

ARTICLES

Electronic structure and strongly correlated systems

Algebra of free fermions: Classifying spaces, Hamiltonians, and computation (32 pages)	165101
Tian Yuan and Yang Qi	
Symplectic symmetry of quadratic-band-touching Hamiltonians in two dimensions (7 pages)	165102
Igor F. Herbut and Samson C. H. Ling	
Orbital-selective Mott and antiferromagnetic phases in diagonally compressed kagome lattice (16 pages)	165103
Jiewei Ding, Ho-Kin Tang, and Wing Chi Yu	
Correlation-driven origin of shallow electron pocket in $\text{Co}_{1/3}\text{TaS}_2$ revealed by ARPES and cluster perturbation theory (11 pages)	165104
Wojciech Sas, Yuki Utsumi Boucher, Seyed Ashkan Moghadam Ziabari, Gaurav Pransu, Trpimir Ivšić, Ivana Vobornik, Jun Fujii, Naveen Singh Dhami, Bruno Gudac, Mario Novak, László Forró, Neven Barišić, Ivo Batistić, and Petar Popčević	
Quantum anomalous layer-resolved Hall effect with high Chern number in MnBi_2Te_4 (22 pages)	165105
Minghao Li, Yang Li, Fanhao Jia, Ruixue Li, Gaofeng Xu, Wu-Ming Liu, and Yuan Li	
Competition and coexistence of superconductivity and nematic order in a two-dimensional electron gas with quadrupolar interactions (9 pages)	165106
Nei Lopes, Guilherme da Silva do Vale, and Daniel G. Barci	
Superconductivity of magnonic Cooper pairs in the infinite- U triangular lattice (6 pages)	165107
Hantian Zhu, Yixin Zhang, Shang-Shun Zhang, Yang Zhang, and Cristian D. Batista	
Evolution of magnetoconductance across the topological-to-trivial phase transition in $\text{In}_x(\text{Bi}_{0.3}\text{Sb}_{0.7})_{2-x}\text{Te}_3$ thin films (12 pages)	165108
Sambhu G Nath, Subhadip Manna, Kanav Sharma, Souvick Chakraborty, Amar Verma, Ritam Banerjee, R K Gopal, Satyabrata Raj, and Chiranjib Mitra	
Exact results on spin and charge transport in the Hubbard model on bipartite lattices (13 pages)	165109
J. M. P. Carmelo and J. E. C. Carmelo	
Machine learning modeling of charge-density-wave recovery after laser melting (11 pages)	165110
Sankha Subhra Bakshi, Yunhao Fan, and Gia-Wei Chern	
Dielectric formalism of the two-dimensional uniform electron gas at finite temperatures (18 pages)	165111
Fotios Kalkavouras, Tobias Dornheim, Paul Hamann, and Panagiotis Tolias	
Pseudopotentials for meta-GGA calculations (16 pages)	165112
Emmi Gareis, Ingo Schelter, and Stephan Kümmel	



(Continued)



Symmetry-protected coexistence of a nodal surface and multiple types of Weyl fermions in CBT-B ₃₀ (9 pages)	165113
Xiao-Jing Gao, Yanfeng Ge, and Yan Gao	
Plasmon excitations in half-filled graphene: A comparative study between quantum Monte Carlo and random phase approximation (11 pages)	165114
Adrien Reingruber, Maksim Ulybyshev, and Kitinan Pongsangangan	
Perpendicular electric field induced competing $s^{\pm}$ -wave and d -wave superconducting pairings in La ₃ Ni ₂ O ₇ thin films (10 pages)	165115
Yongping Wei, Xun Liu, Fan Yang, and Mi Jiang	
Quantized transport in Floquet topological insulators (20 pages)	165116
Rekha Kumari, Manas Kulkarni, and Abhishek Dhar	
Valley- and spin-dependent electronic and transport properties of two-dimensional altermagnetic titanium-based chalcogenide halides (10 pages)	165117
Ruo-Yu Ning, Zhi-Hua Yan, Jin-Yang Li, Yong-Kun Wang, and Si Li	
Effective electron coupling to phonon mechanical angular momentum in helical systems (8 pages)	165118
Akihito Kato, Nobuhiko Yokoshi, and Jun-ichiro Kishine	
Suppression of local magnetic moment formation and paramagnetic exchange interactions in monolayer Fe ₃ GeTe ₂ (9 pages)	165119
A. A. Katanin, A. N. Rudenko, D. I. Badrtdinov, and M. I. Katsnelson	
Dirac electrons in ac-magnetic fields: π -Landau levels and chiral-anomaly-induced homodyne effect (18 pages)	165120
Sota Kitamura and Takashi Oka	
Bulk and surface electronic structure of MoAlB(010) (7 pages)	165121
Gianmarco Gatti, Amalie H. Svaneborg, Wu Bing, Gesa-R. Siemann, Anders S. Mortensen, Naina Kushwaha, Jennifer Rigden, Jakob K. Svaneborg, Matthew D. Watson, Timur K. Kim, Charlotte E. Sanders, Kristian S. Thygesen, Zdenek Sofer, and Philip Hofmann	
Finite-basis method for full-potential Green's functions in density functional theory (16 pages)	165122
H. B. Tran Tan, J. R. White, Z. A. Johnson, R. J. Fish, C. J. Fontes, and C. E. Starrett	
Finite-momentum bound pairs of two electrons in an altermagnetic metal (10 pages)	165124
Hui Hu, Zhao Liu, Jia Wang, and Xia-Ji Liu	
Symmetric mass generation in a bilayer honeycomb lattice with $SU(2) \times SU(2) \times SU(2)/\mathbb{Z}_2$ symmetry (22 pages)	165125
Cheng-Hao He, Yi-Zhuang You, and Xiao Yan Xu	
Coherent dipole units and ferroelectric correlations in asymmetric atomic-layer superlattices (9 pages)	165126
Andrew J. Hamm, James N. Eckstein, Michael B. Weissman, and Maitri P. Warusawithana	
Flat bands and enhanced optomechanical interactions in moiré nanowaveguide (9 pages)	165127
Said El-Jallal, Bahram Djafari-Rouhani, Yun Jing, Badreddine Assouar, Aimad Belboukhari, Yan Pennec, Gaëtan Lévêque, and Mourad Oudich	
Engineering tunable kagome moiré superlattices in twisted transition metal dichalcogenides (17 pages)	165128
Adrian Fedorko, Chao-Xing Liu, and Zhen Bi	

(Continued)

Finite-frequency conductivity of a nonlinear Luttinger liquid in a smooth random potential (<i>13 pages</i>)	165129
A. A. Dontsov, D. N. Aristov, and A. P. Dmitriev	
Polarization-resolved photon statistics of cavity quantum materials (<i>17 pages</i>)	165130
Benjamin Kass, Spenser Talkington, and Martin Claassen	
From quantum dimers to the π -flux toric code via deconfined multicriticality (<i>17 pages</i>)	165131
Ankush Chaubey, Sergej Moroz, and Subhro Bhattacharjee	
Hysteretic coherence collapse across the first-order charge density wave transition in 1T-TaS ₂ (<i>6 pages</i>)	165132
Turgut Yilmaz, Anil Rajapitamahuni, Asish K. Kundu, Menka Jain, and Elio Vescovo	
Selective bulk-boundary correspondence in higher-order topological insulators with anticommuting mirror and chiral symmetries (<i>10 pages</i>)	165133
Suman Aich and Babak Seradjeh	
Neural network impurity solver for real-frequency dynamical mean-field theory (<i>9 pages</i>)	165134
Fenglin Deng, Yi Lu, Xiaodong Cao, and Zhicheng Zhong	
Experimental access to the bulk band inversion in a topological metamaterial (<i>11 pages</i>)	165135
Simon Widmann, Johannes D��reth, Siddhartha Dam, Christian G. Mayer, David Laibacher, Monika Emmerling, Martin Kamp, Friedrich Reinert, Maximilian ��nzelmann, Simon Betzold, Sven H��fing, and Sebastian Klembt	
Quantum coherence in a maximally hot Hubbard chain (<i>16 pages</i>)	165136
C��t��lin Pa��cu Moca, Ovidiu I. P��tu, Bal��zs D��ra, and Gergely Zar��nd	
Edge-controlled non-Hermitian skin effect in the modified Haldane model (<i>13 pages</i>)	165137
Nobuhiro Ito and Shun Uchino	
Floquet product mode and eigenphase order (<i>11 pages</i>)	165138
Felix M��ckel, Harald Schmid, and Felix von Oppen	
Magnetic anisotropy driven electronic properties and magneto-optical response of a MnBi monolayer (<i>14 pages</i>)	165139
S. Davoudi Tanha, Y. Mogulkoc, A. Mogulkoc, and M. Modarresi	
Low-temperature magnetism and spin dynamics in the disordered triangular-lattice Yb ³⁺ compound LiCaYb ₅ (BO ₃) ₆ (<i>12 pages</i>)	165140
Monika Jawale, Saikat Nandi, Prashanta K. Mukharjee, Philipp Gegenwart, and A. V. Mahajan	
Revisiting magnetoelectric response in collinear antiferromagnetic zigzag chains: A downfolding approach beyond conventional low-energy models (<i>16 pages</i>)	165141
Shuhei Kanda and Satoru Hayami	
Two-body solution and instabilities along Středa lines in moir�� flat bands (<i>15 pages</i>)	165142
Guopeng Xu and Chunli Huang	
Finite-temperature enhancement of magnetic interactions from first principles (<i>7 pages</i>)	165143
Ravi Kaushik, Ryota Ono, and Sergey Artyukhin	
Spin dynamics from the Niu-Kleinman adiabatic approach and slave-boson mean-field theory (<i>12 pages</i>)	165144
Xuan Yang, Tianyang Xie, Shaohang Shi, Kun Jiang, and Jiangping Hu	

(Continued)

Semiconductors I: bulk

- Lattice dynamics and thermoelectric transport in $M\text{AgCh}_2$ ($M = \text{Sc, Y}$; $\text{Ch} = \text{S, Se, Te}$): Role of anharmonic phonons and Ag-sublattice vibrations (*19 pages*) 165201
 Shanza Tariq, Hao-Jen You, Rovi Angelo Beloya Villaos, Ina Marie R. Verzola, Zhi-Quan Huang, Junsoo Park, Hsin Lin, and Feng-Chuan Chuang

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

- Photovoltaic readout of ferroelectric polarization direction by conductive atomic force microscopy (*7 pages*) 165301
 K. Marin, A. Bagard, X. Henning, S. Colis, A. Dinia, and M. V. Rastei
- Transition metal dichalcogenide excitons in periodic electrostatic potentials:
 Center-of-mass models (*10 pages*) 165302
 Jose M. Torres-López, S. Kundu, Felipe H. da Jornada, Tony Heinz, and Allan H. MacDonald
-  Corbino-enhanced supersonic acoustic-emission threshold in a GaAs two-dimensional electron system (*10 pages*) 165303
 A. D. Levin, A. S. Jaroshevich, Z. D. Kvon, V. A. Chitta, M. S. Aksenov, D. V. Dmitriev, A. K. Bakarov, and G. M. Gusev
- Room-temperature exciton-trion interconversion via multistrain domains in monolayer MoSe_2 (*10 pages*) 165304
 Qi Zheng, Sabir Hussain, Le Lei, Chi Zhang, Mengmeng Zhang, Senhong Yang, Taishen Wu, Xuying Zhong, Rui Xu, Zhihai Cheng, Dongsheng Tang, and Weichang Zhou
- Exciton-polariton hybrid skin-topological states (*7 pages*) 165305
 Ruiqi Bao, R. Banerjee, S. Mandal, Huawen Xu, Shiji Li, Junfeng Gao, and Timothy C. H. Liew
- Interfacial C=C bond engineering promotes S-scheme-like charge-transfer dynamics in hBNC/ SnS_2 van der Waals heterojunctions (*11 pages*) 165306
 Li Shi, Wangping Xu, Haoran Wei, Yuanhao Duan, Xu Li, Jing Fan, Rui Wang, and Xiaozhi Wu
- Surface physics, nanoscale physics, low-dimensional systems**
- Solving the Peierls-Boltzmann transport equation with matrix product states (*12 pages*) 165401
 Sangyeop Lee, Hira Alipanah, and Juan José Mendoza-Arenas
- Polar unidirectional magnetotransport in p -type tellurene from quantum geometry (*21 pages*) 165402
 Claudio Iacovelli, Pierpaolo Fontana, Victor Velasco, Chang Niu, Peide D. Ye, Marcus V. O. Moutinho, Caio Lewenkopf, and Marcello B. Silva Neto
-  Orthogonal excitation polarization dictated by site symmetry in upconversion luminescence of $\beta\text{-NaYF}_4\text{:Er}^{3+}$ microrods (*10 pages*) 165403
 Liji Wang, Yan Liu, Siyu Guo, Long Zhang, Zhanghai Chen, Guanying Chen, and Ai-Hua Li
- Twist-induced optical transmission and cross-polarization effects in black-phosphorene-calcite heterostructures (*10 pages*) 165404
 C. H. Yang, M. V. Milošević, F. M. Peeters, and Icaro R. Lavor
- Variational method for interacting surfaces with higher-form global symmetries (*21 pages*) 165405
 Kiyoharu Kawana
- Spin polarization selective anomalous Hall responses in type-III ferrovalley heterostructures (*8 pages*) 165406
 Jiali Yang, Xi Wu, Zhijie Wang, and Jia Li

(Continued)

Dual Hall effects in the altermagnet Ta ₂ Te ₂ O with strain-induced valley switching effect (10 pages)	165407
Hanbo Sun, Chao Wu, Pengqiang Dong, Yanchao She, and Ping Li	
Direct observation of the electronic structure of even-layer puckered SnTe monolayer films on graphene (6 pages)	165408
Satoru Ichinokura, Shunsuke Tsuda, Kiyohisa Tanaka, and Koichiro Yaji	
Polarity-controlled excitons and long carrier lifetime in the Janus OMoSiN ₂ monolayer (9 pages)	165409
Yanli Chang, Pucun Bai, Xueping Zhao, and Xiaoming Cui	
Effects of tilting direction on the optical conductivities in two-dimensional tilted semi-Dirac bands (26 pages) . . .	165410
Xin Chen, Jian-Tong Hou, Jian-Hua Luo, Long Liang, Jie Lu, Hong Guo, Chang-Xu Yan, and Hao-Ran Chang (张浩然)	
Imaging the transition from diffusive to Landauer resistivity dipoles (14 pages)	165411
Serhii Kovalchuk, David Kämpfer, Jonathan K. Hofmann, Timofey Balashov, Vasily Cherepanov, Bert Voigtländer, Ireneusz Morawski, F. Stefan Tautz, and Felix Lüpke	
Geometric oscillations of local Hall and Nernst effects in ballistic graphene at weak magnetic fields (8 pages) . . .	165412
Z. Z. Alisultanov and A. V. Kavokin	
Magneto-optical response of five-septuple-layer MnBi ₂ Te ₄ in spin-flip states (10 pages)	165413
Shahid Sattar, Roman Stepanov, A. H. MacDonald, and C. M. Canali	
Topologically robust flat-band zero-index terahertz metasurfaces with polarization-vortex-protected bound states in the continuum (26 pages)	165414
Guangcheng Sun (孙广成), Yongming Zhang (张永明), Bo Gao (高博), Jiayong Han (韩佳勇), Yue Wang (王玥), Wenshuo Chen (陈文烁), Gengyu Bai (白耕瑜), Rui Wu (吴睿), Yaohe Li (李曜合), Zijian Cui (崔子健), and Xiaoguang Zhao (赵晓光)	
Emergence of robust charge density wave phases in one-dimensional nanostructures of 1T'-phase MoTe ₂ (7 pages)	165415
Zi-Yi Han, Liangting Ye, Yu-Qi Li, Ya-Ning Ren, Bing Huang, and Lin He	
Nonequilibrium angular momentum selectivity and filtering in chiral carbon nanotubes (16 pages)	165416
Sergio Shmayer, D. R. da Costa, and D. A. Bahamon	
Learning effective Hamiltonians for crystals exposed to nonresonant optical excitation (10 pages)	165417
P. E. Alcaraz and M. Kolesik	
Machine learning Majorana topology using unsupervised and supervised learning (8 pages)	165418
Jacob R. Taylor, Haining Pan, and Sankar Das Sarma	
Emerging two-dimensional pentagonal $P\bar{4}2_1m$ XY ₂ phases: Tunable electronic states, mechanical flexibility, and piezoelectricity (13 pages)	165419
Heng Zhang, Frédéric Guégan, Gilles Frapper, Huiyao Liu, Qian Chen, Yaxin Di, Congxin Xia, Gian-Marco Rignanese, and Junjie Wang	
Poor man's Majorana bound states in a quantum-dot-based Kitaev chain coupled to a photonic cavity (14 pages)	165420
Francesco Buonemani, Álvaro Gómez-León, Marco Schirò, and Olesia Dmytruk	
Dominant role of sulfur divacancy in charge trapping dynamics in MoS ₂ (9 pages)	165421
Srest Somay, Sitangshu Bhattacharya, and Krishna Balasubramanian	

(Continued)

Effect of electron-hole asymmetry on Δ_T noise in metal/quantum point contact/metal and metal/quantum point contact/superconductor junctions (<i>23 pages</i>)	165422
Sachiraj Mishra and Colin Benjamin	
Fermionic many-body topology in cavity-coupled Su-Schrieffer-Heeger chains (<i>10 pages</i>)	165423
Anna Ritz-Zwilling and Olesia Dmytruk	
DC conductivity of tilted Dirac Fermions across the Lifshitz transition: Short- versus long-range impurities (<i>17 pages</i>)	165424
Mohammad H. Pakzami, Zahra Faraei, and Ali G. Moghaddam	
Tailoring bound states in the continuum in photonic crystal slabs via lattice engineering (<i>13 pages</i>)	165425
Lei Zhang, Renfei Zheng, Shaojun You, Longxiao Wang, Wenxin Zhang, Yicheng Cai, Mengyang Qu, Jinzhong Zhang, Junhao Chu, and Lujun Huang	
Breit-Wigner-Fano Raman characteristics in semimetallic $1T\text{-Ti}_{1.03}\text{S}_2$ (<i>13 pages</i>)	165426
Keana Rylie Pasoquen, Huynh Phuong Anh, Kalingarayanpalayam Matheswaran Arun Kumar, Nguyen Van Thanh, Xiang-Lin Huang, Guo-Jiun Shu, Riichiro Saito, Nguyen Tuan Hung, and Hsiang-Lin Liu	
Emergence of spin-orbit coupling among spin, atomic orbital, and Bloch dynamics in Janus double-transition-metal MXenes (<i>9 pages</i>)	165427
Tetsuro Habe	

ERRATA

Erratum: Charge-state stability of color centers in wide band gap semiconductors [Phys. Rev. B 108 , 235208 (2023)] (<i>3 pages</i>)	169901(E)
Rodrick Kuate Defo, Alejandro W. Rodriguez, and Steven L. Richardson	
Erratum: Oscillatory photoresistance on the high-field side of the cyclotron resonance [Phys. Rev. B 113 , L201404 (2026)] (<i>3 pages</i>)	169902(E)
M. A. Zudov	