

The Table of Contents is a total listing of Parts A and B.
Part A consists of pages L020201–022628, and Part B pages 022801–029902(E).

PART A

LETTERS

Fundamental concepts

- Structure of dimension-bounded temporal correlations (*5 pages*) L020201
Yuan Yuan Mao, Cornelia Spee, Zhen-Peng Xu, and Otfried Gühne
- Logarithmic expansion of many-body wave packets in random potentials (*6 pages*) L020202
Arindam Mallick and Sergej Flach
- Radiation reaction enhancement in flying focus pulses (*6 pages*) L020203
M. Formanek, D. Ramsey, J. P. Palastro, and A. Di Piazza

Quantum information science

- Role of coherence and degeneracies in quantum synchronization (*6 pages*) L020401
Parvinder Solanki, Noufal Jaseem, Michal Hajdušek, and Sai Vinjanampathy

Atomic and molecular structure and dynamics; high-precision experiments

- Formation of astrochemically relevant molecular ions: Reaction of translationally cold CCl^+ with benzene in a linear ion trap (*6 pages*) L020801
O. A. Krohn, K. J. Catani, and H. J. Lewandowski
-  Absolute measurements of state-to-state rotational energy transfer between CO and H₂ at interstellar temperatures (*6 pages*) L020802
Hamza Labiad, Martin Fournier, Laura A. Mertens, Alexandre Faure, David Carty, Thierry Stoecklin, Piotr Jankowski, Krzysztof Szalewicz, Sébastien D. Le Picard, and Ian R. Sims

Light-induced processes in atomic-scale systems

- Propagation time and nondipole contributions to intraband high-order harmonic generation (*7 pages*) L021101
Simon Vendelbo Bylling Jensen and Lars Bojer Madsen
- Deep learning for retrieval of the internuclear distance in a molecule from interference patterns in photoelectron momentum distributions (*6 pages*) L021102
N. I. Shvetsov-Shilovski and M. Lein



Copyright 2022 by American Physical Society

(Continued)



2469-9926(202202)105:2:A;1-2

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

 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).

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Precise control of intracycle interference with a phase-stabilized polarization-gated laser pulse (<i>7 pages</i>)	L021103
RenPing Sun, YanLan Wang, Yu Zhou, ShaoGang Yu, SongPo Xu, XuanYang Lai, Wei Quan, and XiaoJun Liu	

Ultracold systems and matter waves

Two types of dark solitons in a spin-orbit-coupled Fermi gas (<i>6 pages</i>)	L021301
Antonio Muñoz Mateo and Xiaoquan Yu	
Anyon braiding on a fractal lattice with a local Hamiltonian (<i>5 pages</i>)	L021302
Sourav Manna, Callum W. Duncan, Carrie A. Weidner, Jacob F. Sherson, and Anne E. B. Nielsen	
Mediated interaction between polarons in a one-dimensional Bose gas (<i>6 pages</i>)	L021303
Aleksandra Petković and Zoran Ristivojevic	
Sieve of Eratosthenes for Bose-Einstein condensates in optical moiré lattices (<i>5 pages</i>)	L021304
Dmitry Kouznetsov, Pol Van Dorpe, and Niels Verellen	
Anti- $\mathcal{PT}$ flatbands (<i>6 pages</i>)	L021305
Arindam Mallick, Nana Chang, Alexei Andreanov, and Sergej Flach	

Photonics, nonlinear optics, and optomechanics

Slowdown of nanosecond light pulses with photorefractive two-wave mixing (<i>5 pages</i>)	L021501
Nacera Bouldja, Mykhailo Tsyhyka, Alexander Grabar, Marc Sciamanna, and Delphine Wolfersberger	
Interferometric control of nanorotor alignment (<i>6 pages</i>)	L021502
Birthe Schrirski, Benjamin A. Stickler, and Klaus Hornberger	

Quantum optics

Quantum emission of light with densely packed driven dipoles (<i>6 pages</i>)	L021701
Sofia Ribeiro and Simon A. Gardiner	

ARTICLES

Fundamental concepts

Quantum approach to the thermalization of the toppling pencil interacting with a finite bath (<i>11 pages</i>)	022201
Sreeja Loho Choudhury and Frank Grossmann	
Quantum Otto cycle in a superconducting cavity in the nonadiabatic regime (<i>10 pages</i>)	022202
Nicolás F. Del Grosso, Fernando C. Lombardo, Francisco D. Mazzitelli, and Paula I. Villar	
Reverse-chiral response of two $\mathcal{T}$ -symmetric optical systems hosting conjugate exceptional points (<i>6 pages</i>)	022203
Arnab Laha, Sibnath Dey, and Somnath Ghosh	
Correlation-enabled energy exchange in quantum systems without external driving (<i>6 pages</i>)	022204
T. Pyhäranta, S. Alipour, A. T. Rezakhani, and T. Ala-Nissila	
Real-time dynamics in diluted quantum networks (<i>18 pages</i>)	022205
Erik Aurell, Roberto Mulet, and Jan Tuziowski	
Genuine network quantum nonlocality and self-testing (<i>10 pages</i>)	022206
Ivan Šupić, Jean-Daniel Bancal, Yu Cai, and Nicolas Brunner	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Local approximation of multipartite quantum measurements (23 pages)	022207
Scott M. Cohen	
Supervised graph classification for chiral quantum walks (8 pages)	022208
Artem Kryukov, Roman Abramov, Leonid E. Fedichkin, Alexander Alodjants, and Alexey A. Melnikov	
Strong quantum nonlocality in N -partite systems (12 pages)	022209
Fei Shi, Zuo Ye, Lin Chen, and Xiande Zhang	
Studying the squeezing effect and phase-space distribution of a single-photon-added coherent state using a postselected von Neumann measurement (10 pages)	022210
Wen Jun Xu, Taximaiti Yusufu, and Yusuf Turek	
Generalized adiabatic impulse approximation (14 pages)	022211
Takayuki Suzuki and Hiromichi Nakazato	
Mixed states driven by non-Hermitian Hamiltonians of a nuclear spin ensemble (8 pages)	022212
D. Cius, A. Consuelo-Leal, A. G. Araujo-Ferreira, and R. Auccaise	
Informational steady states and conditional entropy production in continuously monitored systems: The case of Gaussian systems (14 pages)	022213
Alessio Belenchia, Mauro Paternostro, and Gabriel T. Landi	
Designing robust quantum refrigerators in disordered spin models (12 pages)	022214
Tanoy Kanti Konar, Srijon Ghosh, Amit Kumar Pal, and Aditi Sen(De)	
Dynamical localization in non-Hermitian quasicrystals (7 pages)	022215
C. M. Dai, Yunbo Zhang, and X. X. Yi	
Experimental demonstration of the violation of the temporal Peres-Mermin inequality using contextual temporal correlations and noninvasive measurements (9 pages)	022216
Dileep Singh, Arvind, and Kavita Dorai	
Quantum mean-square predictors and thermodynamics (5 pages)	022217
Marcelo Janovitch and Gabriel T. Landi	
Geometric phase in a dissipative Jaynes-Cummings model: Theoretical explanation for resonance robustness (9 pages)	022218
Ludmila Viotti, Fernando C. Lombardo, and Paula I. Villar	
$\mathcal{PT}$ phase transition in open quantum systems with Lindblad dynamics (17 pages)	022219
Yuma Nakanishi and Tomohiro Sasamoto	
Dissipative Floquet dynamical quantum phase transition (11 pages)	022220
J. Naji, Masoud Jafari, R. Jafari, and Alireza Akbari	
Leggett-Garg tests for macrorealism in the quantum harmonic oscillator and more general bound systems (15 pages)	022221
C. Mawby and J. J. Halliwell	
Quantum information science	
Non-Gaussian entanglement swapping between three-mode spontaneous parametric down-conversion and three qubits (10 pages)	022401
A. Agustí Casado and C. Sabín	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Universal quantum computation and quantum error correction using discrete holonomies (6 pages)	022402
Cornelis J. G. Mommers and Erik Sjöqvist	
Generalizing the quantum information model for dynamic diffraction (9 pages)	022403
O. Nahman-Lévesque, D. Sarenac, D. G. Cory, B. Heacock, M. G. Huber, and D. A. Pushin	
Anti- $\mathcal{PT}$ -symmetric qubit: Decoherence and entanglement entropy (7 pages)	022404
Julia Cen and Avadh Saxena	
Resolving correlated states of benzyne with an error-mitigated contracted quantum eigensolver (17 pages)	022405
Scott E. Smart, Jan-Niklas Boyn, and David A. Mazziotti	
Multiparameter simultaneous optimal estimation with an SU(2) coding unitary evolution (14 pages)	022406
Yu Yang, Shihao Ru, Min An, Yunlong Wang, Feiran Wang, Pei Zhang, and Fuli Li	
Characterizing correlation within multipartite quantum systems via local randomized measurements (23 pages)	022407
Zhenhuan Liu, Pei Zeng, You Zhou, and Mile Gu	
Network nonlocality via rigidity of token counting and color matching (21 pages)	022408
Marc-Olivier Renou and Salman Beigi	
Classical simulation of quantum circuits using a multiqubit Bloch vector representation of density matrices (11 pages)	022409
Qunsheng Huang and Christian B. Mendl	
Perturbed ferromagnetic chain: Tunable test of hardness in the transverse-field Ising model (12 pages)	022410
D. T. O'Connor, L. Fry-Bouriaux, and P. A. Warburton	
Recycling qubits for the generation of Bell nonlocality between independent sequential observers (16 pages)	022411
Shuming Cheng, Lijun Liu, Travis J. Baker, and Michael J. W. Hall	
Conversion of Gaussian states under incoherent Gaussian operations (9 pages)	022412
Shuanping Du and Zhaofang Bai	
Machine classification for probe-based quantum thermometry (6 pages)	022413
Fabrício S. Luiz, A. de Oliveira Junior, Felipe F. Fanchini, and Gabriel T. Landi	
Quantum matching pursuit: A quantum algorithm for sparse representations (9 pages)	022414
Armando Bellante and Stefano Zanero	
Quantum advantage for differential equation analysis (15 pages)	022415
Bobak Toussi Kiani, Giacomo De Palma, Dirk Englund, William Kaminsky, Milad Marvian, and Seth Lloyd	
Fluctuations of subsystem entropies at late times (20 pages)	022416
Jordan Cotler, Nicholas Hunter-Jones, and Daniel Ranard	
Quantum Krylov subspace algorithms for ground- and excited-state energy estimation (15 pages)	022417
Cristian L. Cortes and Stephen K. Gray	
Quantum noise can enhance algorithmic cooling (9 pages)	022418
Zahra Farahmand, Reyhaneh Aghaei Saem, and Sadegh Raeisi	
Usefulness of adaptive strategies in asymptotic quantum channel discrimination (25 pages)	022419
Farzin Salek, Masahito Hayashi, and Andreas Winter	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Feasibility study of quantum computing using trapped electrons (<i>10 pages</i>)	022420
Qian Yu, Alberto M. Alonso, Jackie Caminiti, Kristin M. Beck, R. Tyler Sutherland, Dietrich Leibfried, Kayla J. Rodriguez, Madhav Dhital, Boerge Hemmerling, and Hartmut Häffner	
Witnessing quantum steering by means of the Fisher information (<i>5 pages</i>)	022421
Ilaria Gianani, Vincenzo Berardi, and Marco Barbieri	
Annihilating and creating nonlocality without entanglement by postmeasurement information (<i>9 pages</i>)	022422
Donghoon Ha and Jeong San Kim	
 Drive-induced nonlinearities of cavity modes coupled to a transmon ancilla (<i>28 pages</i>)	022423
Yaxing Zhang, Jacob C. Curtis, Christopher S. Wang, R. J. Schoelkopf, and S. M. Girvin	
Heat current and entropy production rate in local non-Markovian quantum dynamics of global Markovian evolution (<i>13 pages</i>)	022424
Ahana Ghoshal and Ujjwal Sen	
Complementary relation between tripartite entanglement and the maximum steering inequality violation (<i>8 pages</i>)	022425
Tian-Ze Dai, Yi Fan, and Liang Qiu	
Dual-state purification for practical quantum error mitigation (<i>9 pages</i>)	022427
Mingxia Huo and Ying Li	
Quantum circuit engineering for correcting coherent noise (<i>14 pages</i>)	022428
Muhammad Ahsan, Syed Abbas Zilqurnain Naqvi, and Haider Anwer	
Computable limits of optical multiple-access communications (<i>25 pages</i>)	022429
Haowei Shi and Quntao Zhuang	
Enhancing entanglement and total correlation dynamics via local unitaries (<i>9 pages</i>)	022430
Joab Morais Varela, Ranieri Nery, George Moreno, Alice Caroline de Oliveira Viana, Gabriel Landi, and Rafael Chaves	
Duality as a feasible physical transformation for quantum simulation (<i>14 pages</i>)	022431
Shachar Ashkenazi and Erez Zohar	
Improved graph formalism for quantum circuit simulation (<i>14 pages</i>)	022432
Alexander Tianlin Hu and Andrey Boris Khesin	
Quantumness beyond entanglement: The case of symmetric states (<i>8 pages</i>)	022433
Aaron Z. Goldberg, Markus Grassl, Gerd Leuchs, and Luis L. Sánchez-Soto	
Effect of quantum error correction on detection-induced coherent errors (<i>11 pages</i>)	022434
Qinghong Yang and Dong E. Liu	
Bounds on semi-device-independent quantum random-number expansion capabilities (<i>8 pages</i>)	022435
Vaisakh Mannalath and Anirban Pathak	
Generating the Gottesman-Kitaev-Preskill qubit using a cross-Kerr interaction between squeezed light and Fock states in optics (<i>9 pages</i>)	022436
Kosuke Fukui, Mamoru Endo, Warit Asavanant, Atsushi Sakaguchi, Jun-ichi Yoshikawa, and Akira Furusawa	
One- and two-qubit gate infidelities due to motional errors in trapped ions and electrons (<i>13 pages</i>)	022437
R. Tyler Sutherland, Qian Yu, Kristin M. Beck, and Hartmut Häffner	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Expanding variational quantum eigensolvers to larger systems by dividing the calculations between classical and quantum hardware (<i>6 pages</i>)	022438
John P. T. Stenger, Daniel Gunlycke, and C. Stephen Hellberg	
Nonlocal activation of bound entanglement via local quantum Zeno dynamics (<i>9 pages</i>)	022439
Fatih Ozaydin, Cihan Bayindir, Azmi Ali Altintas, and Can Yesilyurt	
Imaginary-time propagation on a quantum chip (<i>14 pages</i>)	022440
F. Turro, A. Roggero, V. Amitrano, P. Luchi, K. A. Wendt, J. L. Dubois, S. Quaglioni, and F. Pederiva	
Error mitigation for variational quantum algorithms through mid-circuit measurements (<i>14 pages</i>)	022441
Ludmila Botelho, Adam Glos, Akash Kundu, Jarosław Adam Miszczak, Özlem Salehi, and Zoltán Zimborás	
Classical state masking over a quantum channel (<i>12 pages</i>)	022442
Uzi Pereg, Christian Deppe, and Holger Boche	
Stroboscopic quantum nondemolition measurements for enhanced entanglement generation between atomic ensembles (<i>17 pages</i>)	022443
Manish Chaudhary, Yuping Mao, Manikandan Kondappan, Amiel S. P. Paz, Valentin Ivannikov, and Tim Byrnes	
Optimal fidelity witnesses for gravitational entanglement (<i>9 pages</i>)	022444
Thomas Guff, Nicolas Boulle, and Igor Pikovski	
Quantum technologies	
Quantum-enhanced interferometry by entanglement-assisted rejection of environmental noise (<i>7 pages</i>)	022601
Alex O. C. Davis, Giacomo Sorelli, Valérian Thiel, and Brian J. Smith	
Magic state distillation from entangled states (<i>13 pages</i>)	022602
Ning Bao, ChunJun Cao, and Vincent Paul Su	
Variational secure cloud quantum computing (<i>10 pages</i>)	022603
Yuta Shingu, Yuki Takeuchi, Suguru Endo, Shiro Kawabata, Shohei Watabe, Tetsuro Nikuni, Hideaki Hakoshima, and Yuichiro Matsuzaki	
Fundamental limitations on the device-independent quantum conference key agreement (<i>15 pages</i>)	022604
Karol Horodecki, Marek Winczewski, and Siddhartha Das	
 Neural-network-based qubit-environment characterization (<i>17 pages</i>)	022605
Miha Papič and Inés de Vega	
Quantum private broadcasting (<i>9 pages</i>)	022606
Anne Broadbent, Carlos E. González-Guillén, and Christine Schuknecht	
Optimization of the resonator-induced PHASE gate for superconducting qubits (<i>31 pages</i>)	022607
Moein Malekakhlagh, William Shanks, and Hanhee Paik	
Quantum state engineering using weak measurements (<i>11 pages</i>)	022608
Qiang Hu, Taximaiti Yusufu, and Yusuf Turek	
Efficiency statistics of a quantum Otto cycle (<i>10 pages</i>)	022609
Zhaoyu Fei, Jin-Fu Chen, and Yu-Han Ma	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Gain in performance of teleportation with uniformity-breaking distributions (<i>12 pages</i>)	022610
Saptarshi Roy, Shiladitya Mal, and Aditi Sen(De)	
Generation of photonic tensor network states with circuit QED (<i>14 pages</i>)	022611
Zhi-Yuan Wei, J. Ignacio Cirac, and Daniel Malz	
Comparing two-qubit and multiqubit gates within the toric code (<i>7 pages</i>)	022612
David Schwerdt, Yotam Shapira, Tom Manovitz, and Roei Ozeri	
Application of simultaneous and continuous measurement of noncommutative observables: Preparation of the pure ideal quadrature-squeezed state by feedback control (<i>9 pages</i>)	022613
Chao Jiang and Gentaro Watanabe	
Polynomial scaling enhancement in the ground-state preparation of Ising spin models via counterdiabatic driving (<i>8 pages</i>)	022614
Andreas Hartmann, Glen Bigan Mbeng, and Wolfgang Lechner	
Perils of embedding for quantum sampling (<i>15 pages</i>)	022615
Jeffrey Marshall, Gianni Mossi, and Eleanor G. Rieffel	
Relativistic meson spectra on ion-trap quantum simulators (<i>13 pages</i>)	022616
Johannes Knaute and Philipp Hauke	
Coherence properties of a spin in a squeezed resonator (<i>11 pages</i>)	022617
Inbar Shani, Emanuele G. Dalla Torre, and Michael Stern	
Optimal quantum annealing: A variational shortcut-to-adiabaticity approach (<i>10 pages</i>)	022618
G. Passarelli, R. Fazio, and P. Lucignano	
Harmonic dual dressing of spin-1/2 systems (<i>15 pages</i>)	022619
Giuseppe Bevilacqua, Valerio Biancalana, T. Zanon-Willette, and Ennio Arimondo	
Fast high-fidelity geometric gates for singlet-triplet qubits (<i>12 pages</i>)	022620
Mei-Ya Chen, Chengxian Zhang, and Zheng-Yuan Xue	
Quantum computation with charge-and-color-permuting twists in qudit color codes (<i>16 pages</i>)	022621
Manoj G. Gowda and Pradeep Kiran Sarvepalli	
Optimization of a quantum control sequence for initializing a nitrogen-vacancy spin register (<i>8 pages</i>)	022622
T. Chakraborty, J. Zhang, and D. Suter	
 Multiplexed quantum repeaters based on dual-species trapped-ion systems (<i>14 pages</i>)	022623
Prajit Dhara, Norbert M. Linke, Edo Waks, Saikat Guha, and Kaushik P. Seshadreesan	
Generation of Bell and Greenberger-Horne-Zeilinger states from a hybrid qubit-photon-magnon system (<i>13 pages</i>)	022624
Shi-fan Qi and Jun Jing	
Robust spin squeezing from the tower of states of U(1)-symmetric spin Hamiltonians (<i>11 pages</i>)	022625
Tommaso Comparin, Fabio Mezzacapo, and Tommaso Roscilde	
Electrometry of a single resonator mode at a Rydberg-atom–superconducting-circuit interface (<i>9 pages</i>)	022626
D. M. Walker, L. L. Brown, and S. D. Hogan	
Geometric manipulation of a decoherence-free subspace in atomic ensembles (<i>10 pages</i>)	022627
Dongni Chen, Si Luo, Ying-Dan Wang, Stefano Chesi, and Mahn-Soo Choi	

(Continued)

Dimensional enhancements in a quantum battery with imperfections (<i>10 pages</i>)	022628
Srijon Ghosh and Aditi Sen(De)	

PART B**Atomic and molecular structure and dynamics; high-precision experiments**

Compact differential gravimeter at the quantum projection-noise limit (<i>8 pages</i>)	022801
Camille Janvier, Vincent Ménoret, Bruno Desruelle, Sébastien Merlet, Arnaud Landragin, and Franck Pereira dos Santos	
Nonretarded limit of the Lifshitz theory for a wedge (<i>11 pages</i>)	022802
R. Krechetnikov and A. Zelnikov	
Parity-mixed coupled-cluster formalism for computing parity-violating amplitudes (<i>23 pages</i>)	022803
H. B. Tran Tan, Di Xiao, and A. Derevianko	
Calculations of Delbrück scattering to all orders in αZ (<i>14 pages</i>)	022804
J. Sommerfeldt, V. A. Yerokhin, R. A. Müller, V. A. Zaytsev, A. V. Volotka, and A. Surzhykov	
Multiconfiguration Dirac-Hartree-Fock calculations for Hg and Cd with estimates for unknown clock-transition frequencies (<i>16 pages</i>)	022805
Jesse S. Schelfhout and John J. McFerran	
Subshell contributions to electron capture into the continuum in MeV/u collisions of deuterons with multielectron targets (<i>10 pages</i>)	022806
S. Nanos, M. A. Quinto, I. Madesis, A. Laoutaris, T. J. M. Zouros, R. D. Rivarola, J. M. Monti, and E. P. Benis	
Kinetics and nucleation dynamics in ion-seeded atomic clusters (<i>11 pages</i>)	022807
M. G. Rozman, M. Bredice, J. Smucker, H. R. Sadeghpour, D. Vrinceanu, R. Côté, and V. Kharchenko	
Dynamics of translational and rotational thermalization of AlF molecules via collisions with cryogenic helium (<i>10 pages</i>)	022808
M. Karra, M. T. Cretu, B. Friedrich, S. Truppe, G. Meijer, and J. Pérez-Ríos	
<i>Ab initio</i> determination of the polarizability of neon (<i>13 pages</i>)	022809
Robert Hellmann	
Single and double <i>K</i> -shell vacancy production in slow $\text{Xe}^{54+,53+}$ -Xe collisions (<i>8 pages</i>)	022810
P.-M. Hillenbrand, S. Hagmann, Y. S. Kozhedub, E. P. Benis, C. Brandau, R. J. Chen, D. Dmytriiev, O. Forstner, J. Glorius, R. E. Grisenti, A. Gumberidze, M. Lestinsky, Yu. A. Litvinov, E. B. Menz, T. Morgenroth, S. Nanos, N. Petridis, Ph. Pfäfflein, H. Rothard, M. S. Sanjari, R. S. Sidhu, U. Spillmann, S. Trotsenko, I. I. Tupitsyn, L. Varga, and Th. Stöhlker	
Multiconfiguration Dirac-Hartree-Fock theory for copper $K\alpha$ and $K\beta$ diagram lines, satellite spectra, and <i>ab initio</i> determination of single and double shake probabilities (<i>19 pages</i>)	022811
T. V. B. Nguyen, H. A. Melia, F. I. Janssens, and C. T. Chantler	
Pseudovector and pseudoscalar spin-dependent interactions in atoms (<i>8 pages</i>)	022812
Pavel Fadeev, Filip Ficek, Mikhail G. Kozlov, Dmitry Budker, and Victor V. Flambaum	
Multiple locations of boron atoms in the exohedral and endohedral C_{60} fullerene (<i>8 pages</i>)	022813
A. V. Bibikov, A. V. Nikolaev, I. V. Bodrenko, P. V. Borisyuk, and E. V. Tkalya	

(Continued)

Three-body fragmentation dynamics of $\text{CH}_3\text{CCH}^{3+}$ investigated by 50-keV/u Ne^{8+} impact: Comparison with its isomer ion $\text{CH}_2\text{CCH}_2^{3+}$ (8 pages)	022814
Hang Yuan, Zhongfeng Xu, Shenyue Xu, Chao Ma, Zhen Zhang, Dalong Guo, Xiaolong Zhu, Dongmei Zhao, Shaofeng Zhang, Shuncheng Yan, Yong Gao, Ruitian Zhang, and Xinwen Ma	
Properties of radiative charge transfer in heterogeneous noble-gas clusters (9 pages)	022815
Xaver Holzapfel, Tsveta Miteva, Nicolas Sisourat, Alexander Schrod, Lutz Marder, Dana Bloß, Christian Ozga, Catmarna Küstner-Wetekam, Arno Ehresmann, André Knie, and Andreas Hans	
Diamagnetic susceptibility from a nonadiabatic path-integral simulation of few-electron systems (9 pages)	022816
Alpi Tolvanen, Juha Tiihonen, and Tapio T. Rantala	
Benchmarking calculations of wavelengths and transition rates with spectroscopic accuracy for W XLVIII through W LVI tungsten ions (13 pages)	022817
Chun Yu Zhang, Jin Qing Li, Kai Wang, Ran Si, Michel Godefroid, Per Jönsson, Jun Xiao, Ming Feng Gu, and Chong Yang Chen	
Sequential deprotonation of the allene trication produced by 30-keV/u He^{2+} impact (6 pages)	022818
Zhencen He, Jiarong Wang, Yu Zhang, Bo Wang, Jie Han, Baihui Ren, Long Wei, Zihan Xia, Pufang Ma, Tianming Meng, Yaming Zou, Zhimin Hu, and Baoren Wei	
Measurement of the hyperfine coupling constants and absolute energies of the $12s\ ^2S_{1/2}$, $13s\ ^2S_{1/2}$, and $11d\ ^2D_J$ levels in atomic cesium (8 pages)	022819
Jonah A. Quirk, Amy Damitz, Carol E. Tanner, and D. S. Elliott	
Improved ionization and dissociation energies of the deuterium molecule (9 pages)	022820
J. Hussels, N. Hölsch, C.-F. Cheng, E. J. Salumbides, H. L. Bethlem, K. S. E. Eikema, Ch. Jungen, M. Beyer, F. Merkt, and W. Ubachs	
Improving the statistical analysis of antihydrogen free fall by using near-edge events (9 pages)	022821
Olivier Rousselle, Pierre Cladé, Saïda Guellati-Khélifa, Romain Guérout, and Serge Reynaud	
Accurate description of the nonadiabatic proton-coupled electron-transfer process in a diabatic representation: A model study (11 pages)	022822
Haifeng Song, Chaofan Li, and Changjian Xie	
 Spectroscopy on the electron-electric-dipole-moment-sensitive states of ThF^+ (8 pages)	022823
Kia Boon Ng, Yan Zhou, Lan Cheng, Noah Schlossberger, Sun Yool Park, Tanya S. Roussy, Luke Caldwell, Yuval Shagam, Antonio J. Vigil, Eric A. Cornell, and Jun Ye	
Structural properties of $^4\text{He}_N$ ($N = 2-10$) clusters for different potential models at the physical point and at unitarity (14 pages)	022824
A. J. Yates and D. Blume	
Laser-coolable AcOH^+ ion for $\mathcal{CP}$ -violation searches (11 pages)	022825
Alexander V. Oleynichenko, Leonid V. Skripnikov, Andréi V. Zaitsevskii, and Victor V. Flambaum	
Molecular orbitals of an elastic artificial benzene (7 pages)	022826
A. M. Martínez-Argüello, M. P. Toledano-Marino, A. E. Terán-Juárez, E. Flores-Olmedo, G. Báez, E. Sadurní, and R. A. Méndez-Sánchez	
Thermal corrections for positronium (8 pages)	022827
D. Solov'yev, T. Zalialiutdinov, and A. Anikin	

(Continued)

Neutral-atom-scattering-based mapping of atomically thin layers (<i>14 pages</i>)	022828
Geetika Bhardwaj, Krishna Rani Sahoo, Rahul Sharma, Parswa Nath, and Pranav R. Shirhatti	
Light-induced processes in atomic-scale systems	
Two-tone Doppler cooling of radial two-dimensional crystals in a radio-frequency ion trap (<i>8 pages</i>)	023101
Alexander Kato, Apurva Goel, Raymond Lee, Zeyu Ye, Samip Karki, Jian Jun Liu, Andrei Nomerotski, and Boris B. Blinov	
Angle-resolved line profiles in the predissociation of D ₂ : A summation of Fano and Lorentzian profiles (<i>7 pages</i>)	023102
Jie Wang and Yuxiang Mo	
Simulating weak-field attosecond processes with a Lanczos reduced basis approach to time-dependent equation-of-motion coupled-cluster theory (<i>15 pages</i>)	023103
Andreas S. Skeidsvoll, Torsha Moitra, Alice Balbi, Alexander C. Paul, Sonia Coriani, and Henrik Koch	
Signatures of stabilization in the angle-resolved photoemission by an ultrashort intense XUV laser pulse (<i>13 pages</i>)	023104
Wei-Chao Jiang, Mu-Xue Wang, Liang-You Peng, and Joachim Burgdörfer	
High-order harmonic generation from stretched C ₂ H ₂ molecules in intense laser fields (<i>9 pages</i>)	023105
Jianke Li, Zheng Shu, Shilin Hu, Chengrui Bi, Anping Huang, Zhisong Xiao, Xiao-jing Liu, and Jing Chen	
Imprints of multielectron polarization effects in odd-even harmonic generation from CO molecules (<i>8 pages</i>)	023106
Hien T. Nguyen, Kim-Ngan H. Nguyen, Ngoc-Loan Phan, Cam-Tu Le, DinhDuy Vu, Lan-Phuong Tran, and Van-Hoang Le	
Macroscopic phase-matching mechanism for orbital angular momentum spectra of high-order harmonics by mixing two Laguerre-Gaussian vortex modes (<i>16 pages</i>)	023107
Zhong Guan, Zhiming Yin, and Cheng Jin	
Scattering of an intense laser beam by atomic systems (<i>14 pages</i>)	023108
Mihai Dondera	
Polarization measurement of <i>L</i> -shell radiative recombination x rays from highly charged bismuth ions (<i>7 pages</i>)	023109
Naoki Numadate, Shimpei Oishi, Hirokazu Odaka, Priti, Makoto Sakurai, Tadayuki Takahashi, Yutaka Tsuzuki, Yuusuke Uchida, Hirofumi Watanabe, Shin Watanabe, Hiroki Yoneda, and Nobuyuki Nakamura	
Magnetic-field-insensitive coherent-population-trapping resonances excited by bichromatic linearly polarized fields on the <i>D</i> ₁ line of ¹³³ Cs (<i>9 pages</i>)	023110
Kenta Matsumoto, Sota Kagami, Akihiro Kiriara, Shinya Yanagimachi, Takeshi Ikegami, and Atsuo Morinaga	
Genetic-algorithm retrieval of the molecular alignment distribution with high-order harmonics generated from transiently aligned CO ₂ molecules (<i>12 pages</i>)	023111
Changzhi Jiang, Haoran Jiang, Yanbo Chen, Baochang Li, C. D. Lin, and Cheng Jin	
Below-threshold-harmonics-generation limitation due to laser-induced ionization in noble gases (<i>6 pages</i>)	023112
Armando Valter Felicio Zuffi, Nilson Dias Vieira Junior, and Ricardo Elgul Samad	
Creation of high-dimensional entanglement of polar molecules via optimal control fields (<i>10 pages</i>)	023113
Zuo-Yuan Zhang and Jin-Ming Liu	

(Continued)

Ultracold systems and matter waves

Quantum-geometric perspective on spin-orbit-coupled Bose superfluids (<i>9 pages</i>)	023301
A. L. Subaşı and M. Iskin	
Scalable Hamiltonian learning for large-scale out-of-equilibrium quantum dynamics (<i>14 pages</i>)	023302
Agnes Valenti, Guliuxin Jin, Julian Léonard, Sebastian D. Huber, and Eliska Grepova	
Supersolid-like solitons in a spin-orbit-coupled spin-2 condensate (<i>12 pages</i>)	023303
Pardeep Kaur, Sandeep Gautam, and S. K. Adhikari	
 Interspecies interactions in an ultracold dipolar mixture (<i>9 pages</i>)	023304
C. Politi, A. Trautmann, P. Ilzhöfer, G. Durastante, M. J. Mark, M. Modugno, and F. Ferlaino	
Critical velocity for superfluidity in the one-dimensional mean-field regime: From matter to light quantum fluids (<i>14 pages</i>)	023305
J. Huynh, M. Albert, and P.-É. Larré	
Feshbach resonances and molecule formation in ultracold mixtures of Rb and Yb(³ P) atoms (<i>14 pages</i>)	023306
Bijit Mukherjee, Matthew D. Frye, and Jeremy M. Hutson	
Superfluid vortex dynamics on an ellipsoid and other surfaces of revolution (<i>11 pages</i>)	023307
Mônica A. Caracanhas, Pietro Massignan, and Alexander L. Fetter	
Infinite dipolar droplet: A simple theory for the macrodroplet regime (<i>8 pages</i>)	023308
Sukla Pal, D. Baillie, and P. B. Blakie	
Mobile ion in a Fermi sea (<i>8 pages</i>)	023309
Esben Rohan Christensen, Arturo Camacho-Guardian, and Georg M. Bruun	
Rotating Bose gas dynamically entering the lowest Landau level (<i>7 pages</i>)	023310
Vaibhav Sharma and Erich J. Mueller	
Damping transition in an open generalized Aubry-André-Harper model (<i>10 pages</i>)	023311
Peng He, Yu-Guo Liu, Jian-Te Wang, and Shi-Liang Zhu	
Effective-mass tensor of the two-body bound states and the quantum-metric tensor of the underlying Bloch states in multiband lattices (<i>7 pages</i>)	023312
M. Iskin	
Improved characterization of Feshbach resonances and interaction potentials between ²³ Na and ⁸⁷ Rb atoms (<i>10 pages</i>)	023313
Zhichao Guo, Fan Jia, Bing Zhu, Lintao Li, Jeremy M. Hutson, and Dajun Wang	
Spectral functions and localization-landscape theory in speckle potentials (<i>10 pages</i>)	023314
Pierre Pelletier, Dominique Delande, Vincent Josse, Alain Aspect, Svitlana Mayboroda, Douglas N. Arnold, and Marcel Filoche	
Dynamics of large samples of repulsive Fermi gases at nonzero temperatures (<i>6 pages</i>)	023315
Jarosław Ryszkiewicz, Mirosław Brewczyk, and Tomasz Karpiuk	
Moment of inertia and dynamical rotational response of a supersolid dipolar gas (<i>7 pages</i>)	023316
S. M. Roccuzzo, A. Recati, and S. Stringari	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Crossover polarons in a strongly interacting Fermi superfluid (<i>10 pages</i>)	023317
Hui Hu, Jia Wang, Jing Zhou, and Xia-Ji Liu	
Rotating and spiraling spatial dissipative solitons of light and cold atoms (<i>8 pages</i>)	023318
Giuseppe Baio, Thorsten Ackemann, Gian-Luca Oppo, Gordon R. M. Robb, and Alison M. Yao	
Topological study of a Bogoliubov–de Gennes system of pseudo-spin-1/2 bosons with conserved magnetization in a honeycomb lattice (<i>19 pages</i>)	023319
Hong Y. Ling and Ben Kain	
Fine structure of the stripe phase in ring-shaped Bose-Einstein condensates with spin-orbital-angular-momentum coupling (<i>10 pages</i>)	023320
Y. M. Bidasyuk, K. S. Kovtunenkov, and O. O. Prikhodko	
Critical phase boundary and finite-size fluctuations in the Su-Schrieffer-Heeger model with random intercell couplings (<i>7 pages</i>)	023321
Dmitriy S. Shapiro, Sergey V. Remizov, Andrey V. Lebedev, Danila V. Babukhin, Ramil S. Akzyanov, Andrey A. Zhukov, and Leonid V. Bork	
Cold-atom quantum simulator for string and hadron dynamics in non-Abelian lattice gauge theory (<i>21 pages</i>)	023322
Raka Dasgupta and Indrakshi Raychowdhury	
Dark solitons in a trapped gas of long-range interacting bosons (<i>8 pages</i>)	023323
M. Beau, A. del Campo, D. J. Frantzeskakis, T. P. Horikis, and P. G. Kevrekidis	
Scattering theory and equation of state of a spherical two-dimensional Bose gas (<i>8 pages</i>)	023324
A. Tononi	
On-demand generation of dark-bright soliton trains in Bose-Einstein condensates (<i>23 pages</i>)	023325
A. Romero-Ros, G. C. Katsimiga, P. G. Kevrekidis, B. Prinari, G. Biondini, and P. Schmelcher	
Engineering infinite-range $SU(n)$ interactions with spin-orbit-coupled fermions in an optical lattice (<i>17 pages</i>)	023326
Michael A. Perlin, Diego Barberena, Mikhail Mamaev, Bhuvanesh Sundar, Robert J. Lewis-Swan, and Ana Maria Rey	
Chiral superfluid in a one-dimensional bipartite optical lattice (<i>4 pages</i>)	023327
A. H. Abbas	
Persistent current by a static non-Hermitian ratchet (<i>9 pages</i>)	023328
Guitao Lyu and Gentaro Watanabe	
Topological two-particle dynamics in a periodically driven lattice model with on-site interactions (<i>8 pages</i>)	023329
Anna Berti and Iacopo Carusotto	
Radio-frequency driving of an attractive Fermi gas in a one-dimensional optical lattice (<i>17 pages</i>)	023330
Johannes Kombe, Michael Köhl, Corinna Kollath, and Jean-Sébastien Bernier	
Photonics, nonlinear optics, and optomechanics	
Generalized sixth-order dispersion solitons (<i>9 pages</i>)	023501
Y. Long Qiang, Tristram J. Alexander, and C. Martijn de Sterke	
Generation of dissipative solitons in a doped optical fiber modeled by the higher-order dispersive cubic-quintic-septic complex Ginzburg-Landau equation (<i>14 pages</i>)	023502
Dieudonné Zanga, Serge I. Fewo, Conrad B. Tabi, and Timoléon C. Kofané	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Probing the rotational spin-Hall effect in a structured Gaussian beam (<i>9 pages</i>)	023503
Ram Nandan Kumar, Yatish, Subhasish Dutta Gupta, Nirmalya Ghosh, and Ayan Banerjee	
Accelerated ground-state cooling of an optomechanical resonator via shortcuts to adiabaticity (<i>12 pages</i>)	023504
Yu-Hong Liu, Xian-Li Yin, Jin-Feng Huang, and Jie-Qiao Liao	
 Ground-state coherence versus orientation: Competing mechanisms for light-induced magnetic self-organization in cold atoms (<i>10 pages</i>)	023505
G. Labeyrie, J. G. M. Walker, G. R. M. Robb, R. Kaiser, and T. Ackemann	
Three-dimensional microscopic single-pixel imaging with chaotic light (<i>6 pages</i>)	023506
Peilong Hong and Yi Liang	
Determination of tilt degree and Weyl-node separation by the spatial Imbert-Fedorov shift near the Brewster angle (<i>11 pages</i>)	023508
Jipeng Wu, Leyong Jiang, Rongzhou Zeng, Jiaojiao Liang, Xiaoyu Dai, and Yuanjiang Xiang	
Internal transformations and internal symmetries in linear photonic systems (<i>9 pages</i>)	023509
Cheng Guo, Zhixin Zhao, and Shanhui Fan	
Noncentrosymmetric far-zone spectral density induced by light scattering with random media having parity-time symmetry (<i>9 pages</i>)	023510
Xuan Zhang, Yonglei Liu, Yahong Chen, Fei Wang, and Yangjian Cai	
Angular momentum transferred by the field of a moving point charge (<i>9 pages</i>)	023511
Vladimir Epp, Ulyana Guselnikova, and Irina Kamenskaya	
Phase-matching condition in rotatory nonlinear optics (<i>12 pages</i>)	023512
Chen Cui, Fei Liang, Dazhi Lu, Haohai Yu, and Huaijin Zhang	
Biphoton entanglement of topologically distinct modes (<i>6 pages</i>)	023513
Cooper Doyle, Wei-Wei Zhang, Michelle Wang, Bryn A. Bell, Stephen D. Bartlett, and Andrea Blanco-Redondo	
 Unambiguous definition of handedness for locally chiral light (<i>6 pages</i>)	023514
Ofar Neufeld and Oren Cohen	
Cavities with nonspherical mirrors for enhanced interaction between a quantum emitter and cavity photons (<i>8 pages</i>)	023515
Denis V. Karpov and Peter Horak	
Optical theorem of an infinite circular cylinder in weakly absorbing media (<i>12 pages</i>)	023516
Shangyu Zhang, Wenjie Zhang, Jian Dong, and Linhua Liu	
Generalized theory of optical resonator and waveguide modes and their linear and Kerr nonlinear coupling (<i>11 pages</i>)	023517
Jonathan M. Silver and Pascal Del'Haye	
Mean path length in refractive regular polygons and prisms (<i>10 pages</i>)	023518
Matt Majic and Walter R. C. Somerville	
Spectroscopic observation of the crossover from a classical Duffing oscillator to a Kerr parametric oscillator (<i>12 pages</i>)	023519
T. Yamaji, S. Kagami, A. Yamaguchi, T. Satoh, K. Koshino, H. Goto, Z. R. Lin, Y. Nakamura, and T. Yamamoto	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Attosecond measurement via high-order harmonic generation in low-frequency fields (<i>8 pages</i>)	023520
Graham G. Brown, Dong Hyuk Ko, Chunmei Zhang, and P. B. Corkum	
Emission of conical THz radiation induced by bichromatic pump X waves in an air plasma (<i>6 pages</i>)	023521
D. Buožius, B. Motiejūnas, V. Vaičaitis, and V. Tamulienė	
Strong-field ionization of argon: Electron momentum spectra and nondipole effects (<i>10 pages</i>)	023522
Nida Haram, Han Xu, Igor Ivanov, Dashavir Chetty, Igor Litvinyuk, and R. T. Sang	
Inverse Klein tunneling effect in binary waveguide arrays (<i>9 pages</i>)	023523
Minh C. Tran, Quang Nguyen-The, Cuong C. Do, and Truong X. Tran	
Optical helicity of unpolarized light (<i>6 pages</i>)	023524
Kayn A. Forbes	
Extreme events in a broad-area semiconductor laser with coherent injection (<i>9 pages</i>)	023525
Cristina Rimoldi, Mansour Eslami, Franco Prati, and Giovanna Tissoni	
Superradiant atomic recoil lasing with orbital-angular-momentum light (<i>13 pages</i>)	023526
A. T. Gisbert, N. Piovela, G. R. M. Robb, and D. G. McLellan	
Bogoliubov theory of the laser linewidth and application to polariton condensates (<i>8 pages</i>)	023527
Ivan Amelio and Iacopo Carusotto	
Gyrotropy-governed isofrequency surfaces and photonic spin in gyromagnetic media (<i>10 pages</i>)	023528
Rajarshi Sen and Sarang Pendharker	
Coherently controlled ionization of gases by three-color femtosecond laser pulses (<i>8 pages</i>)	023529
Shixiang Wang, Chenhui Lu, Zhengquan Fan, Aurélien Houard, Vladimir Tikhonchuk, André Mysyrowicz, Songlin Zhuang, Vasily A. Kostin, and Yi Liu	
Aspects of wave propagation in a nonlinear medium: Birefringence and the second-order magnetoelectric coefficients (<i>12 pages</i>)	023530
Vitorio A. De Lorenci	
Non-Hermitian high-quality-factor topological photonic crystal cavity (<i>16 pages</i>)	023531
Xiaoxiao Wang, Yandong Li, Xiaoyong Hu, Ruizhe Gu, Yutian Ao, Ping Jiang, and Qihuang Gong	
Quantum optics	
Proposal for a Bell test in cavity optomagnonics (<i>8 pages</i>)	023701
Hong Xie, Zhi-Gao Shi, Le-Wei He, Xiang Chen, Chang-Geng Liao, and Xiu-Min Lin	
Quantized quasinormal-mode theory of coupled lossy and amplifying resonators (<i>37 pages</i>)	023702
Sebastian Franke, Juanjuan Ren, and Stephen Hughes	
Multiband and array effects in matter-wave-based waveguide QED (<i>10 pages</i>)	023703
Alfonso Lanuza, Joonhyuk Kwon, Youngshin Kim, and Dominik Schneble	
Effective Hamiltonians in the quantum Rabi problem (<i>10 pages</i>)	023704
P. Gartner and V. Moldoveanu	
Quantum channel-position finding using single photons (<i>9 pages</i>)	023705
Athena Karsa, Jacques Carolan, and Stefano Pirandola	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Lasing without inversion based on magnetically assisted gain in coherently prepared cold atoms (5 pages)	023706
J. C. de Aquino Carvalho, A. D. M. de Lima, and J. W. R. Tabosa	
Dispersive readout with non-Markovian environments (21 pages)	023707
H. Z. Shen, Q. Wang, and X. X. Yi	
☞ Spectrally resolved four-photon interference of time-frequency-entangled photons (19 pages)	023708
Sofiane Merkouché, Valérian Thiel, and Brian J. Smith	
Nonreciprocal amplification in a cavity magnonics system (10 pages)	023709
Chengsong Zhao, Rui Peng, Zhen Yang, Shilei Chao, Chong Li, Zhihai Wang, and Ling Zhou	
Nonclassical properties and Anderson localization of quantum states in coupled waveguides (10 pages)	023710
Thais L. Silva, Wesley B. Cardoso, Ardiley T. Avelar, and Jorge M. C. Malbouisson	
Quantum treatment of cavity-assisted entanglement of three-level atoms and two fields in an electromagnetically-induced-transparency configuration (7 pages)	023711
Xihua Yang, Nicholas Brewer, and Paul D. Lett	
Chiral quantum optics with giant atoms (16 pages)	023712
Ariadna Soro and Anton Frisk Kockum	
Few-photon transport via a multimode nonlinear cavity: Theory and applications (12 pages)	023713
Yunkai Wang and Kejie Fang	
Large random arrowhead matrices: Multifractality, semilocalization, and protected transport in disordered quantum spins coupled to a cavity (25 pages)	023714
J. Dubail, T. Botzung, J. Schachenmayer, G. Pupillo, and D. Hagenmüller	
Quantum interferometry for rotation sensing in an optical microresonator (8 pages)	023716
Weijun Cheng, Zhihai Wang, and Xiaoguang Wang	
Quantum correlations of localized atomic excitations in a disordered atomic chain (7 pages)	023717
H. H. Jen	
Extreme expected values and their applications in quantum metrology (11 pages)	023718
Wangjun Lu, Lei Shao, Xingyu Zhang, Zhucheng Zhang, Jie Chen, Hong Tao, and Xiaoguang Wang	
☞ Ultrastrong coupling of a qubit with a nonlinear optical resonator (10 pages)	023719
Fabio Mauceri, Alberto Mercurio, Salvatore Savasta, and Omar Di Stefano	
Revealing higher-order light and matter energy exchanges using quantum trajectories in ultrastrong coupling (18 pages)	023720
Vincenzo Macrì, Fabrizio Minganti, Anton Frisk Kockum, Alessandro Ridolfo, Salvatore Savasta, and Franco Nori	
Master equations and quantum trajectories for squeezed wave packets (32 pages)	023721
Jonathan A. Gross, Ben Q. Baragiola, T. M. Stace, and Joshua Combes	
Toward lasing without inversion in the ultraviolet regime: Doppler-free three-photon coherence effects in mercury vapor (11 pages)	023722
Benjamin Rein, Jochen Schmitt, Martin R. Sturm, Reinhold Walser, and Thomas Walther	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW A

THIRD SERIES, VOLUME 105, NUMBER 2

FEBRUARY 2022

Quantum theory of photonic vortices and quantum statistics of twisted photons (<i>16 pages</i>)	023723
Li-Ping Yang and Dazhi Xu	
Loss of antibunching (<i>20 pages</i>)	023724
Juan Camilo López Carreño, Eduardo Zubizarreta Casalengua, Blanca Silva, Elena del Valle, and Fabrice P. Laussy	
Quadrature squeezing of 10^4 spatial modes via manipulation of diffraction (<i>12 pages</i>)	023725
Lida Zhang (张理达), Vincent Boyer, and M. O. Scully	

ERRATA

Erratum: Dispersive optical detection of magnetic Feshbach resonances in ultracold gases [Phys. Rev. A 96 , 022705 (2017)] (<i>1 page</i>)	029901(E)
Bianca J. Sawyer, Milena S. J. Horvath, Eite Tiesinga, Amita B. Deb, and Niels Kjærgaard	
Erratum: Collisions of room-temperature helium with ultracold lithium and the van der Waals bound state of HeLi [Phys. Rev. A 101 , 012702 (2020)] (<i>2 pages</i>)	029902(E)
Constantinos Makrides, Daniel S. Barker, James A. Fedchak, Julia Scherschligt, Stephen Eckel, and Eite Tiesinga	