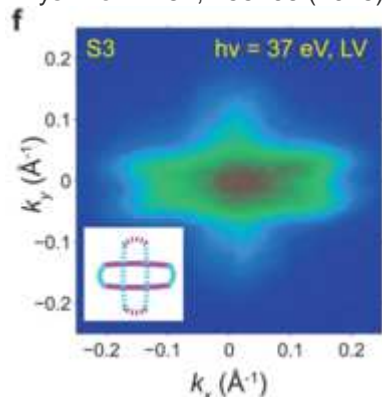


**HIGHLIGHTED ARTICLES**

**Editors' Suggestion**

[Emergence of the nematic electronic state in FeSe](#)

M. D. Watson, T. K. Kim, A. A. Haghighirad, N. R. Davies, A. McCollam, A. Narayanan, S. F. Blake, Y. L. Chen, S. Ghannadzadeh, A. J. Schofield, M. Hoesch, C. Meingast, T. Wolf, and A. I. Coldea  
 Phys. Rev. B **91**, 155106 (2015) – Published 7 April 2015

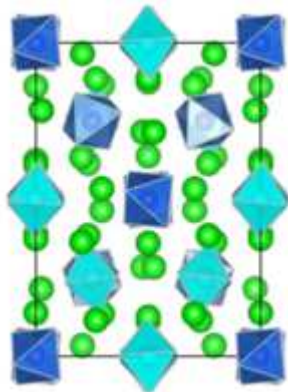


Improvements in experimental resolution allow this group to elucidate how the electronic nematic transition evolves in FeSe. They observe the changing Fermi surface, the position of the lowest energy electronic excitations, as well as the propensity towards nematic order and its manifestation under strain.

**Editors' Suggestion**

[New material for probing spin-orbit coupling in iridates](#)

Brendan F. Phelan, Jason Krizan, Weiwei Xie, Quinn Gibson, and R. J. Cava  
 Phys. Rev. B **91**, 155117 (2015) – Published 13 April 2015

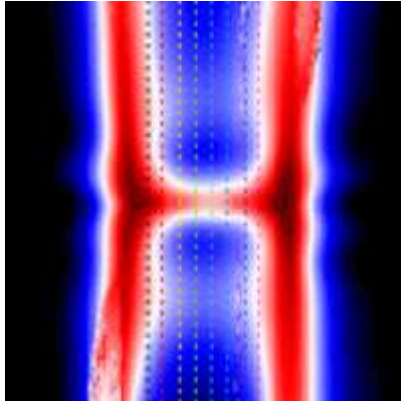


Synthesis of a new material in the iridate family with a continuously tunable valence of Ir shows the dominant role played by spin-orbit coupling in determining the magnetic properties.

**Editors' Suggestion**

[Broken SU\(4\) symmetry in a Kondo-correlated carbon nanotube](#)

Daniel R. Schmid, Sergey Smirnov, Magdalena Margańska, Alois Dirnacher, Peter L. Stiller, Milena Grifoni, Andreas K. Hüttel, and Christoph Strunk  
 Phys. Rev. B **91**, 155435 (2015) – Published 29 April 2015

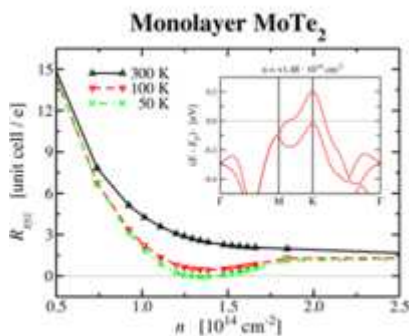


This paper reports on the experimental and theoretical investigation of nonequilibrium Kondo effect in carbon nanotube quantum dots. At low temperature and in the absence of magnetic field, the authors observe two symmetric satellite features on either side of the zero bias peak due to the splitting of single-particle states by the spin-orbit coupling and valley mixing. Further experimental results are discussed based on the underlying symmetries of the carbon nanotube energy spectrum.

#### Editors' Suggestion

[First-principles theory of field-effect doping in transition-metal dichalcogenides: Structural properties, electronic structure, Hall coefficient, and electrical conductivity](#)

Thomas Brumme, Matteo Calandra, and Francesco Mauri  
 Phys. Rev. B **91**, 155436 (2015) – Published 30 April 2015



Electrochemical doping in 2D transition-metal dichalcogenides (TDMs) aimed at creating field effect transistor (FET) conditions can allow one to explore interesting transport phenomena in reduced dimensionality. In this timely work, the authors thoroughly investigate from first principles how field-effect doping affects the structural properties, electronic structure, and Hall coefficient of mono- and few-layers TDMs. They show that (i) the models, typically, used to estimate the doping charge in FET devices cannot be applied to 2D TMDs and, (ii) given the multivalley nature of both the conduction and valence bands, small differences in the band structure can manifest in transport behavior that is very different from that predicted based on a single parabolic band.

## ARTICLES

### Electronic structure and strongly correlated systems

[Mott transition in the triangular lattice Hubbard model: A dynamical cluster approximation study](#)

Hung T. Dang, Xiao Yan Xu, Kuang-Shing Chen, Zi Yang Meng, and Stefan Wessel  
 Phys. Rev. B **91**, 155101 (2015) – Published 2 April 2015

[Eigenvalue-based method and form-factor determinant representations for integrable XXZ Richardson-Gaudin models](#)

Pieter W. Claeys, Stijn De Baerdemacker, Mario Van Raemdonck, and Dimitri Van Neck  
 Phys. Rev. B **91**, 155102 (2015) – Published 3 April 2015

[Spin-triplet superconductivity in Sr<sub>2</sub>RuO<sub>4</sub> due to orbital and spin fluctuations: Analyses by two-dimensional renormalization group theory and self-consistent vertex-correction method](#)

Masahisa Tsuchiizu, Youichi Yamakawa, Seiichiro Onari, Yusuke Ohno, and Hiroshi Kontani  
 Phys. Rev. B **91**, 155103 (2015) – Published 6 April 2015

[Spin-orbit-induced orbital excitations in Sr<sub>2</sub>RuO<sub>4</sub> and Ca<sub>2</sub>RuO<sub>4</sub>: A resonant inelastic x-ray scattering study](#)

C. G. Fatuzzo, M. Dantz, S. Fatale, P. Olalde-Velasco, N. E. Shaik, B. Dalla Piazza, S. Toth, J. Pellicciari, R. Fittipaldi, A. Vecchione, N. Kikugawa, J. S. Brooks, H. M. Rønnow, M. Grioni, Ch. Rüegg, T. Schmitt, and J. Chang

Phys. Rev. B **91**, 155104 (2015) – Published 6 April 2015

[Chromium point defects in hexagonal BaTiO<sub>3</sub>: A comparative study of first-principles calculations and experiments](#)

Sanjeev K. Nayak, Hans T. Langhammer, Waheed A. Adeagbo, Wolfram Hergert, Thomas Müller, and Rolf Böttcher

Phys. Rev. B **91**, 155105 (2015) – Published 6 April 2015

**Editors' Suggestion**

[Emergence of the nematic electronic state in FeSe](#)

M. D. Watson, T. K. Kim, A. A. Haghighirad, N. R. Davies, A. McCollam, A. Narayanan, S. F. Blake, Y. L. Chen, S. Ghannadzadeh, A. J. Schofield, M. Hoesch, C. Meingast, T. Wolf, and A. I. Coldea

Phys. Rev. B **91**, 155106 (2015) – Published 7 April 2015

[Spectral functions of strongly correlated extended systems via an exact quantum embedding](#)

George H. Booth and Garnet Kin-Lic Chan

Phys. Rev. B **91**, 155107 (2015) – Published 7 April 2015

[Ultrafast probes of nonequilibrium hole spin relaxation in the ferromagnetic semiconductor GaMnAs](#)

Aaron Patz, Tianqi Li, Xinyu Liu, Jacek K. Furdyna, Ilias E. Perakis, and Jigang Wang

Phys. Rev. B **91**, 155108 (2015) – Published 8 April 2015

[Exploring approximations to the GW self-energy ionic gradients](#)

C. Faber, P. Boulanger, C. Attaccalite, E. Cannuccia, I. Duchemin, T. Deutsch, and X. Blase

Phys. Rev. B **91**, 155109 (2015) – Published 8 April 2015

[Russian doll spectrum in a non-Abelian string-net ladder](#)

Marc Daniel Schulz, Sébastien Dusuel, and Julien Vidal

Phys. Rev. B **91**, 155110 (2015) – Published 8 April 2015

[Repulsive versus attractive Hubbard model: Transport properties and spin-lattice relaxation rate](#)

Rok Žitko, Žiga Osolin, and Peter Jeglič

Phys. Rev. B **91**, 155111 (2015) – Published 8 April 2015

[Variational minimization of orbital-density-dependent functionals](#)

Giovanni Borghi, Cheol-Hwan Park, Ngoc Linh Nguyen, Andrea Ferretti, and Nicola Marzari

Phys. Rev. B **91**, 155112 (2015) – Published 9 April 2015

[Evidence for ordered magnetic moments at oxygen sites in antiferromagnetic Sr<sub>2</sub>IrO<sub>4</sub> and Sr<sub>3</sub>Ir<sub>2</sub>O<sub>7</sub>](#)

M. Miyazaki, R. Kadono, M. Hiraishi, A. Koda, K. M. Kojima, K. Ohashi, T. Takayama, and H. Takagi

Phys. Rev. B **91**, 155113 (2015) – Published 9 April 2015

[From Hubbard bands to spin-polaron excitations in the doped Mott material Na<sub>x</sub>CoO<sub>2</sub>](#)

Aljoscha Wilhelm, Frank Lechermann, Hartmut Hafermann, Mikhail I. Katsnelson, and Alexander I. Lichtenstein

Phys. Rev. B **91**, 155114 (2015) – Published 10 April 2015

[Strictly single-site DMRG algorithm with subspace expansion](#)

C. Hubig, I. P. McCulloch, U. Schollwöck, and F. A. Wolf

Phys. Rev. B **91**, 155115 (2015) – Published 10 April 2015

[Single- or double-electron emission within the Keldysh nonequilibrium Green's function and Feshbach projection operator techniques](#)

Y. Pavlyukh, M. Schüler, and J. Berakdar

Phys. Rev. B **91**, 155116 (2015) – Published 13 April 2015

**Editors' Suggestion**

[New material for probing spin-orbit coupling in iridates](#)

Brendan F. Phelan, Jason Krizan, Weiwei Xie, Quinn Gibson, and R. J. Cava

Phys. Rev. B **91**, 155117 (2015) – Published 13 April 2015

[Correlation effects in the capacitance of a gated carbon nanotube](#)

Han Fu, B. I. Shklovskii, and Brian Skinner

Phys. Rev. B **91**, 155118 (2015) – Published 13 April 2015

[Ground-state and spectral properties of an asymmetric Hubbard ladder](#)

Anas Abdelwahab, Eric Jeckelmann, and Martin Hohenadler

Phys. Rev. B **91**, 155119 (2015) – Published 14 April 2015

[Z<sub>2</sub> topology in nonsymmorphic crystalline insulators: Möbius twist in surface states](#)

Ken Shiozaki, Masatoshi Sato, and Kiyonori Gomi

Phys. Rev. B **91**, 155120 (2015) – Published 15 April 2015

[Generalized mutual information of quantum critical chains](#)

F. C. Alcaraz and M. A. Rajabpour

Phys. Rev. B **91**, 155122 (2015) – Published 15 April 2015

[Eigenstate thermalization hypothesis and integrability in quantum spin chains](#)

Vincenzo Alba

Phys. Rev. B **91**, 155123 (2015) – Published 16 April 2015

[Structural contributions to the pressure-tuned charge-density-wave to superconductor transition in ZrTe<sub>3</sub>: Raman scattering studies](#)

S. L. Gleason, Y. Gim, T. Byrum, A. Kogar, P. Abbamonte, E. Fradkin, G. J. MacDougall, D. J. Van Harlingen, Xiangde Zhu, C. Petrovic, and S. L. Cooper

Phys. Rev. B **91**, 155124 (2015) – Published 16 April 2015

[Spin-orbital interaction for face-sharing octahedra: Realization of a highly symmetric SU\(4\) model](#)

K. I. Kugel, D. I. Khomskii, A. O. Sboychakov, and S. V. Streltsov  
Phys. Rev. B **91**, 155125 (2015) – Published 17 April 2015  
[Scaling theory of the cuprate strange metals](#)

Sean A. Hartnoll and Andreas Karch  
Phys. Rev. B **91**, 155126 (2015) – Published 17 April 2015  
[Topological classification of dynamical phase transitions](#)

Szabolcs Vajna and Balázs Dóra  
Phys. Rev. B **91**, 155127 (2015) – Published 17 April 2015  
[Fragility of symmetry-protected topological order on a Hubbard ladder](#)

Sanjay Moudgalya and Frank Pollmann  
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[Hole-induced insulator-to-metal transition in  \$\text{La}\_{1-x}\text{Sr}\_x\text{CrO}\_3\$  epitaxial films](#)

K. H. L. Zhang, Y. Du, P. V. Sushko, M. E. Bowden, V. Shutthanandan, S. Sallis, L. F. J. Piper, and S. A. Chambers  
Phys. Rev. B **91**, 155129 (2015) – Published 20 April 2015  
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C. Sturm, D. Solnyshkov, O. Krebs, A. Lemaître, I. Sagnes, E. Galopin, A. Amo, G. Malpuech, and J. Bloch  
Phys. Rev. B **91**, 155130 (2015) – Published 20 April 2015  
[Conductance of molecularly linked gold nanoparticle films across an insulator-to-metal transition: From hopping to strong Coulomb electron-electron interactions and correlations](#)

M. Tie and A.-A. Dhirani  
Phys. Rev. B **91**, 155131 (2015) – Published 20 April 2015  
[Spontaneous formation of kagome network and Dirac half-semimetal on a triangular lattice](#)

Yutaka Akagi and Yukitoshi Motome  
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[Optical properties of  \$\text{V}\_2\text{O}\_3\$  in its whole phase diagram](#)

I. Lo Vecchio, L. Baldassarre, F. D'Apuzzo, O. Limaj, D. Nicoletti, A. Perucchi, L. Fan, P. Metcalf, M. Marsi, and S. Lupi  
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[Two-dimensional topological order of kinetically constrained quantum particles](#)

Stefanos Kourtis and Claudio Castellano  
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[Spin-orbit physics of  \$j=1/2\$  Mott insulators on the triangular lattice](#)

Michael Becker, Maria Hermanns, Bela Bauer, Markus Garst, and Simon Trebst  
Phys. Rev. B **91**, 155135 (2015) – Published 20 April 2015  
[Symmetry-protected topological order in magnetization plateau states of quantum spin chains](#)

Shintaro Takayoshi, Keisuke Totsuka, and Akihiro Tanaka  
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[Charge-transfer model for the electronic structure of layered ruthenates](#)

Krzysztof Rościszewski and Andrzej M. Oleś  
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[Atomically thin dilute magnetism in Co-doped phosphorene](#)

L. Seixas, A. Carvalho, and A. H. Castro Neto  
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[Probing the Fermi surface of three-dimensional Dirac semimetal  \$\text{Cd}\_3\text{As}\_2\$  through the de Haas–van Alphen technique](#)

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[Natural orbitals renormalization group approach to the two-impurity Kondo critical point](#)

Rong-Qiang He, Jianhui Dai, and Zhong-Yi Lu  
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[Influence of wave-function updates in GW calculations on titanates](#)

Gijae Kang, Youngho Kang, and Seungwu Han  
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Yejun Feng, A. Palmer, Yishu Wang, D. M. Silevitch, and T. F. Rosenbaum  
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[Kondo dynamics in one-dimensional doped ferromagnetic insulators](#)

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[Dynamical mean field theory for diatomic molecules and the exact double counting](#)

Juho Lee and Kristjan Haule  
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[Universal logarithmic corrections to entanglement entropies in two dimensions with spontaneously broken continuous symmetries](#)

David J. Luitz, Xavier Plat, Fabien Alet, and Nicolas Laflorencie  
Phys. Rev. B **91**, 155145 (2015) – Published 27 April 2015  
[Spectral changes in layered f-electron systems induced by Kondo hole substitution in the boundary layer](#)  
Sudeshna Sen, J. Moreno, M. Jarrell, and N. S. Vidhyadhiraja  
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[Antiferromagnetic order in weakly coupled random spin chains](#)  
J. Kokalj, J. Herbrych, A. Zheludev, and P. Prelovšek  
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Pei Wang, Guy Cohen, and Shaojun Xu  
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[Slave rotor approach to dynamically screened Coulomb interactions in solids](#)  
I. S. Krivenko and S. Biermann  
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[Rokhsar-Kivelson models of bosonic symmetry-protected topological states](#)  
Luiz H. Santos  
Phys. Rev. B **91**, 155150 (2015) – Published 29 April 2015  
[Two distinct topological phases in the mixed-valence compound YbB6 and its differences from SmB6](#)  
Tay-Rong Chang, Tanmoy Das, Peng-Jen Chen, Madhab Neupane, Su-Yang Xu, M. Zahid Hasan, Hsin Lin, Horng-Tay Jeng, and A. Bansil  
Phys. Rev. B **91**, 155151 (2015) – Published 29 April 2015

### **Semiconductors I: bulk**

[Electronic structure and phase stability of oxide semiconductors: Performance of dielectric-dependent hybrid functional DFT, benchmarked against GW band structure calculations and experiments](#)  
Matteo Gerosa, Carlo Enrico Bottani, Lucia Caramella, Giovanni Onida, Cristiana Di Valentin, and Gianfranco Pacchioni  
Phys. Rev. B **91**, 155201 (2015) – Published 2 April 2015  
[Excitonic correlation in the Mott crossover regime in Ge](#)  
Fumiya Sekiguchi and Ryo Shimano  
Phys. Rev. B **91**, 155202 (2015) – Published 6 April 2015  
[Generalized effective-medium model for the carrier mobility in amorphous organic semiconductors](#)  
Vadim Rodin, Franz Symalla, Velimir Meded, Pascal Friederich, Denis Danilov, Angela Poschlad, Gabriele Nelles, Florian von Wrochem, and Wolfgang Wenzel  
Phys. Rev. B **91**, 155203 (2015) – Published 10 April 2015

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

[Evolution of inhomogeneously broadened spin-noise spectrum with ac drive](#)  
Z. Yue and M. E. Raikh  
Phys. Rev. B **91**, 155301 (2015) – Published 9 April 2015  
[Spin-dependent current through a quantum dot from spin-polarized nonequilibrium quantum Hall edge channels](#)  
H. Kiyama, T. Nakajima, S. Teraoka, A. Oiwa, and S. Tarucha  
Phys. Rev. B **91**, 155302 (2015) – Published 10 April 2015  
[Nonuniversality due to inhomogeneous stress in semiconductor surface nanopatterning by low-energy ion-beam irradiation](#)  
A. Moreno-Barrado, M. Castro, R. Gago, L. Vázquez, J. Muñoz-García, A. Redondo-Cubero, B. Galiana, C. Ballesteros, and R. Cuerno  
Phys. Rev. B **91**, 155303 (2015) – Published 13 April 2015  
[Exciton spin dynamics and photoluminescence polarization of CdSe/CdS dot-in-rod nanocrystals in high magnetic fields](#)  
B. Siebers, L. Biadala, D. R. Yakovlev, A. V. Rodina, T. Aubert, Z. Hens, and M. Bayer  
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[Energy dispersion of tunnel spin polarization extracted from thermal and electrical spin currents](#)  
Kun-Rok Jeon, Hidekazu Saito, Shinji Yuasa, and Ron Jansen  
Phys. Rev. B **91**, 155305 (2015) – Published 16 April 2015  
[Kondo effect and the fate of bistability in molecular quantum dots with strong electron-phonon coupling](#)  
Juliane Klatt, Lothar Mühlbacher, and Andreas Komnik  
Phys. Rev. B **91**, 155306 (2015) – Published 16 April 2015  
[Spinor stochastic resonance](#)  
H. Abbaspour, S. Trebaol, F. Morier-Genoud, M. T. Portella-Oberli, and B. Deveaud  
Phys. Rev. B **91**, 155307 (2015) – Published 17 April 2015  
[Three-dimensional photonic crystals fabricated by simultaneous multidirectional etching](#)  
Keisuke Kitano, Katsuyoshi Suzuki, Kenji Ishizaki, and Susumu Noda  
Phys. Rev. B **91**, 155308 (2015) – Published 23 April 2015



[Hybrid density matrix approach as a factorization scheme for many-body systems: Illustrated by a quantum dot–continuum system](#)

Sandra C. Kuhn and Marten Richter

Phys. Rev. B **91**, 155309 (2015) – Published 24 April 2015

[Dynamics of entanglement of two electron spins interacting with nuclear spin baths in quantum dots](#)

Igor Bragar and Łukasz Cywiński

Phys. Rev. B **91**, 155310 (2015) – Published 24 April 2015

[Anisotropic exciton Stark shift in black phosphorus](#)

A. Chaves, Tony Low, P. Avouris, D. Çakır, and F. M. Peeters

Phys. Rev. B **91**, 155311 (2015) – Published 27 April 2015

[Transport properties of a two-dimensional electron gas dressed by light](#)

S. Morina, O. V. Kibis, A. A. Pervishko, and I. A. Shelykh

Phys. Rev. B **91**, 155312 (2015) – Published 29 April 2015

[Two-dimensional spectroscopy: An approach to distinguish Förster and Dexter transfer processes in coupled nanostructures](#)

Judith F. Specht, Andreas Knorr, and Marten Richter

Phys. Rev. B **91**, 155313 (2015) – Published 29 April 2015

## **Surface physics, nanoscale physics, low-dimensional systems**

[Surface energetics of alkaline-earth metal oxides: Trends in stability and adsorption of small molecules](#)

Michal Bajdich, Jens K. Nørskov, and Aleksandra Vojvodic

Phys. Rev. B **91**, 155401 (2015) – Published 1 April 2015

[Nuclear resonant scattering of synchrotron radiation by physisorbed Kr on TiO<sub>2</sub>\(110\) surfaces in multilayer and monolayer regimes](#)

Akihiko Ikeda, Taizo Kawauchi, Tatsuo Okano, Katsuyuki Fukutani, Masuaki Matsumoto, Xiao Wei Zhang, and Yoshitaka Yoda

Phys. Rev. B **91**, 155402 (2015) – Published 3 April 2015

[Probing interlayer interactions between graphene and metal substrates by supersonic rare-gas atom scattering](#)

H. Shichibe, Y. Satake, K. Watanabe, A. Kinjyo, A. Kunihara, Y. Yamada, M. Sasaki, W. W. Hayes, and J. R. Manson

Phys. Rev. B **91**, 155403 (2015) – Published 6 April 2015

[High-sensitivity temperature sensing using an implanted single nitrogen-vacancy center array in diamond](#)

Junfeng Wang, Fupan Feng, Jian Zhang, Jihong Chen, Zhongcheng Zheng, Liping Guo, Wenlong Zhang, Xuerui Song, Guoping Guo, Lele Fan, Chongwen Zou, Liren Lou, Wei Zhu, and Guanzhong Wang

Phys. Rev. B **91**, 155404 (2015) – Published 6 April 2015

[Magnetic order on a topological insulator surface with warping and proximity-induced superconductivity](#)

Daniel Mendler, Panagiotis Kotetes, and Gerd Schön

Phys. Rev. B **91**, 155405 (2015) – Published 6 April 2015

[Retrieval of material parameters for uniaxial metamaterials](#)

Georgia T. Papadakis, Pochi Yeh, and Harry A. Atwater

Phys. Rev. B **91**, 155406 (2015) – Published 7 April 2015

[Spin-dependent Seebeck effect and spin caloritronics in magnetic graphene](#)

Babak Zare Rameshti and Ali G. Moghaddam

Phys. Rev. B **91**, 155407 (2015) – Published 8 April 2015

[Low thermal conductivity of graphyne nanotubes from molecular dynamics study](#)

Ming Hu, Yuhang Jing, and Xiaoliang Zhang

Phys. Rev. B **91**, 155408 (2015) – Published 9 April 2015

[Electrical manipulation of edge states in graphene and the effect on quantum Hall transport](#)

B. Ostahie, M. Niță, and A. Aldea

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[Electronic properties of triangular and hexagonal MoS<sub>2</sub> quantum dots](#)

S. Pavlović and F. M. Peeters

Phys. Rev. B **91**, 155410 (2015) – Published 10 April 2015

[Interface disorder probed at the atomic scale for graphene grown on the C face of SiC](#)

G. Nicotra, I. Deretzis, M. Scuderi, C. Spinella, P. Longo, R. Yakimova, F. Giannazzo, and A. La Magna

Phys. Rev. B **91**, 155411 (2015) – Published 10 April 2015

[Topological-sector fluctuations and ergodicity breaking at the Berezinskii-Kosterlitz-Thouless transition](#)

Michael F. Faulkner, Steven T. Bramwell, and Peter C. W. Holdsworth

Phys. Rev. B **91**, 155412 (2015) – Published 10 April 2015

[Unbinding transition in semi-infinite two-dimensional localized systems](#)

A. M. Somoza, P. Le Doussal, and M. Ortuño

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[Anisotropic atom displacement in Pd nanocubes resolved by molecular dynamics simulations supported by x-ray diffraction imaging](#)

P. Scardi, A. Leonardi, L. Gelisio, M. R. Suchomel, B. T. Sneed, M. K. Sheehan, and C.-K. Tsung

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[Adsorption effects on radial breathing mode of single-walled carbon nanotubes](#)  
Shohei Chiashi, Kaname Kono, Daiki Matsumoto, Junpei Shitaba, Naoki Homma, Atsushi Beniya, Takahiro Yamamoto, and Yoshikazu Homma  
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[Cloaking resonant scatterers and tuning electron flow in graphene](#)  
Diego Oliver, Jose H. Garcia, Tatiana G. Rappoport, N. M. R. Peres, and Felipe A. Pinheiro  
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[Controlling adsorption and spin configurations of Co atoms on Si\(111\)-\(7×7\)](#)  
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J. Ledieu, É. Gaudry, M.-C. de Weerd, P. Gille, R. D. Diehl, and V. Fournée  
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Simon Liebing, Claudia Martin, Kai Trepte, and Jens Kortus  
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[Out-of-equilibrium electrons and the Hall conductance of a Floquet topological insulator](#)  
Hossein Dehghani, Takashi Oka, and Aditi Mitra  
Phys. Rev. B **91**, 155422 (2015) – Published 20 April 2015  
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Jeil Jung, Marco Polini, and A. H. MacDonald  
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[Stoichiometry engineering of ternary oxide ultrathin films: BaxTi2O3 on Au\(111\)](#)  
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[Validity of the single-particle description and charge noise resilience for multielectron quantum dots](#)  
Michiel A. Bakker, Sebastian Mehl, Tuukka Hiltunen, Ari Harju, and David P. DiVincenzo  
Phys. Rev. B **91**, 155425 (2015) – Published 22 April 2015  
[Effect of magnetic anisotropy on spin-dependent thermoelectric effects in nanoscopic systems](#)  
Maciej Misiorny and Józef Barnaś  
Phys. Rev. B **91**, 155426 (2015) – Published 23 April 2015  
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