferromagnetic order in iron pnictide superconductors (5 pages)	094441
E. Kaneshita and T. Tohyama	

(Continued)

Intra- and intersite electronic excitations in multiferroic TbMnO ₃ probed by resonant inelastic x-ray scattering (8 pages)	094442
J. M. Chen, J. M. Lee, S. W. Huang, K. T. Lu, H. T. Jeng, C. K. Chen, S. C. Haw, T. L. Chou, S. A. Chen, N. Hiraoka, H. Ishii, K. D. Tsuei, and T. J. Yang	
Effect of metallic surfaces on the electronic structure, magnetism, and transport properties of Co-phthalocyanine molecules (11 pages)	094443
Xi Chen and M. Alouani	
Mechanism of large magnetoresistance in Co ₂ MnSi/Ag/Co ₂ MnSi devices with current perpendicular to the plane (5 pages)	094444
Y. Sakuraba, K. Izumi, T. Iwase, S. Bosu, K. Saito, K. Takanashi, Y. Miura, K. Futatsukawa, K. Abe, and M. Shirai	
Magnetic-field-induced domain-wall motion in permalloy nanowires with modified Gilbert damping (7 pages)	094445
Thomas A. Moore, Philipp Möhrke, Lutz Heyne, Andreas Kaldun, Mathias Kläui, Dirk Backes, Jan Rhensius, Laura J. Heyderman, Jan-Ulrich Thiele, Georg Woltersdorf, Arantxa Fraile Rodríguez, Frithjof Nolting, Tevfik O. Menteş, Miguel Á. Niño, Andrea Locatelli, Alessandro Potenza, Helder Marchetto, Stuart Cavill, and Saranjeet S. Dhesi	
Critical behavior of two molecular magnets probed by complementary experiments (9 pages)	094446
M. Czapla, R. Peřka, P. M. Zieliński, A. Budziak, M. Bařanda, M. Makarewicz, A. Pacyna, T. Wasiutyński, Yuji Miyazaki, Yasuhiro Nakazawa, Akira Inaba, Michio Sorai, F. L. Pratt, R. Podgajny, T. Korzeniak, and B. Sieklucka	
Low-energy spin dynamics in randomness-introduced spin-gap systems Tl _{1-x} K _x CuCl ₃ (0.40 ≤ x ≤ 0.65) probed by zero- and longitudinal-field muon spin relaxation (7 pages)	094447
Takao Suzuki, Fumiko Yamada, Motoki Yamada, Takayuki Kawamata, Yasuyuki Ishii, Isao Watanabe, Takayuki Goto, and Hidekazu Tanaka	
NMR study on the stability of the magnetic ground state in MnCr ₂ O ₄ (5 pages)	094448
Dong Young Yoon, Soonchil Lee, Yoon Seok Oh, and Kee Hoon Kim	
Optical control of magnetization in a room-temperature magnet: V-Cr Prussian blue analog (5 pages)	094449
K. Deniz Bozdag, Jung-Woo Yoo, N. P. Raju, Amber C. McConnell, Joel S. Miller, and A. J. Epstein	
Nonmagnetic impurity perturbation to the quasi-two-dimensional quantum helimagnet LiCu ₂ O ₂ (13 pages) . . .	094450
H. C. Hsu, J.-Y. Lin, W. L. Lee, M.-W. Chu, T. Imai, Y. J. Kao, C. D. Hu, H. L. Liu, and F. C. Chou	
Theory of spin transport induced by a temperature gradient (9 pages)	094451
Yuu Takezoe, Kazuhiro Hosono, Akihito Takeuchi, and Gen Tatara	
Valence-bond entanglement entropy of frustrated spin chains (9 pages)	094452
Fabien Alet, Ian P. McCulloch, Sylvain Capponi, and Matthieu Mambrini	
Magnetic phase transition in V ₂ O ₃ nanocrystals (6 pages)	094453
V. A. Blagojevic, J. P. Carlo, L. E. Brus, M. L. Steigerwald, Y. J. Uemura, S. J. L. Billinge, W. Zhou, P. W. Stephens, A. A. Aczel, and G. M. Luke	

Superfluidity and superconductivity

First-principles-based <i>s</i> [±] -wave modeling for iron-based superconductors: Specific heat and nuclear magnetic relaxation rate (5 pages)	094501
N. Nakai, H. Nakamura, Y. Ota, Y. Nagai, N. Hayashi, and M. Machida	

(Continued)

Anisotropic superconducting properties of optimally doped $\text{BaFe}_2(\text{As}_{0.65}\text{P}_{0.35})_2$ under pressure (5 pages)	094502
Swee K. Goh, Y. Nakai, K. Ishida, L. E. Klintberg, Y. Ihara, S. Kasahara, T. Shibauchi, Y. Matsuda, and T. Terashima	
Magnetic ordering in blocking layer and highly anisotropic electronic structure of high- T_c iron-based superconductor $\text{Sr}_2\text{VFeAsO}_3$: LDA+ U study (5 pages)	094503
Hiroki Nakamura and Masahiko Machida	
Tunneling of anyonic Majorana excitations in topological superconductors (11 pages)	094504
Meng Cheng, Roman M. Lutchyn, Victor Galitski, and S. Das Sarma	
Nonequilibrium effects in the thermal switching of underdamped Josephson junctions (5 pages)	094505
Juan José Mazo, Fernando Naranjo, and David Zueco	
Pressure-induced phase transition, metallization, and superconductivity in boron triiodide (7 pages)	094506
Nozomu Hamaya, Miyuki Ishizuka, Suzue Onoda, Jiang Guishan, Ayako Ohmura, and Katsuya Shimizu	
Magnetic resonance within vortex cores in the B phase of superfluid ^3He (12 pages)	094507
I. M. Khaymovich and M. A. Silaev	
Resistivity at low temperatures in electron-doped cuprate superconductors (4 pages)	094508
S. Finkelman, M. Sachs, G. Droulers, N. P. Butch, J. Paglione, P. Bach, R. L. Greene, and Y. Dagan	
Dynamically induced Fermi arcs and Fermi pockets in two dimensions: A model for underdoped cuprates (9 pages)	094509
Han-Yong Choi and Seung Hwan Hong	
Measurement crosstalk between two phase qubits coupled by a coplanar waveguide (7 pages)	094510
Fabio Altomare, Katarina Cicak, Mika A. Sillanpää, Michael S. Allman, Adam J. Sirois, Dale Li, Jae I. Park, Joshua A. Strong, John D. Teufel, Jed D. Whittaker, and Raymond W. Simmonds	
Continuous quantum nondemolition measurement of Fock states of a nanoresonator using feedback-controlled circuit QED (5 pages)	094511
M. J. Woolley, A. C. Doherty, and G. J. Milburn	
Superfluid density and field-induced magnetism in $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ and $\text{Sr}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ measured with muon spin relaxation (7 pages)	094512
T. J. Williams, A. A. Aczel, E. Baggio-Saitovitch, S. L. Bud'ko, P. C. Canfield, J. P. Carlo, T. Goko, H. Kageyama, A. Kitada, J. Munevar, N. Ni, S. R. Saha, K. Kirschenbaum, J. Paglione, D. R. Sanchez-Candela, Y. J. Uemura, and G. M. Luke	
Oscillatory magnetoresistance in nanopatterned superconducting $\text{La}_{1.84}\text{Sr}_{0.16}\text{CuO}_4$ films (7 pages)	094513
I. Sochnikov, A. Shaulov, Y. Yeshurun, G. Logvenov, and I. Božović	
Probing the exchange field of a quantum-dot spin valve by a superconducting lead (9 pages)	094514
Björn Sothmann, David Futterer, Michele Governale, and Jürgen König	
Quantum oscillations in electron-doped high-temperature superconductors (6 pages)	094515
Jonghyoun Eun, Xun Jia, and Sudip Chakravarty	
Skyrmion lattice and intrinsic angular momentum effect in the A phase of superfluid ^3He under rotation (6 pages)	094516
Masanori Ichioka, Takeshi Mizushima, and Kazushige Machida	
Superconducting state in YSn_3 with a AuCu_3 -type structure (5 pages)	094517
K. Kawashima, M. Maruyama, M. Fukuma, and J. Akimitsu	

(Continued)

Terahertz Hall measurements on optimally doped single-crystal $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ (10 pages)	094518
G. S. Jenkins, D. C. Schmadel, A. B. Sushkov, G. D. Gu, H. Kontani, and H. D. Drew	
Generation efficiencies for propagating modes in a supersolid (9 pages)	094519
Matthew R. Sears and Wayne M. Saslow	
Precision microwave electrodynamic measurements of K- and Co-doped BaFe_2As_2 (10 pages)	094520
J. S. Bobowski, J. C. Baglo, James Day, P. Dosanjh, Rinat Ofer, B. J. Ramshaw, Ruixing Liang, D. A. Bonn, W. N. Hardy, Huiqian Luo, Zhao-Sheng Wang, Lei Fang, and Hai-Hu Wen	
Exact diagonalization study of trionic crossover and trion liquid in the attractive three-component Hubbard model (9 pages)	094521
Guido Klingschat and Carsten Honerkamp	
Robustness of Majorana fermions in proximity-induced superconductors (7 pages)	094522
Jay D. Sau, Roman M. Lutchyn, Sumanta Tewari, and S. Das Sarma	
Specific heat across the superconducting dome in the cuprates (8 pages)	094523
A. J. H. Borne, J. P. Carbotte, and E. J. Nicol	
Vortex nucleation induced phonon radiation from a moving electron bubble in superfluid ^4He (7 pages)	094524
Dafei Jin and Wei Guo	

COMMENTS

Comment on “Frustrated magnetization in Co nanowires: Competition between crystal anisotropy and demagnetization energy” (4 pages)	096401
Kristof M. Lebecki and Michael J. Donahue	
Reply to “Comment on ‘Frustrated magnetization in Co nanowires: Competition between crystal anisotropy and demagnetization energy’ ” (1 page)	096402
Gerd Bergmann, Jia G. Lu, Yaqi Tao, and Richard S. Thompson	

ERRATA

Erratum: Spin-wave interaction in two-dimensional ferromagnets with dipolar forces [Phys. Rev. B 77 , 144433 (2008)] (1 page)	099901(E)
A. V. Syromyatnikov	
Erratum: Quantum physics of kinks of dislocations [Phys. Rev. B 82 , 014519 (2010)] (2 pages)	099902(E)
S. T. Chui	
Erratum: $\text{K}_2\text{Cr}_8\text{O}_{16}$ predicted as a half-metallic ferromagnet: Scenario for a metal-insulator transition [Phys. Rev. B 80 , 024416 (2009)] (1 page)	099903(E)
M. Sakamaki, T. Konishi, and Y. Ohta	
Erratum: Theory of magnon-driven spin Seebeck effect [Phys. Rev. B 81 , 214418 (2010)] (1 page)	099904(E)
Jiang Xiao (萧江), Gerrit E. W. Bauer, Ken-chi Uchida, Eiji Saitoh, and Sadamichi Maekawa	
Erratum: Proximity effect in a superconductor/exchange-spring-magnet hybrid system [Phys. Rev. B 81 , 214435 (2010)] (1 page)	099905(E)
J. Y. Gu, Jefery Kusnadi, and Chun-Yeol You	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 82, NUMBER 9

SEPTEMBER 2010-1(I)

Erratum: Microscopic structures and dynamics of high- and low-density liquid <i>trans</i> -1,2-dichloroethylene [Phys. Rev. B 81 , 092202 (2010)] (<i>1 page</i>)	099906(E)
M. Rovira-Esteva, A. Murugan, L. C. Pardo, S. Busch, M. D. Ruiz-Martín, M.-S. Appavou, J. Ll. Tamarit, C. Smuda, T. Unruh, F. J. Bermejo, G. J. Cuello, and S. J. Rzoska	