

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 99, NUMBER 23

JUNE 2019-15(I)

Surface second-harmonic generation from metallic-nanoparticle configurations: A transformation-optics approach (<i>12 pages</i>)	235429
K. Nireekshan Reddy, Parry Y. Chen, Antonio I. Fernández-Domínguez, and Yonatan Sivan	
Topological superconductivity at finite temperatures in proximitized magnetic nanowires (<i>16 pages</i>)	235430
Anna Gorczyca-Goraj, Tadeusz Domański, and Maciej M. Maška	
Normal and anomalous electron-hole pairs in a quantum conductor driven by a voltage pulse (<i>10 pages</i>)	235431
X. K. Yue and Y. Yin	
 Optimal power and efficiency of single quantum dot heat engines: Theory and experiment (<i>11 pages</i>)	235432
Martin Josefsson, Artis Svilans, Heiner Linke, and Martin Leijnse	
Nonlinear optical selection rules of excitons in monolayer transition metal dichalcogenides (<i>11 pages</i>)	235433
Alireza Taghizadeh and T. G. Pedersen	
Structure determination of hydrogen-terminated 4H-SiC(0001) by LEED (<i>6 pages</i>)	235434
Hiroshi Ando, Anton Visikovskiy, Takeshi Nakagawa, Seigi Mizuno, and Satoru Tanaka	
Effects of dissipation on solitons in the hydrodynamic regime of graphene (<i>30 pages</i>)	235435
Thomas Zdyrski and John McGreevy	

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 99, NUMBER 23

JUNE 2019-15(I)

Thermoelectric transport properties of borophane (<i>11 pages</i>)	235413
Moslem Zare	
Spectral near-field thermal emission extraction by optical waveguides (<i>8 pages</i>)	235414
Jiayu Li, Jeffrey Wuenschell, Youngseok Jee, Paul R. Ohodnicki, and Sheng Shen	
First-principles quantum corrections for carrier correlations in double-layer two-dimensional heterostructures (<i>13 pages</i>)	235415
Martin-Isbjörn Trappe, Derek Y. H. Ho, and Shaffique Adam	
Electron pairing in nanostructures driven by an oscillating field (<i>5 pages</i>)	235416
O. V. Kibis	
Flat bands in twisted double bilayer graphene (<i>13 pages</i>)	235417
Narasimha Raju Chebrolu, Bheema Lingam Chittari, and Jeil Jung	
Electric field induced enhancement of photovoltaic effects in graphene nanoribbons (<i>9 pages</i>)	235418
Sara Zamani and Rouhollah Farghadan	
Full electrostatic control of quantum interference in an extended trench Josephson junction (<i>9 pages</i>)	235419
Stefano Guiducci, Matteo Carrega, Fabio Taddei, Giorgio Biasiol, Hervé Courtois, Fabio Beltram, and Stefan Heun	
Majorana qubit readout using longitudinal qubit-resonator interaction (<i>10 pages</i>)	235420
Arne L. Grimsmo and Thomas B. Smith	
Effect of resonant impurity scattering of carriers on the Drude-peak broadening in uniaxially strained graphene (<i>14 pages</i>)	235421
V. O. Shubnyi, Y. V. Skrypnyk, S. G. Sharapov, and V. M. Loktev	
Mesoscopic effects in the heat conductance of superconducting-normal-superconducting and normal-superconducting junctions (<i>7 pages</i>)	235422
Fatemeh Hajiloo, Fabian Hassler, and Janine Splettstoesser	
Topologically nontrivial photonic nodal surface in a photonic metamaterial (<i>7 pages</i>)	235423
Minkyung Kim, Dasol Lee, Dongwoo Lee, and Junsuk Rho	
Wave-packet dynamics in multilayer phosphorene (<i>16 pages</i>)	235424
S. M. Cunha, D. R. da Costa, G. O. de Sousa, Andrey Chaves, J. Milton Pereira, Jr., and G. A. Farias	
Phonon thermal transport in β -NX ($X = \text{P, As, Sb}$) monolayers: A first-principles study of the interplay between harmonic and anharmonic phonon properties (<i>13 pages</i>)	235425
Armin Taheri, Carlos Da Silva, and Cristina H. Amon	
Comb tensor networks (<i>13 pages</i>)	235426
Natalia Chepiga and Steven R. White	
Majorana zero modes in regular B-form single-stranded DNA proximity-coupled to an s -wave superconductor (<i>8 pages</i>)	235427
Han-Zhao Tang, Qing-Feng Sun, Jian-Jun Liu, and Ying-Tao Zhang	
Hydrogenation: An effective strategy to improve the thermoelectric properties of multilayer silicene (<i>13 pages</i>)	235428
Y. F. Li, G. H. Tang, and B. Fu	

(Continued)

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

Spin relaxation time of donor-bound electrons in a CdTe quantum well (<i>10 pages</i>)	235301
G. Garcia-Arellano, F. Bernardot, G. Karczewski, C. Testelin, and M. Chamorro	
Time-resolved buildup of twisted indirect exchange interaction in two-dimensional systems (<i>8 pages</i>)	235302
V. A. Stephanovich, E. V. Kirichenko, V. K. Dugaev, J. Barnaś, and J. Berakdar	
Quantum and transport mobilities of a Na ₃ Bi-based three-dimensional Dirac system (<i>9 pages</i>)	235303
H. F. Yuan, W. Xu, X. N. Zhao, D. Song, G. R. Zhang, Y. M. Xiao, L. Ding, and F. M. Peeters	
Generalized statistical dynamical theory of x-ray diffraction by imperfect multilayer crystal structures with defects (<i>17 pages</i>)	235304
S. I. Olikhovskii, V. B. Molodkin, E. G. Len, E. S. Skakunova, and S. V. Lizunova	

Surface physics, nanoscale physics, low-dimensional systems

Raman-active modes of 1T'-WTe ₂ under tensile strain: A first-principles prediction (<i>6 pages</i>)	235401
Wei Yang, Zi-Yang Yuan, Ying-Qi Luo, Yu Yang, Fa-Wei Zheng, Zong-Hai Hu, Xiao-Hui Wang, Yuan-An Liu, and Ping Zhang	
Pseudospin-1 wave scattering that defies chaos <i>Q</i> -spoiling and Klein tunneling (<i>16 pages</i>)	235403
Hong-Ya Xu and Ying-Cheng Lai	
Superconductivity in twisted graphene NbSe ₂ heterostructures (<i>11 pages</i>)	235404
Yohanes S. Gani, Hadar Steinberg, and Enrico Rossi	
Low-dissipation edge currents without edge states (<i>8 pages</i>)	235405
Justin C. W. Song and Giovanni Vignale	
Band structure and topological properties of twisted double bilayer graphene (<i>8 pages</i>)	235406
Mikito Koshino	
Enhanced graphene-light interaction assisted by magnetic plasmons in metallic nanogroove arrays (<i>10 pages</i>)	235407
Wei Wang, Yuhang Zhu, Hong Zhang, Longyu Qing, Li Lei, Daimin Li, and Juemin Yi	
Topology and localization of a periodically driven Kitaev model (<i>16 pages</i>)	235408
I. C. Fulga, M. Maksymenko, M. T. Rieder, N. H. Lindner, and E. Berg	
Absorption cross-section spectroscopy of a single strong-coupling system between plasmon and molecular exciton resonance using a single silver nanoparticle dimer generating surface-enhanced resonant Raman scattering (<i>12 pages</i>)	235409
Tamitake Itoh, Yuko S. Yamamoto, and Takayuki Okamoto	
Optical forces from near-field directionalities in planar structures (<i>9 pages</i>)	235410
Jack J. Kingsley-Smith, Michela F. Picardi, Lei Wei, Anatoly V. Zayats, and Francisco J. Rodríguez-Fortuño	
Dynamics of surface graphene ripplocations on a flat graphite substrate (<i>13 pages</i>)	235411
Alexander V. Savin, Elena A. Korznikova, and Sergey V. Dmitriev	
Amplification and regulation of periodic nanostructures in multipulse ultrashort laser-induced surface evolution by electromagnetic-hydrodynamic simulations (<i>11 pages</i>)	235412
Anton Rudenko, Cyril Mauchair, Florence Garrelie, Razvan Stoian, and Jean-Philippe Colombier	

(Continued)

☞ Orientation of the ground-state orbital in CeCoIn ₅ and CeRhIn ₅ (6 pages)	235143
M. Sundermann, A. Amorese, F. Strigari, B. Leedahl, L. H. Tjeng, M. W. Haverkort, H. Gretarsson, H. Yavaş, M. Moretti Sala, E. D. Bauer, P. F. S. Rosa, J. D. Thompson, and A. Severing	
Parity anomaly from the Hamiltonian point of view (13 pages)	235144
Matthew F. Lapa	
First-principles many-body models for electron transport through molecular nanomagnets (11 pages)	235145
A. Chiesa, E. Macaluso, P. Santini, S. Carretta, and E. Pavarini	
Instability of the <i>f</i> -electron state in URu ₂ Si _{2-x} P _x probed using high magnetic fields (6 pages)	235146
K. Huang, K.-W. Chen, A. Gallagher, Y. Lai, L. Nelson, D. Graf, and R. E. Baumbach	
Charge and nematic orders in AFe ₂ As ₂ (A = Rb, Cs) superconductors (7 pages)	235147
M. Moroni, G. Prando, S. Aswartham, I. Morozov, Z. Bukowski, B. Büchner, H. J. Grafe, and P. Carretta	
☞ Electron hydrodynamics with a polygonal Fermi surface (23 pages)	235148
Caleb Q. Cook and Andrew Lucas	
☞ Anomalous attenuation of plasmons in strange metals and holography (17 pages)	235149
Aurelio Romero-Bermúdez, Alexander Krikun, Koenraad Schalm, and Jan Zaanen	
Solid-state platform for space-time engineering: The 8 <i>Pmmn</i> borophene sheet (11 pages)	235150
T. Farajollahpour, Z. Faraei, and S. A. Jafari	
Crystal field and hyperfine structure of ¹⁶⁷ Er ³⁺ in YPO ₄ :Er single crystals: High-resolution optical and EPR spectroscopy (10 pages)	235151
M. N. Popova, S. A. Klimin, S. A. Moiseev, K. I. Gerasimov, M. M. Minnegaliev, E. I. Baibekov, G. S. Shakurov, M. Bettinelli, and M. C. Chou	
Superconductivity from repulsion: Variational results for the two-dimensional Hubbard model in the limit of weak interaction (16 pages)	235152
Dionys Baeriswyl	
Anomalous electron transport in epitaxial NdNiO ₃ films (8 pages)	235153
Shashank Kumar Ojha, Sujay Ray, Tanmoy Das, S. Middey, Sagar Sarkar, Priya Mahadevan, Zhen Wang, Yimei Zhu, Xiaoran Liu, M. Kareev, and J. Chakhalian	
Symmetry-enforced Dirac points in antiferromagnetic semiconductors (5 pages)	235154
V. V. Kabanov	
Thermoelectric power and its correlation with conductivity in NbS ₃ whiskers (17 pages)	235155
S. G. Zybtev, V. Ya. Pokrovskii, V. F. Nasretdinova, S. V. Zaitsev-Zotov, V. V. Pryadun, E. S. Kozlyakova, O. S. Volkova, A. N. Vasiliev, Woei Wu Pai, and D. Starešinić	
Cavity quantum electrodynamical Chern insulator: Towards light-induced quantized anomalous Hall effect in graphene (7 pages)	235156
Xiao Wang, Enrico Ronca, and Michael A. Sentef	
Interaction-induced edge states in HgTe/CdTe quantum wells under a magnetic field (7 pages)	235157
Zewei Chen and Tai Kai Ng	
Semiconductors I: bulk	
☞ Polaronic interacceptor hopping transport in intrinsically doped nickel oxide (13 pages)	235201
Robert Karsthof, Marius Grundmann, Arthur Markus Anton, and Friedrich Kremer	

(Continued)

Mechanisms to enhance the capacitance beyond the classical limits in capacitors with free-electron-like electrodes (<i>21 pages</i>)	235127
Javier Junquera, Pablo García-Fernández, and Massimiliano Stengel	
Enhanced correlations and superconductivity in weakly interacting partially flat-band systems: A determinantal quantum Monte Carlo study (<i>7 pages</i>)	235128
Edwin W. Huang, Mohammad-Sadegh Vaezi, Zohar Nussinov, and Abolhassan Vaezi	
Magnetic and electronic properties of <i>B</i> -site-ordered double-perovskite oxide $\text{La}_2\text{CrMnO}_6$ thin films (<i>8 pages</i>)	235129
K. Yoshimatsu, J. Ishimaru, K. Watarai, K. Yamamoto, Y. Hirata, H. Wadati, Y. Takeda, K. Horiba, H. Kumigashira, O. Sakata, and A. Ohtomo	
Inversion and magnetic quantum oscillations in the symmetric periodic Anderson model (<i>11 pages</i>)	235130
Panch Ram and Brijesh Kumar	
Classifying local fractal subsystem symmetry-protected topological phases (<i>20 pages</i>)	235131
Trithep Devakul	
Higher-order bosonic topological phases in spin models (<i>11 pages</i>)	235132
Oleg Dubinkin and Taylor L. Hughes	
Unconventional orbital ordering and emergent dimensional reduction in fulleride superconductors (<i>11 pages</i>)	235133
Shintaro Hoshino, Philipp Werner, and Ryotaro Arita	
Effect of the chiral anomaly on circular dichroism and Hall angle in doped and tilted Weyl semimetals (<i>10 pages</i>)	235134
Ashutosh Singh and J. P. Carbotte	
Low offset frequency $1/f$ flicker noise in spin-torque vortex oscillators (<i>9 pages</i>)	235135
Steffen Wittrock, Sumito Tsunegi, Kay Yakushiji, Akio Fukushima, Hitoshi Kubota, Paolo Bortolotti, Ursula Ebels, Shinji Yuasa, Gilles Cibiel, Serge Galliou, Enrico Rubiola, and Vincent Cros	
Scattering mechanisms and electrical transport near an Ising nematic quantum critical point (<i>24 pages</i>)	235136
Xiaoyu Wang and Erez Berg	
Topological quantum field theory for Abelian topological phases and loop braiding statistics in $(3 + 1)$ -dimensions (<i>12 pages</i>)	235137
Qing-Rui Wang, Meng Cheng, Chenjie Wang, and Zheng-Cheng Gu	
Suppression of charge density wave order by disorder in Pd-intercalated ErTe_3 (<i>9 pages</i>)	235138
J. A. W. Straquadine, F. Weber, S. Rosenkranz, A. H. Said, and I. R. Fisher	
 <i>Ab initio</i> theory of polarons: Formalism and applications (<i>21 pages</i>)	235139
Weng Hong Sio, Carla Verdi, Samuel Poncé, and Feliciano Giustino	
Microscopic polarization and magnetization fields in extended systems (<i>21 pages</i>)	235140
Perry T. Mahon, Rodrigo A. Muniz, and J. E. Sipe	
Mean-field approximations for short-range four-body interactions at $\nu = \frac{3}{5}$ (<i>11 pages</i>)	235141
Bartosz Kuśmierz, Arkadiusz Wójs, and G. J. Sreejith	
Auxiliary field quantum Monte Carlo for multiband Hubbard models: Controlling the sign and phase problems to capture Hund's physics (<i>12 pages</i>)	235142
Hongxia Hao, Brenda M. Rubenstein, and Hao Shi	

(Continued)

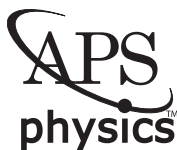
Computation of intrinsic spin Hall conductivities from first principles using maximally localized Wannier functions (<i>11 pages</i>)	235113
Ji Hoon Ryoo, Cheol-Hwan Park, and Ivo Souza	
Composite fermion Hall conductivity and the half-filled Landau level (<i>7 pages</i>)	235114
Prashant Kumar, S. Raghu, and Michael Mulligan	
Simulating the out-of-equilibrium dynamics of local observables by trading entanglement for mixture (<i>11 pages</i>)	235115
J. Surace, M. Piani, and L. Tagliacozzo	
Optical signature of the pressure-induced dimerization in the honeycomb iridate α -Li ₂ IrO ₃ (<i>9 pages</i>)	235116
V. Hermann, J. Ebad-Allah, F. Freund, A. Jesche, A. A. Tsirlin, P. Gegenwart, and C. A. Kuntscher	
Spectral function of Mott-insulating Hubbard ladders: From fractionalized excitations to coherent quasiparticles (<i>9 pages</i>)	235117
Chun Yang and Adrian E. Feiguin	
Flat-band engineering in tight-binding models: Beyond the nearest-neighbor hopping (<i>12 pages</i>)	235118
Tomonari Mizoguchi and Masafumi Udagawa	
Quantum anomalous Hall effect and gate-controllable topological phase transition in layered EuCd ₂ As ₂ (<i>5 pages</i>)	235119
Chengwang Niu, Ning Mao, Xiangting Hu, Baibiao Huang, and Ying Dai	
☞ Hierarchies of methods towards the exact Kohn-Sham correlation energy based on the adiabatic-connection fluctuation-dissipation theorem (<i>20 pages</i>)	235120
Andreas Görling	
Characterization of the charge density wave transition and observation of the amplitude mode in LaAuSb ₂ (<i>7 pages</i>)	235121
C. N. Kuo, D. Shen, B. S. Li, Nguyen Nhat Quyen, W. Y. Tzeng, C. W. Luo, L. M. Wang, Y. K. Kuo, and C. S. Lue	
<i>Ab initio</i> path integral Monte Carlo approach to the static and dynamic density response of the uniform electron gas (<i>20 pages</i>)	235122
S. Groth, T. Dornheim, and J. Vorberger	
Fingerprints of the conformal anomaly in the thermoelectric transport in Dirac and Weyl semimetals (<i>9 pages</i>)	235123
Vicente Arjona, Maxim N. Chernodub, and María A. H. Vozmediano	
Thermal radiation as a probe of one-dimensional electron liquids (<i>5 pages</i>)	235124
Wade DeGottardi, Michael J. Gullans, Suraj Hegde, Smitha Vishveshwara, and Mohammad Hafezi	
Symmetry representation approach to topological invariants in C _{2v} T-symmetric systems (<i>14 pages</i>)	235125
Junyeong Ahn and Bohm-Jung Yang	
Pressure-induced reentrant transition in NbS ₃ phases: Combined Raman scattering and x-ray diffraction study (<i>7 pages</i>)	235126
M. Abdel-Hafiez, R. Thiyagarajan, A. Majumdar, R. Ahuja, W. Luo, A. N. Vasiliev, A. A. Maarouf, S. G. Zybtsev, V. Ya. Pokrovskii, S. V. Zaitsev-Zotov, V. V. Pavlovskiy, Woei Wu Pai, W. Yang, and L. V. Kulik	

(Continued)

ARTICLES

Electronic structure and strongly correlated systems

- Magnetoelastic coupling in URu_2Si_2 : Probing multipolar correlations in the hidden order state (6 pages) 235101
Mark Wartenbe, Ryan E. Baumbach, Arkady Shekhter, Gregory S. Boebinger, Eric D. Bauer,
Carolina Corvalán Moya, Neil Harrison, Ross D. McDonald, Myron B. Salamon, and Marcelo Jaime
- Coupled-wire description of surface *ADE* topological order (26 pages) 235102
Bo Han and Jeffrey C. Y. Teo
- Ultrasoft pseudopotentials with kinetic energy density support: Implementing the Tran-Blaha
potential (9 pages) 235103
Albert P. Bartók and Jonathan R. Yates
- Lattice dynamics, crystal-field excitations, and quadrupolar fluctuations of YbRu_2Ge_2 (11 pages) 235104
Mai Ye, E. W. Rosenberg, I. R. Fisher, and G. Blumberg
- Efficient method to compute $\mathbb{Z}_4$ indices with glide symmetry and applications to the Möbius materials CeNiSn
and UCoGe (18 pages) 235105
Tsuneya Yoshida, Akito Daido, Norio Kawakami, and Youichi Yanase
- Efficient evaluation of the polarization function in dynamical mean-field theory (14 pages) 235106
Friedrich Krien
- Ferromagnetic instability for the single-band Hubbard model in the strong-coupling regime (6 pages) 235107
Yusuke Kamogawa, Joji Nasu, and Akihisa Koga
- Spatial anisotropy of the Kondo screening cloud in a type-II Weyl semimetal (10 pages) 235108
Lu-Ji Wang, Xing-Tai Hu, Lin Li, Dong-Hui Xu, Jin-Hua Sun, and Wei-Qiang Chen
- ☞ Reconstructing entanglement Hamiltonian via entanglement eigenstates (12 pages) 235109
W. Zhu, Zhoushen Huang, and Yin-Chen He
- Chern insulators for electromagnetic waves in electrical circuit networks (9 pages) 235110
Rafael Haenel, Timothy Branch, and Marcel Franz
- Performance of the spin-dependent Krieger-Li-Iafrate approximation in jellium slabs (12 pages) 235111
C. M. Horowitz, S. Rigamonti, and C. R. Proetto
- ☞ Periodic table for topological bands with non-Hermitian symmetries (19 pages) 235112
Hengyun Zhou and Jong Yeon Lee



Copyright 2019 by American Physical Society



2469-9950(20190615)99:23;1-6

(Continued)

This paper was highlighted in the APS publication *Physics* (physics.aps.org).

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).