

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 5

AUGUST 2011-1(I)

Erratum: Engineering a $p + ip$ superconductor: Comparison of topological insulator and Rashba spin-orbit-coupled materials [Phys. Rev. B 83 , 184520 (2011)] (2 pages)	059906(E)
Andrew C. Potter and Patrick A. Lee	
Publisher's Note: Liquid heat capacity in the approach from the solid state: Anharmonic theory [Phys. Rev. B 84 , 054106 (2011)] (1 page)	059907(E)
Dima Bolmatov and Kostya Trachenko	
Publisher's Note: Magnetic phase diagram of $\text{Li}_2(\text{Pd}_{1-x}\text{Pt}_x)_3\text{B}$ by ac susceptometry [Phys. Rev. B 84 , 054521 (2011)] (1 page)	059908(E)
D. C. Peets, G. Eguchi, M. Kriener, S. Harada, Sk. Md. Shamsuzzamen, Y. Inada, G.-Q. Zheng, and Y. Maeno	
Publisher's Note: Nonlinear parametric amplification in a triport nanoelectromechanical device [Phys. Rev. B 84 , 054108 (2011)] (1 page)	059909(E)
E. Collin, T. Moutonet, J.-S. Heron, O. Bourgeois, Yu. M. Bunkov, and H. Godfrin	

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 5

AUGUST 2011-1(I)

Superconducting high-pressure phase of platinum hydride from first principles (5 pages)	054543
Xiang-Feng Zhou (周向锋), Artem R. Oganov, Xiao Dong (董校), Lixin Zhang (张立新), Yongjun Tian(田永君), and Hui-Tian Wang (王慧田)	
Nematic spin fluid in the tetragonal phase of BaFe ₂ As ₂ (13 pages)	054544
L. W. Harriger, H. Q. Luo, M. S. Liu, C. Frost, J. P. Hu, M. R. Norman, and Pengcheng Dai	
<i>d</i> -wave superconductivity on the checkerboard Hubbard model at weak and strong coupling (8 pages)	054545
Shiladitya Chakraborty, David Sénéchal, and A.-M. S. Tremblay	

COMMENTS

Comment on “Colossal dielectric and magnetodielectric effect in Er ₂ O ₃ nanoparticles embedded in a SiO ₂ glass matrix” (2 pages)	056102
D. Hreniak, L. Marciniak, W. Strek, F. Piccinelli, A. Speghini, and M. Bettinelli	
Reply to “Comment on ‘Colossal dielectric and magnetodielectric effect in Er ₂ O ₃ nanoparticles embedded in a SiO ₂ glass matrix’” (2 pages)	056103
S. Mukherjee, C. H. Chen, C. C. Chou, K. F. Tseng, B. K. Chaudhuri, and H. D. Yang	
Comment on “High-energy neutron scattering from hydrogen using a direct geometry spectrometer” (5 pages)	056301
J. Mayers, N. I. Gidopoulos, M. A. Adams, G. Reiter, C. Andreani, and R. Senesi	
Reply to “Comment on ‘High-energy neutron scattering from hydrogen using a direct geometry spectrometer’” (2 pages)	056302
C. Stock, R. A. Cowley, J. W. Taylor, and S. M. Bennington	

ERRATA

Erratum: Radial deformation and its related energy variations of single-walled carbon nanotubes [Phys. Rev. B 83 , 134113 (2011)] (1 page)	059901(E)
Weibang Lu, Tsu-Wei Chou, and Byung-Sun Kim	
Publisher’s Note: Anisotropic exchange interaction between nonmagnetic europium cations in Eu ₂ O ₃ [Phys. Rev. B 84 , 014427 (2011)] (1 page)	059902(E)
G. Concas, J. K. Dewhurst, A. Sanna, S. Sharma, and S. Massidda	
Erratum: First-principles study of grain boundary sliding in α -Al ₂ O ₃ [Phys. Rev. B 75 , 184109 (2007)] (1 page)	059903(E)
Kaoru Nakamura, Teruyasu Mizoguchi, Naoya Shibata, Katsuyuki Matsunaga, Takahisa Yamamoto, and Yuichi Ikuhara	
Erratum: Formation of magnetic glass in calcium-doped YBaCo ₂ O _{5.5} cobaltites [Phys. Rev. B 83 , 214428 (2011)] (1 page)	059904(E)
Tapati Sarkar, V. Pralong, and B. Raveau	
Publisher’s Note: Successive transition from superconducting to antiferromagnetic phase in (Ca ₆ (Al, Ti) ₄ O _y)Fe ₂ As ₂ studied via ⁷⁵ As and ²⁷ Al NMR [Phys. Rev. B 84 , 060502(R) (2011)] (1 page)	059905(E)
T. Nakano, N. Fujiwara, S. Tsutsumi, H. Ogino, K. Kishio, and J. Shimoyama	

(Continued)

Incommensurate spin-density wave and a multiband superconducting phase in Na_xFeAs revealed by nuclear magnetic resonance (6 pages)	054528
M. Klanjšek, P. Jeglič, B. Lv, A. M. Guloy, C. W. Chu, and D. Arčon	
Importance of electronic correlations for structural and magnetic properties of the iron pnictide superconductor LaFeAsO (7 pages)	054529
Markus Aichhorn, Leonid Pourovskii, and Antoine Georges	
Theory of the unusual high-temperature anisotropic resistivity of underdoped iron arsenide superconductors: Evidence for an orbital nematic order (5 pages)	054530
M. S. Laad and L. Craco	
In-plane magnetic penetration depth in NbS_2 (5 pages)	054531
P. Diener, M. Leroux, L. Cario, T. Klein, and P. Rodière	
Crossover from Majorana edge- to end-states in quasi-one-dimensional p -wave superconductors (7 pages)	054532
Bin Zhou and Shun-Qing Shen	
Influence of spin-dependent quasiparticle distribution on the Josephson current through a ferromagnetic weak link (18 pages)	054533
A. M. Bobkov and I. V. Bobkova	
Suppressed superconductivity in charge-doped $\text{Li}(\text{Fe}_{1-x}\text{Co}_x)\text{As}$ single crystals (5 pages)	054534
S. Aswartham, G. Behr, L. Harnagea, D. Bombor, A. Bachmann, I. V. Morozov, V. B. Zabolotnyy, A. A. Kordyuk, T. K. Kim, D. V. Evtushinsky, S. V. Borisenko, A. U. B. Wolter, C. Hess, S. Wurmehl, and B. Büchner	
Quasiparticle energy relaxation times in NbN/CuNi nanostripes from critical velocity measurements (7 pages)	054536
C. Cirillo, V. Pagliarulo, H. Myoren, C. Bonavolontà, L. Parlato, G. P. Pepe, and C. Attanasio	
Dynamics and morphology of dendritic flux avalanches in superconducting films (6 pages)	054537
J. I. Vestgård, D. V. Shantsev, Y. M. Galperin, and T. H. Johansen	
Probing Majorana edge states with a flux qubit (16 pages)	054538
Chang-Yu Hou, Fabian Hassler, Anton R. Akhmerov, and Johan Nilsson	
Hysteretic magnetic pinning and reversible resistance switching in high-temperature superconductor/ferromagnet multilayers (6 pages)	054539
C. Visani, P. J. Metaxas, A. Collaudin, B. Calvet, R. Bernard, J. Briatico, C. Deranlot, K. Bouzehouane, and J. E. Villegas	
Possible origin of the nonmonotonic doping dependence of the in-plane resistivity anisotropy of $\text{Ba}(\text{Fe}_{1-x}\text{T}_x)_2\text{As}_2$ ($T = \text{Co, Ni and Cu}$) (11 pages)	054540
Hsueh-Hui Kuo, Jiun-Haw Chu, Scott C. Riggs, Leo Yu, Peter L. McMahon, Kristiaan De Greve, Yoshihisa Yamamoto, James G. Analytis, and Ian R. Fisher	
Superconductivity in iron silicide $\text{Lu}_2\text{Fe}_3\text{Si}_5$ probed by radiation-induced disordering (7 pages)	054541
A. E. Karkin, M. R. Yangirov, Yu. N. Akshentsev, and B. N. Goshchitskii	
Small anisotropy in iron-based superconductors induced by electron correlation (5 pages)	054542
Hyo Seok Ji, Geunsik Lee, and Ji Hoon Shim	

(Continued)

Global phase diagram of three-dimensional extended Boson Hubbard model: A continuous-time quantum Monte Carlo study (6 pages)	054512
Bin Xi, Fei Ye, Weiqiang Chen, Fuchun Zhang, and Gang Su	
☞ Electrochemical synthesis and superconducting phase diagram of $\text{Cu}_x\text{Bi}_2\text{Se}_3$ (5 pages)	054513
M. Kriener, Kouji Segawa, Zhi Ren, Satoshi Sasaki, Shohei Wada, Susumu Kuwabata, and Yoichi Ando	
Triplet order parameter component at Co/CoO/In contacts (7 pages)	054514
B. Almog, S. Hacoheh-Gourgy, A. Tsukernik, and G. Deutscher	
Frequency-dependent ratchet effect in superconducting films with a tilted washboard pinning potential (12 pages)	054515
Valerij A. Shklovskij and Oleksandr V. Dobrovolskiy	
Comparative analysis of tunneling magnetoresistance in low- T_c Nb/Al- AlO_x /Nb and high- T_c $\text{Bi}_{2-y}\text{Pb}_y\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ intrinsic Josephson junctions (13 pages)	054516
V. M. Krasnov, H. Motzkau, T. Golod, A. Rydh, S. O. Katterwe, and A. B. Kulakov	
Phase diagram of hard-core bosons on clean and disordered two-leg ladders: Mott insulator–Luttinger liquid–Bose glass (22 pages)	054517
François Crépin, Nicolas Laflorencie, Guillaume Roux, and Pascal Simon	
Field-induced superconducting phase in superconductor–normal metal and superconductor–superconductor bilayers (10 pages)	054518
X. Montiel and A. I. Buzdin	
☞ Mott insulator to metal transition in filling-controlled SmMnAsO_{1-x} (8 pages)	054519
Y. Shiomi, S. Ishiwata, Y. Taguchi, and Y. Tokura	
Spin-Hall current and spin polarization in an electrically biased SNS Josephson junction (9 pages)	054520
A. G. Mal'shukov and C. S. Chu	
Magnetic phase diagram of $\text{Li}_2(\text{Pd}_{1-x}\text{Pt}_x)_3\text{B}$ by ac susceptometry (5 pages)	054521
D. C. Peets, G. Eguchi, M. Kriener, S. Harada, Sk. Md. Shamsuzzamen, Y. Inada, G.-Q. Zheng, and Y. Maeno	
Suppression of superconductivity in Fe chalcogenides by annealing: A reverse effect to pressure (6 pages)	054522
Despina Louca, Jiaqiang Yan, Anna Llobet, and Ryotaro Arita	
Dislocation-induced superfluidity in a model supersolid (9 pages)	054523
D. Goswami, K. Dasbiswas, C.-D. Yoo, and Alan T. Dorsey	
Pressure-induced structural phase transitions in UIr (5 pages)	054524
H. Kotegawa, S. Araki, T. Akazawa, A. Hori, Y. Irie, S. Fukushima, H. Hidaka, T. C. Kobayashi, K. Takeda, Y. Ohishi, K. Murata, E. Yamamoto, S. Ikeda, Y. Haga, R. Settai, and Y. Ōnuki	
Energy spectra of quantum turbulence: Large-scale simulation and modeling (6 pages)	054525
Narimasa Sasa, Takuma Kano, Masahiko Machida, Victor S. L'vov, Oleksii Rudenko, and Makoto Tsubota	
Evolution of correlation strength in $\text{K}_x\text{Fe}_{2-y}\text{Se}_2$ superconductor doped with S (5 pages)	054526
Kefeng Wang (王克锋), Hechang Lei (雷和畅), and C. Petrovic	
Magnetic and superconducting instabilities in a hybrid model of itinerant/localized electrons for iron pnictides (11 pages)	054527
Yi-Zhuang You, Fan Yang, Su-Peng Kou, and Zheng-Yu Weng	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 5

AUGUST 2011-1(I)

Effect of spin diffusion on current generated by spin motive force (13 pages)	054462
Kyoung-Whan Kim, Jung-Hwan Moon, Kyung-Jin Lee, and Hyun-Woo Lee	
Magnetoelastic response of $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{SrTiO}_3$ superlattices to reversible strain (8 pages)	054463
M. C. Dekker, A. Herklotz, L. Schultz, M. Reibold, K. Vogel, M. D. Biegalski, H. M. Christen, and K. Dörr	
Orbital moment anisotropy of $\text{Pt}/\text{Co}/\text{AlO}_x$ heterostructures with strong Rashba interaction (10 pages)	054464
C. Nistor, T. Balashov, J. J. Kavich, A. Lodi Rizzini, B. Ballesteros, G. Gaudin, S. Auffret, B. Rodmacq, S.S. Dhesi, and P. Gambardella	
Superfluidity and superconductivity	
Quasiparticle interference in an iron-based superconductor (8 pages)	054501
S. Sykora and Piers Coleman	
Electronic and magnetic structures of the ternary iron selenides AFe_2Se_2 ($A = \text{Cs, Rb, K, or Tl}$) (8 pages)	054502
Xun-Wang Yan, Miao Gao, Zhong-Yi Lu, and Tao Xiang	
Detecting phonon blockade with photons (6 pages)	054503
Nicolas Didier, Stefano Pugnetti, Yaroslav M. Blanter, and Rosario Fazio	
Supercurrent and Andreev bound state dynamics in superconducting quantum point contacts under microwave irradiation (14 pages)	054504
F. S. Bergeret, P. Virtanen, A. Ozaeta, T. T. Heikkilä, and J. C. Cuevas	
Evidence for line nodes in the energy gap of the overdoped $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ from low-temperature specific heat measurements (5 pages)	054505
Gang Mu, Jun Tang, Yoichi Tanabe, Jingtao Xu, Satoshi Heguri, and Katsumi Tanigaki	
Equilibrium rotation of a vortex bundle terminating on a lateral wall (7 pages)	054506
E. B. Sonin and S. K. Nemirovskii	
Isotropic three-dimensional gap in the iron arsenide superconductor LiFeAs from directional heat transport measurements (5 pages)	054507
M. A. Tanatar, J.-Ph. Reid, S. René de Cotret, N. Doiron-Leyraud, F. Laliberté, E. Hassinger, J. Chang, H. Kim, K. Cho, Yoo Jang Song, Yong Seung Kwon, R. Prozorov, and Louis Taillefer	
Extracting the dynamical effective interaction and competing order from an analysis of Raman spectra of the high-temperature $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ superconductor (10 pages)	054508
S. Caprara, C. Di Castro, B. Muschler, W. Prestel, R. Hackl, M. Lambacher, A. Erb, S. Komiya, Y. Ando, and M. Grilli	
Symmetry-preserving lattice collapse in tetragonal $\text{SrFe}_{2-x}\text{Ru}_x\text{As}_2$ ($x = 0, 0.2$): A combined experimental and theoretical study (9 pages)	054509
Deepa Kasinathan, Miriam Schmitt, Klaus Koepernik, Alim Ormeci, Katrin Meier, Ulrich Schwarz, Michael Hanfland, Christoph Geibel, Yuri Grin, Andreas Leithe-Jasper, and Helge Rosner	
Generic first-order versus continuous quantum nucleation of supersolidity (5 pages)	054510
Lars Bonnes and Stefan Wessel	
Solidification of ^4He confined in a nanometer-size channel (6 pages)	054511
Junko Taniguchi and Masaru Suzuki	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 5

AUGUST 2011-1(I)

Element-specific magnetic properties of $\text{Co}_2(\text{Mn}_{1-x}\text{Fe}_x)\text{Si}$ films probed by x-ray magnetic circular/linear dichroism (10 pages)	054448
M. Kallmayer, P. Klaer, H. Schneider, G. Jakob, H. J. Elmers, D. Legut, and P. M. Oppeneer	
Magnetic dichroism in angle-resolved hard x-ray photoemission from buried layers (8 pages)	054449
Xeniya Kozina, Gerhard H. Fecher, Gregory Stryganyuk, Siham Ouardi, Benjamin Balke, Claudia Felser, Gerd Schönhense, Eiji Ikenaga, Takeharu Sugiyama, Naomi Kawamura, Motohiro Suzuki, Tomoyuki Taira, Tetsuya Uemura, Masafumi Yamamoto, Hiroaki Sukegawa, Wenhong Wang, Koichiro Inomata, and Keisuke Kobayashi	
Magnetic anisotropy of mesoscale-twinned Ni-Mn-Ga thin films (7 pages)	054450
V. A. Chernenko, V. A. Lvov, V. Golub, I. R. Aseguinolaza, and J. M. Barandiarán	
Bilinear-biquadratic spin-1 chain undergoing quadratic Zeeman effect (8 pages)	054451
G. De Chiara, M. Lewenstein, and A. Sanpera	
120° helical magnetic order in the distorted triangular antiferromagnet $\alpha\text{-CaCr}_2\text{O}_4$ (12 pages)	054452
S. Toth, B. Lake, S. A. J. Kimber, O. Pieper, M. Reehuis, A. T. M. N. Islam, O. Zaharko, C. Ritter, A. H. Hill, H. Ryll, K. Kiefer, D. N. Argyriou, and A. J. Williams	
Evidence of bulk antiferromagnet spin rearrangement during ferromagnetic layer reversal in a double exchange bias sandwich (5 pages)	054453
Y. Xu, Q. Ma, J. W. Cai, and L. Sun	
Magnetic properties of monolayer Co islands on Ir(111) probed by spin-resolved scanning tunneling microscopy (6 pages)	054454
Jessica E. Bickel, Focko Meier, Jens Brede, André Kubetzka, Kirsten von Bergmann, and Roland Wiesendanger	
Frustration-driven magnetic order in hexagonal InMnO_3 (7 pages)	054455
X. Fabrèges, I. Mirebeau, S. Petit, P. Bonville, and A. A. Belik	
Magnetic domain patterns in Co_2MnGe Heusler nanostripes (8 pages)	054456
K. Gross, P. Szary, O. Petravic, F. Brüssing, K. Westerholt, and H. Zabel	
Phase locking of dynamical modes in a nanomagnetic oscillator with a circularly spin-polarized current (5 pages)	054457
Jui-Hang Chang, Hao-Hsuan Chen, Ching-Ray Chang, and Yaowen Liu	
Current-driven defect-unbinding transition in an XY ferromagnet (13 pages)	054458
Aditi Mitra and Andrew J. Millis	
Effects of radio-frequency current on critical fields for magnetization reversal in spin-torque devices (6 pages)	054459
W. Chen, S. H. Florez, J. A. Katine, M. J. Carey, L. Folks, and B. D. Terris	
Magnetization splitting in Landau and diamond-domain structures: Dependence on exchange interaction, anisotropy, and size (7 pages)	054460
Kaixuan Xie, Xiaopu Zhang, Weiwei Lin, Peng Zhang, and Hai Sang	
Magnetic anisotropy of epitaxial $\text{Fe}_{1-x}\text{Si}_x$ films on GaAs(001) (7 pages)	054461
Matthias Wegscheider, German Käferböck, Christian Gusenbauer, Tanveer Ashraf, Reinhold Koch, and Wolfgang Jantsch	

(Continued)

Ferromagnetically coupled dimers on the distorted Shastry-Sutherland lattice: Application to $(\text{CuCl})\text{LaNb}_2\text{O}_7$ (19 pages)	054432
Shunsuke Furukawa, Tyler Dodds, and Yong Baek Kim	
Crossover between a short-range and a long-range Ising model (9 pages)	054433
Taro Nakada, Per Arne Rikvold, Takashi Mori, Masamichi Nishino, and Seiji Miyashita	
Probing vertically graded anisotropy in FePtCu films (9 pages)	054434
Randy K. Dumas, Yeyu Fang, B. J. Kirby, Chaolin Zha, Valentina Bonanni, Josep Nogués, and Johan Åkerman	
Short-range ferromagnetic correlations in the spin-chain compound $\text{Ca}_3\text{CoMnO}_6$ (5 pages)	054435
Z. W. Ouyang, N. M. Xia, Y. Y. Wu, S. S. Sheng, J. Chen, Z. C. Xia, L. Li, and G. H. Rao	
Origin of the magnetic anomaly and tunneling effect of europium on the ferromagnetic ordering in $\text{Eu}_{8-x}\text{Sr}_x\text{Ga}_{16}\text{Ge}_{30}$ ($x = 0, 4$) type-I clathrates (7 pages)	054436
Manh-Huong Phan, Victorino Franco, Anurag Chaturvedi, Stevce Stefanoski, George S. Nolas, and Hariharan Srikanth	
Joule heating in nanowires (12 pages)	054437
Hans Fangohr, Dmitri S. Chernyshenko, Matteo Franchin, Thomas Fischbacher, and Guido Meier	
Electronic and magnetic structure of $\text{CrO}_2\text{-RuO}_2$ interfaces (7 pages)	054438
K. B. Chetry, H. Sims, W. H. Butler, and A. Gupta	
Antiferromagnetic order and consequences on the transport properties of $\text{Ba}_4\text{Ru}_3\text{O}_{10}$ (7 pages)	054439
Y. Klein, G. Rousse, F. Damay, F. Porcher, G. André, and I. Terasaki	
Magnetically driven ferroelectric atomic displacements in orthorhombic YMnO_3 (7 pages)	054440
D. Okuyama, S. Ishiwata, Y. Takahashi, K. Yamauchi, S. Picozzi, K. Sugimoto, H. Sakai, M. Takata, R. Shimano, Y. Taguchi, T. Arima, and Y. Tokura	
Defect-trapped electrons and ferromagnetic exchange in ZnO (15 pages)	054441
Aurab Chakrabarty and Charles H. Patterson	
Dynamics in the Sherrington-Kirkpatrick Ising spin glass at and above T_g (6 pages)	054442
Alain Billoire and I. A. Campbell	
Electron theory of magnetoelectric effects in metallic ferromagnetic nanostructures (9 pages)	054443
Sergej Subkow and Manfred Fähnle	
Understanding neutron scattering data in YMn_2O_5 : An effective spin Hamiltonian (9 pages)	054444
Santu Baidya, Prabhuddha Sanyal, Hena Das, Bertrand Roessli, Tapan Chatterji, and T. Saha-Dasgupta	
Bosonic representation of quantum magnets with large single-ion easy-plane anisotropy (11 pages)	054445
A. V. Sizanov and A. V. Syromyatnikov	
Determination of boundary scattering, magnon-magnon scattering, and the Haldane gap in Heisenberg spin chains (5 pages)	054446
Hiroshi Ueda and Koichi Kusakabe	
Magnetic structure of Fe-doped CoFe_2O_4 probed by x-ray magnetic spectroscopies (10 pages)	054447
J. A. Moyer, C. A. F. Vaz, D. A. Arena, D. Kumah, E. Negusse, and V. E. Henrich	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 5

AUGUST 2011-1(I)

Heat capacity of the site-diluted spin dimer system $\text{Ba}_3(\text{Mn}_{1-x}\text{V}_x)_2\text{O}_8$ (11 pages)	054417
E. C. Samulon, M. C. Shapiro, and I. R. Fisher	
Tailoring magnetoresistance through rotating Ni particles (9 pages)	054418
Steven Achilles, Michael Czerner, and Ingrid Mertig	
Strong coupling of Sm and Fe magnetism in SmFeAsO as revealed by magnetic x-ray scattering (8 pages)	054419
S. Nandi, Y. Su, Y. Xiao, S. Price, X. F. Wang, X. H. Chen, J. Herrero-Martín, C. Mazzoli, H. C. Walker, L. Paolasini, S. Francoual, D. K. Shukla, J. Stremper, T. Chatterji, C. M. N. Kumar, R. Mittal, H. M. Rønnow, Ch. Rüegg, D. F. McMorrow, and Th. Brückel	
Growth mechanism and interface magnetic properties of Co nanostructures on graphite (6 pages)	054420
P. K. J. Wong, M. P. de Jong, L. Leonardus, M. H. Siekman, and W. G. van der Wiel	
Magnetic domain structure in the orbital-spin-coupled system MnV_2O_4 (5 pages)	054421
Y. Murakami, Y. Nii, T. Arima, D. Shindo, K. Yanagisawa, and A. Tonomura	
Magnetic properties of the quasi-two-dimensional antiferromagnet $\text{Ni}_{0.7}\text{Al}_2\text{S}_{3.7}$ (7 pages)	054422
Tomoya Higo, Rieko Ishii, Melissa C. Menard, Julia Y. Chan, Hironori Yamaguchi, Masayuki Hagiwara, and Satoru Nakatsuji	
 Analysis of the line shape of electrically detected ferromagnetic resonance (12 pages)	054423
M. Harder, Z. X. Cao, Y. S. Gui, X. L. Fan, and C.-M. Hu	
Perpendicular ferromagnetic resonance measurements of damping and Landé g -factor in sputtered $(\text{Co}_2\text{Mn})_{1-x}\text{Ge}_x$ thin films (15 pages)	054424
H. T. Nembach, T. J. Silva, J. M. Shaw, M. L. Schneider, M. J. Carey, S. Maat, and J. R. Childress	
Magnetic hysteresis of dynamic response of one-dimensional magnonic crystals consisting of homogenous and alternating width nanowires observed with broadband ferromagnetic resonance (12 pages)	054425
J. Ding, M. Kostylev, and A. O. Adeyeye	
Weak ferromagnetism and magnetic phase transitions in Gd_2CuO_4 (6 pages)	054426
P. J. Brown and T. Chatterji	
Versatile helimagnetic phases under magnetic fields in cubic perovskite SrFeO_3 (5 pages)	054427
S. Ishiwata, M. Tokunaga, Y. Kaneko, D. Okuyama, Y. Tokunaga, S. Wakimoto, K. Kakurai, T. Arima, Y. Taguchi, and Y. Tokura	
Frustration and magnetism of the zigzag chain compounds EuL_2O_4 ($L = \text{Yb, Lu, Gd, Eu}$) (5 pages)	054428
Oren Ofer, Jun Sugiyama, Jess H. Brewer, Eduardo J. Ansaldo, Martin Månsson, Kim H. Chow, Kazuya Kamazawa, Yoshihiro Doi, and Yukio Hinatsu	
Magnetoelectric transitions of a distorted triangular-lattice antiferromagnet in a magnetic field (8 pages)	054429
Tota Nakamura	
Magnetic and diffusive nature of LiFePO_4 investigated by muon spin rotation and relaxation (9 pages)	054430
Jun Sugiyama, Hiroshi Nozaki, Masashi Harada, Kazuya Kamazawa, Oren Ofer, Martin Månsson, Jess H. Brewer, Eduardo J. Ansaldo, Kim H. Chow, Yutaka Ikeda, Yasuhiro Miyake, Kazuki Ohishi, Isao Watanabe, Genki Kobayashi, and Ryoji Kanno	
Model of bound interface dynamics for coupled magnetic domain walls (8 pages)	054431
P. Politi, P. J. Metaxas, J.-P. Jamet, R. L. Stamps, and J. Ferré	

(Continued)

Gate-dependent spin-torque in a nanoconductor-based spin-valve (9 pages)	054402
Audrey Cottet	
Spin currents in metallic nanostructures: Explicit calculations (9 pages)	054403
F. S. M. Guimarães, A. T. Costa, R. B. Muniz, and D. L. Mills	
Magnetostatics and the rotational sense of cycloidal spin spirals (7 pages)	054404
N. Mikuszeit, S. Meckler, R. Wiesendanger, and R. Miranda	
Molecular spin-orbit excitations in the $J_{\text{eff}}=\frac{1}{2}$ frustrated spinel GeCo_2O_4 (7 pages)	054405
K. Tomiyasu, M. K. Crawford, D. T. Adroja, P. Manuel, A. Tominaga, S. Hara, H. Sato, T. Watanabe, S. I. Ikeda, J. W. Lynn, K. Iwasa, and K. Yamada	
Quantum magnetism in ultracold alkali and alkaline-earth fermion systems with symplectic symmetry (14 pages)	054406
Hsiang-Hsuan Hung, Yupeng Wang, and Congjun Wu	
☞ Quantum criticality in $\text{SU}(3)$ and $\text{SU}(4)$ antiferromagnets (8 pages)	054407
Ribhu K. Kaul	
High-field magnetic phase transitions and spin excitations in magnetoelectric LiNiPO_4 (10 pages)	054408
Rasmus Toft-Petersen, Jens Jensen, Thomas Bagger Stibius Jensen, Niels Hessel Andersen, Niels Bech Christensen, Christof Niedermayer, Michel Kenzelmann, Markos Skoulatos, Manh Duc Le, Kim Lefmann, Sonja Rosenlund Hansen, Jiying Li, Jerel L. Zarestky, and David Vaknin	
Effects of spin vacancies on magnetic properties of the Kitaev-Heisenberg model (12 pages)	054409
Fabien Trouselet, Giniyat Khaliullin, and Peter Horsch	
Spin precession and inverted Hanle effect in a semiconductor near a finite-roughness ferromagnetic interface (11 pages)	054410
S. P. Dash, S. Sharma, J. C. Le Breton, J. Peiro, H. Jaffrès, J.-M. George, A. Lemaître, and R. Jansen	
Role of quadratic terms in the Heisenberg model for quantum spin dynamics (8 pages)	054411
R. Wieser	
Structural and physical properties of CaFe_4As_3 (6 pages)	054412
A. B. Karki, G. T. McCandless, S. Stadler, Y. M. Xiong, J. Li, Julia Y. Chan, and R. Jin	
Nonuniversal magnetization at the BEC critical field: Application to the spin dimer compound $\text{Ba}_3\text{Mn}_2\text{O}_8$ (5 pages)	054413
S. Suh, K. A. Al-Hassanieh, E. C. Samulon, I. R. Fisher, S. E. Brown, and C. D. Batista	
β -detected NMR of Li in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ (8 pages)	054414
Q. Song, K. H. Chow, Z. Salman, H. Saadaoui, M. D. Hossain, R. F. Kiefl, C. D. P. Levy, M. R. Pearson, T. J. Parolin, M. Smadella, D. Wang, K. M. Yu, X. Liu, J. K. Furdyna, and W. A. MacFarlane	
Theory of laser-induced ultrafast magneto-optic spin flip and transfer in charged two-magnetic-center molecular ions: Role of bridging atoms (9 pages)	054415
Chun Li, Wei Jin, Hongping Xiang, Georgios Lefkidis, and Wolfgang Hübner	
☞ Magnetization dissipation in ferromagnets from scattering theory (13 pages)	054416
Arne Brataas, Yaroslav Tserkovnyak, and Gerrit E. W. Bauer	

(Continued)

Inhomogeneous, disordered, and partially ordered systems

- Angular rigidity in tetrahedral network glasses with changing composition (*9 pages*) 054201
M. Bauchy, M. Micoulaut, M. Celino, S. Le Roux, M. Boero, and C. Massobrio
- Temperature-induced martensitic phase transitions in gum-metal approximants: First-principles investigations for Ti_3Nb (*17 pages*) 054202
Petr Lazar, Michal Jahnátek, Jürgen Hafner, Naoyuki Nagasako, Ryoji Asahi, Claudia Blaas-Schenner, Markus Stöhr, and Raimund Podlucky
- Electrical and thermal conductivity of liquid sodium from first-principles calculations (*7 pages*) 054203
Monica Pozzo, Michael P. Desjarlais, and Dario Alfè
- Thermal noise and dephasing due to electron interactions in nontrivial geometries (*8 pages*) 054204
M. Treiber, C. Texier, O. M. Yevtushenko, J. von Delft, and I. V. Lerner
- Nonlinearity exponents in lightly doped conducting polymers (*18 pages*) 054205
D. Talukdar, U. N. Nandi, K. K. Bardhan, C. C. Bof Bufon, T. Heinzl, A. De, and C. D. Mukherjee
- Elastic properties of Ca-based metallic glasses predicted by first-principles simulations (*6 pages*) 054206
M. Widom, B. Sauerwine, A. M. Cheung, S. J. Poon, P. Tong, D. Louca, and G. J. Shiflet
- Pressure-induced formation of intermediate-valence quasicrystalline system in a Cd-Mg-Yb alloy (*6 pages*) 054207
Tetsu Watanuki, Daichi Kawana, Akihiko Machida, and AnPang Tsai
- Correlation function analysis of fiber networks: Implications for thermal conductivity (*8 pages*) 054208
Jorge Martinez-Garcia, Leonid Braginsky, Valery Shklover, and John W. Lawson

Dynamics, dynamical systems, lattice effects:

- Generalized acceleration theorem for spatiotemporal Bloch waves (*11 pages*) 054301
Stephan Arlinghaus and Martin Holthaus
- Finite-temperature study of bosons in a two-dimensional optical lattice (*13 pages*) 054302
K. W. Mahmud, E. N. Duchon, Y. Kato, N. Kawashima, R. T. Scalettar, and N. Trivedi
- First-principles study of phonon linewidths in noble metals (*7 pages*) 054303
Xiaoli Tang and B. Fultz
-  Generalized Gibbs ensemble prediction of prethermalization plateaus and their relation to nonthermal steady states in integrable systems (*10 pages*) 054304
Marcus Kollar, F. Alexander Wolf, and Martin Eckstein
- Causality relations in the homogenization of metamaterials (*16 pages*) 054305
Andrea Alù, Arthur D. Yaghjian, Robert A. Shore, and Mário G. Silveirinha

Magnetism

- First-principles investigation of the very large perpendicular magnetic anisotropy at Fe|MgO and Co|MgO interfaces (*5 pages*) 054401
H. X. Yang, M. Chshiev, B. Dieny, J. H. Lee, A. Manchon, and K. H. Shin

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 5

AUGUST 2011-1(I)

Vertically elongated three-dimensional Yukawa clusters in dusty plasmas (<i>10 pages</i>)	054104
Carsten Killer, André Schella, Tobias Miksch, and André Melzer	
U and Xe transport in $\text{UO}_{2\pm x}$: Density functional theory calculations (<i>12 pages</i>)	054105
D. A. Andersson, B. P. Uberuaga, P. V. Nerikar, C. Unal, and C. R. Stanek	
Liquid heat capacity in the approach from the solid state: Anharmonic theory (<i>7 pages</i>)	054106
Dima Bolmatov and Kostya Trachenko	
Raman spectroscopic study of high-pressure behavior of $\text{Ag}_3[\text{Co}(\text{CN})_6]$ (<i>6 pages</i>)	054107
Rekha Rao, S. N. Achary, A. K. Tyagi, and T. Sakuntala	
Nonlinear parametric amplification in a triport nanoelectromechanical device (<i>16 pages</i>)	054108
E. Collin, T. Moutonet, J.-S. Heron, O. Bourgeois, Yu. M. Bunkov, and H. Godfrin	
Temperature-induced evolution of subsurface nanocavities in argon-implanted copper (<i>11 pages</i>)	054109
O. Kurnosikov, D. V. Kulikov, V. S. Kharlamov, H. J. M. Swagten, and Yu. V. Trushin	
Density functional theory study of $\text{La}_2\text{Ce}_2\text{O}_7$: Disordered fluorite versus pyrochlore structure (<i>9 pages</i>)	054110
D. E. P. Vanpoucke, P. Bultinck, S. Cottenier, V. Van Speybroeck, and I. Van Driessche	
Melting curve of potassium to 22 GPa (<i>7 pages</i>)	054111
O. Narygina, E. E. McBride, G. W. Stinton, and M. I. McMahon	
Epitaxial strain stabilization of a ferroelectric phase in PbZrO_3 thin films (<i>8 pages</i>)	054112
Ayan Roy Chaudhuri, Miryam Arredondo, Angelika Hähnel, Alessio Morelli, Michael Becker, Marin Alexe, and Ionela Vrejoiu	
Selective coherent x-ray diffractive imaging of displacement fields in (Ga,Mn)As/GaAs periodic wires (<i>7 pages</i>)	054113
A. A. Minkevich, E. Fohtung, T. Slobodskyy, M. Riotte, D. Grigoriev, M. Schmidbauer, A. C. Irvine, V. Novák, V. Holý, and T. Baumbach	
Determination of the phase boundary of the ferroelastic rutile to CaCl_2 transition in RuO_2 using <i>in situ</i> high-pressure and high-temperature Raman spectroscopy (<i>5 pages</i>)	054114
Shigeaki Ono and Kenji Mibe	
Enhanced kinetics of hydride-metal phase transition in magnesium by vacancy clustering (<i>7 pages</i>)	054115
R. Checchetto, N. Bazzanella, A. Kale, A. Miotello, S. Mariuzzi, R. S. Brusa, P. Mengucci, C. Macchi, A. Somoza, W. Egger, and L. Ravelli	
Mechanical properties of clusters in quasicrystal approximants: The example of the 1/1 Al-Cu-Fe approximant (<i>5 pages</i>)	054116
Daniel Y. Jung and Walter Steurer	
Role of phase instabilities in the early response of bulk fused silica during laser-induced breakdown (<i>7 pages</i>) . . .	054118
P. DeMange, R. A. Negres, R. N. Raman, J. D. Colvin, and S. G. Demos	
Two-dimensional Ising-like model with specific edge effects for spin-crossover nanoparticles: A Monte Carlo study (<i>7 pages</i>)	054119
Azusa Muraoka, Kamel Boukheddaden, Jorge Linarès, and F. Varret	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 5

AUGUST 2011-1(I)

Exponential asymptotic spin correlations in anisotropic spin-1/2 XY chains at finite temperatures (<i>4 pages</i>)	052406
Jörn Krones and Joachim Stolze	
Pseudogap and charge ordering in a large-bandwidth electron-doped manganite (<i>5 pages</i>)	052407
R. Bindu, Ganesh Adhikary, Nishaina Sahadev, N. P. Lalla, and Kalobaran Maiti	
Superfluidity and superconductivity	
Phonon splitting and anomalous enhancement of infrared-active modes in BaFe ₂ As ₂ (<i>4 pages</i>)	052501
A. A. Schafgans, B. C. Pursley, A. D. LaForge, A. S. Sefat, D. Mandrus, and D. N. Basov	
Superconductivity mediated by the antiferromagnetic spin wave in chalcogenide iron-based superconductors (<i>4 pages</i>)	052502
G. M. Zhang, Z. Y. Lu, and T. Xiang	
Superconducting critical fields of single-crystalline K _{0.73} Fe _{1.68} Se ₂ (<i>4 pages</i>)	052503
M. I. Tsindlekht, I. Felner, M. Zhang, A. F. Wang, and X. H. Chen	
Off-diagonal long-range order studied in a soft-core solid: Two-dimensional screened Coulomb bosons (<i>4 pages</i>)	052504
M. Rossi, S. L. Zavattari, D. E. Galli, and L. Reatto	
Effects of nonmagnetic La impurities on the spin resonance of Ce _{1-x} La _x CoIn ₅ single crystals as seen via inelastic neutron scattering (<i>4 pages</i>)	052505
J. Panarin, S. Raymond, G. Lapertot, J. Flouquet, and J.-M. Mignot	
Local-moment magnetism in superconducting FeTe _{0.35} Se _{0.65} as seen via inelastic neutron scattering (<i>4 pages</i>) . . .	052506
Zhijun Xu, Jinsheng Wen, Guangyong Xu, Songxue Chi, Wei Ku, Genda Gu, and J. M. Tranquada	
Critical current density and mechanism of vortex pinning in K _x Fe _{2-y} Se ₂ doped with S (<i>4 pages</i>)	052507
Hechang Lei (雷和畅) and C. Petrovic	
Field-induced spin-exciton condensation in the $d_{x^2-y^2}$ -wave superconductor CeCoIn ₅ (<i>4 pages</i>)	052508
V. P. Michal and V. P. Mineev	
Evidence for <i>s</i> -wave superconductivity in noncentrosymmetric Re ₂₄ Nb ₅ from ⁹³ Nb NMR measurements (<i>4 pages</i>)	052509
C. S. Lue, T. H. Su, H. F. Liu, and Ben-Li Young	
Fishtail and vortex dynamics in the Ni-doped iron pnictide BaFe _{1.82} Ni _{0.18} As ₂ (<i>4 pages</i>)	052510
S. Salem-Sugui Jr., L. Ghivelder, A. D. Alvarenga, L. F. Cohen, Huiqian Luo, and Xingye Lu	

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

Self-organizing nanochannel networks in periodically perforated semiconductor films (<i>9 pages</i>)	054101
R. K. Annabattula and P. R. Onck	
High-pressure study of the behavior of mineral barite by x-ray diffraction (<i>8 pages</i>)	054102
D. Santamaría-Pérez, L. Gracia, G. Garbarino, A. Beltrán, R. Chuliá-Jordán, O. Gomis, D. Errandonea, Ch. Ferrer-Roca, D. Martínez-García, and A. Segura	
Diffusive molecular dynamics and its application to nanoindentation and sintering (<i>8 pages</i>)	054103
Ju Li, Sanket Sarkar, William T. Cox, Thomas J. Lenosky, Erik Bitzek, and Yunzhi Wang	

(Continued)

BRIEF REPORTS

Structure, structural phase transitions, mechanical properties, defects

- Tunable helium bubble superlattice ordered by screw dislocation network (*5 pages*) 052101
Zengfeng Di, Xian-Ming Bai, Qiangmin Wei, Jonghan Won, Richard G. Hoagland, Yongqiang Wang,
Amit Misra, Blas P. Uberuaga, and Michael Nastasi

Inhomogeneous, disordered, and partially ordered systems

- Inelastic x-ray scattering study of liquid Ga: Implications for the short-range order (*4 pages*) 052201
Valentina M. Giordano and Giulio Monaco
- Logarithmic temperature dependence of Hall transport in granular metals (*4 pages*) 052202
Yu-Jie Zhang, Zhi-Qing Li, and Juhn-Jong Lin

Dynamics, dynamical systems, lattice effects:

- Effect of lattice strain on hydrogen diffusion in Pd: A density functional theory study (*4 pages*) 052301
Henrik Grönbeck and Vladimir P. Zhdanov
- Nonexponential relaxation dynamics of localized carrier densities in oxide crystals without structural
or energetic disorder (*4 pages*) 052302
C. Merschjann, M. Imlau, H. Brüning, B. Schoke, and S. Torbrügge

Magnetism

- Coupling of field-induced spin fluctuations and spin-density wave in intermetallic CeAg₂Ge₂ (*4 pages*) 052401
D. K. Singh, A. Thamizhavel, S. Chang, J. W. Lynn, D. A. Joshi, S. K. Dhar, and S. Chi
- Magnetization processes in rectangular versus rhombic planar superlattices of magnetic bars (*4 pages*) 052402
Y. G. Pogorelov, G. N. Kakazei, J. M. Teixeira, A. Hierro-Rodriguez, F. Valdés-Bango, M. Vélez,
J. M. Alameda, J. I. Martín, J. Ventura, and J. B. Sousa
- Electrical signature of magnetic domain-wall dynamics (*4 pages*) 052403
Y. Liu, O. A. Tretiakov, and Ar. Abanov
- Spin-transfer torque and current-induced vortex superlattices in nanomagnets (*4 pages*) 052404
Oleksii M. Volkov, Volodymyr P. Kravchuk, Denis D. Sheka, and Yuri Gaididei
- Quantum spin fluctuations and ellipticity for a triangular-lattice antiferromagnet (*4 pages*) 052405
Randy S. Fishman

