

PHYSICAL REVIEW CTM

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 2469-9985)

PERIODICALS

Postmaster send address changes to:

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

THIRD SERIES, VOLUME 114, NUMBER 3

CONTENTS

SEPTEMBER 2026

LETTERS

Nuclear Structure

- Thermodynamic nature of upbend resonance and validity of Brink-Axel hypothesis in the low-energy region (*7 pages*) L031301
L. Tan Phuc, N. Quang Hung, N. Ngoc Anh, and N. Dinh Dang

Nuclear Reactions

- Constraining neutron skin impurity in ⁴⁸Ca and its relevance for the CREX-PREX puzzle (*7 pages*) L031601
Phan Nhut Huan
- Fragment spin generation and scission mechanism in rapidly rotating fission (*6 pages*) L031602
Yu Qiang, Zhibo Li, and Junchen Pei
- Visualization of the pear shape and its quantum fluctuations in atomic nuclei (*7 pages*) L031603
Zu-Xing Yang, Xiao-Hua Fan, Zhi-Pan Li, and Shunji Nishimura
- New perspective on cold fusion reactions: A microscopic description (*7 pages*) L031604
Yinu Zhang, Bo Han, Yueping Fang, and Long Zhu

Relativistic Nuclear Collisions

- Search for true muonium in relativistic heavy-ion collisions (*6 pages*) L031901
Zuo-tang Liang, Qian Yang, Hong Zhang, Jiaying Zhao, and Pengfei Zhuang

ARTICLES

Nucleon-Nucleon Interaction, Few-Body Systems

- Gaussian characterization of two-neutron halo nuclei (*12 pages*) 034001
A. Deltuva, M. Gattobigio, D. Jurčiukonis, and A. Kievsky
- Modeling short-range nucleon pair and triplet abundances in atomic nuclei (*8 pages*) 034002
I. Wischnevsky Shlush, I. Korover, E. Piasetzky, A. Denniston, and R. Wagner
- Three-body model study of ¹²Be using the Faddeev method in momentum space (*15 pages*) 034003
Ning Li, Chang Xu, Jun-Jie He, Liang-Kai Wu, Meng-Jiao Lyu, Jin Li, and Zhao-Jun Ma
- Ξ-deuteron low-energy *s*-wave phase shifts and momentum correlation functions in Faddeev formulation (*9 pages*) 034004
M. Kohno and H. Kamada



2469-9985(202609)114:3;1-T

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

One- and three-dimensional identical charged-kaon femtoscopic correlations in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV (19 pages)	034005
I. J. Abualrob <i>et al.</i> (ALICE Collaboration)	
Two-pion exchange contributions to the nucleon-nucleon interaction from the Roper resonance (17 pages)	034006
Yang Xiao, Li-Sheng Geng, and U. van Kolck	
Quantum information in neutron-proton scattering from the M matrix (12 pages)	034007
Linjun Xie, Hong Shen, Jinniu Hu, and Ying Zhang	
Λ -deuteron scattering below the Σ threshold (8 pages)	034008
A. Deltuva	
Highly correlated exponential variational method applied to the $d - \Omega_{ccc}$ system (7 pages)	034009
Yushu Wang	
Renormalization group evolution and power counting in nuclear matter (31 pages)	034010
Manuel Pavon Valderrama	
Examination of the $c\bar{c} + n + {}^{10}\text{Be}$ bound-state problem within three-cluster models based on QCD charmonium-nucleon interactions (13 pages)	034011
Faisal Etminan	
Vortex nucleons as partial-wave filters in nucleon-nucleon scattering (5 pages)	034012
Jinniu Hu, Ying Zhang, and Hong Shen	
Nuclear Structure	
Observing the effects of numbers of valence nucleons on $0_{gs}^+ \rightarrow 2_1^+$ transitions in deformed nuclei by comparing proton and neutron transition matrix elements (7 pages)	034301
P. D. Cottle, L. A. Riley, A. Gade, K. W. Kemper, and M. Spieker	
Effect of constraining the $1d_{3/2}-1f_{7/2}$ energy gap in ${}^{40}\text{Ca}$ using a modified relativistic mean field approach (6 pages)	034302
Nitin Mahavar and A. Bhagwat	
Reentrance of proton-neutron pairing in hot nuclear systems (15 pages)	034303
T. Vu Dong, Alan A. Dzhihev, A. I. Vdovin, and N. Quang Hung	
Comparative study of a quartet superfluid state: Quartet Bardeen-Cooper-Schrieffer theory and generalized Nambu-Gor'kov formalism (12 pages)	034304
Yixin Guo (郭一昕), Hiroyuki Tajima (田島裕之), and Haozhao Liang (梁豪兆)	
Isoscalar giant resonances in highly deformed ${}^{172}\text{Yb}$ (14 pages)	034305
K. Khokhar, S. Bagchi, Y. Niu, C. Chen, M. N. Harakeh, M. Abdullah, H. Akimune, D. Das, T. Doi, L. M. Donaldson, Y. Fujikawa, M. Fujiwara, T. Furuno, U. Garg, Y. K. Gupta, K. B. Howard, Y. Hijikata, K. Inaba, S. Ishida, M. Itoh, N. Kalantar-Nayestanaki, D. Kar, T. Kawabata, S. Kawashima, K. Kitamura, N. Kobayashi, Y. Matsuda, A. Nakagawa, S. Nakamura, K. Nosaka, S. Okamoto, S. Ota, S. Pal, S. Roy, S. Weyhmiller, Z. Yang, and J. C. Zamora	
Influence of nuclear deformation on the α -decay systematics of superheavy nuclei with $Z = 120-130$: Density-dependent cluster model and improved empirical approaches (14 pages)	034306
Theeb Alsultan, Saifull Kamaluddin Muzakir, and S. G. Abd-Elnasser	
<i>Ab initio</i> mapping of the boundary of the $N = 20$ island of inversion (20 pages)	034307
E. F. Zhou (周恩付), C. R. Ding (丁晨蓉), Q. Y. Luo (罗青杨), J. M. Yao (尧江明), and H. Hergert	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

Generic mechanism for shell structure evolution from an energy density functional perspective (7 pages)	034308
L. Heitz, J.-P. Ebran, E. Khan, and D. Verney	
Helium-3 and triton relativistic wave functions in light-front dynamics (24 pages)	034309
Zhimin Zhu, Ziqi Zhang, Kaiyu Fu, and V. A. Karmanov	
Correcting nuclear mass models with interpretable machine learning to bridge theory and data (10 pages)	034310
Yanhua Lu, Tianshuai Shang, Pengxiang Du, Jian Li, and Haozhao Liang	
Direct mass measurement of ^{91}Rh and ^{89}Ru and mid-shell trend of the one-proton separation energies for $N = Z + 1$ nuclei (13 pages)	034311
Samuel Ayet San Andrés <i>et al.</i> (for the Super-FRS Experiment Collaboration)	
Optimized basis of covariant density functional theory: Point coupling functionals and excited states (17 pages)	034312
A. Dalbah, A. V. Afanasjev, and B. Osei	
Evolution of high-spin states in neutron-rich $^{195-202}\text{Au}$ isotopes approaching the $N = 126$ shell closure (21 pages)	034313
Y. Cho <i>et al.</i>	
Gauge auxiliary-field quantum Monte Carlo method for many-fermion systems (9 pages)	034314
Zhaozhan Zhang	
Reexamining the role of I^3 in mass formulas via the double-difference of binding energies (9 pages)	034315
Junyao Kong, Yibin Qian, and Rui Wang	
Response of superfluid fermions at finite temperature (14 pages)	034316
Sumit Bhattacharjee and Elena Litvinova	
Gamow-Teller strength of $^{12,14,16}\text{C}$ within the deformed quasiparticle random-phase approximation (13 pages)	034317
Eunja Ha, Myung-Ki Cheoun, H. Sagawa, and Gianluca Colò	
Core breaking at low spin in ^{68}Zn from nuclear resonance fluorescence (22 pages)	034318
S. R. Johnson, R. V. F. Janssens, B. A. Brown, A. D. Ayangeakaa, S. S. Bhattacharjee, E. Churchman, S. W. Finch, U. Friman-Gayer, S. Frye, M. Fulghieri, D. Gribble, X. H.-K. James, R. Longland, and C. Wegner	
Quantum Monte Carlo calculations in the nuclear shell model by the complex Langevin method (11 pages)	034319
Yuhma Asano, Yuta Ito, Jun Nishimura, and Noritaka Shimizu	
Emulator-assisted nuclear density-functional-theory inference and its consequences for the structure of neutron stars (14 pages)	034320
Pietro Klausner, Marco Antonelli, Gianluca Colò, Francesca Gulminelli, Xavier Roca-Maza, and Enrico Vigezzi	
Discovery of K -isomeric states in seaborgium isotopes (11 pages)	034321
P. Mořat, B. Andel, J. Khuyagbaatar, D. Ackermann, S. Antalic, S. Heinz, I. Kojouharov, P. Kuusiniemi, M. Mazzocco, J. Miřt, K. Nishio, B. Streicher, B. Sulignano, and F. P. Heřberger	
Doppler-shift attenuation method lifetimes in ^{54}Cr : A reevaluation (11 pages)	034322
A. E. Stuchbery	
Interplay between tensor force and pairing correlations in the microscopic description of α decay within the Hartree-Fock-Bogoliubov framework (11 pages)	034323
Hailan Zheng, Zhongzhou Ren, Tongqi Liang, Zhen Wang, and Bin Hong	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

Spectroscopic factors as a probe of the nuclear shape in ^{44}S via one-neutron knockout reactions (<i>11 pages</i>)	034324
Ranojit Barman, Masaaki Kimura, Yoshiki Chazono, Kazuki Yoshida, Kazuyuki Ogata, and Rajdeep Chatterjee	
Systematics of α -decay half-lives from neural network modeling and application to superheavy nuclei (<i>23 pages</i>)	034325
Nishu Jain and Raj Kumar	
Many-body perturbation theory for the nuclear equation of state up to fifth order (<i>28 pages</i>)	034326
C. Drischler, K. S. McElvain, and P. Arthuis	
Competing roles of Coulomb repulsion and shell closure in pseudospin symmetry breaking of proton resonant states (<i>13 pages</i>)	034327
Jin He, Quan Liu, and Jian-You Guo	
Shape evolution of krypton isotopes calculated with axially deformed relativistic Hartree-Bogoliubov approach (<i>11 pages</i>)	034328
Zi Xin Liu (刘子鑫), Yi Hua Lam (藍乙華), and Peter Ring	
Growth of quartet correlations in neutron-rich tellurium isotopes within quartet Bardeen-Cooper-Schrieffer theory (<i>9 pages</i>)	034329
Yixin Guo (郭一昕), Hiroyuki Sagawa (佐川弘幸), and Masaaki Kimura (木村真明)	
Detailed experimental study of excited states in ^{50}Ti via the (d, p) and ($d, p\gamma$) reactions (<i>25 pages</i>)	034330
B. Kelly, M. Spieker, L. T. Baby, S. Baker, A. L. Conley, D. Houlihan, K. W. Kemper, E. Litvinova, N. Tsoneva, and A. Volya	
CREX and PREX-II reconciled within nuclear energy density functional theory (<i>8 pages</i>)	034331
Panagiota Papakonstantinou	
Investigation of β -decay energy based on physically interpretable machine learning (<i>11 pages</i>)	034332
S. J. Guo (郭世杰), S. Y. Wang (王守宇), B. Qi (仵斌), E. H. Wang (王恩宏), and Y. L. Huang (黄永琳)	
Microscopic theory of the γ decay of giant resonances in superfluid nuclei (<i>13 pages</i>)	034333
W.-L. Lv (吕万里), Y.-F. Niu (牛一斐), and G. Colò	
Physics-structured cooperative neural network for baseline-free nuclear mass modeling (<i>12 pages</i>)	034334
Peiwen Zai, Wei Cheng, and Feng-Shou Zhang	
Nuclear Reactions	
Impact of the small Dirac component on the valence electron density of actinides at their nuclei in solids (<i>9 pages</i>)	034601
A. V. Nikolaev, U. N. Kurelchuk, and E. V. Tkalya	
Decay-resolved charge changes from radioactive decays in levitated microparticles (<i>11 pages</i>)	034602
Jiaxiang Wang, T. W. Penny, Yu-Han Tseng, Benjamin Siegel, and David C. Moore	
Information entropy and Δ -scaling law in central $^{197}\text{Au} + ^{197}\text{Au}$ collisions at 20–350 MeV/nucleon (<i>10 pages</i>)	034603
Jin-Mei Wang (汪金梅), Feng-Hua Qiao (乔枫华), Xian-Gai Deng (邓先概), and Yu-Gang Ma (马余刚)	
Muon-induced fission of actinide nuclei (<i>14 pages</i>)	034604
Christian Ross and A. S. Umar	
Photonuclear cross sections for the $^{197}\text{Au}(\gamma, pn)^{195m}\text{Pt}$ reaction near threshold (<i>6 pages</i>)	034605
J. Song, J. Nolen, D. Rotsch, R. Gampa, R. M. de Kruijff, T. Brossard, C. R. Howell, F. Krishichayan, S. W. Finch, Y. K. Wu, S. Mikhailov, M. W. Ahmed, and R. V. F. Janssens	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

Self-consistent spectral framework for inclusive nonelastic breakup: The Trojan-horse method as its sub-Coulomb resonant limit (<i>14 pages</i>)	034606
Jin Lei	
Scintillation response of cryogenic CsI to few-keV and sub-keV nuclear recoils (<i>7 pages</i>)	034607
J. I. Collar, C. M. Lewis, A. Simón, and S. G. Yoon	
Probing near-barrier reaction dynamics with a ^{10}B projectile (<i>8 pages</i>)	034608
Prabhat Mishra, S. K. Pandit, V. V. Parkar, K. Mahata, A. Shrivastava, Satbir Kaur, D. Chattopadhyay, K. Ramachandran, Vineet Kumar, Arati Chavan, Sangeeta Dhuri, Prasanna M., and S. Rathi	
Coulomb scaling, geometric normalization, and the limits of a single-Gaussian description of sub-barrier fusion across seven projectile species (<i>8 pages</i>)	034609
A. M. Vinodkumar and B. R. S. Babu	
Improving the accuracy of $^{182,184,186}\text{W}(n, n'\gamma)$ cross-section calculations (<i>36 pages</i>)	034610
G. Henning, M. Dupuis, M. Kerveno, A. Bacquias, C. Borcea, M. Boromiza, R. Capote, A. Coman, Ph. Dessagne, C. de Saint Jean, J.-C. Drohé, K. H. Guber, S. Hilaire, T. Kawano, A. Negret, M. Nyman, A. J. M. Plompen, P. Romain, G. Rudolf, P. Scholtes, and P. Tamagno	
Impact of potential parameter readjustment on the identification of coupling schemes in heavy-ion fusion reactions (<i>16 pages</i>)	034611
Zhixiu He, Huilin Zhang, and Yingchen Mao	
Two-neutron stripping reaction dynamics in the $^{18}\text{O} + ^{197}\text{Au}$ system at near-barrier energies (<i>12 pages</i>)	034612
X. Ma, Sunil Dutt, B. Paes, G. S. Li, Y. L. Zhang, Y. S. Zhang, J. L. Ferreira, Y. Song, Y. T. Yang, P. C. Ma, J. Gada, H. Huang, D. D. Zhang, W. Wang, P. S. Zheng, C. S. Gao, X. Y. Gu, F. R. Shi, J. H. Pu, Pankaj K. Giri, A. C. Visakh, F. F. Zeng, K. K. Zheng, K. L. Wang, J. G. Wang, S. C. Wang, Y. D. Fang, S. Guo, M. L. Liu, Y. H. Qiang, Z. G. Gan, X. H. Zhou, and J. Lubian	
Description of nucleon elastic scattering off ^6Li with the four-body continuum-discretized coupled-channels method (<i>8 pages</i>)	034613
Kazuyuki Ogata and Shoya Ogawa	
Reexamining experimental data on (p, p') scattering off ^{12}C via its Hoyle state and its impact on triple- α reaction rate (<i>7 pages</i>)	034614
A. Baishya, S. Santra, A. Pal, P. C. Rout, T. Santhosh, T. Singh, M. Meher, H. Kumawat, and Ramandeep Gandhi	
Multimodal shell-driven fission in radium isotopes (<i>16 pages</i>)	034615
K. J. Cook, M. K. Lakelin, J. Buete, D. J. Hinde, M. Dasgupta, M. M. Webber, L. T. Bezzina, S. L. Hayles, H. Lee, P. Linardakis, C. da Costa Seabra, T. Tran, and T. Tunningley	
Production probability of superheavy nuclei in fusion (<i>11 pages</i>)	034616
Ning Wang, Cheng Li, and Hong Yao	
Nuclear medium effects in microscopic calculations of α -decay half-lives (<i>19 pages</i>)	034617
M. M. Mesmh, M. Ismail, A. Adel, and A. R. Abdulghany	
Maris polarization in the (p, pd) reaction (<i>9 pages</i>)	034618
Yoshiki Chazono	
Exclusive cross-section measurements of $^{12}\text{C}(n, p_n)$ and $^{12}\text{C}(n, d_n)$ reactions (<i>9 pages</i>)	034619
A. Wantz, A. N. Kuchera, W. F. Rogers, T. Baumann, C. Boothby, M. Devlin, N. Frank, P. Gueye, K. J. Kelly, S. A. Kuvín, A. LaRochelle, T. Redpath, T. Tran Nguyen, and J. R. Winkelbauer	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

Nuclear mass excesses calibrated by Bayesian ridge regression for predicting optimal incident energies for the synthesis of superheavy elements (<i>10 pages</i>)	034620
Ming-Hao Zhang, Lu Guo, and Feng-Shou Zhang	
Deep-learning emulator for photonuclear reactions and a framework for Bayesian joint evaluations via Hamiltonian Monte Carlo (<i>21 pages</i>)	034621
Noah Walton, Ajeeta Khatiwada, and Toshihiko Kawano	
Measurement of the forward angle $^{12}\text{C} + ^{12}\text{C}$ fragmentation differential cross sections at 62 MeV/nucleon (<i>10 pages</i>)	034622
G. Guo, G. Casini, B. H. Sun, S. Barlini, A. Camaiani, C. Frosin, I. Lombardo, O. Lopez, S. Piantelli, I. Tanihata, S. Terashima, S. Valdré, G. Verde, F. W. Zhao, L. Baldesi, B. Borderie, R. Bougault, C. Ciampi, I. Dekhissi, J. A. Dueñas, Q. Fable, F. Gramegna, D. Gruyer, A. Hocine, B. Hong, S. Kim, T. Kozik, S. H. Nam, N. Le Neindre, J. Park, M. Parlog, E. Vient, M. Vigilante, and C. J. Wang (FAZIA Collaboration)	
Improved ^{94}Mo neutron resonance parameters from neutron capture and transmission measurements at n_TOF and GELINA (<i>16 pages</i>)	034623
R. Mucciola <i>et al.</i> (n_TOF Collaboration)	
Calculation of α -decay half-lives for new superheavy nuclei with $Z = 113\text{--}118$ with the GLDM-BNN hybrid model (<i>11 pages</i>)	034624
Jia-Jia Liu, Yu-Hai Zhang, Dong-Hong Zhang, and Feng-Shou Zhang	
Exploration of mass-asymmetric fission of the sublead nucleus ^{192}Hg (<i>10 pages</i>)	034625
Pavneet Kaur, Moumita Maiti, Rishabh Kumar, Ankur Singh, Himanshu Sharma, M. V. S. Chandrachud, N. Saneesh, A. Parihari, M. Kumar, K. S. Golda, A. Jhingan, and P. Sugathan	
Relativistic Nuclear Collisions	
Sensitivity of anisotropic flow in Pb + Pb collisions to the neutron skin of ^{208}Pb at energies available at the CERN Large Hadron Collider (<i>9 pages</i>)	034901
Xin-Li Zhao, Xin-Yi Xie, Yuan Li, and Guo-Liang Ma	
☞ Electromagnetic radiation from baryon-rich matter in heavy-ion collisions (<i>18 pages</i>)	034902
Xiang-Yu Wu, Charles Gale, Sangyong Jeon, Jean-François Paquet, Björn Schenke, and Chun Shen	
Improved formula for Wigner function and spin polarization in a decoupling relativistic fluid at local thermodynamic equilibrium (<i>14 pages</i>)	034903
Xin-Li Sheng, Francesco Becattini, and Daniele Roselli	
Causal-horizon scaling of quarkonium suppression in strong QCD fields (<i>7 pages</i>)	034904
Yi Yang	
Probing the tetrahedral α clusters in relativistic $^{16}\text{O} + ^{16}\text{O}$ collisions (<i>8 pages</i>)	034905
Jin-Yu Hu, Hao-jie Xu, Xiaobao Wang, and Shi Pu	
Covariant formulation of relativistic quantum molecular dynamics for a system of interacting wave packets (<i>26 pages</i>)	034906
Yasushi Nara, Asanosuke Jinno, and Koichi Murase	
$f_2(1270) \rightarrow \pi + \pi$ as a probe of spin and vorticity in heavy-ion collisions (<i>13 pages</i>)	034907
In Woo Park, Beomkyu Kim, Giorgio Torrieri, Kayman J. Gonçalves, Sanghoon Lim, and Su Houn Lee	
Microscopic study of baryon stopping in low-energy heavy-ion collisions within the UrQMD model (<i>15 pages</i>)	034908
Sudhir Pandurang Rode	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

Sensitivity of heavy-quark dipolar flow to its initial spatial distributions in Cu + Au collisions (7 pages)	034909
Ankit Kumar Panda and Tribhuban Parida	
Cumulants of mean transverse momentum and elliptic flow in the hydrodynamic model of heavy-ion collisions (8 pages)	034910
Tribhuban Parida and Piotr Bożek	
Quadrupole spectra derived from 2.76-TeV Pb-Pb identified-hadron $v_2(p_T)$ data (22 pages)	034911
Thomas A. Trainor	
Species-dependent viscous corrections at particlization: A novel relaxation time approximation approach (20 pages)	034912
I. Aguiar, T. Nunes da Silva, G. S. Denicol, M. Luzum, G. S. Rocha, and C. Shen	
Testing microscopic nuclear-density inputs for deformation-sensitive observables in relativistic $^{238}\text{U} + ^{238}\text{U}$ and $^{197}\text{Au} + ^{197}\text{Au}$ collisions (8 pages)	034913
Yuan Li, Hao-jie Xu, Dandan Zhang, and Guo-Liang Ma	
Energy-energy correlators inside single inclusive jets in heavy-ion collisions with the CoLBT-hydro model (8 pages)	034914
Zhong Yang, Raghav Kunawalkam Elayavalli, and Xin-Nian Wang	
Secondary hadron-nucleus collisions of short-lived hadrons in ultrarelativistic fixed-target heavy-ion interactions (6 pages)	034915
Sanatan Digal, P. S. Saumia, and Ajit M. Srivastava	
Non-Gaussian fluctuations in relativistic hydrodynamics: Confluent equations for three-point correlations (25 pages)	034916
Xin An, Gökçe Başar, and Mikhail Stephanov	
Non-Gaussian hydrodynamic fluctuations in an expanding relativistic fluid (19 pages)	034917
Gökçe Başar and Shuo Song	
From hyperon-nucleon interactions to deuteron-hyperon femtoscopy (9 pages)	034918
Jiaxing Zhao	
Production correlation of light (hyper-)nuclei in Au-Au collisions from the RHIC Beam Energy Scan (18 pages)	034919
Jiang-He Qiao, Jian-Yu Liu, Yan-Ting Feng, Feng-Lan Shao, and Rui-Qin Wang	
Investigation of hadronic effects on resonance productions in small collision systems using the EPOS4 model (14 pages)	034920
Hyunji Lim, Bong-Hwi Lim, Minjung Kim, and Sanghoon Lim	
Hadronic Physics and QCD	
Phenomenological search for light neutral scalar couplings in elastic electron-proton scattering within a two-photon-exchange-consistent framework (9 pages)	035201
I. A. Qattan	
γW -exchange correction beyond the forward-angle limit in neutron β decay (9 pages)	035202
Hui-Yun Cao and Hai-Qing Zhou	
Coherent deeply virtual Compton scattering on ^4He beyond leading power (18 pages)	035203
V. Martínez-Fernández, B. Pire, P. Sznajder, and J. Wagner	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

Electroweak Interaction, Symmetries

- ☞ Precise determination of electron-capture Q value of ^{113}Sn decay related to electron neutrino mass measurements (*10 pages*) 035501
 Zhuang Ge, Tommi Eronen, Vasile Alin Sevestrean, Ovidiu Nițescu, Sabin Stoica, Marlom Ramalho, Jouni Suhonen, Anu Kankainen, Marjut Hukkanen, Arthur Jaries, Ari Jokinen, Joel Kostensalo, Jenni Kotila, Maxime Mougeot, Iain D. Moore, Wirunchana Rattanasakuldilok, Jouni Ruotsalainen, and Marek Stryczyk
- Skyrme SV density-functional analysis of the $2\nu\beta\beta$ decay in ^{76}Ge (*11 pages*) 035502
 Jan Miśkiewicz, Jakub Wysocki, and Wojciech Satuła

Nuclear Astrophysics

- Indirect measurement of the $S^*(E)$ factor for $^{12}\text{C}(^{12}\text{C}, p)^{23}\text{Na}$ at Gamow energies via the Trojan horse method with near- 0° spectator detection (*9 pages*) 035801
 Chengbo Li, Huiming Jia, Qungang Wen, Chengjian Lin, Lei Yang, Feng Yang, Nanru Ma, Tianpeng Luo, Xuepeng Sun, Shangkun Shao, and Xuejian Wang
- Neutron star matter with hyperons: Bayesian comparison of nucleonic and SU(6)/SU(3) hyperonic models (*21 pages*) 035802
 Athira S., Vishal Parmar, Monika Sinha, and Ignazio Bombaci
- Nuclear constraints on $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ and their impact on black-hole mass predictions (*14 pages*) 035803
 A. M. Mukhamedzhanov
- Machine- and deep-learning regression for equations of state of compact objects (*17 pages*) 035804
 I. Stergakis, Th. Diakonidis, and Ch. C. Moustakidis
- ☞ Correlated and uncorrelated Monte Carlo neutron-capture rate variations in weak r -process simulations (*22 pages*) 035805
 Atul Kedia, Jeffrey M. Berryman, Jonathan Cabrera Garcia, Jutta E. Escher, Oliver C. Gorton, Erika M. Holmbeck, Gail C. McLaughlin, Cole D. Pruitt, Andre Sieverding, and Rebecca Surman
- Role of nuclear shell effects of various nuclear physics ingredients in shaping r -process abundance patterns (*10 pages*) 035806
 Y. W. Hao (郝艺伟), Y. F. Niu (牛一斐), and Z. M. Niu (牛中明)
- First strength measurements of low-energy resonances in the $^{45}\text{Sc}(p, \gamma)^{46}\text{Ti}$ reaction and its astrophysical implications (*16 pages*) 035807
 R. S. Sidhu, R. J. deBoer, J. Görres, M. Wiescher, W. N. Catford, C. Dembski, C. R. Jones, Ó. E. López-López, G. Lotay, K. Manukyan, M. Matney, J. O'Neill, J. Rufino, A. T. Sanchez, M. Williams, and L. Zimmer

ERRATA

- Erratum: Quantum magic and multipartite entanglement in the structure of nuclei [Phys. Rev. C **111**, 034317 (2025)] (*3 pages*) 039901(E)
 Florian Brökemeier, S. Momme Hengstenberg, James W. T. Keeble, Caroline E. P. Robin, Federico Rocco, and Martin J. Savage

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW C

THIRD SERIES, VOLUME 114, NUMBER 3

SEPTEMBER 2026

Erratum: Observation of new levels and proposed octupole correlations in neutron-rich ^{150}Ce [Phys. Rev. C 85 , 014330 (2012)] (<i>3 pages</i>)	039902(E)
E. H. Wang, S. J. Zhu (朱胜江), M. Sakhaee, J. H. Hamilton, A. V. Ramayya, N. T. Brewer, J. K. Hwang, S. H. Liu, E. Y. Yeoh (杨韵颐), Z. G. Xiao (肖志刚), Q. Xu (徐强), Z. Zhang (张钊), Y. X. Luo, J. O. Rasmussen, I. Y. Lee, K. Li, and W. C. Ma	
Erratum: Equation of state and correlation functions of hypernuclear matter within the lowest order constrained variational method [Phys. Rev. C 100 , 044314 (2019)] (<i>6 pages</i>)	039903(E)
M. Shahrbafe, H. R. Moshfegh, and M. Modarres	
Erratum: Spectroscopic study of the possibly triaxial transitional nucleus ^{75}Ge [Phys. Rev. C 97 , 034322 (2018)] (<i>2 pages</i>)	039904(E)
C. Y. Niu (牛晨阳) <i>et al.</i>	