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
P.O. Box 41
Annapolis Junction, MD 20701

THIRD SERIES, VOLUME 92, NUMBER 22 *CONTENTS* **DECEMBER 2015-1(II)**

RAPID COMMUNICATIONS

Structure, structural phase transitions, mechanical properties, defects

Class of Rashba ferroelectrics in hexagonal semiconductors *(4 pages)* . . . . . 220101(R)
Awadhesh Narayan

Selectively doping barlowite for quantum spin liquid: A first-principles study *(5 pages)* . . . . . 220102(R)
Zheng Liu, Xiaolong Zou, Jia-Wei Mei, and Feng Liu

Inhomogeneous, disordered, and partially ordered systems

Exponential orthogonality catastrophe in single-particle and many-body localized systems *(5 pages)* . . . . . 220201(R)
Dong-Ling Deng, J. H. Pixley, Xiaopeng Li, and S. Das Sarma

Measurement of untruncated nuclear spin interactions via zero- to ultralow-field nuclear magnetic resonance *(6 pages)* . . . . . 220202(R)
J. W. Blanchard, T. F. Sjolander, J. P. King, M. P. Ledbetter, E. H. Levine, V. S. Bajaj, D. Budker, and A. Pines

Magnetism

Asymptotic freedom in quantum magnets *(5 pages)* . . . . . 220401(R)
H. D. Scammell and O. P. Sushkov

Determination of effective field induced by spin-orbit torque using magnetic domain wall creep in Pt/Co structure *(4 pages)* . . . . . 220402(R)
T. Koyama and D. Chiba

Critical damping constant of a spin torque oscillator with a perpendicularly magnetized free layer and an in-plane magnetized reference layer *(4 pages)* . . . . . 220403(R)
Hiroko Arai, Rie Matsumoto, Shinji Yuasa, and Hiroshi Imamura

Paramagnetism in the kagome compounds $(Zn,Mg,Cd)Cu_3(OH)_6Cl_2$ *(6 pages)* . . . . . 220404(R)
Yasir Iqbal, Harald O. Jeschke, Johannes Reuther, Roser Valentí, I. I. Mazin, Martin Greiter, and Ronny Thomale

Probing ultrafast spin dynamics with high-harmonic magnetic circular dichroism spectroscopy *(5 pages)* . . . . . 220405(R)
F. Willems, C. T. L. Smeenk, N. Zhavoronkov, O. Kornilov, I. Radu, M. Schmidbauer, M. Hanke, C. von Korff Schmising, M. J. J. Vrakking, and S. Eisebitt

Nonlocal spin torques in Rashba quantum wires with steep magnetic textures *(5 pages)* . . . . . 220406(R)
Martin Stier and Michael Thorwart

Copyright 2015 by American Physical Society

(Continued)

1098-0121(20151201)92:22;1-Z

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).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 92, NUMBER 22** **DECEMBER 2015-1(II)**

Unconventional scaling and significant enhancement of the spin Seebeck effect in multilayers *(5 pages)* . . . . . 220407(R)
R. Ramos, T. Kikkawa, M. H. Aguirre, I. Lucas, A. Anadón, T. Oyake, K. Uchida, H. Adachi, J. Shiomi, P. A. Algarabel, L. Morellón, S. Maekawa, E. Saitoh, and M. R. Ibarra

Electronic phase transition in hollandite titanates $Ba_xTi_8O_{16+\delta}$ *(5 pages)* . . . . . 220408(R)
R. Murata, T. Sato, T. Okuda, Y. Horibe, H. Tsukasaki, S. Mori, N. Yamaguchi, K. Sugimoto, S. Kawaguchi, M. Takata, and T. Katsufuji

Topological spin transport by Brownian diffusion of domain walls *(5 pages)* . . . . . 220409(R)
Se Kwon Kim, So Takei, and Yaroslav Tserkovnyak

Dynamical current-induced ferromagnetic and antiferromagnetic resonances *(5 pages)* . . . . . 220410(R)
F. S. M. Guimarães, S. Lounis, A. T. Costa, and R. B. Muniz

Molecular anisotropic magnetoresistance *(4 pages)* . . . . . 220411(R)
Fabian Otte, Stefan Heinze, and Yuriy Mokrousov

Magnetic soliton confinement and discretization effects arising from macroscopic coherence in a chiral spin soliton lattice *(6 pages)* . . . . . 220412(R)
Y. Togawa, T. Koyama, Y. Nishimori, Y. Matsumoto, S. McVitie, D. McGrouther, R. L. Stamps, Y. Kousaka, J. Akimitsu, S. Nishihara, K. Inoue, I. G. Bostrem, Vl. E. Sinitsyn, A. S. Ovchinnikov, and J. Kishine

Interfacial Dzyaloshinskii-Moriya interaction studied by time-resolved scanning Kerr microscopy *(5 pages)* . . . . . 220413(R)
H. S. Körner, J. Stigloher, H. G. Bauer, H. Hata, T. Taniguchi, T. Moriyama, T. Ono, and C. H. Back

Resonant isotropic optical magnetism of plasmonic nanoclusters in visible light *(5 pages)* . . . . . 220414(R)
V. Ponsinet, P. Barois, S. M. Gali, P. Richetti, J. B. Salmon, A. Vallecchi, M. Albani, A. Le Beulze, S. Gomez-Grana, E. Duguet, S. Mornet, and M. Treguer-Delapierre

Spin waves in full-polarized state of Dzyaloshinskii-Moriya helimagnets: Small-angle neutron scattering study *(5 pages)* . . . . . 220415(R)
S. V. Grigoriev, A. S. Sukhanov, E. V. Altynbaev, S.-A. Siegfried, A. Heinemann, P. Kizhe, and S. V. Maleyev

Self-dual quantum electrodynamics as boundary state of the three-dimensional bosonic topological insulator *(5 pages)* . . . . . 220416(R)
Cenke Xu and Yi-Zhuang You

Frustration and correlations in stacked triangular-lattice Ising antiferromagnets *(4 pages)* . . . . . 220417(R)
F. J. Burnell and J. T. Chalker

Mechanism for nuclear and electron spin excitation by radio frequency current *(5 pages)* . . . . . 220418(R)
Stefan Müllegger, Eva Rauls, Uwe Gerstmann, Stefano Tebi, Giulia Serrano, Stefan Wiespointner-Baumgarthuber, Wolf Gero Schmidt, and Reinhold Koch

Influence of epitaxial strain on clustering of iron in $Pb(Fe_{1/2}Nb_{1/2})O_3$ thin films *(6 pages)* . . . . . 220419(R)
S. A. Prosandeev, I. P. Raevski, S. I. Raevskaya, and H. Chen

Spin relaxation through Kondo scattering in Cu/Py lateral spin valves *(5 pages)* . . . . . 220420(R)
J. T. Batley, M. C. Rosamond, M. Ali, E. H. Linfield, G. Burnell, and B. J. Hickey

Dynamical process of skyrmion-helical magnetic transformation of the chiral-lattice magnet FeGe probed by small-angle resonant soft x-ray scattering *(5 pages)* . . . . . 220421(R)
Y. Yamasaki, D. Morikawa, T. Honda, H. Nakao, Y. Murakami, N. Kanazawa, M. Kawasaki, T. Arima, and Y. Tokura

(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).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 92, NUMBER 22** **DECEMBER 2015-1(II)**

Interfacial exchange-coupling induced chiral symmetry breaking of spin-orbit effects *(5 pages)* . . . . . 220422(R)
P. Perna, F. Ajejas, D. Maccariello, J. L. Fernandez Cuñado, R. Guerrero, M. A. Niño, A. Bollero, R. Miranda, and J. Camarero

Superfluidity and superconductivity

Ong construction for the reconstructed Fermi surface of underdoped cuprates *(5 pages)* . . . . . 220501(R)
P. Robinson and N. E. Hussey

Using magnetic stripes to stabilize superfluidity in electron-hole double monolayer graphene *(5 pages)* . . . . . 220502(R)
Luca Dell'Anna, Andrea Perali, Lucian Covaci, and David Neilson

Weak interband-coupling superconductivity in the filled skutterudite $LaPt_4Ge_{12}$ *(5 pages)* . . . . . 220503(R)
J. L. Zhang, G. M. Pang, L. Jiao, M. Nicklas, Y. Chen, Z. F. Weng, M. Smidman, W. Schnelle, A. Leithe-Jasper, A. Maisuradze, C. Baines, R. Khasanov, A. Amato, F. Steglich, R. Gumeniuk, and H. Q. Yuan

Lattice dynamical properties of superconducting $SrPt_3P$ studied via inelastic x-ray scattering and density functional perturbation theory *(5 pages)* . . . . . 220504(R)
D. A. Zocco, S. Krannich, R. Heid, K.-P. Bohnen, T. Wolf, T. Forrest, A. Bosak, and F. Weber

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

Unified treatment of coupled optical and acoustic phonons in piezoelectric cubic materials *(5 pages)* 224101
Morten Willatzen and Zhong Lin Wang

Melting curves of metals with excited electrons in the quasiharmonic approximation *(10 pages)* 224102
D. V. Minakov and P. R. Levashov

Pressure-induced collapsed-tetragonal phase in $SrCo_2As_2$ *(6 pages)* 224103
W. T. Jayasekara, U. S. Kaluarachchi, B. G. Ueland, Abhishek Pandey, Y. B. Lee, V. Taufour, A. Sapkota, K. Kothapalli, N. S. Sangeetha, G. Fabbris, L. S. I. Veiga, Yejun Feng, A. M. dos Santos, S. L. Bud'ko, B. N. Harmon, P. C. Canfield, D. C. Johnston, A. Kreyssig, and A. I. Goldman

Structure, dynamical stability, and electronic properties of phases in TaS_2 from a high-level quantum mechanical calculation *(11 pages)* 224104
Petr Lazar, Jana Martincová, and Michal Otyepka

Electron paramagnetic resonance study of the Ce^{3+} pair centers in $YAlO_3$:Ce scintillator crystals *(10 pages)* 224105
M. Buryi, V. V. Laguta, E. Mihóková, P. Novák, and M. Nikl

Point defect absorption by grain boundaries in α-iron by atomic density function modeling *(6 pages)* 224106
O. Kapikranian, H. Zapolsky, R. Patte, C. Pareige, B. Radiguet, and P. Pareige

Monovacancy formation energies and Fermi surface topological transitions in Pd-Ag alloys *(9 pages)* 224107
E. K. Delczeg-Czirjak, L. Delczeg, L. Vitos, and O. Eriksson

Structural and chemical ordering of Heusler $Co_xMn_yGe_z$ epitaxial films on Ge (111): Quantitative study using traditional and anomalous x-ray diffraction techniques *(21 pages)* 224108
B. A. Collins, Y. S. Chu, L. He, D. Haskel, and F. Tsui

(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).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 92, NUMBER 22** **DECEMBER 2015-1(II)**

Stabilization and highly metallic properties of heavy group-V hydrides at high pressures *(5 pages)* 224109
Kazutaka Abe and N. W. Ashcroft

High-pressure melting curve of titanium *(10 pages)* 224110
Vincent Stutzmann, Agnès Dewaele, Johann Bouchet, François Bottin, and Mohamed Mezouar

Systematic defect donor levels in III-V and II-VI semiconductors revealed by hybrid functional density-functional theory *(6 pages)* 224111
Guido Petretto and Fabien Bruneval

Relaxor ferroelectricity and electric-field-driven structural transformation in the giant lead-free piezoelectric (Ba,Ca)(Ti, Zr)O_3 *(8 pages)* 224112
Kumar Brajesh, Khagesh Tanwar, Mulualem Abebe, and Rajeev Ranjan

First-principles modeling of three-body interactions in highly compressed solid helium *(10 pages)* 224113
Claudio Cazorla and Jordi Boronat

Inhomogeneous, disordered, and partially ordered systems

Complex magnetism of Ho-Dy-Y-Gd-Tb hexagonal high-entropy alloy *(14 pages)* 224201
J. Lužnik, P. Koželj, S. Vrtnik, A. Jelen, Z. Jagličić, A. Meden, M. Feuerbacher, and J. Dolinšek

Minimum reflection channel in amplifying random media *(7 pages)* 224202
Seng Fatt Liew and Hui Cao

Charge transfer mechanism in nonstationary granular systems *(16 pages)* 224203
A. S. Ioselevich and V. V. Sivak

Dynamics, dynamical systems, lattice effects:

First-principles investigation of quantum mechanical effects on the diffusion of hydrogen in iron and nickel *(8 pages)* 224301
Davide Di Stefano, Matous Mrovec, and Christian Elsässer

Negative thermal expansion of ScF_3: Insights from density-functional molecular dynamics in the isothermal-isobaric ensemble *(6 pages)* 224302
Petr Lazar, Tomáš Bučko, and Jürgen Hafner

Direct observation of an optically induced charge density wave transition in 1T-$TaSe_2$ *(5 pages)* 224303
Shuaishuai Sun, Linlin Wei, Zhongwen Li, Gaolong Cao, Y. Liu, W. J. Lu, Y. P. Sun, Huanfang Tian, Huaixin Yang, and Jianqi Li

Higher-order nonlinear effects in a Josephson parametric amplifier *(7 pages)* 224304
Bogdan A. Kochetov and Arkady Fedorov

Magnetism

Temperature dependence of nuclear spin coherence in Eu^{3+}:Y_2SiO_5 *(6 pages)* 224401
Andrea Arcangeli, Roger M. Macfarlane, Alban Ferrier, and Philippe Goldner

Determination of intrinsic damping of perpendicularly magnetized ultrathin films from time-resolved precessional magnetization measurements *(9 pages)* 224402
Amir Capua, See-hun Yang, Timothy Phung, and Stuart S. P. Parkin

(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).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 92, NUMBER 22** **DECEMBER 2015-1(II)**

In situ small-angle x-ray and nuclear resonant scattering study of the evolution of structural and magnetic properties of an Fe thin film on MgO (001) *(8 pages)* 224403
Gagan Sharma, Ajay Gupta, Mukul Gupta, Kai Schlage, and H.-C. Wille

Magnon instability driven by heat current in magnetic bilayers *(8 pages)* 224404
Yuichi Ohnuma, Hiroto Adachi, Eiji Saitoh, and Sadamichi Maekawa

Field-dependent magnetization of $BiFeO_3$ in an ultrathin $La_{0.7}Sr_{0.3}MnO_3/BiFeO_3$ superlattice *(6 pages)* 224405
Surendra Singh, J. Xiong, A. P. Chen, M. R. Fitzsimmons, and Q. X. Jia

Static and quasielastic properties of the spiral magnet $Ba_2CuGe_2O_7$ studied by neutron resonance spin echo spectroscopy and neutron Larmor labeling *(9 pages)* 224406
S. Mühlbauer, J. Kindervater, and W. Häußler

Band-gap narrowing in Mn-doped GaAs probed by room-temperature photoluminescence *(9 pages)* 224407
S. Prucnal, K. Gao, I. Skorupa, L. Rebohle, L. Vines, H. Schmidt, M. Khalid, Y. Wang, E. Weschke, W. Skorupa, J. Grenzer, R. Hübner, M. Helm, and S. Zhou

Magnetic structure of the quasi-two-dimensional antiferromagnet $NiPS_3$ *(11 pages)* 224408
A. R. Wildes, V. Simonet, E. Ressouche, G. J. McIntyre, M. Avdeev, E. Suard, S. A. J. Kimber, D. Lançon, G. Pepe, B. Moubaraki, and T. J. Hicks

Long-range magnetic order in models for rare-earth quasicrystals *(10 pages)* 224409
Stefanie Thiem and J. T. Chalker

Spin-Hall magnetoresistance and spin Seebeck effect in spin-spiral and paramagnetic phases of multiferroic $CoCr_2O_4$ films *(8 pages)* 224410
A. Aqeel, N. Vlietstra, J. A. Heuver, G. E. W. Bauer, B. Noheda, B. J. van Wees, and T. T. M. Palstra

In-plane rotation of magnetic stripe domains in $Fe_{1-x}Ga_x$ thin films *(9 pages)* 224411
S. Fin, R. Tomasello, D. Bisero, M. Marangolo, M. Sacchi, H. Popescu, M. Eddrief, C. Hepburn, G. Finocchio, M. Carpentieri, A. Rettori, M. G. Pini, and S. Tacchi

Theory of magnetic-field-induced polarization flop in spin-spiral multiferroics *(6 pages)* 224412
Masahito Mochizuki

Electronic structure, magnetism, and antisite disorder in CoFeCrGe and CoMnCrAl quaternary Heusler alloys *(7 pages)* 224413
Enamullah, Y. Venkateswara, Sachin Gupta, Manoj Raama Varma, Prashant Singh, K. G. Suresh, and Aftab Alam

Aharonov-Bohm detection of two-dimensional magnetostatic cloaks *(6 pages)* 224414
Constantinos A. Valagiannopoulos, Amir Nader Askarpour, and Andrea Alù

Long-range pure magnon spin diffusion observed in a nonlocal spin-Seebeck geometry *(13 pages)* 224415
Brandon L. Giles, Zihao Yang, John S. Jamison, and Roberto C. Myers

Anisotropic defect-induced ferromagnetism and transport in Gd-doped GaN two-dimensional electron gasses *(12 pages)* 224416
Zihao Yang, Thomas F. Kent, Jing Yang, Hyungyu Jin, Joseph P. Heremans, and Roberto C. Myers

Overcoming magnetic frustration and promoting half-metallicity in spinel $CoCr_2O_4$ by doping with Fe *(9 pages)* 224417
Shreemoyee Ganguly, Raghuveer Chimata, and Biplab Sanyal

(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).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 92, NUMBER 22** **DECEMBER 2015-1(II)**

Ferromagnetic domain behavior and phase transition in bilayer manganites investigated at the nanoscale *(7 pages)* 224418
C. Phatak, A. K. Petford-Long, H. Zheng, J. F. Mitchell, S. Rosenkranz, and M. R. Norman

Continuous dynamical decoupling of a single diamond nitrogen-vacancy center spin with a mechanical resonator *(13 pages)* 224419
E. R. MacQuarrie, T. A. Gosavi, S. A. Bhave, and G. D. Fuchs

Thermal spin fluctuation effect on the elastic constants of paramagnetic Fe from first principles *(10 pages)* 224420
Zhihua Dong, Wei Li, Stephan Schönecker, Song Lu, Dengfu Chen, and Levente Vitos

Effect of partial order on galvanomagnetic transport properties of ferromagnetic PdFe and PdCo alloys *(8 pages)* 224421
J. Kudrnovský, V. Drchal, and I. Turek

Nontransverse factorizing fields and entanglement in finite spin systems *(10 pages)* 224422
M. Cerezo, R. Rossignoli, and N. Canosa

Probing magnetization dynamics in individual magnetite nanocrystals using magnetoresistive scanning tunneling microscopy *(7 pages)* 224423
Amir Hevroni, Boris Tsukerman, and Gil Markovich

Antiferromagnetic magnonic crystals *(5 pages)* 224424
Roberto E. Troncoso, Camilo Ulloa, Felipe Pesce, and A. S. Nunez

Dependence of transverse magnetothermoelectric effects on inhomogeneous magnetic fields *(8 pages)* 224425
A. S. Shestakov, M. Schmid, D. Meier, T. Kuschel, and C. H. Back

Intrinsic spin torque without spin-orbit coupling *(10 pages)* 224426
Kyoung-Whan Kim, Kyung-Jin Lee, Hyun-Woo Lee, and M. D. Stiles

Electronic and magnetic properties of phosphorus across the first-order ferromagnetic transition of $(Mn,Fe)_2(P,Si,B)$ giant magnetocaloric materials *(9 pages)* 224427
F. Guillou, K. Ollefs, F. Wilhelm, A. Rogalev, A. N. Yaresko, H. Yibole, N. H. van Dijk, and E. Brück

Magnetic structure of an incommensurate phase of La-doped $BiFe_{0.5}Sc_{0.5}O_3$: Role of antisymmetric exchange interactions *(7 pages)* 224428
D. D. Khalyavin, A. N. Salak, A. B. Lopes, N. M. Olekhnovich, A. V. Pushkarev, Yu. V. Radyush, E. L. Fertman, V. A. Desnenko, A. V. Fedorchenko, P. Manuel, A. Feher, J. M. Vieira, and M. G. S. Ferreira

Magnetic ordering in magnetic shape memory alloy Ni-Mn-In-Co *(7 pages)* 224429
K. Ollefs, Ch. Schöppner, I. Titov, R. Meckenstock, F. Wilhelm, A. Rogalev, J. Liu, O. Gutfleisch, M. Farle, H. Wende, and M. Acet

Magnetic structure and crystal-field states of the pyrochlore antiferromagnet $Nd_2Zr_2O_7$ *(12 pages)* 224430
J. Xu, V. K. Anand, A. K. Bera, M. Frontzek, D. L. Abernathy, N. Casati, K. Siemensmeyer, and B. Lake

Phase diagram in exchange-coupled CoTb/[Co/Pt] multilayer-based magnetic tunnel junctions *(11 pages)* 224431
M. Bersweiler, D. Lacour, K. Dumesnil, F. Montaigne, and M. Hehn

Shapiro steps for skyrmion motion on a washboard potential with longitudinal and transverse ac drives *(11 pages)* 224432
C. Reichhardt and C. J. Olson Reichhardt

(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).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 92, NUMBER 22** **DECEMBER 2015-1(II)**

Tuning interfacial domain walls in GdCo/Gd/GdCo′ spring magnets *(10 pages)* 224433
C. Blanco-Roldán, Y. Choi, C. Quirós, S. M. Valvidares, R. Zarate, M. Vélez, J. M. Alameda, D. Haskel, and J. I. Martín

Frustrated Heisenberg antiferromagnet on the honeycomb lattice: Spin gap and low-energy parameters *(14 pages)* 224434
R. F. Bishop, P. H. Y. Li, O. Götze, J. Richter, and C. E. Campbell

Ruderman-Kittel-Kasuya-Yosida interaction in Weyl semimetals *(6 pages)* 224435
Mir Vahid Hosseini and Mehdi Askari

Vector spectroscopy for spin pumping *(8 pages)* 224436
J. Lustikova, Y. Shiomi, and E. Saitoh

Quantum spin transport and dynamics through a ferromagnetic/normal metal junction *(7 pages)* 224437
Hua Li and Kevin S. Bedell

Superfluidity and superconductivity

Josephson junction detectors for Majorana modes and Dirac fermions *(8 pages)* 224501
M. Maiti, K. M. Kulikov, K. Sengupta, and Yu. M. Shukrinov

Two types of nematicity in the phase diagram of the cuprate superconductor $YBa_2Cu_3O_y$ *(7 pages)* 224502
O. Cyr-Choinière, G. Grissonnanche, S. Badoux, J. Day, D. A. Bonn, W. N. Hardy, R. Liang, N. Doiron-Leyraud, and Louis Taillefer

Quantum waveguide theory of the Josephson effect in multiband superconductors *(10 pages)* 224503
C. Nappi, F. Romeo, E. Sarnelli, and R. Citro

Long-range order and pinning of charge-density waves in competition with superconductivity *(12 pages)* 224504
Yosef Caplan, Gideon Wachtel, and Dror Orgad

Magnetotransport signatures of a single nodal electron pocket constructed from Fermi arcs *(7 pages)* 224505
N. Harrison and S. E. Sebastian

Finite quasiparticle lifetime in disordered superconductors *(7 pages)* 224506
M. Žemlička, P. Neilinger, M. Trgala, M. Rehák, D. Manca, M. Grajcar, P. Szabó, P. Samuely, Š. Gaži, U. Hübner, V. M. Vinokur, and E. Il'ichev

Higgs mechanism, phase transitions, and anomalous Hall effect in three-dimensional topological superconductors *(9 pages)* 224507
Flavio S. Nogueira, Asle Sudbø, and Ilya Eremin

Odd-frequency Cooper pairs in two-band superconductors and their magnetic response *(11 pages)* 224508
Yasuhiro Asano and Akihiro Sasaki

Universal scaling law for the condensation energy across a broad range of superconductor classes *(8 pages)* 224509
J. S. Kim, G. N. Tam, and G. R. Stewart

Impurity-induced antiferromagnetic order in Pauli-limited nodal superconductors: Application to heavy-fermion $CeCoIn_5$ *(7 pages)* 224510
Johannes H. J. Martiny, Maria N. Gastiasoro, I. Vekhter, and Brian M. Andersen

Collective modes in the fluxonium qubit *(21 pages)* 224511
Giovanni Viola and Gianluigi Catelani

(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).

PHYSICAL REVIEW B **THIRD SERIES, VOLUME 92, NUMBER 22** **DECEMBER 2015-1(II)**

Fulde-Ferrell-Larkin-Ovchinnikov states in a superconducting ring with magnetic fields: Phase diagram and the first-order phase transitions *(7 pages)* 224512
Ryosuke Yoshii, Satoshi Takada, Shunji Tsuchiya, Giacomo Marmorini, Hisao Hayakawa, and Muneto Nitta

Logarithmic velocity profile of quantum turbulence of superfluid ^{4}He *(5 pages)* 224513
Satoshi Yui, Kazuya Fujimoto, and Makoto Tsubota

Electron pairing in the presence of incipient bands in iron-based superconductors *(14 pages)* 224514
Xiao Chen, S. Maiti, A. Linscheid, and P. J. Hirschfeld

Spin excitations in a model of FeSe with orbital ordering *(10 pages)* 224515
A. Kreisel, Shantanu Mukherjee, P. J. Hirschfeld, and Brian M. Andersen

Interlayer-state-driven superconductivity in CaC_6 studied by angle-resolved photoemission spectroscopy *(5 pages)* 224516
Wonshik Kyung, Yeongkwan Kim, Garam Han, Choonshik Leem, Chul Kim, Yoonyoung Koh, Beomyoung Kim, Youngwook Kim, Jun Sung Kim, Keun Su Kim, Eli Rotenberg, Jonathan D. Denlinger, and Changyoung Kim

Direct observation of Higgs mode oscillations in the pump-probe photoemission spectra of electron-phonon mediated superconductors *(7 pages)* 224517
A. F. Kemper, M. A. Sentef, B. Moritz, J. K. Freericks, and T. P. Devereaux