PHYSICAL REVIEW A THIRD SERIES, VOLUME 93, NUMBER 6 JUNE 2016

COMMENTS

Comment on "Direct counterfactual transmission of a quantum state" *(2 pages)* 066301
L. Vaidman

Reply to "Comment on 'Direct counterfactual transmission of a quantum state"' *(1 page)* 066302
Zheng-Hong Li, M. Al-Amri, and M. Suhail Zubairy

Comment on "Device-independent entanglement-based Bennett 1992 protocol" *(4 pages)* 066303
Yong-gang Tan and Qing-yu Cai

Reply to "Comment on 'Device-independent entanglement-based Bennett 1992 protocol' " *(2 pages)* 066304
Giuseppe Vallone, Giovanni Di Giuseppe, Paolo Mataloni, Paolo Villoresi, and Marco Lucamarini

Comment on "Classical description of H($1s$) and H*(n=2) for cross-section calculations relevant to charge-exchange diagnostics" *(4 pages)* 066701
A. Jorge, L. F. Errea, Clara Illescas, and L. Méndez

Reply to "Comment on 'Classical description of H($1s$) and H*($n = 2$) for cross-section calculations relevant to charge-exchange diagnostics"' *(5 pages)* 066702
N. D. Cariatore, S. Otranto, and R. E. Olson

ERRATA

Erratum: Electron rescattering in strong-field photodetachment of F^- [Phys. Rev. A **91**, 031404(R) (2015)] *(3 pages)* . . . . . 069901(E)
O. Hassouneh, S. M. K. Law, S. F. C. Shearer, A. C. Brown, and H. W. van der Hart

Erratum: Gaussian entanglement distribution via satellite [Phys. Rev. A **91**, 022304 (2015)] *(1 page)* . . . . . 069902(E)
Nedasadat Hosseinidehaj and Robert Malaney

Erratum: One-pion-exchange effect in the energy spectrum of muonic hydrogen [Phys. Rev. A **92**, 032512 (2015)] *(1 page)* . . . . . 069903(E)
Hai-Qing Zhou and Hou-Rong Pang

Erratum: Slicing the Fock space for state production and protection [Phys. Rev. A **90**, 033840 (2014)] *(2 pages)* . . . . . 069904(E)
R. F. Rossetti, G. D. de Moraes Neto, F. O. Prado, F. Brito, and M. H. Y. Moussa

Erratum: Atom-field dressed states in slow-light waveguide QED [Phys. Rev. A **93**, 033833 (2016)] *(1 page)* . . . . 069905(E)
Giuseppe Calajó, Francesco Ciccarello, Darrick Chang, and Peter Rabl

Erratum: Measures of electronic-vibrational entanglement and quantum coherence in a molecular system [Phys. Rev. A **92**, 042323 (2015)] *(1 page)* . . . . . 069906(E)
Mihaela Vatasescu

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Comprehensive study on the concept of temporal optical waveguides *(5 pages)* 063847
Junhe Zhou, Guozeng Zheng, and Jianjie Wu

Evidence of indistinguishability and entanglement determined by the energy-time uncertainty principle in a system of two strongly coupled bosonic modes *(12 pages)* 063848
Smail Bougouffa and Zbigniew Ficek

Theory of patch-antenna metamaterial perfect absorbers *(8 pages)* 063849
Patrick T. Bowen, Alexandre Baron, and David R. Smith

Polarization-selective branching of stop gaps in three-dimensional photonic crystals *(11 pages)* 063850
Priya and Rajesh V. Nair

Unusual quantum Talbot effect based on the orbital angular momentum of photons *(9 pages)* 063851
Yifan Sun and Xiangdong Zhang

Interaction of atom with nonparaxial Laguerre-Gaussian beam: Forming superposition of vortex states in Bose-Einstein condensates *(6 pages)* 063852
Anal Bhowmik, Pradip Kumar Mondal, Sonjoy Majumder, and Bimalendu Deb

Optomechanical cooling in the non-Markovian regime *(8 pages)* 063853
Wen-Zhao Zhang, Jiong Cheng, Wen-Dong Li, and Ling Zhou

Influence of finite bandwidth on the propagation of information in fast- and slow-light media *(8 pages)* 063854
Heisuke Amano and Makoto Tomita

Coherently coupling distinct spin ensembles through a high-T_c superconducting resonator *(7 pages)* 063855
A. Ghirri, C. Bonizzoni, F. Troiani, N. Buccheri, L. Beverina, A. Cassinese, and M. Affronte

Coherent light in intense spatiospectral twin beams *(16 pages)* 063857
Jan Peřina, Jr.

Asymmetric Laguerre-Gaussian beams *(10 pages)* 063858
A. A. Kovalev, V. V. Kotlyar, and A. P. Porfirev

Solvable multistate model of Landau-Zener transitions in cavity QED *(12 pages)* 063859
Nikolai A. Sinitsyn and Fuxiang Li

Single-photon nonlinearities in a strongly driven optomechanical system with quadratic coupling *(7 pages)* 063860
Hong Xie, Gong-Wei Lin, Xiang Chen, Zhi-Hua Chen, and Xiu-Min Lin

Method for observing robust and tunable phonon blockade in a nanomechanical resonator coupled to a charge qubit *(11 pages)* 063861
Xin Wang, Adam Miranowicz, Hong-Rong Li, and Franco Nori

Quantum and classical phases in optomechanics *(9 pages)* 063862
Federico Armata, Ludovico Latmiral, Igor Pikovski, Michael R. Vanner, Časlav Brukner, and M. S. Kim

Intrinsic optical bistability in a strongly driven Rydberg ensemble *(5 pages)* 063863
Natalia R. de Melo, Christopher G. Wade, Nikola Šibalić, Jorge M. Kondo, Charles S. Adams, and Kevin J. Weatherill

Controlling the topological charge of twisted light beams with propagation *(6 pages)* 063864
Ahmed H. Dorrah, Michel Zamboni-Rached, and Mo Mojahedi

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

$\mathcal{PT}$-symmetry breaking in waveguides with competing loss-gain pairs *(7 pages)* 063831
P. A. Kalozoumis, C. V. Morfonios, F. K. Diakonos, and P. Schmelcher

Efficient treatment of stacked metasurfaces for optimizing and enhancing the range of accessible optical functionalities *(12 pages)* 063832
C. Menzel, J. Sperrhake, and T. Pertsch

Effect of high-power laser divergence on the plasma structural parameters during multiple filamentation in air *(7 pages)* 063833
Yu. E. Geints and A. A. Zemlyanov

Dissipative two-level systems under ultrastrong off-resonant driving *(6 pages)* 063834
A. P. Saiko, S. A. Markevich, and R. Fedaruk

Polaritonic modes in a dense cloud of cold atoms *(8 pages)* 063835
N. J. Schilder, C. Sauvan, J.-P. Hugonin, S. Jennewein, Y. R. P. Sortais, A. Browaeys, and J.-J. Greffet

Weak-light rogue waves, breathers, and their active control in a cold atomic gas via electromagnetically induced transparency *(10 pages)* 063836
Junyang Liu, Chao Hang, and Guoxiang Huang

Ground state of an ultrastrongly coupled qubit-oscillator system with broken inversion symmetry *(6 pages)* 063837
Li-Tuo Shen, Zhen-Biao Yang, Huai-Zhi Wu, and Shi-Biao Zheng

Three-way noiseless signal splitting in a parametric amplifier with quantum correlation *(8 pages)* 063838
Nannan Liu, Jiamin Li, Xiaoying Li, and Z. Y. Ou

Dark solitons in the Lugiato-Lefever equation with normal dispersion *(17 pages)* 063839
P. Parra-Rivas, E. Knobloch, D. Gomila, and L. Gelens

Symmetry-constrained electron vortex propagation *(9 pages)* 063840
L. Clark, G. Guzzinati, A. Béché, A. Lubk, and J. Verbeeck

Precisely measuring the orbital angular momentum of beams via weak measurement *(5 pages)* 063841
Jiangdong Qiu, Changliang Ren, and Zhiyou Zhang

Intrinsic upper bound on two-qubit polarization entanglement predetermined by pump polarization correlations in parametric down-conversion *(6 pages)* 063842
Girish Kulkarni, V. Subrahmanyam, and Anand K. Jha

Multitime correlation functions in nonclassical stochastic processes *(6 pages)* 063843
F. Krumm, J. Sperling, and W. Vogel

Electromagnetic eigenstates and the field of an oscillating point electric dipole in a flat-slab composite structure *(16 pages)* 063844
Asaf Farhi and David J. Bergman

Dynamical Lamb effect versus dissipation in superconducting quantum circuits *(12 pages)* 063845
A. A. Zhukov, D. S. Shapiro, W. V. Pogosov, and Yu. E. Lozovik

Optical response of dipole antennas on an epsilon-near-zero substrate *(4 pages)* 063846
Sebastian A. Schulz, Asad A. Tahir, M. Zahirul Alam, Jeremy Upham, Israel De Leon, and Robert W. Boyd

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Giant enhancement of optical high-order sideband generation and their control in a dimer of two cavities with gain and loss *(10 pages)* 063814
Jiahui Li, Jiahua Li, Qian Xiao, and Ying Wu

Crossover from superdiffusive to diffusive dynamics in fluctuating light fields *(4 pages)* 063815
Manuel I. Marqués

Indirect measurement of three-photon correlation in nonclassical light sources *(8 pages)* 063816
Byoung-moo Ann, Younghoon Song, Junki Kim, Daeho Yang, and Kyungwon An

Quantum speed meter based on dissipative coupling *(5 pages)* 063817
Sergey P. Vyatchanin and Andrey B. Matsko

Number-state filter for pulses of light *(8 pages)* 063818
Nikolai Lauk and Michael Fleischhauer

Dynamical zeroing of spin-wave momentum to suppress motional dephasing in an atomic-ensemble quantum memory *(4 pages)* 063819
Yan Jiang, Jun Rui, Xiao-Hui Bao, and Jian-Wei Pan

Time-local Heisenberg-Langevin equations and the driven qubit *(5 pages)* 063820
S. J. Whalen and H. J. Carmichael

Control of the size of the coherence area in entangled twin beams *(6 pages)* 063821
M. W. Holtfrerich and A. M. Marino

Extracting work from quantum states of radiation *(11 pages)* 063822
M. Kolář, A. Ryabov, and R. Filip

Simple, robust, and on-demand generation of single and correlated photons *(9 pages)* 063823
Sankar Raman Sathyamoorthy, Andreas Bengtsson, Steven Bens, Michaël Simoen, Per Delsing, and Göran Johansson

Phase solitons and domain dynamics in an optically injected semiconductor laser *(10 pages)* 063824
F. Gustave, L. Columbo, G. Tissoni, M. Brambilla, F. Prati, and S. Barland

Control of atomic spin squeezing via quantum coherence *(5 pages)* 063825
Xuping Shao, Yang Ling, Xihua Yang, and Min Xiao

Probing vacuum-induced coherence via magneto-optical rotation in molecular systems *(11 pages)* 063826
Pardeep Kumar, Bimalendu Deb, and Shubhrangshu Dasgupta

Polariton states in circuit QED for electromagnetically induced transparency *(12 pages)* 063827
Xiu Gu, Sai-Nan Huai, Franco Nori, and Yu-xi Liu

Negative frequencies in wave propagation: A microscopic model *(11 pages)* 063828
S. A. R. Horsley and S. Bugler-Lamb

Localized topological states in Bragg multihelicoidal fibers with twist defects *(10 pages)* 063829
C. N. Alexeyev, B. P. Lapin, G. Milione, and M. A. Yavorsky

Implementation of chiral quantum optics with Rydberg and trapped-ion setups *(18 pages)* 063830
Benoît Vermersch, Tomás Ramos, Philipp Hauke, and Peter Zoller

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Localization of wave packets in one-dimensional random potentials *(14 pages)* 063634
Juan Pablo Ramírez Valdes and Thomas Wellens

Spin evolution of cold atomic gases in SU(2) ⊗ U(1) fields *(7 pages)* 063635
I. V. Tokatly and E. Ya. Sherman

Second-order virial expansion for an atomic gas in a harmonic waveguide *(12 pages)* 063636
Tom Kristensen, Xavier Leyronas, and Ludovic Pricoupenko

Dynamics of fermions in an amplitude-modulated lattice *(7 pages)* 063637
Tomotake Yamakoshi, Shinichi Watanabe, Shun Ohgoda, and Alexander P. Itin

Quantum optics, physics of lasers, nonlinear optics, classical optics

Temporal laser-pulse-shape effects in nonlinear Thomson scattering *(8 pages)* 063801
V. Yu. Kharin, D. Seipt, and S. G. Rykovanov

Theory of TE-polarized waves in a lossless cubic-quintic nonlinear planar waveguide *(8 pages)* 063802
Hans Werner Schürmann and Valery Serov

Stochastic methods for light propagation and recurrent scattering in saturated and nonsaturated atomic ensembles *(22 pages)* 063803
Mark D. Lee, Stewart D. Jenkins, and Janne Ruostekoski

Quantum-enhanced spectroscopy with entangled multiphoton states *(6 pages)* 063804
Hossein T. Dinani, Manish K. Gupta, Jonathan P. Dowling, and Dominic W. Berry

Perfect photon absorption in the nonlinear regime of cavity quantum electrodynamics *(6 pages)* 063805
G. S. Agarwal, Ke Di, Liyong Wang, and Yifu Zhu

Noise and dynamics in forward Brillouin interactions *(12 pages)* 063806
P. Kharel, R. O. Behunin, W. H. Renninger, and P. T. Rakich

Quantum multimode treatment of light scattering by an atom in a waveguide *(18 pages)* 063807
William Konyk and Julio Gea-Banacloche

Superconducting quantum metamaterials as an active lasing medium: Effects of disorder *(8 pages)* 063808
Martin Koppenhöfer, Michael Marthaler, and Gerd Schön

℘ Quantum backaction and noise interference in asymmetric two-cavity optomechanical systems *(9 pages)* 063809
Yariv Yanay, Jack C. Sankey, and Aashish A. Clerk

Chirped solitary pulses for a nonic nonlinear Schrödinger equation on a continuous-wave background *(7 pages)* 063810
Houria Triki, K. Porsezian, Amitava Choudhuri, and P. Tchofo Dinda

Electric dipole coupling in optical cavities and its implications for energy transfer, up-conversion, and pooling *(11 pages)* 063811
Michael D. LaCount and Mark T. Lusk

Parity-time–symmetry breaking in two-dimensional photonic crystals: Square lattice *(13 pages)* 063812
Adam Mock

Temporal photonic crystals with modulations of both permittivity and permeability *(9 pages)* 063813
Juan Sabino Martínez-Romero, O. M. Becerra-Fuentes, and P. Halevi

(Continued)

℘ The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Exploring the stability and dynamics of dipolar matter-wave dark solitons *(12 pages)* 063617
M. J. Edmonds, T. Bland, D. H. J. O'Dell, and N. G. Parker

Attraction-induced dynamical stability of a Bose-Einstein condensate in a nonlinear lattice *(10 pages)* 063618
Raka Dasgupta, B. Prasanna Venkatesh, and Gentaro Watanabe

Contact resistance and phase slips in mesoscopic superfluid-atom transport *(8 pages)* 063619
S. Eckel, Jeffrey G. Lee, F. Jendrzejewski, C. J. Lobb, G. K. Campbell, and W. T. Hill, III

Matter-wave recombiners for trapped Bose-Einstein condensates *(10 pages)* 063620
T. Berrada, S. van Frank, R. Bücker, T. Schumm, J.-F. Schaff, J. Schmiedmayer, B. Julía-Díaz, and A. Polls

Coherent population trapping in a Raman atom interferometer *(5 pages)* 063621
B. Cheng, P. Gillot, S. Merlet, and F. Pereira Dos Santos

Pressure profiles of nonuniform two-dimensional atomic Fermi gases *(6 pages)* 063622
Kirill Martiyanov, Tatiana Barmashova, Vasiliy Makhalov, and Andrey Turlapov

SO(2)-induced breathing patterns in multicomponent Bose-Einstein condensates *(11 pages)* 063623
E. G. Charalampidis, Wenlong Wang, P. G. Kevrekidis, D. J. Frantzeskakis, and J. Cuevas-Maraver

Properties of the single-site reduced density matrix in the Bose-Bose resonance model in the ground state and in quantum quenches *(14 pages)* 063624
F. Dorfner and F. Heidrich-Meisner

Spin-1 quantum walks *(10 pages)* 063625
Daichi Morita, Toshihiro Kubo, Yasuhiro Tokura, and Makoto Yamashita

Hidden-symmetry-protected quantum pseudo–spin Hall effect in optical lattices *(6 pages)* 063626
Jing-Min Hou and Wei Chen

Ground-state properties of hard-core anyons in a harmonic potential *(6 pages)* 063627
Yajiang Hao

Bragg interferometer for gravity gradient measurements *(9 pages)* 063628
G. D'Amico, F. Borselli, L. Cacciapuoti, M. Prevedelli, G. Rosi, F. Sorrentino, and G. M. Tino

Stoner ferromagnetism of a strongly interacting Fermi gas in the quasirepulsive regime *(12 pages)* 063629
Lianyi He, Xia-Ji Liu, Xu-Guang Huang, and Hui Hu

Enhanced effects of variation of the fundamental constants in laser interferometers and application to dark-matter detection *(8 pages)* 063630
Y. V. Stadnik and V. V. Flambaum

Dimensional crossover of nonrelativistic bosons *(16 pages)* 063631
Soeren Lammers, Igor Boettcher, and Christof Wetterich

Quantum simulators based on the global collective light-matter interaction *(22 pages)* 063632
Santiago F. Caballero-Benitez, Gabriel Mazzucchi, and Igor B. Mekhov

Periodic driving control of Raman-induced spin-orbit coupling in Bose-Einstein condensates: The heating mechanisms *(11 pages)* 063633
J. M. Gomez Llorente and J. Plata

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Matter waves and collective properties of cold atoms and molecules

Multiconfigurational time-dependent Hartree method for bosons with internal degrees of freedom: Theory and composite fragmentation of multicomponent Bose-Einstein condensates *(10 pages)* 063601
Axel U. J. Lode

Impact of many-body correlations on the dynamics of an ion-controlled bosonic Josephson junction *(12 pages)* 063602
J. M. Schurer, R. Gerritsma, P. Schmelcher, and A. Negretti

Reservoir interactions of a vortex in a trapped three-dimensional Bose-Einstein condensate *(9 pages)* 063603
S. J. Rooney, A. J. Allen, U. Zülicke, N. P. Proukakis, and A. S. Bradley

Brownian motion of a matter-wave bright soliton moving through a thermal cloud of distinct atoms *(5 pages)* 063604
R. G. McDonald and A. S. Bradley

Excitations of one-dimensional supersolids with optical lattices *(5 pages)* 063605
C.-H. Hsueh, Y.-C. Tsai, and W. C. Wu

Dirac and Weyl rings in three-dimensional cold-atom optical lattices *(8 pages)* 063606
Yong Xu and Chuanwei Zhang

First-order superfluid-to-Mott-insulator phase transitions in spinor condensates *(5 pages)* 063607
J. Jiang, L. Zhao, S.-T. Wang, Z. Chen, T. Tang, L.-M. Duan, and Y. Liu

Optical-lattice-influenced geometry of quasi-two-dimensional binary condensates and quasiparticle spectra *(9 pages)* 063608
K. Suthar and D. Angom

Producing directed migration with correlated atoms in a tilted ac-driven lattice *(6 pages)* 063609
Yi Zheng and Shi-Jie Yang

Competing ground states of strongly correlated bosons in the Harper-Hofstadter-Mott model *(9 pages)* 063610
Stefan S. Natu, Erich J. Mueller, and S. Das Sarma

Reentrant superfluidity and pair density wave in single-component dipolar Fermi gases *(6 pages)* 063611
Yanming Che, Jibiao Wang, and Qijin Chen

Collisional decoherence of polar molecules *(9 pages)* 063612
Kai Walter, Benjamin A. Stickler, and Klaus Hornberger

Signatures of spatial inversion asymmetry of an optical lattice observed in matter-wave diffraction *(5 pages)* 063613
C. K. Thomas, T. H. Barter, T.-H. Leung, S. Daiss, and D. M. Stamper-Kurn

One-dimensional topological chains with Majorana fermions in two-dimensional nontopological optical lattices *(6 pages)* 063614
Lei Jiang, Chunlei Qu, and Chuanwei Zhang

Robust spatial coherence 5 μm from a room-temperature atom chip *(14 pages)* 063615
Shuyu Zhou, David Groswasser, Mark Keil, Yonathan Japha, and Ron Folman

Multichannel scattering and loss processes of ultracold atoms in anisotropic harmonic waveguides *(9 pages)* 063616
Sara Shadmehri, Shahpoor Saeidian, and Vladimir S. Melezhik

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Simulation of laser cooling by the bichromatic force *(6 pages)* 063410
Xiang Hua, Christopher Corder, and Harold Metcalf

Photoionization microscopy for a hydrogen atom in parallel electric and magnetic fields *(7 pages)* 063411
M. Deng, W. Gao, Rong Lu, J. B. Delos, L. You, and H. P. Liu

Photoelectron recapture and reemission process associated with double Auger decay in Ar *(6 pages)* 063412
Y. Hikosaka, R. Mashiko, T. Odagiri, J. Adachi, H. Tanaka, T. Kosuge, and K. Ito

Level sequence and splitting identification of closely spaced energy levels by angle-resolved analysis of fluorescence light *(8 pages)* 063413
Z. W. Wu, A. V. Volotka, A. Surzhykov, C. Z. Dong, and S. Fritzsche

Nonlinear Fano interferences in open quantum systems: An exactly solvable model *(8 pages)* 063414
Daniel Finkelstein-Shapiro, Monica Calatayud, Osman Atabek, Vladimiro Mujica, and Arne Keller

Intrapulse x-ray parametric amplification in high-order-harmonic generation *(4 pages)* 063415
Carles Serrat

Coherent control of the dissociation probability of H_2^+ in ω-3ω two-color fields *(5 pages)* 063416
Han Xu, Hongtao Hu, Xiao-Min Tong, Peng Liu, Ruxin Li, Robert T. Sang, and Igor V. Litvinyuk

Angular anisotropy of time delay in XUV+IR photoionization of H_2^+ *(8 pages)* 063417
Vladislav V. Serov and A. S. Kheifets

Improved strong-field approximation and quantum-orbit theory: Application to ionization by a bicircular laser field *(20 pages)* 063418
D. B. Milošević and W. Becker

Probing and extracting the structure of vibrating SF_6 molecules with inner-shell photoelectrons *(9 pages)* 063419
Ngoc-Ty Nguyen, R. R. Lucchese, C. D. Lin, and Anh-Thu Le

Quantum spin dynamics in a spin-orbit-coupled Bose-Einstein condensate *(10 pages)* 063420
Ting Fung Jeffrey Poon and Xiong-Jun Liu

Laser-subcycle control of sequential double-ionization dynamics of helium *(10 pages)* 063421
Markus S. Schöffler, Xinhua Xie (谢新华), Philipp Wustelt, Max Möller, Stefan Roither, Daniil Kartashov, A. Max Sayler, Andrius Baltuska, Gerhard G. Paulus, and Markus Kitzler

Magnetic-sublevel-independent magic wavelengths: Application to Rb and Cs atoms *(5 pages)* 063422
Sukhjit Singh, B. K. Sahoo, and Bindiya Arora

Dynamics of the $Q_2\,{}^1\Pi_u(1)$ state studied from the isotope effect on the cross sections for the formation of the $2p$ atom pair in the photoexcitation of H_2 and D_2 *(8 pages)* 063423
Kouichi Hosaka, Kennichi Shiino, Yuko Nakanishi, Takeshi Odagiri, Masashi Kitajima, and Noriyuki Kouchi

Flag-based control of quantum purity for $n = 2$ systems *(10 pages)* 063424
Patrick Rooney, Anthony M. Bloch, and C. Rangan

Dipole-forbidden atomic transitions induced by superintense x-ray laser fields *(5 pages)* 063425
Aleksander Skjerlie Simonsen and Morten Førre

Selective strong-field enhancement and suppression of ionization with short laser pulses *(5 pages)* 063426
N. A. Hart, J. Strohaber, A. A. Kolomenskii, G. G. Paulus, D. Bauer, and H. A. Schuessler

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A THIRD SERIES, VOLUME 93, NUMBER 6 JUNE 2016

H^+-H_2O collisions studied by time-dependent density-functional theory combined with the molecular dynamics method *(9 pages)* 062706
Xuhai Hong, Feng Wang, Yong Wu, Bingcong Gou, and Jianguo Wang

Comparison of experimental and theoretical triple differential cross sections for the single ionization of CO_2 $(1\pi_g)$ by electron impact *(6 pages)* 062707
Zehra N. Ozer, Esam Ali, Mevlut Dogan, Murat Yavuz, Osman Alwan, Adnan Naja, Ochbadrakh Chuluunbaatar, Boghos B. Joulakian, Chuan-Gang Ning, James Colgan, and Don Madison

Complete-velocity-range description of negative-ion conversion of neutral atoms on an alkali-metal-halide surface under grazing geometry *(8 pages)* 062708
Hu Zhou, Wang Zhou, Meixiao Zhang, Lihua Zhou, Yulong Ma, Guangyi Wang, Yong Wu, Bowen Li, and Ximeng Chen

Electron-impact ionization of W^{27+} *(5 pages)* 062709
M. S. Pindzola and S. D. Loch

PART B

Atomic and molecular processes in external fields, including interactions with strong fields and short pulses

Enhancement of VUV and EUV generation by field-controlled resonance structures of diatomic molecules *(11 pages)* 063401
John Heslar, Dmitry A. Telnov, and Shih-I Chu

Trapping neutral particles endowed with a magnetic moment by an electromagnetic wave carrying orbital angular momentum: Semiclassical theory *(8 pages)* 063402
Iwo Bialynicki-Birula and Tomasz Radożycki

Longitudinal photoelectron momentum shifts induced by absorbing a single XUV photon in diatomic molecules *(5 pages)* 063403
Di Lao, Pei-Lun He, and Feng He

ac Stark shift measurements of the clock transition in cold Cs atoms: Scalar and tensor light shifts of the D_2 transition *(10 pages)* 063404
G. A. Costanzo, S. Micalizio, A. Godone, J. C. Camparo, and F. Levi

Exploration of the electron multiple recollision dynamics in intense laser fields with Bohmian trajectories *(7 pages)* 063405
Hossein Z. Jooya, Dmitry A. Telnov, and Shih-I Chu

Calculation of Ar photoelectron satellites in the hard-x-ray region *(5 pages)* 063406
V. G. Yarzhemsky and M. Ya. Amusia

Rotational relaxation of fluoromethane molecules in low-temperature collisions with buffer-gas helium *(8 pages)* 063407
Xingjia Li, Liang Xu, Yanning Yin, Supeng Xu, Yong Xia, and Jianping Yin

Autoionization in time-dependent density-functional theory *(8 pages)* 063408
V. Kapoor

Inner-shell electron effects in strong-field double ionization of Xe *(5 pages)* 063409
Zongqiang Yuan, Difa Ye, Jie Liu, and Libin Fu

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Collisional shift and broadening of the transition lines in pionic helium *(6 pages)* 062505
Boyan Obreshkov and Dimitar Bakalov

Relativistic coupled-cluster study of RaF as a candidate for the parity- and time-reversal-violating interaction *(7 pages)* 062506
Sudip Sasmal, Himadri Pathak, Malaya K. Nayak, Nayana Vaval, and Sourav Pal

Universalities for the Efimov-favored system with finite-range interactions *(6 pages)* 062507
Meng-Shan Wu, Hui-Li Han, and Ting-Yun Shi

Electric dipole moments of superheavy elements: A case study on copernicium *(9 pages)* 062508
Laima Radžiūtė, Gediminas Gaigalas, Per Jönsson, and Jacek Bieroń

Microwave transitions from pairs of Rb $nd_{5/2}nd_{5/2}$ atoms *(7 pages)* 062509
Jeonghun Lee and T. F. Gallagher

Coulomb potentials and Taylor expansions in time-dependent density-functional theory *(13 pages)* 062510
Søren Fournais, Jonas Lampart, Mathieu Lewin, and Thomas Østergaard Sørensen

Vibration-induced field fluctuations in a superconducting magnet *(7 pages)* 062511
J. W. Britton, J. G. Bohnet, B. C. Sawyer, H. Uys, M. J. Biercuk, and J. J. Bollinger

Core correlation effects in multiconfiguration calculations of isotope shifts in Mg I *(8 pages)* 062512
Livio Filippin, Michel Godefroid, Jörgen Ekman, and Per Jönsson

Measurement of Rydberg positronium fluorescence lifetimes *(10 pages)* 062513
A. Deller, A. M. Alonso, B. S. Cooper, S. D. Hogan, and D. B. Cassidy

Nuclear recoil corrections to the Lamb shift of hydrogen and light hydrogenlike ions *(7 pages)* 062514
V. A. Yerokhin and V. M. Shabaev

Atomic and molecular collisions and interactions

Matching universal behavior with potential models *(7 pages)* 062701
R. Álvarez-Rodríguez, A. Deltuva, M. Gattobigio, and A. Kievsky

Collisions of slow electrons with SiF_4 and GeF_4: Shape resonance, Ramsauer-Townsend minimum, and virtual state *(8 pages)* 062702
G. M. Moreira and M. H. F. Bettega

Random walks with thermalizing collisions in bounded regions: Physical applications valid from the ballistic to diffusive regimes *(15 pages)* 062703
C. M. Swank, A. K. Petukhov, and R. Golub

Kinematically complete study of low-energy electron-impact ionization of argon: Internormalized cross sections in three-dimensional kinematics *(8 pages)* 062704
Xueguang Ren, Sadek Amami, Oleg Zatsarinny, Thomas Pflüger, Marvin Weyland, Alexander Dorn, Don Madison, and Klaus Bartschat

Experimental and theoretical triple-differential cross sections for tetrahydrofuran ionized by low-energy 26-eV-electron impact *(6 pages)* 062705
Esam Ali, XueGuang Ren, Alexander Dorn, Chuangang Ning, James Colgan, and Don Madison

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Lower bounds on the violation of the monogamy inequality for quantum correlation measures *(8 pages)* 062337
Asutosh Kumar and Himadri Shekhar Dhar

Shortcut to nonadiabatic quantum state transmission *(5 pages)* 062338
Zhao-Ming Wang, C. Allen Bishop, Jun Jing, Yong-Jian Gu, Christian Garcia, and Lian-Ao Wu

Quantum state transfer in optomechanical arrays *(6 pages)* 062339
G. D. de Moraes Neto, F. M. Andrade, V. Montenegro, and S. Bose

General monogamy of Tsallis q-entropy entanglement in multiqubit systems *(9 pages)* 062340
Yu Luo, Tian Tian, Lian-He Shao, and Yongming Li

Geometric entanglement and quantum phase transitions in two-dimensional quantum lattice models *(10 pages)* 062341
Qian-Qian Shi, Hong-Lei Wang, Sheng-Hao Li, Sam Young Cho, Murray T. Batchelor, and Huan-Qiang Zhou

Time-independent quantum circuits with local interactions *(16 pages)* 062342
Sahand Seifnashri, Farzad Kianvash, Jahangir Nobakht, and Vahid Karimipour

Cryptanalysis of quantum secret sharing with d-level single particles *(5 pages)* 062343
Song Lin, Gong-De Guo, Yong-Zhen Xu, Ying Sun, and Xiao-Fen Liu

Distribution of Bell-inequality violation versus multiparty-quantum-correlation measures *(9 pages)* 062344
Kunal Sharma, Tamoghna Das, Aditi Sen(De), and Ujjwal Sen

Temporal steering and security of quantum key distribution with mutually unbiased bases against individual attacks *(7 pages)* 062345
Karol Bartkiewicz, Antonín Černoch, Karel Lemr, Adam Miranowicz, and Franco Nori

Spacetime-constrained oblivious transfer *(8 pages)* 062346
Damián Pitalúa-García

Classical noise and the structure of minimum uncertainty states *(14 pages)* 062347
Kamil Korzekwa and Matteo Lostaglio

Programmable atom-photon quantum interface *(5 pages)* 062348
Christoph Kurz, Pascal Eich, Michael Schug, Philipp Müller, and Jürgen Eschner

Atomic and molecular structure and dynamics

La^- binding energies by analysis of its photodetachment spectra *(8 pages)* 062501
Lin Pan and Donald R. Beck

Static electric multipole susceptibilities of the relativistic hydrogenlike atom in the ground state: Application of the Sturmian expansion of the generalized Dirac-Coulomb Green function *(40 pages)* 062502
Radosław Szmytkowski and Grzegorz Łukasik

$\mathcal{P},\mathcal{T}$-odd electron-nucleus interaction in atomic systems as an exchange by Higgs bosons *(7 pages)* 062503
D. V. Chubukov and L. N. Labzowsky

Second-order kinetic Kohn-Sham lattice model *(8 pages)* 062504
S. Solórzano, M. Mendoza, and H. J. Herrmann

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Circuit quantum electrodynamics simulator of flat band physics in a Lieb lattice *(10 pages)* 062319
Zi-He Yang, Yan-Pu Wang, Zheng-Yuan Xue, Wan-Li Yang, Yong Hu, Jin-Hua Gao, and Ying Wu

Entangled Bloch spheres: Bloch matrix and two-qubit state space *(18 pages)* 062320
Omar Gamel

Generation of tree-type three-dimensional entangled states via adiabatic passage *(6 pages)* 062321
Chong Song, Shi-Lei Su, Jin-Lei Wu, Dong-Yang Wang, Xin Ji, and Shou Zhang

Quantumness and the role of locality on quantum correlations *(10 pages)* 062322
G. Bellomo, A. Plastino, and A. R. Plastino

Entanglement of quantum circular states of light *(9 pages)* 062323
D. B. Horoshko, S. De Bièvre, M. I. Kolobov, and G. Patera

Appearance of causality in process matrices when performing fixed-basis measurements for two parties *(3 pages)* 062324
Veronika Baumann and Časlav Brukner

Quantum memories with zero-energy Majorana modes and experimental constraints *(17 pages)* 062325
Matteo Ippoliti, Matteo Rizzi, Vittorio Giovannetti, and Leonardo Mazza

Flexible quantum circuits using scalable continuous-variable cluster states *(10 pages)* 062326
Rafael N. Alexander and Nicolas C. Menicucci

Quantum paradox of choice: More freedom makes summoning a quantum state harder *(7 pages)* 062327
Emily Adlam and Adrian Kent

Passive states as optimal inputs for single-jump lossy quantum channels *(9 pages)* 062328
Giacomo De Palma, Andrea Mari, Seth Lloyd, and Vittorio Giovannetti

Experimental generation of a high-fidelity four-photon linear cluster state *(7 pages)* 062329
Chao Zhang, Yun-Feng Huang, Bi-Heng Liu, Chuan-Feng Li, and Guang-Can Guo

Probabilistic quantum teleportation in the presence of noise *(9 pages)* 062330
Raphael Fortes and Gustavo Rigolin

Purification and switching protocols for dissipatively stabilized entangled qubit states *(11 pages)* 062331
Sven M. Hein, Camille Aron, and Hakan E. Türeci

Efficient classical simulation of matchgate circuits with generalized inputs and measurements *(10 pages)* 062332
Daniel J. Brod

Two-message quantum-Arthur-Merlin game with single-qubit measurements *(4 pages)* 062333
Tomoyuki Morimae

Quantum walks with a one-dimensional coin *(8 pages)* 062334
Alessandro Bisio, Giacomo Mauro D'Ariano, Marco Erba, Paolo Perinotti, and Alessandro Tosini

Staggered quantum walks on graphs *(13 pages)* 062335
Renato Portugal

Entangled microwaves as a resource for entangling spatially separate solid-state qubits: Superconducting qubits, nitrogen-vacancy centers, and magnetic molecules *(13 pages)* 062336
Angela Viviana Gómez, Ferney Javier Rodríguez, Luis Quiroga, and Juan José García-Ripoll

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A THIRD SERIES, VOLUME 93, NUMBER 6 JUNE 2016

Quantum information

Quantum simulation of pairing Hamiltonians with nearest-neighbor-interacting qubits *(13 pages)* 062301
Zhixin Wang, Xiu Gu, Lian-Ao Wu, and Yu-xi Liu

Generation and protection of a maximally entangled state between many modes in an optical network with dissipation *(9 pages)* 062302
Raul Coto, Miguel Orszag, and Vitalie Eremeev

Stark echo modulation for quantum memories *(6 pages)* 062303
A. Arcangeli, A. Ferrier, and Ph. Goldner

Direct state reconstruction with coupling-deformed pointer observables *(6 pages)* 062304
Xuanmin Zhu, Yu-Xiang Zhang, and Shengjun Wu

Bidirectional imperfect quantum teleportation with a single Bell state *(8 pages)* 062305
E. O. Kiktenko, A. A. Popov, and A. K. Fedorov

Randomized gap and amplitude estimation *(11 pages)* 062306
Ilia Zintchenko and Nathan Wiebe

Mechanical Einstein-Podolsky-Rosen entanglement with a finite-bandwidth squeezed reservoir *(11 pages)* 062307
Muhammad Asjad, Stefano Zippilli, and David Vitali

Universal control induced by noise *(10 pages)* 062308
Christian Arenz, Daniel Burgarth, Paolo Facchi, Vittorio Giovannetti, Hiromichi Nakazato, Saverio Pascazio, and Kazuya Yuasa

Entanglement and measurement-induced nonlocality of mixed maximally entangled states in multipartite dynamics *(11 pages)* 062309
Li-Die Wang, Li-Tao Wang, Mou Yang, Jing-Zhou Xu, Z. D. Wang, and Yan-Kui Bai

Theory of remote entanglement via quantum-limited phase-preserving amplification *(10 pages)* 062310
Matti Silveri, Evan Zalys-Geller, Michael Hatridge, Zaki Leghtas, Michel H. Devoret, and S. M. Girvin

Practical quantum retrieval games *(9 pages)* 062311
Juan Miguel Arrazola, Markos Karasamanis, and Norbert Lütkenhaus

Driver Hamiltonians for constrained optimization in quantum annealing *(8 pages)* 062312
Itay Hen and Marcelo S. Sarandy

Irreconcilable difference between quantum walks and adiabatic quantum computing *(7 pages)* 062313
Thomas G. Wong and David A. Meyer

Approximate reversibility in the context of entropy gain, information gain, and complete positivity *(11 pages)* . . . 062314
Francesco Buscemi, Siddhartha Das, and Mark M. Wilde

Coherent-state discrimination via nonheralded probabilistic amplification *(6 pages)* 062315
Matteo Rosati, Andrea Mari, and Vittorio Giovannetti

Classical-like behavior in quantum walks with inhomogeneous, time-dependent coin operators *(7 pages)* 062316
Miquel Montero

Entanglement and nonclassicality: A mutual impression *(8 pages)* 062318
H. Gholipour and F. Shahandeh

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A **THIRD SERIES, VOLUME 93, NUMBER 6** **JUNE 2016**

Out-of-equilibrium open quantum systems: A comparison of approximate quantum master equation approaches with exact results *(10 pages)* 062114
Archak Purkayastha, Abhishek Dhar, and Manas Kulkarni

Reexamination of Bloch-Messiah reduction *(8 pages)* 062115
Gianfranco Cariolaro and Gianfranco Pierobon

Explicit definition of $\mathcal{PT}$ symmetry for nonunitary quantum walks with gain and loss *(13 pages)* 062116
Ken Mochizuki, Dakyeong Kim, and Hideaki Obuse

Bell inequalities for continuous-variable systems in generic squeezed states *(31 pages)* 062117
Jérôme Martin and Vincent Vennin

Assessing the significance of fidelity as a figure of merit in quantum state reconstruction of discrete and continuous-variable systems *(10 pages)* 062118
Antonio Mandarino, Matteo Bina, Carmen Porto, Simone Cialdi, Stefano Olivares, and Matteo G. A. Paris

Quantum non-Gaussianity dynamics of two-mode single-photon squeezed Bell states based on cumulant theory *(9 pages)* 062119
Shao-Hua Xiang, Wei Wen, Yu-Jing Zhao, and Ke-Hui Song

High-energy electroproduction in an atomic field *(10 pages)* 062120
P. A. Krachkov and A. I. Milstein

Device-independent parallel self-testing of two singlets *(5 pages)* 062121
Xingyao Wu, Jean-Daniel Bancal, Matthew McKague, and Valerio Scarani

Exact decoherence-free state of two distant quantum systems in a non-Markovian environment *(7 pages)* 062122
Chong Chen, Chun-Jie Yang, and Jun-Hong An

Tightening the entropic uncertainty bound in the presence of quantum memory *(6 pages)* 062123
F. Adabi, S. Salimi, and S. Haseli

Towards a gauge-equivalent magnetic structure of the nonlocal nonlinear Schrödinger equation *(6 pages)* 062124
T. A. Gadzhimuradov and A. M. Agalarov

Characterizing the parent Hamiltonians for a complete set of orthogonal wave functions: An inverse quantum problem *(9 pages)* 062125
A. Ramezanpour

Three-dimensional visualization of a qutrit *(7 pages)* 062126
Paweł Kurzyński, Adrian Kołodziejski, Wiesław Laskowski, and Marcin Markiewicz

System-time entanglement in a discrete-time model *(7 pages)* 062127
A. Boette, R. Rossignoli, N. Gigena, and M. Cerezo

Quantum decay and amplification in a non-Hermitian unstable continuum *(10 pages)* 062129
Stefano Longhi

Majorana edge modes with gain and loss *(4 pages)* 062130
C. Yuce

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A THIRD SERIES, VOLUME 93, NUMBER 6 JUNE 2016

Parity effect in a mesoscopic Fermi gas *(6 pages)* . . . . . 061602(R)
Johannes Hofmann, Alejandro M. Lobos, and Victor Galitski

Quantum filaments in dipolar Bose-Einstein condensates *(5 pages)* . . . . . 061603(R)
F. Wächtler and L. Santos

Quantum optics, physics of lasers, nonlinear optics, classical optics

Topological photonic crystal with equifrequency Weyl points *(6 pages)* . . . . . 061801(R)
Luyang Wang, Shao-Kai Jian, and Hong Yao

ARTICLES

Fundamental concepts

$\mathcal{PT}$-breaking threshold in spatially asymmetric Aubry-André and Harper models: Hidden symmetry and topological states *(7 pages)* 062101
Andrew K. Harter, Tony E. Lee, and Yogesh N. Joglekar

Crucial tests of macrorealist and semiclassical gravity models with freely falling mesoscopic nanospheres *(15 pages)* 062102
Samuel Colin, Thomas Durt, and Ralph Willox

Ground state and the spin precession of the Dirac electron in counterpropagating plane electromagnetic waves *(10 pages)* 062103
G. N. Borzdov

Non-Markovian dynamics in chiral quantum networks with spins and photons *(23 pages)* 062104
Tomás Ramos, Benoît Vermersch, Philipp Hauke, Hannes Pichler, and Peter Zoller

Irreversible degradation of quantum coherence under relativistic motion *(6 pages)* 062105
Jieci Wang, Zehua Tian, Jiliang Jing, and Heng Fan

Space-time-resolved quantum electrodynamics: A (1+1)-dimensional model *(10 pages)* 062106
Scott Glasgow, Dallas Smith, Luke Pritchett, John Gardiner, and Michael J. Ware

Gaussianity and localization of N-qubit states *(12 pages)* 062107
M. Gaeta, C. Muñoz, and A. B. Klimov

Local shortcut to adiabaticity for quantum many-body systems *(7 pages)* 062108
Victor Mukherjee, Simone Montangero, and Rosario Fazio

Natural generalization of the ground-state Slater determinant to more than one dimension *(13 pages)* 062109
D. K. Sunko

Parity-time symmetry under magnetic flux *(7 pages)* 062110
L. Jin and Z. Song

Entropic framework for wave-particle duality in multipath interferometers *(10 pages)* 062111
Patrick J. Coles

Distinguishability of generic quantum states *(12 pages)* 062112
Zbigniew Puchała, Łukasz Pawela, and Karol Życzkowski

(Continued)

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).

PHYSICAL REVIEW A™

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 2469-9926)

PERIODICALS
Postmaster send address changes to:

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

THIRD SERIES, VOLUME 93, NUMBER 6
PARTS A AND B

CONTENTS

JUNE 2016

The Table of Contents is a total listing of Parts A and B.
Part A consists of pages 060301(R)–062709, and Part B pages 063401–069906(E).

PART A

RAPID COMMUNICATIONS

Quantum information

Fock-state stabilization and emission in superconducting circuits using dc-biased Josephson junctions *(6 pages)* . . . . . 060301(R)
J.-R. Souquet and A. A. Clerk

Procedure for systematically tuning up cross-talk in the cross-resonance gate *(5 pages)* . . . . . 060302(R)
Sarah Sheldon, Easwar Magesan, Jerry M. Chow, and Jay M. Gambetta

Measure-independent freezing of quantum coherence *(5 pages)* . . . . . 060303(R)
Xiao-Dong Yu, Da-Jian Zhang, C. L. Liu, and D. M. Tong

Atomic and molecular structure and dynamics

Single, double, and triple Auger decay probabilities of $C^+(1s2s^22p^2\,{}^2D, {}^2P)$ resonances *(5 pages)* . . . . . 060501(R)
Fuyang Zhou, Yulong Ma, and Yizhi Qu

Atomic and molecular processes in external fields, including interactions with strong fields and short pulses

Inner-shell photoexcitations as probes of the molecular ions CH^+, OH^+, and SiH^+: Measurements and theory *(6 pages)* . . . . . 061401(R)
J.-P. Mosnier, E. T. Kennedy, P. van Kampen, D. Cubaynes, S. Guilbaud, N. Sisourat, A. Puglisi, S. Carniato, and J.-M. Bizau

Two-photon double ionization of neon using an intense attosecond pulse train *(5 pages)* . . . . . 061402(R)
B. Manschwetus, L. Rading, F. Campi, S. Maclot, H. Coudert-Alteirac, J. Lahl, H. Wikmark, P. Rudawski, C. M. Heyl, B. Farkas, T. Mohamed, A. L'Huillier, and P. Johnsson

Matter waves and collective properties of cold atoms and molecules

Synthetic-gauge-field stabilization of the chiral-spin-liquid phase *(6 pages)* . . . . . 061601(R)
Gang Chen, Kaden R. A. Hazzard, Ana Maria Rey, and Michael Hermele

Copyright 2016 by American Physical Society

(Continued)

2469-9926(201606)93:6:B;1-K

The editors and referees of PRA find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. A 88, 020001 (2013).