PHYSICAL REVIEW B™

For editorial and subscription correspondence, please see inside front cover
(ISSN: 2469-9950)

PERIODICALS
Postmaster send address changes to:

APS Subscription Services
P.O. Box 41
Annapolis Junction, MD 20701

THIRD SERIES, VOLUME 112, NUMBER 3 *CONTENTS* **JULY 2025-15(I)**

ARTICLES

Electronic structure and strongly correlated systems

Optimal symbolic construction of matrix product operators and tree tensor network operators *(18 pages)* 035101
Hazar Çakır, Richard M. Milbradt, and Christian B. Mendl

Topological properties of the [110] SnTe nanowires *(14 pages)* 035102
Alicja Kawala and Wojciech Brzezicki

Steady-state dynamical mean field theory based on influence functional matrix product states *(21 pages)* 035103
Mithilesh Nayak, Julian Thoenniss, Michael Sonner, Dmitry A. Abanin, and Philipp Werner

Left-left-right-right magnetic order in spin-$\frac{1}{2}$ Kitaev-Heisenberg chain *(20 pages)* 035104
Wang Yang, Chao Xu, Shicheng Ma, Alberto Nocera, and Ian Affleck

$\mathbb{Z}_2$ gauging and self-dualities of the XX model and its cousins *(11 pages)* 035105
Lei Su

Effects of chemical disorder and spin-orbit coupling on the electronic-structure and Fermi-surface topology of YbSb-based monopnictides *(11 pages)* 035106
Maxwell Eibert, Christopher Burgio, Tyler Del Rose, Prince Sharma, Yaroslav Mudryk, and Prashant Singh

Altermagnetism and beyond in the t-t'-δ Fermi-Hubbard model *(13 pages)* 035108
Saisai He, Jize Zhao, Hong-Gang Luo, and Shijie Hu

Chiral symmetry and magnetism in a three-dimensional kagome lattice: $R\mathrm{Pt}_2\mathrm{B}$ prototype crystals (R = La and Nd) *(11 pages)* 035109
C. E. Ardila-Gutiérrez, D. Torres-Amaris, Rafael González-Hernández, Aldo. H. Romero, and A. C. Garcia-Castro

Cusplike feature in the Hall resistivity of a uniaxial ferromagnet in nonorthogonal Hall geometry *(5 pages)* 035110
Banik Rai and Nitesh Kumar

Charge transport limited by nonlocal electron-phonon interaction. I. Hierarchical equations of motion approach *(23 pages)* 035111
Veljko Janković

Charge transport limited by nonlocal electron-phonon interaction. II. Numerically exact quantum dynamics in the slow-phonon regime *(14 pages)* 035112
Veljko Janković

(Continued)

2469-9950(20250715)112:3;1-7

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 112, NUMBER 3** **JULY 2025-15(I)**

℘ Coadjoint-orbit bosonization of a Fermi surface in a weak magnetic field *(14 pages)* 035113
Mengxing Ye and Yuxuan Wang

Non-Hermitian glide-time symmetry: Topology and dynamics *(12 pages)* 035114
Li-Wei Wang and Jian-Hua Jiang

Discrete scale invariance in topological semimetals *(6 pages)* 035115
Haiwen Liu, Hua Jiang, Ziqiang Wang, Robert Joynt, and X. C. Xie

Symmetry-adapted closest Wannier modeling based on complete multipole basis set *(21 pages)* 035116
Rikuto Oiwa, Akane Inda, Satoru Hayami, Takuya Nomoto, Ryotaro Arita, and Hiroaki Kusunose

Condensate ground states of hardcore bosons induced by an array of impurities *(9 pages)* 035117
J. Y. Liu-Sun, E. S. Ma, and Z. Song

Interplay of superconducting, metallic, and crystalline states of composite fermions at $\nu = \frac{1}{6}$ in wide quantum wells *(12 pages)* 035118
Ajit C. Balram, Anirban Sharma, and J. K. Jain

Detection of two-dimensional symmetry protected topological order with partial symmetries *(19 pages)* 035119
Alex Turzillo, Naren Manjunath, and José Garre-Rubio

Universal entanglement correction induced by relevant deformations at the quantum critical point *(8 pages)* 035120
Rui-Zhen Huang and Chen Peng

Hall angle of a spatially random vector model *(14 pages)* 035121
Yi-Li Wang, Young-Kwon Han, Xian-Hui Ge, and Sang-Jin Sin

Direct observation of Dirac fermion and surface states in $LaRhIn_5$ *(8 pages)* 035122
Yuzhe Wang, Tongrui Li, Rui Xu, Jianghao Yao, Sen Liao, Zhengtai Liu, Dawei Shen, Yongjun Zhang, Qiuyun Chen, Yilin Wang, Juan Jiang, and Donglai Feng

℘ A quantum cellular automaton for every symmetry protected topological phase *(19 pages)* 035123
Lukasz Fidkowski, Jeongwan Haah, and Matthew B. Hastings

Dynamic critical exponents as an emergent property at interacting topological quantum critical points *(6 pages)* 035124
Fan Yang, Zheng-Cheng Gu, and Fei Zhou

Quench dynamics of stripes and phase separation in the two-dimensional t-J model *(10 pages)* 035125
Luke Staszewski and Alexander Wietek

Pressure-induced orbital reordering in Na_2CuF_4 *(8 pages)* 035126
Craig I. Hiley, Catriona A. Crawford, Craig L. Bull, Nicholas P. Funnell, Urmimala Dey, Nicholas C. Bristowe, Richard I. Walton, and Mark S. Senn

Correlations, spectra, and entanglement transitions in ensembles of matrix product states *(9 pages)* 035127
Hugo Lóio, Guillaume Cecile, Sarang Gopalakrishnan, Guglielmo Lami, and Jacopo De Nardis

Disorder-induced spin excitation continuum and spin-glass ground state in the inverse spinel $CuGa_2O_4$ *(10 pages)* 035128
Zhentao Huang, Zhijun Xu, Shuaiwei Li, Qingchen Duan, Junbo Liao, Song Bao, Yanyan Shangguan, Bo Zhang, Hao Xu, Shufan Cheng, Zihang Song, Shuai Dong, Maofeng Wu, M. B. Stone, Yiming Qiu, Ruidan Zhong, Guangyong Xu, Zhen Ma, G. D. Gu, J. M. Tranquada, and Jinsheng Wen

(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 112, NUMBER 3** **JULY 2025-15(I)**

℘ Textured exciton insulators *(29 pages)* 035129
Yves H. Kwan, Ziwei Wang, Glenn Wagner, Steven H. Simon, S. A. Parameswaran, and Nick Bultinck

℘ Chern-textured exciton insulators with valley spiral order in moiré materials *(15 pages)* 035130
Ziwei Wang, Yves H. Kwan, Glenn Wagner, Steven H. Simon, Nick Bultinck, and S. A. Parameswaran

Optical absorption and luminescence of α-LiV_2O_5 from the Bethe-Salpeter equation *(8 pages)* 035132
Claudio Garcia and Walter R. L. Lambrecht

Probing the superconducting gap of the kagome-lattice superconductor $LaRu_3Si_2$ *(6 pages)* 035133
Vuong Thi Anh Hong, Honghong Wang, Seung-Yeop Paek, Jaegu Song, Seokmin Choi, Hanoh Lee, Harim Jang, Samreen Rashid, Soon-Gil Jung, and Tuson Park

Asymmetric real topology of conduction and valence bands *(9 pages)* 035134
J. X. Dai, Chen Zhang, and Y. X. Zhao

Refining the two-band model for highly compensated semimetals using thermoelectric coefficients *(8 pages)* 035135
Ian A. Leahy, Andrew C. Treglia, Gang Cao, Brian Skinner, and Minhyea Lee

Dispersion of neutral collective modes in partonic fractional quantum Hall states and its applications to paired states of composite fermions *(18 pages)* 035136
Koyena Bose and Ajit C. Balram

Surface effects in x-ray absorption spectra of lanthanides: Focus on strongly correlated cerium materials *(9 pages)* 035137
D. Yu. Usachov, K. A. Bokai, G. Poelchen, V. S. Stolyarov, A. V. Fedorov, K. Kliemt, S. Khim, N. Caroca-Canales, C. Krellner, and D. V. Vyalikh

Composition-dependent ultrafast luminescence in Cu-Ni alloys: Combined experimental and *ab initio* study *(6 pages)* 035138
Tohru Suemoto, Haruki Morino, Shota Ono, Tsuyoshi Okuno, Takeshi Suzuki, Kozo Okazaki, Shuntaro Tani, and Yohei Kobayashi

Large ferromagnetic-like band splitting in ultrathin SmC_6 films *(8 pages)* 035139
Hao Zheng, Yifu Xu, Guowei Yang, Ze Pan, Yi Wu, Yuan Zheng, Tulai Sun, Jiefeng Cao, Yi-feng Yang, Ming Shi, Chao Cao, and Yang Liu

Resonant $4f$ photoemission from lanthanides at the $4d$ edge: Analysis for individual $|M_J\rangle$ states *(12 pages)* 035140
D. Yu. Usachov, K. Kliemt, C. Krellner, V. S. Stolyarov, G. Poelchen, and D. V. Vyalikh

Time-dependent density functional theory simulation for analyzing the neutralization process of hydrogen ions injected onto tungsten surfaces *(10 pages)* 035141
Yuto Toda, Arimichi Takayama, and Atsushi M. Ito

Effects of Ru doping on the magnetism of $Ag_3LiIr_2O_6$: A candidate Kitaev quantum spin liquid *(7 pages)* 035142
Sanjay Bachhar, M. Baenitz, John Wilkinson, and A. V. Mahajan

Nonlinear Hall effect in bilayer WTe_2 induced by strong laser fields *(12 pages)* 035143
M. Umar Farooq, Arqum Hashmi, Mizuki Tani, Kazuhiro Yabana, Kenichi L. Ishikawa, Li Huang, and Tomohito Otobe

Charge creation via quantum tunneling in one-dimensional Mott insulators: A numerical study of the extended Hubbard model *(14 pages)* 035144
Thomas Hansen, Lars Bojer Madsen, and Yuta Murakami

(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 112, NUMBER 3** **JULY 2025-15(I)**

Fractionally quantized electric polarization and discrete shift of crystalline fractional Chern insulators *(13 pages)* 035145
Yuxuan Zhang and Maissam Barkeshli

Magnetic-field-tuned randomness in inhomogeneous altermagnets *(20 pages)* 035146
Anzumaan R. Chakraborty, Jörg Schmalian, and Rafael M. Fernandes

Crystalline invariants of fractional Chern insulators *(16 pages)* 035147
Ryohei Kobayashi, Yuxuan Zhang, Naren Manjunath, and Maissam Barkeshli

Bosonized one-dimensional quantum systems through enhanced event-chain Monte Carlo *(18 pages)* 035148
Oscar Bouverot-Dupuis, Alberto Rosso, and Manon Michel

X-ray linear dichroism in $Ti_3C_2T_Z$ MXenes *(7 pages)* 035149
Thierry Ouisse, Hanna Pazniak, Fabrice Wilhelm, Aditya Sharma, Serge Quessada, Jesus Gonzalez-Julian, and Andrei Rogalev

Signatures of orbital order and disorder in fluoroperovskites with t_{2g} electronic degeneracies *(8 pages)* 035150
C. A. Crawford, C. I. Hiley, J. Gainza, C. Ritter, R. I. Walton, and M. S. Senn

Tuning incommensurate charge order in $Ba_{1-x}Sr_xAl_4$ and $Ba_{1-y}Eu_yAl_4$ *(9 pages)* 035151
Prathum Saraf, Eleanor M. Clements, Danila Sokratov, Shanta Saha, Peter Zavalij, Thomas W. Heitmann, Jeffrey W. Lynn, Camille Bernal-Choban, Dipanjan Chaudhuri, Caitlin S. Kengle, Yue Su, Simon Bettler, Nathan Manning, Peter Abbamonte, Sananda Biswas, Roser Valentí, and Johnpierre Paglione

Pure spin and orbital bulk photovoltaic effect in topological screw dislocations *(9 pages)* 035152
Mengtong Yang, Chunmei Zhang, and Jian Zhou

Shubnikov–de Haas oscillations reaching the quantum limit in two-dimensional electron systems at $SrTiO_3$ (111) interfaces *(9 pages)* 035153
Ziqiao Wang, Autumn Heltman, Shalini Kumari, Lunhui Hu, Zhu Lin, Rojin Taheri, Leixin Miao, Nasim Alem, Lin Jiao, Shalinee Chikara, Alexey Suslov, John Singleton, Fedor Balakirev, Chaoxing Liu, and Qi Li

Higher Berry curvature from matrix product states *(13 pages)* 035154
Ken Shiozaki, Niclas Heinsdorf, and Shuhei Ohyama

Classification of mass terms in kagome semimetals *(14 pages)* 035155
Simone Ciceri, Matteo Massaro, and Lars Fritz

Satellites, core hole excitations, and spin-resolved electronic structure in the spectroscopy of half-metallic CrO_2 *(13 pages)* 035156
J. C. Woicik, C. Weiland, C. Jaye, E. L. Shirley, I. Jarrige, J. Pelliciari, V. Bisogni, A. K. Rumaiz, J. M. Ablett, Lijuan Qian, Gang Xiao, G. Ohad, A. V. Cohen, and L. Kronik

Nematic correlations and nematic Berezinskii-Kosterlitz-Thouless transition in spin-1 kagome lattice antiferromagnets *(9 pages)* 035157
Chun-Jiong Huang, Xu-Ping Yao, and Gang v. Chen

Geometric bound on the structure factor and a harmonic condition on band geometry *(6 pages)* 035158
Yugo Onishi, Alexander Avdoshkin, and Liang Fu

(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 112, NUMBER 3** **JULY 2025-15(I)**

Dirac and chiral spin liquids on spin-1/2 square-lattice Heisenberg antiferromagnet *(13 pages)* 035159
Hui-Ke Jin, Hong-Hao Tu, and Ya-Hui Zhang

Surface preparation method for investigating the three-dimensional electronic structure of perovskite nickelates *(7 pages)* 035160
Yong Zhong, Kyuho Lee, Regan Bhatta, Yu Zhang, Yonghun Lee, Martin Gonzalez, Jiarui Li, Ruohan Wang, Makoto Hashimoto, Donghui Lu, Sung-Kwan Mo, Chunjing Jia, Harold Y. Hwang, and Zhi-Xun Shen

Optical spectroscopy evidence of a second-order Mott phase transition *(8 pages)* 035161
Ariano De Giovanni Rodrigues, Andrea Perucchi, Luca Tomarchio, Marine Verseils, Paraskevas Parisiades, Benoît Baptiste, Keevin Béneut, Edmondo Gilioli, Stefano Lupi, and Andrea Gauzzi

Bicircular light-induced multistate geometric current *(24 pages)* 035162
Zhichao Guo, Zhuocheng Lu, Hua Wang, and Kai Chang

Topological nodal line electride with inherently small spin-orbit coupling gaps *(7 pages)* 035163
Yinuo Huo, Yihang Lin, Yong-An Zhong, Lei Jin, Ying Liu, Xuefang Dai, Xiaoming Zhang, and Guodong Liu

Site-selective correlations in interacting flat-band quasicrystals *(10 pages)* 035164
Yuxi Zhang, Richard T. Scalettar, and Rafael M. Fernandes

Language-inspired machine learning approach for solving strongly correlated problems with dynamical mean-field theory *(12 pages)* 035165
Hovan Lee, Zelong Zhao, George H. Booth, Weifeng Ge, and Cedric Weber

Berry curvature induced intrinsic spin Hall effect in the light-element-based CrN system for magnetization switching *(9 pages)* 035166
Gaurav K. Shukla, Prabhat Kumar, and Shinji Isogami

Disordered topological crystalline phases *(27 pages)* 035167
Adam Yanis Chaou, Mateo Moreno-Gonzalez, Alexander Altland, and Piet W. Brouwer

Observing two-electron interactions with correlation-ARPES *(11 pages)* 035168
A. F. Kemper, Francesco Goto, Heba A. Labib, Nicolas Gauthier, E. H. da Silva Neto, and F. Boschini

Topological phase transition in the two-leg Hubbard model: Emergence of the Haldane phase via diagonal hopping and strong interactions *(12 pages)* 035169
João Pedro Gama D'Elia and Thereza Paiva

Collapse of Landau levels in tilted Weyl semimetals and its detection via the planar Hall effect *(12 pages)* 035170
Fu-Yang Chen, Zhuo-Hua Chen, Hou-Jian Duan, Mou Yang, Rui-Qiang Wang, and Ming-Xun Deng

Order parameter fluctuation effects on current-induced magnetization *(10 pages)* 035171
Genta Furuya and Kazumasa Hattori

Computation kernel for Feynman diagrams *(10 pages)* 035172
Daria Gazizova, Rayan Farid, B. D. E. McNiven, I. Assi, Ethan G. Armstrong, and J. P. F. LeBlanc

Duality via sequential quantum circuit in the topological holography formalism *(20 pages)* 035173
Robijn Vanhove, Vibhu Ravindran, David T. Stephen, Xiao-Gang Wen, and Xie Chen

(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 112, NUMBER 3 JULY 2025-15(I)

Semiconductors I: bulk

Theory of polarization-switchable electrical conductivity anisotropy in piezoelectric and ferroelectric semiconductors *(8 pages)* 035201
Hong Jian Zhao, Yanchao Wang, Laurent Bellaiche, and Yanming Ma

Semiconductors II: surfaces, interfaces, microstructures, and related topics

Electric-field-enhanced electron-phonon coupling facilitating ultrafast charge transfer in two-dimensional g-$C_3N_4/MoSi_2N_4$ heterostructure *(10 pages)* 035301
Yanqi Wang, Shangyong Yu, Chaochao Qin, Zhongpo Zhou, Shuhong Ma, and Zhaoyong Jiao

Enhancing the interfacial electric field via attaching graphene to boosting photocatalytic activity of water splitting in a ternary Z-scheme heterostructure *(12 pages)* 035302
Renjie Li, Xiufeng Wang, Xiaole Chen, Shuai Zhu, Lei Peng, and Yucheng Huang

Magnon-mediated superconductivity at the interface between a ferromagnetic insulator and a topological crystalline insulator with wallpaper fermions *(11 pages)* 035303
Koki Mizuno and Ai Yamakage

Spin-flip Raman scattering of bright excitons in CdSe nanocrystals in a glass matrix *(10 pages)* 035304
Ina V. Kalitukha, Dennis Kudlacik, Grigorii S. Dimitriev, Victor F. Sapega, Aleksandr A. Golovatenko, Alehander V. Myasoedov, Demid A. Kirilenko, Alla A. Sitnikova, Serguei V. Goupalov, Dmitri R. Yakovlev, Aleksei A. Onushchenko, and Manfred Bayer

Indirect excitons and many-body interactions in InGaAs double quantum wells *(11 pages)* 035305
Christopher L. Smallwood, Rachel Owen, Matthew W. Day, Takeshi Suzuki, Rohan Singh, Travis M. Autry, Smriti Bhalerao, Fauzia Jabeen, and Steven T. Cundiff

Electron-phonon coupled nonequilibrium thermal transport in Cu/GaN heterojunctions with fractal rough interfaces *(13 pages)* 035306
Zhe Wu, Yifei Li, Dian Huang, and Guihua Tang

Simulation of charge and exciton dynamics across nanostructured rough interfaces in organic light emitting devices *(13 pages)* 035307
Giacomo Cotelli, Engin Torun, Stefano Gottardi, and Anna Köhler

Enhanced electron mobility in undoped $Si/Si_{0.77}Ge_{0.23}$ quantum wells with superior interface sharpness *(8 pages)* 035308
Jingxiong Liu, Xinyou Liu, Wenlong Lu, Zonghu Li, Yiwen Zhang, Xiangsheng Wang, Chao Zhao, Gang Cao, Haiou Li, Guoping Guo, Zhenzhen Kong, Baochuan Wang, and Guilei Wang

Surface physics, nanoscale physics, low-dimensional systems

Planar Hall effect in ultrathin topological insulator films *(6 pages)* 035401
Mohammad Shafiei and Milorad V. Milošević

High-performance Andreev interferometer based electronic coolers *(11 pages)* 035402
Francesco Cioni and Fabio Taddei

Broadband directional thermal emission with anisothermal microsources *(6 pages)* 035403
F. Herz, R. Messina, and P. Ben-Abdallah

(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 112, NUMBER 3** **JULY 2025-15(I)**

Correlation effects mediated by disorders in one-dimensional channels *(9 pages)* 035404
Vivek Kumar, Yingshi Duo, Patrick See, Jonathan P. Griffiths, David A. Ritchie, Ian Farrer, and Sanjeev Kumar

Quasiparticle energies and excitonic effects in α-$RuCl_3$ *(8 pages)* 035405
Du Li and Li Yang

Steady-state elastic plastic shock waves in a low-symmetry molecular crystal *(12 pages)* 035406
Jason J. Wilkening, Steven F. Son, and Alejandro Strachan

Strain-induced speed-up of Mn^{2+} spin-lattice relaxation in (Cd,Mn)Te/(Cd,Mg)Te quantum wells: A time-resolved optically detected magnetic resonance study *(8 pages)* 035407
A. Bogucki, A. Łopion, K. E. Połczyńska, W. Pacuski, T. Kazimierczuk, A. Golnik, and P. Kossacki

Chiral effects in strongly coupled resonant metasurfaces with epsilon-near-zero guided modes *(9 pages)* 035408
Ling Yue, Peng Xie, Shiyu Shen, Qi Ding, and Wei Wang

Phonon-limited valley lifetimes in single-particle bilayer graphene quantum dots *(8 pages)* 035409
L. Banszerus, K. Hecker, L. Wang, S. Möller, K. Watanabe, T. Taniguchi, G. Burkard, C. Volk, and C. Stampfer

Symmetry preservation in commensurate twisted bilayers *(13 pages)* 035410
David T. S. Perkins

Vortex wall phase in the fractonic XY-plaquette model on a square lattice *(15 pages)* 035411
A. M. Begun, M. N. Chernodub, V. A. Goy, and A. V. Molochkov

Casimir-Lifshitz force with graphene: Role of spatial nonlocality and of losses *(17 pages)* 035412
Pablo Rodriguez-Lopez and Mauro Antezza

Multiple magnetic states, valley electronics, and topological phase transitions in two-dimensional Janus *XYZ*H (X = Sc, Y, La; Y = Cl, Br, I; Z = S, Se, Te) monolayers and bilayers *(14 pages)* 035413
Xinyu Tian, Zixuan Zhang, Lixiu Guan, Xiaobiao Liu, Xiaoyu Zhao, and Linyang Li

Strain modulation of nuclear quantum effects in graphene-hBN heterostructures *(10 pages)* 035414
Xiaotong Deng, Xin Zhang, Ximeng Chen, and Ye Yuan

Quantum phase diagram and non-Abelian Moore-Read state in double twisted bilayer graphene *(7 pages)* 035415
Sen Niu, Yang Peng, and D. N. Sheng

Measuring work in quantum many-body systems using a dynamical work agent *(14 pages)* 035416
Cheolhee Han, Nadav Katz, and Eran Sela

Ultrafast spintronics with geometric effects in nonadiabatic wave-packet dynamics *(17 pages)* 035417
Matisse Wei-Yuan Tu, Li-Sheng Lin, Chung-Yu Wang, Jyh-Pin Chou, Sin-Yi Wei, Chien-Ming Tu, Chia-Nung Kuo, Chin Shan Lue, and Chih-Wei Luo

Magnetic flux tunable electronic transport through domain walls in a three-dimensional second-order topological insulator *(11 pages)* 035418
Zhe Hou and Ai-Min Guo

Generalized incommensurability: Role of anomalously strong spin-orbit coupling for the spin ordering in the quasi-two-dimensional system FeSe *(18 pages)* 035419
Piotr Chudzinski, Abyay Ghosh, and Myrta Grüning

(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 112, NUMBER 3** **JULY 2025-15(I)**

Non-Hermitian effects in the Su-Schrieffer-Heeger model: Exploring substrate coupling and decoupling dynamics *(10 pages)* 035420
Shayan Edalatmanesh and Thomas Frederiksen

Soliton-like domain wall motion in sliding ferroelectrics with ultralow damping *(8 pages)* 035421
Yubai Shi, Yuxiang Gao, Hua Wang, Bingwen Zhang, Zhicheng Zhong, and Ri He

Nonadiabatic reactive scattering of hydrogen on different surface facets of copper *(15 pages)* 035422
Wojciech G. Stark, Connor L. Box, Matthias Sachs, Nils Hertl, and Reinhard J. Maurer

Transverse spin photocurrents in ultrathin topological insulator films *(11 pages)* 035423
S. Movafagh and P. Nikolić

Characterization of unidirectional charge states in $NbSe_2$ nanoribbonlike structures *(7 pages)* 035424
Lili Zhou, Yu Zhang, Liangguang Jia, Yaoyao Chen, Can Zhang, Fudi Zhou, Shuyi He, Shuangquan Qu, Jia-Bin Qiao, Xiaolong Xu, Teng Zhang, Huixia Yang, Lijun Zhang, and Yeliang Wang

Enhancement of persistent current in a non-Hermitian disordered ring *(11 pages)* 035425
Suparna Sarkar, Soumya Satpathi, and Swapan K. Pati

$\mathcal{T}$-matrix method for computation of second-harmonic generation upon optical wave scattering from clusters of arbitrary particles: Application to nonlinear optical interaction of bound states in the continuum *(20 pages)* . . . 035426
Ivan Sekulic, Ji Tong Wang, Jian Wei You, and Nicolae C. Panoiu

Phase transitions in a non-Hermitian Su-Schrieffer-Heeger model via Krylov spread complexity *(15 pages)* 035427
E. Medina-Guerra, I. V. Gornyi, and Yuval Gefen

Edelstein effect in optically driven monolayer jacutingaite Pt_2HgSe_3 *(7 pages)* 035428
Nguyen Q. Bau, Ta T. Tho, Le T. T. Phuong, and Bui D. Hoi

Crossover in electronic specific heat near narrow-sense type-III Dirac cones *(7 pages)* 035429
Keita Kishigi and Yasumasa Hasegawa

ERRATA

Erratum: Phases and exotic phase transitions of a two-dimensional Su-Schrieffer-Heeger model [Phys. Rev. B **109**, 195154 (2024)] *(1 page)* . . . . . 039901(E)
Anika Götz, Martin Hohenadler, and Fakher F. Assaad

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).