

1 January 2015

HIGHLIGHTED ARTICLES

**Featured in Physics** **Editors' Suggestion** **Rapid Communication**

*Superabsorption of acoustic waves with bubble metascreens*

Valentin Leroy, Anatoliy Strybulevych, Maxime Lanoy, Fabrice Lemoult, Arnaud Tourin, and John H. Page

Phys. Rev. B **91**, 020301(R) (2015) – Published 6 January 2015

Antireflective acoustic coatings for hiding submarines and other watercraft could be made much thinner than those in use today.

**Editors' Suggestion** **Rapid Communication**

*High-Q optical cavities in hyperuniform disordered materials*

Timothy Amoah and Marian Florescu

Phys. Rev. B **91**, 020201(R) (2015) – Published 20 January 2015

Hyperuniform disordered materials are a class of photonic solids with a constrained randomness that have short-range order and long-range statistical isotropy. In these materials, calculations suggest a new type of high-Q localization mechanism in optical cavities, that has no analogue in periodic or quasi-periodic photonic crystals.

**Editors' Suggestion** **Rapid Communication**

*Hydrostatic pressure-induced modifications of structural transitions lead to large enhancements of magnetocaloric effects in MnNiSi-based systems*

Tapas Samanta, Daniel L. Lepkowski, Ahmad Us Saleheen, Alok Shankar, Joseph Prestigiacomo, Igor Dubenko, Abdiel Quetz, Iain W. H. Oswald, Gregory T. McCandless, Julia Y. Chan, Philip W. Adams, David P. Young, Naushad Ali, and Shane Stadler

Phys. Rev. B **91**, 020401(R) (2015) – Published 5 January 2015

By means of alloying appropriate amounts of MnNiSi and MnFeGe, materials are found that undergo a paramagnetic to ferromagnetic transition close to room temperature, accompanied by a huge volume change. Thanks to this volume change, application of moderate pressures leads to a remarkable enhancement of the magnetocaloric response. Work like this may open new opportunities in the development of new solid-state magnetic refrigeration devices.

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*Two distinct kinetic regimes for the relaxation of light-induced superconductivity in  $La_{1.675}Eu_{0.2}Sr_{0.125}CuO_4$*

C. R. Hunt, D. Nicoletti, S. Kaiser, T. Takayama, H. Takagi, and A. Cavalleri

Phys. Rev. B **91**, 020505(R) (2015) – Published 29 January 2015

Using femtosecond laser excitation to melt stripe order in  $\text{La}_{1.675}\text{Eu}_{0.2}\text{Sr}_{0.125}\text{CuO}_4$ , the authors reintroduce c-axis coherent coupling and observe the formation and subsequent relaxation of a competing state, which can be induced up to 80 K. In addition, they also find two distinct kinetic regimes above and below the spin-order transition at  $T_{\text{SO}} \sim 25$  K.

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*Unconventional superconductivity in quasi-one-dimensional  $\text{Rb}_2\text{Cr}_3\text{As}_3$*

Zhang-Tu Tang, Jin-Ke Bao, Yi Liu, Yun-Lei Sun, Abduweli Ablimit, Hui-Fei Zhai, Hao Jiang, Chun-Mu Feng, Zhu-An Xu, and Guang-Han Cao

Phys. Rev. B **91**, 020506(R) (2015) – Published 30 January 2015

Following the authors' own discovery of superconductivity in quasi-one-dimensional  $\text{K}_2\text{Cr}_3\text{As}_3$ , the analogous compound  $\text{Rb}_2\text{Cr}_3\text{As}_3$  is synthesized for the first time in polycrystalline form. Bulk superconductivity emerges at 4.8 K. Further work is needed to verify the nature of the superconducting state.

**Editors' Suggestion Rapid Communication**

*Anisotropic  $H_{c2}$ , thermodynamic and transport measurements, and pressure dependence of  $T_c$  in  $\text{K}_2\text{Cr}_3\text{As}_3$  single crystals*

Tai Kong, Sergey L. Bud'ko, and Paul C. Canfield

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$\text{K}_2\text{Cr}_3\text{As}_3$  is a newly discovered compound that has a superconducting transition temperature of 6.1 K. Special interest in it stems from the fact that it crystallizes in a hexagonal lattice containing a quasi-one-dimensional chain structure made of  $(\text{Cr}_3\text{As}_3)_2^-$ . With careful measurements on single crystals this research team from Iowa State University demonstrates that although the material can be considered to be close to quasi-one-dimensional in a crystallographic sense, the data support a three-dimensional nature with Fermi-liquid-like properties.

**Editors' Suggestion**

*Competing superconducting and magnetic order parameters and field-induced magnetism in electron-doped  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$*

J. Larsen, B. Mencia Uranga, G. Stieper, S. L. Holm, C. Bernhard, T. Wolf, K. Lefmann, B. M. Andersen, and C. Niedermayer

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This paper presents a systematic study of the magnetic and superconducting properties of  $\text{Ba}(\text{Fe}_{0.95}\text{Co}_{0.05})_2\text{As}_2$  as a function of temperature and external magnetic field using neutron scattering and muon spin rotation. Calculations based on the five-band Hubbard Hamiltonian reproduce the physical properties of the coexistence region of  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ . Below the superconducting transition temperature the magnetic and superconducting order parameters coexist and compete. An external magnetic field significantly enhances the magnetic order parameter within the superconducting state. This behavior can be caused by the vortices, which in the superconducting state can slow down and locally freeze spin fluctuations.

## RAPID COMMUNICATIONS

Structure, structural phase transitions, mechanical properties, defects

**Rapid Communication**

## *Prediction of a stable post-post-perovskite structure from first principles*

Changsong Xu, Bin Xu, Yurong Yang, Huafeng Dong, Artem R. Oganov, Shanying Wang, Wenhui Duan, Binglin Gu, and L. Bellaiche

Phys. Rev. B **91**, 020101(R) (2015) – Published 15 January 2015

### **Rapid Communication**

## *Tuning and optimizing properties of ferroelectric films grown on a single substrate: A first-principles-based study*

Zhigang Gui and L. Bellaiche

Phys. Rev. B **91**, 020102(R) (2015) – Published 22 January 2015

### **Rapid Communication**

## *Locally resonant band gaps in periodic beam lattices by tuning connectivity*

Pai Wang, Filippo Casadei, Sung Hoon Kang, and Katia Bertoldi

Phys. Rev. B **91**, 020103(R) (2015) – Published 26 January 2015

## Inhomogeneous, disordered, and partially ordered systems

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## *High- $Q$ optical cavities in hyperuniform disordered materials*

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## Dynamics, dynamical systems, lattice effects

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## Magnetism

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*Hydrostatic pressure-induced modifications of structural transitions lead to large enhancements of magnetocaloric effects in MnNiSi-based systems*

Tapas Samanta, Daniel L. Lepkowski, Ahmad Us Saleheen, Alok Shankar, Joseph Prestigiacomo, Igor Dubenko, Abdiel Quetz, Iain W. H. Oswald, Gregory T. McCandless, Julia Y. Chan, Philip W. Adams, David P. Young, Naushad Ali, and Shane Stadler

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**Rapid Communication**

*Spin-12 Heisenberg  $J_1$ – $J_2$  antiferromagnet on the kagome lattice*

Yasir Iqbal, Didier Poilblanc, and Federico Becca

Phys. Rev. B **91**, 020402(R) (2015) – Published 9 January 2015

**Rapid Communication**

*Modulation of pure spin currents with a ferromagnetic insulator*

Estitxu Villamor, Miren Isasa, Saül Vélez, Amilcar Bedoya-Pinto, Paolo Vavassori, Luis E. Hueso, F. Sebastián Bergeret, and Fèlix Casanova

Phys. Rev. B **91**, 020403(R) (2015) – Published 9 January 2015

**Rapid Communication**

*Nontrivial order parameter in  $Sr_2IrO_4$*

Shreemoyee Ganguly, Oscar Grånäs, and Lars Nordström

Phys. Rev. B **91**, 020404(R) (2015) – Published 16 January 2015

**Rapid Communication**

*Photoinduced magnetization enhancement in two-dimensional weakly anisotropic Heisenberg magnets*

Antonio Caretta, Michiel C. Donker, Alexey O. Polyakov, Thomas T. M. Palstra, and Paul H. M. van Loosdrecht

Phys. Rev. B **91**, 020405(R) (2015) – Published 20 January 2015

**Rapid Communication**

*Scaling of temporal correlations in an attractive Tomonaga-Luttinger spin liquid*

K. Yu. Povarov, D. Schmidiger, N. Reynolds, R. Bewley, and A. Zheludev

Phys. Rev. B **91**, 020406(R) (2015) – Published 23 January 2015

**Rapid Communication**

*Strong competition between orbital ordering and itinerancy in a frustrated spinel vanadate*

J. Ma, J. H. Lee, S. E. Hahn, Tao Hong, H. B. Cao, A. A. Aczel, Z. L. Dun, M. B. Stone, W. Tian, Y. Qiu, J. R. D. Copley, H. D. Zhou, R. S. Fishman, and M. Matsuda

Phys. Rev. B **91**, 020407(R) (2015) – Published 26 January 2015

**Rapid Communication**

*Spin and orbital magnetic moment of reconstructed  $2\sqrt{2}\times 2\sqrt{2}\times R45^\circ$  magnetite(001)*

Laura Martín-García, Raquel Gargallo-Caballero, Matteo Monti, Michael Foerster, José F. Marco, Lucía Aballe, and Juan de la Figuera

Phys. Rev. B **91**, 020408(R) (2015) – Published 26 January 2015

**Rapid Communication**

*Pressure dependence of the magnetic order in CrAs: A neutron diffraction investigation*

L. Keller, J. S. White, M. Frontzek, P. Babkevich, M. A. Susner, Z. C. Sims, A. S. Sefat, H. M. Rønnow, and Ch. Rüegg

Phys. Rev. B **91**, 020409(R) (2015) – Published 29 January 2015

**Rapid Communication**

*Infinite geometric frustration in a cubic dipole cluster*

Johannes Schönke, Tobias M. Schneider, and Ingo Rehberg

Phys. Rev. B **91**, 020410(R) (2015) – Published 29 January 2015

**Rapid Communication**

*Macroscopic drift current in the inverse Faraday effect*

Riccardo Hertel and Manfred Fähnle

Phys. Rev. B **91**, 020411(R) (2015) – Published 29 January 2015

**Superfluidity and superconductivity**

**Rapid Communication**

*Mottness-induced healing in strongly correlated superconductors*

Shao Tang, E. Miranda, and V. Dobrosavljevic

Phys. Rev. B **91**, 020501(R) (2015) – Published 5 January 2015

**Rapid Communication**

*First-principles theory of electron-spin fluctuation coupling and superconducting instabilities in iron selenide*

Johannes Lischner, Timur Bazhiron, Allan H. MacDonald, Marvin L. Cohen, and Steven G. Louie

Phys. Rev. B **91**, 020502(R) (2015) – Published 21 January 2015

**Rapid Communication**

*Direct observation of nanoscale interface phase in the superconducting chalcogenide  $K_xFe_{2-y}Se_2$  with intrinsic phase separation*

A. Ricci, N. Poccia, B. Joseph, D. Innocenti, G. Campi, A. Zozulya, F. Westermeier, A. Schavkan, F. Coneri, A. Bianconi, H. Takeya, Y. Mizuguchi, Y. Takano, T. Mizokawa, M. Sprung, and N. L. Saini

Phys. Rev. B **91**, 020503(R) (2015) – Published 26 January 2015

**Rapid Communication**

*Antiferromagnetic ground state with pair-checkerboard order in FeSe*

Hai-Yuan Cao, Shiyu Chen, Hongjun Xiang, and Xin-Gao Gong

Phys. Rev. B **91**, 020504(R) (2015) – Published 26 January 2015

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*Two distinct kinetic regimes for the relaxation of light-induced superconductivity in  $La_{1.675}Eu_{0.2}Sr_{0.125}CuO_4$*

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#### **Rapid Communication**

*Simultaneous vanishing of nematic electronic state and structural orthorhombicity in  $\text{NaFe}_{1-x}\text{Co}_x\text{As}$  single crystals*

Qiang Deng, Jianzhong Liu, Jie Xing, Huan Yang, and Hai-Hu Wen

Phys. Rev. B **91**, 020508(R) (2015) – Published 30 January 2015

## ARTICLES

Structure, structural phase transitions, mechanical properties, defects

*Polarization switching and high piezoelectric response in Sn-modified  $\text{BaTiO}_3$*

Ajay Kumar Kalyani, Hari Krishnan, Arijit Sen, Anatoliy Senyshyn, and Rajeev Ranjan

Phys. Rev. B **91**, 024101 (2015) – Published 5 January 2015

*Neutron holography and diffuse scattering of palladium hydride*

Kouichi Hayashi, Kenji Ohoyama, Shin-ichi Orimo, Hideyuki Takahashi, and Kaoru Shibata

Phys. Rev. B **91**, 024102 (2015) – Published 7 January 2015

*First-principles modeling of quantum nuclear effects and atomic interactions in solid  $\text{He}_4$  at high pressure*

Claudio Cazorla and Jordi Boronat

Phys. Rev. B **91**, 024103 (2015) – Published 7 January 2015

*Nature of ferroelectric-paraelectric phase transition and origin of negative thermal expansion in  $\text{PbTiO}_3$*

Huazhi Fang, Yi Wang, Shunli Shang, and Zi-Kui Liu

Phys. Rev. B **91**, 024104 (2015) – Published 9 January 2015

*Quantitative modeling of the equilibration of two-phase solid-liquid Fe by atomistic simulations on diffusive time scales*

Ebrahim Asadi, Mohsen Asle Zaeem, Sasan Nouranian, and Michael I. Baskes

Phys. Rev. B **91**, 024105 (2015) – Published 12 January 2015

*Special quasirandom structure in heterovalent ionic systems*

Atsuto Seko and Isao Tanaka

Phys. Rev. B **91**, 024106 (2015) – Published 15 January 2015

*Pressure, relaxation volume, and elastic interactions in charged simulation cells*

Fabien Bruneval, Céline Varvenne, Jean-Paul Crocombette, and Emmanuel Clouet

Phys. Rev. B **91**, 024107 (2015) – Published 21 January 2015

*Phase stability of ternary fcc and bcc Fe-Cr-Ni alloys*

Jan S. Wróbel, Duc Nguyen-Manh, Mikhail Yu. Lavrentiev, Marek Muzyk, and Sergei L. Dudarev

Phys. Rev. B **91**, 024108 (2015) – Published 23 January 2015

*Lattice vacancies responsible for the linear dependence of the low-temperature heat capacity of insulating materials*

Jacob M. Schliesser and Brian F. Woodfield

Phys. Rev. B **91**, 024109 (2015) – Published 29 January 2015

Inhomogeneous, disordered, and partially ordered systems

*From local to global ground states in Ising spin glasses*

Iliia Zintchenko, Matthew B. Hastings, and Matthias Troyer

Phys. Rev. B **91**, 024201 (2015) – Published 5 January 2015

*Hierarchical spin glasses in a magnetic field: A renormalization-group study*

Michele Castellana and Carlo Barbieri

Phys. Rev. B **91**, 024202 (2015) – Published 26 January 2015

*Surface transport coefficients for three-dimensional topological superconductors*

Hong-Yi Xie, Yang-Zhi Chou, and Matthew S. Foster

Phys. Rev. B **91**, 024203 (2015) – Published 30 January 2015

Dynamics, dynamical systems, lattice effects

*Effective temperature from fluctuation-dissipation theorem in systems with bipartite eigenmode entanglement*

T. S. Bortolin and A. Iucci

Phys. Rev. B **91**, 024301 (2015) – Published 8 January 2015

*Temperature-dependent thermoelectric properties of individual silver nanowires*

D. Kojda, R. Mitdank, M. Handweg, A. Mogilatenko, M. Albrecht, Z. Wang, J. Ruhhammer, M. Kroener, P. Woias, and S. F. Fischer

Phys. Rev. B **91**, 024302 (2015) – Published 29 January 2015



## Magnetism

### *Magnetic order without tetragonal-symmetry-breaking in iron arsenides: Microscopic mechanism and spin-wave spectrum*

Xiaoyu Wang, Jian Kang, and Rafael M. Fernandes

Phys. Rev. B **91**, 024401 (2015) – Published 5 January 2015

### *Temperature dependence of spin diffusion length and spin Hall angle in Au and Pt*

Miren Isasa, Estitxu Villamor, Luis E. Hueso, Martin Gradhand, and Fèlix Casanova

Phys. Rev. B **91**, 024402 (2015) – Published 5 January 2015

### *Critical behavior of the single-crystal helimagnet MnSi*

Lei Zhang, Dirk Menzel, Chiming Jin, Haifeng Du, Min Ge, Changjin Zhang, Li Pi, Mingliang Tian, and Yuheng Zhang

Phys. Rev. B **91**, 024403 (2015) – Published 6 January 2015

### *Resonant spin tunneling in randomly oriented nanospheres of Mn<sub>12</sub> acetate*

S. Lendínez, R. Zarzuela, J. Tejada, M. W. Terban, S. J. L. Billinge, J. Espin, I. Imaz, D. MasPOCH, and E. M. Chudnovsky

Phys. Rev. B **91**, 024404 (2015) – Published 6 January 2015

### *Magnetoelectric properties of epitaxial Fe<sub>3</sub>O<sub>4</sub> thin films on (011) PMN-PT piezosubstrates*

Alexander Tkach, Mehrdad Baghaie Yazdi, Michael Foerster, Felix Büttner, Mehran Vafaei, Maximilian Fries, and Mathias Kläui

Phys. Rev. B **91**, 024405 (2015) – Published 7 January 2015

### *Manipulating magnetism in La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> via piezostrain*

J. Heidler, C. Piamonteze, R. V. Chopdekar, M. A. Uribe-Laverde, A. Alberca, M. Buzzi, A. Uldry, B. Delley, C. Bernhard, and F. Nolting

Phys. Rev. B **91**, 024406 (2015) – Published 7 January 2015

### *Competing Jahn-Teller distortions and ferrimagnetic ordering in the geometrically frustrated system Ni<sub>1-x</sub>Cu<sub>x</sub>Cr<sub>2</sub>O<sub>4</sub>*

M. Reehuis, M. Tovar, D. M. Többens, P. Pattison, A. Hoser, and B. Lake

Phys. Rev. B **91**, 024407 (2015) – Published 8 January 2015

### *Magnetism and superconductivity in U<sub>2</sub>Pt<sub>x</sub>Rh<sub>1-x</sub>C<sub>2</sub>*

N. Wakeham, Ni Ni, E. D. Bauer, J. D. Thompson, E. Tegtmeier, and F. Ronning

Phys. Rev. B **91**, 024408 (2015) – Published 9 January 2015

### *Temperature-dependent magnetic properties of ferrimagnetic DyCo<sub>3</sub> alloy films*

Kai Chen, Dieter Lott, Florin Radu, Fadi Choueikani, Edwige Otero, and Philippe Ohresser

Phys. Rev. B **91**, 024409 (2015) – Published 9 January 2015

*Quantum phase diagram of the  $S=12$  triangular-lattice antiferromagnet  $Ba_3CoSb_2O_9$*

G. Koutroulakis, T. Zhou, Y. Kamiya, J. D. Thompson, H. D. Zhou, C. D. Batista, and S. E. Brown

Phys. Rev. B **91**, 024410 (2015) – Published 12 January 2015

*Magnetoresistance in a doped Mott-Hubbard system:  $RTiO_3$*

T. Ito, Y. Shimada, and T. Katsufuji

Phys. Rev. B **91**, 024411 (2015) – Published 12 January 2015

*Magnetic properties and magnetic structures of  $TbBaMn_2O_{5.75}$ : Possible observation of unconventional polaron trimers*

Graham King, Anna Llobet, and Susana Garcia-Martin

Phys. Rev. B **91**, 024412 (2015) – Published 12 January 2015

*Antiferromagnetism of  $Zn_2VO(PO_4)_2$  and the dilution with  $Ti^{4+}$*

A. Yogi, N. Ahmed, R. Nath, A. A. Tsirlin, S. Kundu, A. V. Mahajan, J. Sichelschmidt, B. Roy, and Y. Furukawa

Phys. Rev. B **91**, 024413 (2015) – Published 14 January 2015

*Anomalous weak ferromagnetism in the magnetically frustrated system  $R_{1-x}Y_xB_4$  ( $R=Tb$  and  $Dy$ )*

B. Y. Kang, J. Y. Kim, H. Y. Choi, and B. K. Cho

Phys. Rev. B **91**, 024414 (2015) – Published 15 January 2015

*Quantum phase transition as an interplay of Kitaev and Ising interactions*

A. Langari, A. Mohammad-Aghaei, and R. Haghshenas

Phys. Rev. B **91**, 024415 (2015) – Published 15 January 2015

*Frustration and Dzyaloshinsky-Moriya anisotropy in the kagome francisites  $Cu_3Bi(SeO_3)_2O_2X$  ( $X = Br, Cl$ )*

Ioannis Rousochatzakis, Johannes Richter, Ronald Zinke, and Alexander A. Tsirlin

Phys. Rev. B **91**, 024416 (2015) – Published 16 January 2015

*Spin transport and spin conversion in compound semiconductor with non-negligible spin-orbit interaction*

Akiyori Yamamoto, Yuichiro Ando, Teruya Shinjo, Tetsuya Uemura, and Masashi Shiraishi

Phys. Rev. B **91**, 024417 (2015) – Published 20 January 2015

*Two-dimensional skyrmion lattice in a nanopatterned magnetic film*

M. V. Sapozhnikov and O. L. Ermolaeva

Phys. Rev. B **91**, 024418 (2015) – Published 20 January 2015

*Magnetostructural relationship in the tetrahedral spin-chain oxide CsCoO<sub>2</sub>*

N. Z. Ali, R. C. Williams, F. Xiao, S. J. Clark, T. Lancaster, S. J. Blundell, D. V. Sheptyakov, and M. Jansen

Phys. Rev. B **91**, 024419 (2015) – Published 20 January 2015

*Equilibrium state of planar arrays of magnetic dipoles in the presence of exchange interaction*

Anatolij M. Shutyi, Svetlana V. Eliseeva, and Dmitrij I. Sementsov

Phys. Rev. B **91**, 024421 (2015) – Published 22 January 2015

*Lattice dynamics in spin-crossover nanoparticles through nuclear inelastic scattering*

Gautier Félix, Mirko Mikolasek, Haonan Peng, William Nicolazzi, Gábor Molnár, Aleksandr I. Chumakov, Lionel Salmon, and Azzedine Bousseksou

Phys. Rev. B **91**, 024422 (2015) – Published 22 January 2015

*Low-temperature ordered phases of the spin-1/2 XXZ chain system Cs<sub>2</sub>CoCl<sub>4</sub>*

O. Breunig, M. Garst, A. Rosch, E. Sela, B. Buldmann, P. Becker, L. Bohatý, R. Müller, and T. Lorenz

Phys. Rev. B **91**, 024423 (2015) – Published 28 January 2015

**Superfluidity and superconductivity**

*Magnetic and structural transitions in La<sub>0.4</sub>Na<sub>0.6</sub>Fe<sub>2</sub>As<sub>2</sub> single crystals*

J.-Q. Yan, S. Nandi, B. Saparov, P. Čermák, Y. Xiao, Y. Su, W. T. Jin, A. Schneidewind, Th. Brückel, R. W. McCallum, T. A. Lograsso, B. C. Sales, and D. G. Mandrus

Phys. Rev. B **91**, 024501 (2015) – Published 5 January 2015

*Heat transport in RbFe<sub>2</sub>As<sub>2</sub> single crystals: Evidence for nodal superconducting gap*

Z. Zhang, A. F. Wang, X. C. Hong, J. Zhang, B. Y. Pan, J. Pan, Y. Xu, X. G. Luo, X. H. Chen, and S. Y. Li

Phys. Rev. B **91**, 024502 (2015) – Published 6 January 2015

*Superfluid nanomechanical resonator for quantum nanofluidics*

X. Rojas and J. P. Davis

Phys. Rev. B **91**, 024503 (2015) – Published 13 January 2015

**Editors' Suggestion**

*Competing superconducting and magnetic order parameters and field-induced magnetism in electron-doped Ba(Fe<sub>1-x</sub>Co<sub>x</sub>)<sub>2</sub>As<sub>2</sub>*

J. Larsen, B. Mencia Uranga, G. Stieper, S. L. Holm, C. Bernhard, T. Wolf, K. Lefmann, B. M. Andersen, and C. Niedermayer

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### *Supercurrent dephasing by electron-electron interactions*

Andrew G. Semenov and Andrei D. Zaikin

Phys. Rev. B **91**, 024505 (2015) – Published 14 January 2015

### *Spin Hanle effect in mesoscopic superconductors*

M. Silaev, P. Virtanen, T. T. Heikkilä, and F. S. Bergeret

Phys. Rev. B **91**, 024506 (2015) – Published 14 January 2015

### *Sign reversal of the Hall response in a crystalline superconductor*

Erez Berg, Sebastian D. Huber, and Netanel H. Lindner

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