

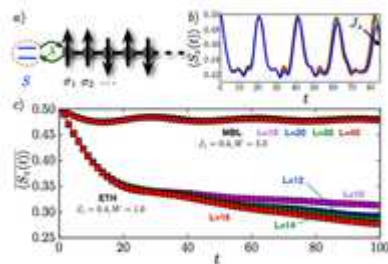
HIGHLIGHTED ARTICLES

Editors' Suggestion **Rapid Communication**

[Quantum revivals and many-body localization](#)

R. Vasseur, S. A. Parameswaran, and J. E. Moore

Phys. Rev. B **91**, 140202(R) (2015) – Published 27 April 2015



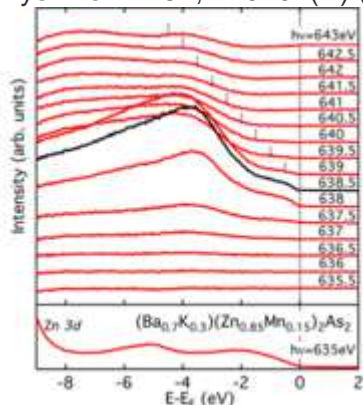
The authors consider the phenomena of quantum revivals in a system exhibiting many-body localization. To this end the authors study a qubit attached to a disordered insulator. Without interactions, the qubit undergoes revivals at a rate that approaches a constant as time goes to infinity. If interactions are added to the insulator, this rate sees instead a logarithmic suppression in time. This logarithmic behavior is related to the same mechanism that underpins the logarithmic growth in entanglement entropy after a quantum quench in a many-body localized system.

Editors' Suggestion **Rapid Communication**

[Photoemission and x-ray absorption studies of the isostructural to Fe-based superconductors diluted magnetic semiconductor \$\text{Ba}_{1-x}\text{K}_x\(\text{Zn}_{1-y}\text{Mn}_y\)_2\text{As}_2\$](#)

H. Suzuki, K. Zhao, G. Shibata, Y. Takahashi, S. Sakamoto, K. Yoshimatsu, B. J. Chen, H. Kumigashira, F.-H. Chang, H.-J. Lin, D. J. Huang, C. T. Chen, Bo Gu, S. Maekawa, Y. J. Uemura, C. Q. Jin, and A. Fujimori

Phys. Rev. B **91**, 140401(R) (2015) – Published 6 April 2015

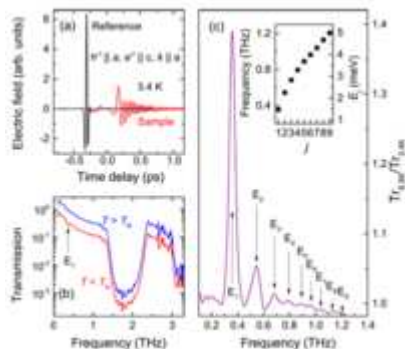


Diluted magnetic semiconductors have attracted much attention as candidates for spintronic devices after the discovery of ferromagnetism in Mn-doped GaAs. However, the limited chemical solubility of the magnetic element Mn together with the inability to control carrier density independently of the magnetic element concentration are major obstacles to material design and applications. The newly found diluted magnetic semiconductor $\text{Ba}_{1-y}\text{K}_y(\text{Zn}_{1-x}\text{Mn}_x)_2\text{As}_2$, which has the same crystal structure as the iron-based superconductor BaFe_2As_2 , circumvents these problems and exhibits ferromagnetic transition temperatures as high as 230 K. Using x-ray absorption and resonance photoemission spectroscopy this group explicitly demonstrates that the ThCr_2Si_2 -type crystal structure is an ideal framework both for high-temperature superconductivity and for ferromagnetism, and that the carrier-induced ferromagnetism of GaMnAs is operating in other ferromagnetic semiconductors.

Editors' Suggestion **Rapid Communication**

[Spinon confinement in the one-dimensional Ising-like antiferromagnet \$\text{SrCo}_2\text{V}_2\text{O}_8\$](#)

Zhe Wang, M. Schmidt, A. K. Bera, A. T. M. N. Islam, B. Lake, A. Loidl, and J. Deisenhofer

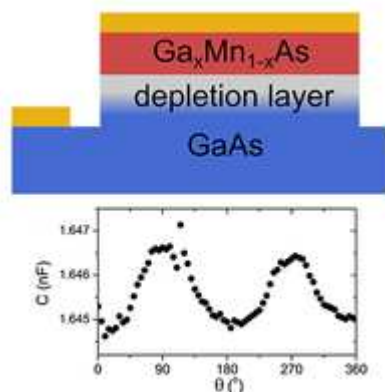


Using high resolution THz spectroscopy, the authors study spinon confinement in the weakly coupled antiferromagnetic chain compound SrCo₂V₂O₈. The confined spinons appear in a hierarchy that can be fully described by a one dimensional Schrödinger equation with a linear confinement potential.

Editors' Suggestion **Rapid Communication**

[Anisotropic magnetocapacitance in ferromagnetic-plate capacitors](#)

J. A. Haigh, C. Ciccarelli, A. C. Betz, A. Irvine, V. Novák, T. Jungwirth, and J. Wunderlich
 Phys. Rev. B **91**, 140409(R) (2015) – Published 29 April 2015

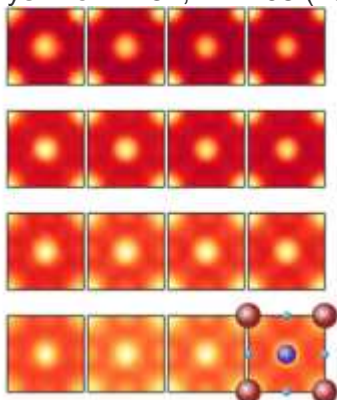


The paper reports the observation of an anisotropic capacitance in a parallel plate p-n junction capacitor where one plate is a ferromagnetic semiconductor, GaMnAs, and the other is nonmagnetic n-doped GaAs. The capacitance depends on the angle of the magnetization of the ferromagnetic plate and is analogous to the tunneling anisotropic magnetoresistance, which originates from the spin-orbit interaction. This can be an important effect in magnetic sensor applications.

Editors' Suggestion

[Atomic resolution imaging using electron energy-loss phonon spectroscopy](#)

N. R. Lugg, B. D. Forbes, S. D. Findlay, and L. J. Allen
 Phys. Rev. B **91**, 144108 (2015) – Published 20 April 2015



Inelastic scattering of electrons on crystals can excite lattice vibrations known as phonons. An energy resolution of 10 meV in the scattered electron energy loss has recently been demonstrated in scanning transmission electron microscopy (STEM), permitting experimenters to distinguish between elastic and inelastic scattering events. In this paper the authors present simulations showing that, with the recent improvement in energy resolution, atomic resolution phonon spectroscopy and imaging of crystals using STEM should now be feasible.

Editors' Suggestion

[Dependence of superconductivity in Cu_xBi₂Se₃ on quenching conditions](#)



$\text{Cu}_x\text{Bi}_2\text{Se}_3$ is a material of significant recent interest and controversy, as it might be a topological superconductor. However, it is now apparent that different preparation routes yield crystals with different properties. This group offers the first systematic study of the preparation-dependence of superconductivity in this material.

RAPID COMMUNICATIONS

Structure, structural phase transitions, mechanical properties, defects

Rapid Communication

[Synchrotron-radiation-based Mössbauer spectroscopy of \$\text{K}_{40}\$ in antiferromagnetic potassium nanoclusters in sodalite](#)

Takehito Nakano, Naoki Fukuda, Makoto Seto, Yasuhiro Kobayashi, Ryo Masuda, Yoshitaka Yoda, Mototsugu Mihara, and Yasuo Nozue

Phys. Rev. B **91**, 140101(R) (2015) – Published 6 April 2015

Rapid Communication

[NMR detection of dynamical processes in antiferroelectric nanoclusters during the order-disorder transition in \$\text{NH}_4\text{H}_2\text{AsO}_4\$](#)

Riqiang Fu, Ozge Gunaydin-Sen, Irinel Chiorescu, and Naresh S. Dalal

Phys. Rev. B **91**, 140102(R) (2015) – Published 17 April 2015

Inhomogeneous, disordered, and partially ordered systems

Rapid Communication

[Effect of a dilute random field on a continuous-symmetry order parameter](#)

T. C. Proctor and E. M. Chudnovsky

Phys. Rev. B **91**, 140201(R) (2015) – Published 14 April 2015

Editors' Suggestion | Rapid Communication

[Quantum revivals and many-body localization](#)

R. Vasseur, S. A. Parameswaran, and J. E. Moore

Phys. Rev. B **91**, 140202(R) (2015) – Published 27 April 2015

Magnetism

Editors' Suggestion | Rapid Communication

[Photoemission and x-ray absorption studies of the isostructural to Fe-based superconductors diluted magnetic semiconductor \$\text{Ba}_{1-x}\text{K}_x\(\text{Zn}_{1-y}\text{Mn}_y\)_2\text{As}_2\$](#)

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Phys. Rev. B **91**, 140401(R) (2015) – Published 6 April 2015

Rapid Communication

[Interfacial spin and heat transfer between metals and magnetic insulators](#)

Scott A. Bender and Yaroslav Tserkovnyak

Phys. Rev. B **91**, 140402(R) (2015) – Published 8 April 2015

Rapid Communication

[Coupled spin-charge order in frustrated itinerant triangular magnets](#)

Sahinur Reja, Rajyavardhan Ray, Jeroen van den Brink, and Sanjeev Kumar

Phys. Rev. B **91**, 140403(R) (2015) – Published 9 April 2015

Editors' Suggestion | Rapid Communication

[Spinon confinement in the one-dimensional Ising-like antiferromagnet \$\text{SrCo}_2\text{V}_2\text{O}_8\$](#)

Zhe Wang, M. Schmidt, A. K. Bera, A. T. M. N. Islam, B. Lake, A. Loidl, and J. Deisenhofer
Phys. Rev. B **91**, 140404(R) (2015) – Published 9 April 2015

Rapid Communication

[Strain-induced magnetic phase transition in \$\text{SrCoO}_{3-\delta}\$ thin films](#)

S. J. Callori, S. Hu, J. Bertinshaw, Z. J. Yue, S. Danilkin, X. L. Wang, V. Nagarajan, F. Klose, J. Seidel, and C. Ulrich

Phys. Rev. B **91**, 140405(R) (2015) – Published 10 April 2015

Rapid Communication

[Vortex and Meissner phases of strongly interacting bosons on a two-leg ladder](#)

M. Piraud, F. Heidrich-Meisner, I. P. McCulloch, S. Greschner, T. Vekua, and U. Schollwöck

Phys. Rev. B **91**, 140406(R) (2015) – Published 10 April 2015

Rapid Communication

[Spin Hamiltonian, order out of a Coulomb phase, and pseudocriticality in the frustrated pyrochlore](#)

[Heisenberg antiferromagnet \$\text{FeF}_3\$](#)

Azam Sadeghi, Mojtaba Alaei, Farhad Shahbazi, and Michel J. P. Gingras

Phys. Rev. B **91**, 140407(R) (2015) – Published 22 April 2015

Rapid Communication

[Strong coupling between \$\text{P1}\$ diamond impurity centers and a three-dimensional lumped photonic microwave cavity](#)

Daniel L. Creedon, Jean-Michel Le Floch, Maxim Goryachev, Warrick G. Farr, Stefania Castelletto, and Michael E. Tobar

Phys. Rev. B **91**, 140408(R) (2015) – Published 24 April 2015

Editors' Suggestion **Rapid Communication**

[Anisotropic magnetocapacitance in ferromagnetic-plate capacitors](#)

J. A. Haigh, C. Ciccarelli, A. C. Betz, A. Irvine, V. Novák, T. Jungwirth, and J. Wunderlich

Phys. Rev. B **91**, 140409(R) (2015) – Published 29 April 2015

Rapid Communication

[Coherent manipulation of nuclear spins using spin injection from a half-metallic spin source](#)

Tetsuya Uemura, Takafumi Akiho, Yuya Ebina, and Masafumi Yamamoto

Phys. Rev. B **91**, 140410(R) (2015) – Published 29 April 2015

Superfluidity and superconductivity

Rapid Communication

[Nanoscale phase separation in deeply underdoped \$\text{Bi}_2\text{Sr}_2\text{CuO}_{6+\delta}\$ and \$\text{Ca}_2\text{CuO}_2\text{Cl}_2\$](#)

Peter Mistark, Robert S. Markiewicz, and Arun Bansil

Phys. Rev. B **91**, 140501(R) (2015) – Published 6 April 2015

Rapid Communication

[Strong interaction between electrons and collective excitations in the multiband superconductor \$\text{MgB}_2\$](#)

Daixiang Mou, Rui Jiang, Valentin Taufour, Rebecca Flint, S. L. Bud'ko, P. C. Canfield, J. S. Wen, Z. J. Xu, Genda Gu, and Adam Kaminski

Phys. Rev. B **91**, 140502(R) (2015) – Published 8 April 2015

Rapid Communication

[Origin of the superconducting state in the collapsed tetragonal phase of \$\text{KFe}_2\text{As}_2\$](#)

Daniel Guterding, Steffen Backes, Harald O. Jeschke, and Roser Valentí

Phys. Rev. B **91**, 140503(R) (2015) – Published 13 April 2015

Rapid Communication

[Spontaneous breakdown of time-reversal symmetry induced by thermal fluctuations](#)

Johan Carlström and Egor Babaev

Phys. Rev. B **91**, 140504(R) (2015) – Published 16 April 2015

Rapid Communication

[Linear dichroism and the nature of charge order in underdoped cuprates](#)

M. R. Norman

Phys. Rev. B **91**, 140505(R) (2015) – Published 21 April 2015

Rapid Communication

[Evidence for broken time-reversal symmetry in the superconducting phase of \$\text{URu}_2\text{Si}_2\$](#)

E. R. Schemm, R. E. Baumbach, P. H. Tobash, F. Ronning, E. D. Bauer, and A. Kapitulnik

Phys. Rev. B **91**, 140506(R) (2015) – Published 30 April 2015

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

[In situ x-ray diffraction of fast compressed iron: Analysis of strains and stress under non-hydrostatic pressure](#)

Zuzana Konôpková, André Rothkirch, Anil K. Singh, Sergio Speziale, and Hanns-Peter Liermann
Phys. Rev. B **91**, 144101 (2015) – Published 7 April 2015

[Effects of rotational states on the \$C/a\$ ratio in solid hydrogens](#)

Mikhail A. Strzhemechny and Russell J. Hemley
Phys. Rev. B **91**, 144102 (2015) – Published 8 April 2015

[First-principles study of the phonon modes in bismuth sillenites](#)

D. J. Arenas, Carl Middleton, and A. F. Kemper
Phys. Rev. B **91**, 144103 (2015) – Published 9 April 2015

[Direct observation of the recovery of an antiferroelectric phase during polarization reversal of an induced ferroelectric phase](#)

Hanzheng Guo and Xiaoli Tan
Phys. Rev. B **91**, 144104 (2015) – Published 10 April 2015

[Structure factor of a relaxor ferroelectric](#)

G. G. Guzmán-Verri and C. M. Varma
Phys. Rev. B **91**, 144105 (2015) – Published 14 April 2015

[Orientation-dependent structural phase diagrams and dielectric properties of \$\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3\$ polydomain thin films](#)

Ruijuan Xu, Jialan Zhang, Zuhuang Chen, and Lane W. Martin
Phys. Rev. B **91**, 144106 (2015) – Published 17 April 2015

[Phase stability and transformations in the halide perovskite \$\text{CsSnI}_3\$](#)

E. Lora da Silva, Jonathan M. Skelton, Stephen C. Parker, and Aron Walsh
Phys. Rev. B **91**, 144107 (2015) – Published 17 April 2015

Editors' Suggestion

[Atomic resolution imaging using electron energy-loss phonon spectroscopy](#)

N. R. Lugg, B. D. Forbes, S. D. Findlay, and L. J. Allen
Phys. Rev. B **91**, 144108 (2015) – Published 20 April 2015

[Dynamics of field-induced polarization reversal in thin strained perovskite ferroelectric films with C-oriented polarization](#)

Laurent Baudry, Igor A. Luk'yanchuk, and Anna Razumnaya
Phys. Rev. B **91**, 144110 (2015) – Published 21 April 2015

[One-dimensional chain melting in incommensurate potassium](#)

E. E. McBride, K. A. Munro, G. W. Stinton, R. J. Husband, R. Briggs, H.-P. Liermann, and M. I. McMahon
Phys. Rev. B **91**, 144111 (2015) – Published 22 April 2015

[In-plane charge fluctuations in bismuth-sulfide superconductors](#)

Anushika Athauda, Junjie Yang, Seunghun Lee, Yoshikazu Mizuguchi, Keita Deguchi, Yoshihiko Takano, Osuke Miura, and Despina Louca
Phys. Rev. B **91**, 144112 (2015) – Published 22 April 2015

[High-pressure structure, decomposition, and superconductivity of \$\text{MoS}_2\$](#)

Oto Kohulák, Roman Martoňák, and Erio Tosatti
Phys. Rev. B **91**, 144113 (2015) – Published 23 April 2015

[Two-dimensional Cs-vacancy superstructure in iron-based superconductor \$\text{Cs}_{0.8}\text{Fe}_{1.6}\text{Se}_2\$](#)

D. G. Porter, E. Cemal, D. J. Voneshen, K. Refson, M. J. Gutmann, A. Bombardi, A. T. Boothroyd, A. Krzton-Maziopa, E. Pomjakushina, K. Conder, and J. P. Goff
Phys. Rev. B **91**, 144114 (2015) – Published 30 April 2015

Inhomogeneous, disordered, and partially ordered systems

[Shrinking water's no man's land by lifting its low-temperature boundary](#)

Markus Seidl, Alice Fayter, Josef N. Stern, Gerhard Zifferer, and Thomas Loerting
Phys. Rev. B **91**, 144201 (2015) – Published 15 April 2015

[Simulating photoconductive atomic-force microscopy on disordered photovoltaic materials](#)

James C. Blakesley and Fernando A. Castro
Phys. Rev. B **91**, 144202 (2015) – Published 28 April 2015

Density functional theory calculations of the turbostratically disordered compound $[(\text{SnSe})_{1+y}]_m(\text{VSe}_2)_n$

Sven P. Rudin and David C. Johnson

Phys. Rev. B **91**, 144203 (2015) – Published 30 April 2015

Dynamics, dynamical systems, lattice effects

Classification of the Floquet statistical distribution for time-periodic open systems

Dong E. Liu

Phys. Rev. B **91**, 144301 (2015) – Published 7 April 2015

Phonon anharmonicity of monoclinic zirconia and yttrium-stabilized zirconia

C. W. Li, H. L. Smith, T. Lan, J. L. Niedziela, J. A. Muñoz, J. B. Keith, L. Mauger, D. L. Abernathy, and B. Fultz

Phys. Rev. B **91**, 144302 (2015) – Published 13 April 2015

Isostructural elemental crystals in the presence of hot carriers

Isabel Klett, Tobias Zier, Baerbel Rethfeld, Martin E. Garcia, and Eeuwe S. Zijlstra

Phys. Rev. B **91**, 144303 (2015) – Published 13 April 2015

Ultralow lattice thermal conductivity of the fully filled skutterudite $\text{YbFe}_4\text{Sb}_{12}$ due to the flat avoided-crossing filler modes

Wu Li and Natalio Mingo

Phys. Rev. B **91**, 144304 (2015) – Published 15 April 2015

Magnetism

Angular dependence of spin-orbit spin-transfer torques

Ki-Seung Lee, Dongwook Go, Aurélien Manchon, Paul M. Haney, M. D. Stiles, Hyun-Woo Lee, and Kyung-Jin Lee

Phys. Rev. B **91**, 144401 (2015) – Published 6 April 2015

Effect of chemical order on the magnetic and electronic properties of epitaxial off-

stoichiometry $\text{Fe}_x\text{Si}_{1-x}$ thin films

J. Karel, J. Juraszek, J. Minar, C. Bordel, K. H. Stone, Y. N. Zhang, J. Hu, R. Q. Wu, H. Ebert, J. B. Kortright, and F. Hellman

Phys. Rev. B **91**, 144402 (2015) – Published 6 April 2015

Anomalous magnetic order in the magnetoelectric oxide NdCrTiO_5 revealed by impurity effects

Shunsuke Kori, Takuma Okamura, Ryuji Okazaki, Ichiro Terasaki, and Yukio Yasui

Phys. Rev. B **91**, 144403 (2015) – Published 6 April 2015

Magnetic structures in the magnetic phase diagram of Ho_2RhIn_8

Petr Čermák, Karel Prokeš, Bachir Ouladdiaf, Martin Boehm, Marie Kratochvílová, and Pavel Javorský

Phys. Rev. B **91**, 144404 (2015) – Published 7 April 2015

Spin-dependent thermal transport perpendicular to the planes of Co/Cu multilayers

Johannes Kimling, R. B. Wilson, Karsten Rott, Judith Kimling, Günter Reiss, and David G. Cahill

Phys. Rev. B **91**, 144405 (2015) – Published 7 April 2015

Valence-bond solid as the quantum ground state in honeycomb layered urusovite $\text{CuAl}(\text{AsO}_4)\text{O}$

A. N. Vasiliev, O. S. Volkova, E. A. Zvereva, A. V. Koshelev, V. S. Urusov, D. A. Chareev, V. I. Petkov, M. V. Sukhanov, B. Rahaman, and T. Saha-Dasgupta

Phys. Rev. B **91**, 144406 (2015) – Published 7 April 2015

Magnetic properties of the helimagnet $\text{Cr}_{1/3}\text{NbS}_2$ observed by μSR

D. Braam, C. Gomez, S. Tezok, E. V. L. de Mello, L. Li, D. Mandrus, Hae-Young Kee, and J. E. Sonier

Phys. Rev. B **91**, 144407 (2015) – Published 7 April 2015

Strong ferromagnetism induced by canted antiferromagnetic order in double perovskite

iridates $(\text{La}_{1-x}\text{Sr}_x)_2\text{ZnIrO}_6$

W. K. Zhu, Chi-Ken Lu, W. Tong, J. M. Wang, H. D. Zhou, and S. X. Zhang

Phys. Rev. B **91**, 144408 (2015) – Published 8 April 2015

Competing magnetic states, disorder, and the magnetic character of Fe_3Ga_4

J. H. Mendez, C. E. Ekuma, Y. Wu, B. W. Fulfer, J. C. Prestigiacomo, W. A. Shelton, M. Jarrell, J. Moreno, D. P. Young, P. W. Adams, A. Karki, R. Jin, Julia Y. Chan, and J. F. DiTusa

Phys. Rev. B **91**, 144409 (2015) – Published 13 April 2015

Quantum corrections to the conductivity of itinerant antiferromagnets

K. A. Muttalib and P. Wölfle

Phys. Rev. B **91**, 144410 (2015) – Published 13 April 2015

[Raman study of magnetic excitations and magnetoelastic coupling in \$\alpha\$ -SrCr₂O₄](#)

Michael E. Valentine, Seyed Koohpayeh, Martin Mourigal, Tyrel M. McQueen, Collin Broholm, Natalia Drichko, Siân E. Dutton, Robert J. Cava, Turan Birol, Hena Das, and Craig J. Fennie
Phys. Rev. B **91**, 144411 (2015) – Published 13 April 2015

[Experimental demonstration of the coexistence of spin Hall and Rashba effects](#)

[in \$\beta\$ -tantalum/ferromagnet bilayers](#)

Gary Allen, Sasikanth Manipatruni, Dmitri E. Nikonov, Mark Doczy, and Ian A. Young

Phys. Rev. B **91**, 144412 (2015) – Published 16 April 2015

[Low-temperature magnetic, thermodynamic, and transport properties of antiferromagnetic CeAuSn single crystals](#)

C. L. Huang, V. Fritsch, B. Pilawa, C. C. Yang, M. Merz, and H. v. Löhneysen

Phys. Rev. B **91**, 144413 (2015) – Published 16 April 2015

[Consequences of critical interchain couplings and anisotropy on a Haldane chain](#)

A. K. Bera, B. Lake, A. T. M. N. Islam, O. Janson, H. Rosner, A. Schneidewind, J. T. Park, E. Wheeler, and S. Zander

Phys. Rev. B **91**, 144414 (2015) – Published 17 April 2015

[Transferring spin into an extended \$\pi\$ orbital of a large molecule](#)

Taner Esat, Thorsten Deilmann, Benedikt Lechtenberg, Christian Wagner, Peter Krüger, Ruslan Temirov, Frithjof B. Anders, Michael Rohlfing, and F. Stefan Tautz

Phys. Rev. B **91**, 144415 (2015) – Published 20 April 2015

[Quantum degradation of a second-order phase transition](#)

S. M. Stishov, A. E. Petrova, S. Yu. Gavrilkin, and L. A. Klinkova

Phys. Rev. B **91**, 144416 (2015) – Published 21 April 2015

[Spin diffusion in the low-dimensional molecular quantum Heisenberg](#)

[antiferromagnet Cu\(py_z\)\(NO₃\)₂ detected with implanted muons](#)

F. Xiao, J. S. Möller, T. Lancaster, R. C. Williams, F. L. Pratt, S. J. Blundell, D. Ceresoli, A. M. Barton, and J. L. Manson

Phys. Rev. B **91**, 144417 (2015) – Published 22 April 2015

[Long-range ferromagnetic order in LaCoO₃- \$\delta\$ epitaxial films due to the interplay of epitaxial strain and oxygen vacancy ordering](#)

V. V. Mehta, N. Biskup, C. Jenkins, E. Arenholz, M. Varela, and Y. Suzuki

Phys. Rev. B **91**, 144418 (2015) – Published 23 April 2015

[Ground state and low-energy magnetic dynamics in the frustrated magnet CoAl₂O₄ as revealed by local spin probes](#)

M. Iakovleva, E. Vavilova, H.-J. Grafe, S. Zimmermann, A. Alfonsov, H. Luetkens, H.-H. Klauss, A. Maljuk, S. Wurmehl, B. Büchner, and V. Kataev

Phys. Rev. B **91**, 144419 (2015) – Published 24 April 2015

[Magnetic order in \$\alpha\$ -RuCl₃: A honeycomb-lattice quantum magnet with strong spin-orbit coupling](#)

J. A. Sears, M. Songvilay, K. W. Plumb, J. P. Clancy, Y. Qiu, Y. Zhao, D. Parshall, and Young-June Kim

Phys. Rev. B **91**, 144420 (2015) – Published 24 April 2015

[Berry-phase effects and electronic dynamics in a noncollinear antiferromagnetic texture](#)

Olena Gomonay

Phys. Rev. B **91**, 144421 (2015) – Published 27 April 2015

[Combined first-principles and thermodynamic approach to M-nitronyl nitroxide \(M = Co, Mn\) spin helices](#)

Marco Scarrozza, Alessandro Vindigni, Paolo Barone, Roberta Sessoli, and Silvia Picozzi

Phys. Rev. B **91**, 144422 (2015) – Published 27 April 2015

[Variation of magnetic ground state of Sr_{1-x}Ca_xCo₂P₂ determined with \$\mu\$ +SR](#)

Jun Sugiyama, Hiroshi Nozaki, Izumi Umegaki, Masashi Harada, Yuki Higuchi, Kazutoshi Miwa, Eduardo J. Ansaldo, Jess H. Brewer, Masaki Imai, Chishiro Michioka, Kazuyoshi Yoshimura, and Martin Månsson

Phys. Rev. B **91**, 144423 (2015) – Published 29 April 2015

[Magnetic phase diagram of an Fe monolayer on W\(110\) and Ta\(110\) surfaces based on *ab initio* calculations](#)

Levente Rózsa, László Udvardi, László Szunyogh, and István A. Szabó

Phys. Rev. B **91**, 144424 (2015) – Published 29 April 2015

[Quantitative simulation of temperature-dependent magnetization dynamics and equilibrium properties of elemental ferromagnets](#)

R. F. L. Evans, U. Atxitia, and R. W. Chantrell

Phys. Rev. B **91**, 144425 (2015) – Published 30 April 2015

Superfluidity and superconductivity

[Energy and vorticity spectra in turbulent superfluid He₄ from T=0 to T_λ](#)

Laurent Boué, Victor S. L'vov, Yotam Nagar, Sergey V. Nazarenko, Anna Pomyalov, and Itamar Procaccia

Phys. Rev. B **91**, 144501 (2015) – Published 1 April 2015

[Charge density waves and phonon-electron coupling in ZrTe₃](#)

Yuwen Hu, Feipeng Zheng, Xiao Ren, Ji Feng, and Yuan Li

Phys. Rev. B **91**, 144502 (2015) – Published 3 April 2015

[FeTe_{0.55}Se_{0.45}: A multiband superconductor in the clean and dirty limit](#)

C. C. Homes, Y. M. Dai, J. S. Wen, Z. J. Xu, and G. D. Gu

Phys. Rev. B **91**, 144503 (2015) – Published 10 April 2015

[Symmetry-protected vortex bound state in superfluid He₃–B phase](#)

Yasumasa Tsutsumi, Takuto Kawakami, Ken Shiozaki, Masatoshi Sato, and Kazushige Machida

Phys. Rev. B **91**, 144504 (2015) – Published 10 April 2015

[Probing Majorana-like states in quantum dots and quantum rings](#)

Benedikt Scharf and Igor Žutić

Phys. Rev. B **91**, 144505 (2015) – Published 13 April 2015

Editors' Suggestion

[Dependence of superconductivity in Cu_xBi₂Se₃ on quenching conditions](#)

J. A. Schneeloch, R. D. Zhong, Z. J. Xu, G. D. Gu, and J. M. Tranquada

Phys. Rev. B **91**, 144506 (2015) – Published 20 April 2015

[Diagrammatic Monte Carlo study of a mass-imbalanced Fermi-polaron system](#)

Peter Kroiss and Lode Pollet

Phys. Rev. B **91**, 144507 (2015) – Published 20 April 2015

[General framework for transport in spin-orbit-coupled superconducting heterostructures: Nonuniform spin-orbit coupling and spin-orbit-active interfaces](#)

Kuei Sun and Nayana Shah

Phys. Rev. B **91**, 144508 (2015) – Published 20 April 2015

[Robust quantum state transfer using tunable couplers](#)

Eyob A. Sete, Eric Mlinar, and Alexander N. Korotkov

Phys. Rev. B **91**, 144509 (2015) – Published 22 April 2015

[Superfluidity and density order in a bilayer extended Hubbard model](#)

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