

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 102, NUMBER 5

AUGUST 2020-1(I)

Magnetic field induced global paramagnetic response in a Fulde-Ferrell superconducting strip (<i>8 pages</i>)	054519
P. M. Marychev, V. D. Plastovets, and D. Yu. Vodolazov	
Linear dichroism infrared resonance in overdoped, underdoped, and optimally doped cuprate superconductors (<i>6 pages</i>)	054520
A. Mukherjee, J. Seo, M. M. Arik, H. Zhang, C. C. Zhang, T. Kirzhner, D. K. George, A. G. Markelz, N. P. Armitage, G. Koren, J. Y. T. Wei, and J. Cerne	

ERRATA

Erratum: Bulk photovoltaic effects in the presence of a static electric field [Phys. Rev. B 100 , 064301 (2019)] (<i>4 pages</i>)	059901(E)
Benjamin M. Fregoso	

Domes of T_c in single-band and multiband superconductors with finite-range attractive interactions (<i>12 pages</i>) . . . Nazim Boudjada, Finn Lasse Buessen, and Arun Paramakanti	054504
Suppression of superconducting parameters by correlated quasi-two-dimensional magnetic fluctuations (<i>15 pages</i>) A. E. Koshelev	054505
Theory of strain-induced magnetic order and splitting of T_c and T_{TRSB} in Sr_2RuO_4 (<i>8 pages</i>) Astrid T. Rømer, Andreas Kreisel, Marvin A. Müller, P. J. Hirschfeld, Ilya M. Eremin, and Brian M. Andersen	054506
Fractional Shapiro steps in resistively shunted Josephson junctions as a fingerprint of a skewed current-phase relationship (<i>9 pages</i>) B. Raes, N. Tubsrinuan, R. Sreedhar, D. S. Guala, R. Panghotra, H. Dausy, Clécio C. de Souza Silva, and J. Van de Vondel	054507
Constrained thermalization and topological superconductivity (<i>12 pages</i>) S. Nulty, J. Vala, D. Meidan, and G. Kells	054508
Ultrasound-induced generation of multielectron bubbles in liquid helium (<i>10 pages</i>) Neha Yadav, Yunhu Huang, and Ambarish Ghosh	054509
Superconducting fluctuations probed by the Higgs mode in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ thin films (<i>9 pages</i>) Kota Katsumi, Zhi Zhong Li, Hélène Raffy, Yann Gallais, and Ryo Shimano	054510
Elastoresistance measurements on $\text{CaKFe}_4\text{As}_4$ and $\text{KCa}_2\text{Fe}_4\text{As}_4\text{F}_2$ with the Fe site of C_{2v} symmetry (<i>7 pages</i>) . . . Taichi Terashima, Yoshitaka Matsushita, Hiroyuki Yamase, Naoki Kikugawa, Hideki Abe, Motoharu Imai, Shinya Uji, Shigeyuki Ishida, Hiroshi Eisaki, Akira Iyo, Kunihiro Kihou, Chul-Ho Lee, Teng Wang, and Gang Mu	054511
Deep learning of topological phase transitions from entanglement aspects (<i>8 pages</i>) Yuan-Hong Tsai, Meng-Zhe Yu, Yu-Hao Hsu, and Ming-Chiang Chung	054512
Microscopic description of surface superconductivity (<i>13 pages</i>) M. D. Croitoru, A. A. Shanenko, Y. Chen, A. Vagov, and J. Albino Aguiar	054513
Enhancing superconductivity of $\text{Y}_5\text{Rh}_6\text{Sn}_{18}$ by atomic disorder (<i>14 pages</i>) A. Ślebarski, M. Fijałkowski, P. Zajdel, M. M. Maśka, J. Deniszczuk, M. Zubko, O. Pavlosiuk, K. Sasmal, and M. B. Maple	054514
Orbital selectivity of layer-resolved tunneling in the iron-based superconductor $\text{Ba}_{0.6}\text{K}_{0.4}\text{Fe}_2\text{As}_2$ (<i>5 pages</i>) J.-X. Yin, X.-X. Wu, Jian Li, Zheng Wu, J.-H. Wang, C.-S. Ting, P.-H. Hor, X. J. Liang, C. L. Zhang, P. C. Dai, X. C. Wang, C. Q. Jin, G. F. Chen, J. P. Hu, Z.-Q. Wang, Ang Li, H. Ding, and S. H. Pan	054515
Vortex ice pattern evolution in a kagome nanostructured superconductor (<i>6 pages</i>) Xing-Hong Chen, Xiu-De He, An-Lei Zhang, Victor V. Moshchalkov, and Jun-Yi Ge	054516
Lightwave terahertz quantum manipulation of nonequilibrium superconductor phases and their collective modes (<i>17 pages</i>) M. Mootz, J. Wang, and I. E. Perakis	054517
Periodicity of superconducting shape resonances in thin films (<i>9 pages</i>) D. Valentinis and C. Berthod	054518

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 102, NUMBER 5

AUGUST 2020-1(I)

Anisotropic tensor renormalization group (7 pages)	054432
Daiki Adachi, Tsuyoshi Okubo, and Synge Todo	
Interface-induced enhanced magnetocaloric effect in an epitaxial $\text{CoFe}_2\text{O}_4/\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ heterostructure (18 pages)	054433
Abhisikta Barman, Subhashree Chatterjee, Jayjit Kr. Dey, Anuja Datta, and Devajyoti Mukherjee	
Magnetism of Nd_2O_3 single crystals near the Néel temperature (10 pages)	054434
Binod K. Rai, A. D. Christianson, G. Sala, M. B. Stone, Y. Liu, and A. F. May	
Magnon dispersion relations in the noncollinear antiferromagnet IrMn_3 (5 pages)	054435
S. M. Rezende, J. B. S. Mendes, D. S. Maior, J. E. Abrão, A. Azevedo, and R. L. Rodríguez-Suárez	
Phase diagram and topological order in the modulated XYZ chain with magnetic field (16 pages)	054436
Toplal Pandey and Gennady Y. Chitov	
Thermodynamic and transport properties in disordered Kitaev models (6 pages)	054437
Joji Nasu and Yukitoshi Motome	
Magnetoresistance in $\text{Fe}_{0.8}\text{Ga}_{0.2}$ thin films with magnetic stripes: The role of the three-dimensional magnetic structure (8 pages)	054438
B. Pianciola, S. Flewett, E. De Biasi, C. Hepburn, L. Lounis, M. Vázquez-Mansilla, M. Granada, M. Barturen, M. Eddrief, M. Sacchi, M. Marangolo, and J. Milano	
Magnetic skyrmions in cylindrical ferromagnetic nanostructures with chiral interactions (10 pages)	054439
D. Kechrakos, L. Tzannetou, and A. Patsopoulos	
Current fluctuations driven by ferromagnetic and antiferromagnetic resonance (10 pages)	054440
Arne Brataas	
Out-of-plane magnetic anisotropy engineered via band distortion in two-dimensional materials (6 pages)	054441
Li Yin and David S. Parker	
s - d model for local and nonlocal spin dynamics in laser-excited magnetic heterostructures (9 pages)	054442
M. Beens, R. A. Duine, and B. Koopmans	
Quantum-critical scaling properties of the two-dimensional random-singlet state (14 pages)	054443
Lu Liu, Wenan Guo, and Anders W. Sandvik	
Dynamics after quenches in one-dimensional quantum Ising-like systems (18 pages)	054444
Davide Rossini and Ettore Vicari	
Superfluidity and superconductivity	
Electron energy relaxation in disordered superconducting NbN films (15 pages)	054501
Mariia Sidorova, Alexej Semenov, Heinz-Wilhelm Hübers, Konstantin Ilin, Michael Siegel, Ilya Charaev, Maria Moshkova, Natalia Kaurova, Gregory N. Goltsman, Xiaofu Zhang, and Andreas Schilling	
Edge current and orbital angular momentum of chiral superfluids revisited (11 pages)	054502
Wenxing Nie, Wen Huang, and Hong Yao	
Spontaneous Nernst effect in the iron-based superconductor $\text{Fe}_{1+y}\text{Te}_{1-x}\text{Se}_x$ (11 pages)	054503
Lu Chen, Ziji Xiang, Colin Tinsman, Bin Lei, Xianhui Chen, G. D. Gu, and Lu Li	

(Continued)

Absolute crystal and magnetic chiralities in the langasite compound $\text{Ba}_3\text{NbFe}_3\text{Si}_2\text{O}_{14}$ determined by polarized neutron and x-ray scattering (<i>12 pages</i>)	054417
N. Qureshi, A. Bombardi, S. Picozzi, P. Barone, E. Lelièvre-Berna, X. Xu, C. Stock, D. F. McMorrow, A. Hearmon, F. Fabrizi, P. G. Radaelli, S.-W. Cheong, and L. C. Chapon	
Lattice and spin excitations of YFeO_3 : A Raman and density functional theory study (<i>9 pages</i>)	054418
Yu. S. Ponosov and D. Y. Novoselov	
Dynamics of antiferromagnetic skyrmions in the absence or presence of pinning defects (<i>7 pages</i>)	054419
Z. Jin, T. T. Liu, W. H. Li, X. M. Zhang, Z. P. Hou, D. Y. Chen, Z. Fan, M. Zeng, X. B. Lu, X. S. Gao, M. H. Qin, and J.-M. Liu	
Controlling symmetry of spin-orbit entangled pseudospin state through uniaxial strain (<i>4 pages</i>)	054420
Jong-Woo Kim, S. H. Chun, Y. Choi, B. J. Kim, M. H. Upton, and P. J. Ryan	
Spin-wave modes localized on isolated defects in a two-dimensional array of dipolarly coupled magnetic nanodots (<i>12 pages</i>)	054421
R. V. Verba, E. G. Galkina, V. S. Tiberkevich, A. N. Slavin, and B. A. Ivanov	
Dimensional crossover in spin Hall oscillators (<i>14 pages</i>)	054422
Andrew Smith, Kemal Sobotkiewich, Amanatullah Khan, Eric A. Montoya, Liu Yang, Zheng Duan, Tobias Schneider, Kilian Lenz, Jürgen Lindner, Kyongmo An, Xiaolin Li, and Ilya N. Krivorotov	
Short-range magnetic interactions and spin-glass behavior in the quasi-two-dimensional nickelate $\text{Pr}_4\text{Ni}_3\text{O}_8$ (<i>6 pages</i>)	054423
Shangxiong Huangfu, Zurab Guguchia, Denis Cheptiakov, Xiaofu Zhang, Hubertus Luetkens, Dariusz Jakub Gawryluk, Tian Shang, Fabian O. von Rohr, and Andreas Schilling	
Temperature-dependent spin polarization of Heusler Co_2MnSi from the disordered local-moment approach: Effects of atomic disordering and nonstoichiometry (<i>13 pages</i>)	054424
Kenji Nawa, Ivan Kurniawan, Keisuke Masuda, Yoshio Miura, Christopher E. Patrick, and Julie B. Staunton	
Identifying the origin of the nonmonotonic thickness dependence of spin-orbit torque and interfacial Dzyaloshinskii-Moriya interaction in a ferrimagnetic insulator heterostructure (<i>7 pages</i>)	054425
Shilei Ding, Lorenzo Baldrati, Andrew Ross, Zengyao Ren, Rui Wu, Sven Becker, Jinbo Yang, Gerhard Jakob, Arne Brataas, and Mathias Kläui	
Magnetic field tuning of low-energy spin dynamics in the single-atomic magnet $\text{Li}_2(\text{Li}_{1-x}\text{Fe}_x)\text{N}$ (<i>17 pages</i>)	054426
S. A. Bräuninger, A. Jesche, S. Kamusella, F. Seewald, M. Fix, R. Sarkar, A. A. Zvyagin, and H.-H. Klauss	
Gadolinium-implanted GaN studied by spin-polarized positron annihilation spectroscopy (<i>8 pages</i>)	054427
M. Mackawa, A. Miyashita, S. Sakai, and A. Kawasuso	
Magnetic properties and crystal field splitting of the rare-earth pyrochlore $\text{Er}_2\text{Ir}_2\text{O}_7$ (<i>11 pages</i>)	054428
Kristina Vlášková, Petr Proschek, Martin Diviš, Duc Le, Ross Harvey Colman, and Milan Klicpera	
 Magnon trap by chiral spin pumping (<i>8 pages</i>)	054429
Tao Yu, Hanchen Wang, Michael A. Sentef, Haiming Yu, and Gerrit E. W. Bauer	
Orbital selective spin waves in detwinned NaFeAs (<i>11 pages</i>)	054430
David W. Tam, Zhiping Yin, Yaofeng Xie, Weiye Wang, M. B. Stone, D. T. Adroja, H. C. Walker, Ming Yi, and Pengcheng Dai	

(Continued)

 Antichiral spin order, its soft modes, and their hybridization with phonons in the topological semimetal Mn_3Ge (15 pages)	054403
Y. Chen, J. Gaudet, S. Dasgupta, G. G. Marcus, J. Lin, T. Chen, T. Tomita, M. Ikhlas, Y. Zhao, W. C. Chen, M. B. Stone, O. Tchernyshyov, S. Nakatsuji, and C. Broholm	
Charge disproportionation and interchange transitions in twelve-layer BaFeO_3 (7 pages)	054404
Zhenhong Tan, Fabio Denis Romero, Takashi Saito, Masato Goto, Midori Amano Patino, Anucha Koedtrud, Yoshihisa Kosugi, Wei-Tin Chen, Yu-Chun Chuang, Hwo-Shuenn Sheu, J. Paul Attfield, and Yuichi Shimakawa	
Suppression of magnetic ordering in Fe-deficient $\text{Fe}_{3-x}\text{GeTe}_2$ from application of pressure (10 pages)	054405
Dante J. O'Hara, Zachary E. Brubaker, Ryan L. Stillwell, Earl F. O'Bannon, Alexander A. Baker, Daniel Weber, Leonardus Bimo Bayu Aji, Joshua E. Goldberger, Roland K. Kawakami, Rena J. Zieve, Jason R. Jeffries, and Scott K. McCall	
Giant magnetic anisotropy energy and long coherence time of uranium substitution on defected $\text{Al}_2\text{O}_3(0001)$ (6 pages)	054406
Jie Li, Lei Gu, and Ruqian Wu	
Spin-phonon interaction induces tunnel splitting in single-molecule magnets (6 pages)	054407
Kilian Irländer and Jürgen Schnack	
Pyrochlore $S = \frac{1}{2}$ Heisenberg antiferromagnet at finite temperature (20 pages)	054408
Robin Schäfer, Imre Hagymási, Roderich Moessner, and David J. Luitz	
Metamagnetic transitions and magnetoelectric responses in the chiral polar helimagnet $\text{Ni}_2\text{InSbO}_6$ (8 pages)	054409
Y. Araki, T. Sato, Y. Fujima, N. Abe, M. Tokunaga, S. Kimura, D. Morikawa, V. Ukleev, Y. Yamasaki, C. Tabata, H. Nakao, Y. Murakami, H. Sagayama, K. Ohishi, Y. Tokunaga, and T. Arima	
Electrical detection of the inverse Edelstein effect on the surface of SmB_6 (7 pages)	054410
Jehyun Kim, Chaun Jang, Xiangfeng Wang, Johnpierre Paglione, Seokmin Hong, Shehrin Sayed, Dongwon Chun, and Dohun Kim	
Intrinsic ferromagnetism in atomically thin two-dimensional organic-inorganic van der Waals crystals (7 pages)	054411
Dipayan Sen, Gour Jana, Nitin Kaushal, Anamitra Mukherjee, and Tanusri Saha-Dasgupta	
 Domain switching and exchange bias control by electric field in the multiferroic conical magnet Mn_2GeO_4 (6 pages)	054412
J. K. H. Fischer, H. Ueda, and T. Kimura	
Magnetoelectric coupling in the mixed erythrosiderite $[(\text{NH}_4)_{1-x}\text{K}_x]_2[\text{FeCl}_5(\text{H}_2\text{O})]$ (11 pages)	054413
Daniel Brüning, Tobias Fröhlich, Malte Langenbach, Thomas Leich, Martin Meven, Petra Becker, Ladislav Bohatý, Markus Grüninger, Markus Braden, and Thomas Lorenz	
Theoretical study on the anomalies of the magnetic susceptibility in the honeycomb lattice compound $\text{Na}_2\text{Co}_2\text{TeO}_6$ (9 pages)	054414
Yuliang Mao and Yize Li	
 Einstein-de Haas effect at radio frequencies in and near magnetic equilibrium (13 pages)	054415
K. Mori, M. G. Dunsmore, J. E. Losby, D. M. Jenson, M. Belov, and M. R. Freeman	
Bloch oscillations of backward volume magnetostatic spin waves (6 pages)	054416
A. S. Laurenson, J. Bertolotti, and V. V. Kruglyak	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 102, NUMBER 5

AUGUST 2020-1(I)

Higher-order level spacings in random matrix theory based on Wigner's conjecture (7 pages)	054202
Wen-Jia Rao	
Control of thermoelectric properties in Mn-substituted Fe ₂ TiSi epilayers (7 pages)	054203
Y. Shimanuki, S. Yamada, A. Masago, T. Ishibe, K. Kudo, Y. Nakamura, and K. Hamaya	
Statistically related many-body localization in the one-dimensional anyon Hubbard model (9 pages)	054204
Guo-Qing Zhang, Dan-Wei Zhang, Zhi Li, Z. D. Wang, and Shi-Liang Zhu	
Disorder-induced electron and hole trapping in amorphous TiO ₂ (11 pages)	054205
David Mora-Fonz, Moloud Kaviani, and Alexander L. Shluger	
 Experimental probes of Stark many-body localization (10 pages)	054206
S. R. Taylor, M. Schulz, F. Pollmann, and R. Moessner	
Averaged cluster approach to including chemical short-range order in KKR-CPA (8 pages)	054207
Vishnu Raghuraman, Yang Wang, and Michael Widom	
Static density response function studied by inelastic x-ray scattering: Friedel oscillations in solid and liquid Li (7 pages)	054208
Toru Hagiya, Kazuhiro Matsuda, Nozomu Hiraoka, Yukio Kajihara, Koji Kimura, and Masanori Inui	
Band engineering of Dirac cones in iron chalcogenides (9 pages)	054209
Lars Lauke, Rolf Heid, Michael Merz, Thomas Wolf, Amir-Abbas Haghighirad, and Jörg Schmalian	
Neutron Brillouin scattering and <i>ab initio</i> simulation study of the collective dynamics of liquid silver (19 pages)	054210
Eleonora Guarini, Alessio De Francesco, Ubaldo Bafle, Alessio Laloni, Beatriz G. del Rio, David J. González, Luis E. González, Fabrizio Barocchi, and Ferdinando Formisano	
Dynamics, dynamical systems, lattice effects:	
Compact localized states and localization dynamics in the dice lattice (13 pages)	054301
S. M. Zhang and L. Jin	
Measurement-induced quantum criticality under continuous monitoring (14 pages)	054302
Yohei Fuji and Yuto Ashida	
Out-of-time-ordered correlator in non-Hermitian quantum systems (7 pages)	054303
Liang-Jun Zhai and Shuai Yin	
Dynamics of interacting particle systems: Modeling implications of the repulsive interactions and experiments on magnetic prototypes (7 pages)	054304
Weijian Jiao and Stefano Gonella	
Magnetism	
Superconductivity emerging upon Se doping of the quantum spin liquid 1T-TaS ₂ (9 pages)	054401
Izidor Benedičič, Nejc Janša, Marion van Midden, Peter Jeglič, Martin Klanjšek, Erik Zupanič, Zvonko Jagličič, Petra Šutar, Peter Prelovšek, Dragan Mihailovič, and Denis Arčon	
Influence of structure and cation distribution on magnetic anisotropy and damping in Zn/Al doped nickel ferrites (11 pages)	054402
Julia Lumetzberger, Martin Buchner, Santa Pile, Verena Ney, Wolfgang Gaderbauer, Niéli Daffé, Marcos V. Moro, Daniel Primetzhofer, Kilian Lenz, and Andreas Ney	

(Continued)

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

- Exchange-correlation functional challenges in modeling quaternary chalcogenides (*11 pages*) 054101
Robert B. Wexler, Gopalakrishnan Sai Gautam, and Emily A. Carter
- Compression-induced solidification of shock-melted cerium (*6 pages*) 054102
Christopher T. Seagle, Michael P. Desjarlais, Andrew J. Porwitzky, and Brian J. Jensen
- Tailoring the phase transition and electron-phonon coupling in $1T'$ -MoTe₂ by charge doping:
A Raman study (*12 pages*) 054103
Suvodeep Paul, Saheb Karak, Manasi Mandal, Ankita Ram, Sourav Marik, R. P. Singh, and Surajit Saha
- ☞ Behavior of Sm in the boron cage of Sm-doped RB₆ ($R = \text{Yb, La}$) observed by multiple-wavelength neutron
holography (*10 pages*) 054104
Shoichi Uechi, Kenji Ohoyama, Yohei Fukumoto, Yuki Kanazawa, Naohisa Happe, Masahide Harada,
Yasuhiro Inamura, Kenichi Oikawa, Wataru Matsuhira, Fumitoshi Iga, Artoni Kevin R. Ang,
and Kouichi Hayashi
- Evolution of the structural transition in Mo_{1-x}W_xTe₂ (*9 pages*) 054105
John A. Schneeloch, Yu Tao, Chunruo Duan, Masaaki Matsuda, Adam A. Aczel, Jaime A. Fernandez-Baca,
Guangyong Xu, Jörg C. Neufeind, Junjie Yang, and Despina Louca
- Strong variant selection observed in the α - ϵ martensitic transition of iron under quasihydrostatic compression
along $[111]_{\alpha}$ (*10 pages*) 054106
Naoki Ishimatsu, Daiki Miyashita, and Saori I. Kawaguchi
- Machine learning topological phases in real space (*13 pages*) 054107
N. L. Holanda and M. A. R. Griffith
- Nonmonotonous atomic motions in metallic glasses (*9 pages*) 054108
P. Luo, M. X. Li, H. Y. Jiang, R. Zhao, F. Zontone, Q. S. Zeng, H. Y. Bai, B. Ruta, and W. H. Wang
- Brillouin scattering of V₂O₅ and Sn-intercalated V₂O₅ (*7 pages*) 054109
Bryan W. Reed, Vicky Huynh, Catherine Tran, and Kristie J. Koski

Inhomogeneous, disordered, and partially ordered systems

- Wave propagation in a strongly disordered one-dimensional phononic lattice supporting rotational waves (*9 pages*) 054201
A. Ngapasare, G. Theocharis, O. Richoux, Ch. Skokos, and V. Achilleos

