PHYSICAL REVIEW C™

For editorial and subscription correspondence, please see inside front cover
(ISSN: 0556-2813)

PERIODICALS
Postmaster send address changes to:

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

THIRD SERIES, VOLUME 92, NUMBER 2 *CONTENTS* **AUGUST 2015**

RAPID COMMUNICATIONS

Nuclear Structure

Decay spectroscopy of element 115 daughters: ^{280}Rg $\rightarrow$ ^{276}Mt and ^{276}Mt $\rightarrow$ ^{272}Bh *(6 pages)* . . . . . 021301(R)
J. M. Gates, K. E. Gregorich, O. R. Gothe, E. C. Uribe, G. K. Pang, D. L. Bleuel, M. Block, R. M. Clark, C. M. Campbell, H. L. Crawford, M. Cromaz, A. Di Nitto, Ch. E. Düllmann, N. E. Esker, C. Fahlander, P. Fallon, R. M. Farjadi, U. Forsberg, J. Khuyagbaatar, W. Loveland, A. O. Macchiavelli, E. M. May, P. R. Mudder, D. T. Olive, A. C. Rice, J. Rissanen, D. Rudolph, L. G. Sarmiento, J. A. Shusterman, M. A. Stoyer, A. Wiens, A. Yakushev, and H. Nitsche

Hoyle band and α condensation in ^{12}C *(6 pages)* . . . . . 021302(R)
Y. Funaki

Systematics of α-decay transitions to excited states *(4 pages)* . . . . . 021303(R)
D. S. Delion and A. Dumitrescu

Nuclear Reactions

Role of breakup and direct processes in deuteron-induced reactions at low energies *(4 pages)* . . . . . 021601(R)
M. Avrigeanu and V. Avrigeanu

Universal damping mechanism of quantum vibrations in deep sub-barrier fusion reactions *(4 pages)* . . . . . 021602(R)
Takatoshi Ichikawa and Kenichi Matsuyanagi

Relativistic Nuclear Collisions

Energy dependence of $K\pi$, $p\pi$, and Kp fluctuations in Au + Au collisions from $\sqrt{s_{NN}} = 7.7$ to 200 GeV *(7 pages)* . . . . . 021901(R)
L. Adamczyk *et al.* (STAR Collaboration)

Nuclear Astrophysics

Imaginary-time formalism for triple-α reaction rates *(5 pages)* . . . . . 022801(R)
T. Akahori, Y. Funaki, and K. Yabana

ARTICLES

Nucleon-Nucleon Interaction, Few-Body Systems

Four-body calculation of elastic deuteron-deuteron scattering *(5 pages)* 024001
A. Deltuva and A. C. Fonseca

Copyright 2015 by American Physical Society

0556-2813(201508)92:2;1-U

(Continued)

The editors and referees of PRC find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. C 86, 010001 (2012).

PHYSICAL REVIEW C THIRD SERIES, VOLUME 92, NUMBER 2 AUGUST 2015

Three-pion exchange nucleon-nucleon potentials with virtual Δ-isobar excitation *(9 pages)* 024002
N. Kaiser

Short-range correlations in nuclei with similarity renormalization group transformations *(12 pages)* 024003
T. Neff, H. Feldmeier, and W. Horiuchi

Experimental study of ultracold neutron production in pressurized superfluid helium *(8 pages)* 024004
P. Schmidt-Wellenburg, J. Bossy, E. Farhi, M. Fertl, K. K. H. Leung, A. Rahli, T. Soldner, and O. Zimmer

Quantifying truncation errors in effective field theory *(20 pages)* 024005
R. J. Furnstahl, N. Klco, D. R. Phillips, and S. Wesolowski

$J = 3/2$ charmed hypertriton *(6 pages)* 024006
H. Garcilazo, A. Valcarce, and T. F. Caramés

Nuclear Structure

Effects of electron screening on α-decay half-lives in different external environments *(5 pages)* 024301
Niu Wan (万牛), Chang Xu (许昌), and Zhongzhou Ren (任中洲)

Constraining the symmetry energy content of nuclear matter from nuclear masses: A covariance analysis *(6 pages)* 024302
C. Mondal, B. K. Agrawal, and J. N. De

Evolution of ground-state quadrupole and octupole stiffnesses in even-even barium isotopes *(12 pages)* 024303
Hua-Lei Wang, Jie Yang, Min-Liang Liu, and Fu-Rong Xu

New decay scheme of the $^{136}_{51}Sb_{85}$ 6^- isomer *(4 pages)* 024304
R. Lozeva *et al.*

Spurious finite-size instabilities in nuclear energy density functionals: Spin channel *(9 pages)* 024305
A. Pastore, D. Tarpanov, D. Davesne, and J. Navarro

Global calculations of microscopic energies and nuclear deformations: Isospin dependence of the spin-orbit coupling *(13 pages)* 024306
Zhe-Ying Wu, Chong Qi, Ramon Wyss, and Hong-Liang Liu

Direct microscopic calculation of nuclear level densities in the shell model Monte Carlo approach *(5 pages)* 024307
Y. Alhassid, M. Bonett-Matiz, S. Liu, and H. Nakada

Positive-parity rotational band in ^{158}Tb *(4 pages)* 024308
J. Zhong, H. L. Ma, S. P. Hu, X. G. Wu, H. B. Sun, G. S. Li, C. Y. He, Y. Zheng, C. B. Li, Q. M. Chen, H. W. Li, Y. H. Wu, and P. W. Luo

Lifetime measurement for the possible antimagnetic rotation band in ^{101}Pd *(6 pages)* 024309
M. Sugawara, T. Hayakawa, M. Oshima, Y. Toh, A. Osa, M. Matsuda, T. Shizuma, Y. Hatsukawa, H. Kusakari, T. Morikawa, Z. G. Gan, and T. Czosnyka

Isospin-breaking interactions studied through mirror energy differences *(8 pages)* 024310
M. A. Bentley, S. M. Lenzi, S. A. Simpson, and C. Aa. Diget

Non-Markovian fission rate within the Kramers model *(9 pages)* 024311
S. V. Radionov and V. M. Kolomietz

Gamow-Teller transitions to ^{45}Ca via the ^{45}Sc$(t,{}^3\mathrm{He}+\gamma)$ reaction at 115 MeV/u and its application to stellar electron-capture rates *(9 pages)* 024312
S. Noji, R. G. T. Zegers, Sam M. Austin, T. Baugher, D. Bazin, B. A. Brown, C. M. Campbell, A. L. Cole, H. J. Doster, A. Gade, C. J. Guess, S. Gupta, G. W. Hitt, C. Langer, S. Lipschutz, E. Lunderberg, R. Meharchand, Z. Meisel, G. Perdikakis, J. Pereira, F. Recchia, H. Schatz, M. Scott, S. R. Stroberg, C. Sullivan, L. Valdez, C. Walz, D. Weisshaar, S. J. Williams, and K. Wimmer

(Continued)

The editors and referees of PRC find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. C 86, 010001 (2012).

PHYSICAL REVIEW C **THIRD SERIES, VOLUME 92, NUMBER 2** **AUGUST 2015**

Electron capture decay of 58-min $^{229}_{92}$U and levels in $^{229}_{91}$Pa *(10 pages)* 024313
I. Ahmad, R. R. Chasman, J. P. Greene, F. G. Kondev, and S. Zhu

Electric quadrupole and magnetic dipole moments of odd nuclei near the magic ones in a self-consistent approach *(14 pages)* 024314
G. Co', V. De Donno, M. Anguiano, R. N. Bernard, and A. M. Lallena

Triplet energy differences and the low lying structure of ^{62}Ga *(6 pages)* 024315
T. W. Henry, M. A. Bentley, R. M. Clark, P. J. Davies, V. M. Bader, T. Baugher, D. Bazin, C. W. Beausang, J. S. Berryman, A. M. Bruce, C. M. Campbell, H. L. Crawford, M. Cromaz, P. Fallon, A. Gade, J. Henderson, H. Iwasaki, D. G. Jenkins, I. Y. Lee, A. Lemasson, S. M. Lenzi, A. O. Macchiavelli, D. R. Napoli, A. J. Nichols, S. Paschalis, M. Petri, F. Recchia, J. Rissanen, E. C. Simpson, S. R. Stroberg, R. Wadsworth, D. Weisshaar, A. Wiens, and C. Walz

Isoscalar response of ^{68}Ni to α-particle and deuteron probes *(12 pages)* 024316
M. Vandebrouck, J. Gibelin, E. Khan, N. L. Achouri, H. Baba, D. Beaumel, Y. Blumenfeld, M. Caamaño, L. Càceres, G. Colò, F. Delaunay, B. Fernandez-Dominguez, U. Garg, G. F. Grinyer, M. N. Harakeh, N. Kalantar-Nayestanaki, N. Keeley, W. Mittig, J. Pancin, R. Raabe, T. Roger, P. Roussel-Chomaz, H. Savajols, O. Sorlin, C. Stodel, D. Suzuki, and J. C. Thomas

Lifetime measurement for the 2^+_1 state in ^{140}Sm and the onset of collectivity in neutron-deficient Sm isotopes *(8 pages)* 024317
F. L. Bello Garrote, A. Görgen, J. Mierzejewski, C. Mihai, J. P. Delaroche, M. Girod, J. Libert, E. Sahin, J. Srebrny, T. Abraham, T. K. Eriksen, F. Giacoppo, T. W. Hagen, M. Kisielinski, M. Klintefjord, M. Komorowska, M. Kowalczyk, A. C. Larsen, T. Marchlewski, I. O. Mitu, S. Pascu, S. Siem, A. Stolarz, and T. G. Tornyi

γ-ray spectroscopy of fission fragments produced in ^{208}Pb(^{18}O, f) *(12 pages)* 024318
P. Banerjee, S. Ganguly, M. K. Pradhan, Md. Moin Shaikh, H. P. Sharma, S. Chakraborty, R. Palit, R. G. Pillay, V. Nanal, S. Saha, J. Sethi, and D. C. Biswas

Analogous intruder behavior near Ni, Sn, and Pb isotopes *(7 pages)* 024319
S. N. Liddick, W. B. Walters, C. J. Chiara, R. V. F. Janssens, B. Abromeit, A. Ayres, A. Bey, C. R. Bingham, M. P. Carpenter, L. Cartegni, J. Chen, H. L. Crawford, I. G. Darby, R. Grzywacz, J. Harker, C. R. Hoffman, S. Ilyushkin, F. G. Kondev, N. Larson, M. Madurga, D. Miller, S. Padgett, S. V. Paulauskas, M. M. Rajabali, K. Rykaczewski, D. Seweryniak, S. Suchyta, and S. Zhu

Nilsson-SU3 self-consistency in heavy $N = Z$ nuclei *(14 pages)* 024320
A. P. Zuker, A. Poves, F. Nowacki, and S. M. Lenzi

Phase change near $N = 70$ in the wave function of the $I^\pi = 11/2^-$ isomers along the cadmium-isotope chain *(5 pages)* 024321
Y. Lei (雷杨), H. Jiang (姜慧), and S. Pittel

Cluster-transfer reactions with radioactive beams: A spectroscopic tool for neutron-rich nuclei *(8 pages)* 024322
S. Bottoni, S. Leoni, B. Fornal, R. Raabe, K. Rusek, G. Benzoni, A. Bracco, F. C. L. Crespi, A. I. Morales, P. Bednarczyk, N. Cieplicka-Oryńczak, W. Królas, A. Maj, B. Szpak, M. Callens, J. Bouma, J. Elseviers, H. De Witte, F. Flavigny, R. Orlandi, P. Reiter, M. Seidlitz, N. Warr, B. Siebeck, S. Hellgartner, D. Mücher, J. Pakarinen, M. Vermeulen, C. Bauer, G. Georgiev, R. V. F. Janssens, D. Balabanski, M. Sferrazza, M. Kowalska, E. Rapisarda, D. Voulot, M. Lozano Benito, and F. Wenander

High-spin states and band terminations in ^{49}V *(7 pages)* 024323
D. Rodrigues, D. Hojman, S. M. Lenzi, M. A. Cardona, E. Farnea, M. Axiotis, C. Beck, P. Bednarczyk, P. G. Bizzetti, A. M. Bizzetti-Sona, F. Della Vedova, J. Grębosz, F. Haas, M. Kmiecik, A. Maj, W. Męczyński, D. R. Napoli, M. Nespolo, P. Papka, A. Sánchez i Zafra, J. Styczen, S. Thummerer, and M. Zięblíński

(Continued)

The editors and referees of PRC find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. C 86, 010001 (2012).

PHYSICAL REVIEW C THIRD SERIES, VOLUME 92, NUMBER 2 AUGUST 2015

Analytical continuation from bound to resonant states in the Dirac equation with quadrupole-deformed potentials *(5 pages)* 024324
Xu-Dong Xu, Shi-Sheng Zhang, A. J. Signoracci, M. S. Smith, and Z. P. Li

Investigation of the $nn\Lambda$ bound state in pionless effective theory *(8 pages)* 024325
Shung-Ichi Ando, Udit Raha, and Yongseok Oh

Nuclear Reactions

Isotopic molybdenum total neutron cross section in the unresolved resonance region *(10 pages)* 024601
R. Bahran, D. Barry, R. Block, G. Leinweber, M. Rapp, A. Daskalakis, E. Blain, D. Williams, B. McDermott, L. Leal, and Y. Danon

Contribution of two-particle–two-hole final states to the nuclear response *(8 pages)* 024602
Omar Benhar, Alessandro Lovato, and Noemi Rocco

Multinucleon transfer study in ^{206}Pb(^{18}O, x) at energies above the Coulomb barrier *(10 pages)* 024603
Sonika, B. J. Roy, A. Parmar, U. K. Pal, H. Kumawat, V. Jha, S. K. Pandit, V. V. Parkar, K. Ramachandran, K. Mahata, A. Pal, S. Santra, A. K. Mohanty, and K. Sekizawa

Extracting the mass dependence and quantum numbers of short-range correlated pairs from $A(e,e'p)$ and $A(e,e'pp)$ scattering *(6 pages)* 024604
C. Colle, O. Hen, W. Cosyn, I. Korover, E. Piasetzky, J. Ryckebusch, and L. B. Weinstein

Novel technique to extract experimental symmetry free energy information for nuclear matter *(5 pages)* 024605
J. Mabiala, H. Zheng, A. Bonasera, P. Cammarata, K. Hagel, L. Heilborn, Z. Kohley, L. W. May, A. B. McIntosh, M. D. Youngs, A. Zarrella, and S. J. Yennello

Low-energy excitations and quasielastic contribution to electron-nucleus and neutrino-nucleus scattering in the continuum random-phase approximation *(10 pages)* 024606
V. Pandey, N. Jachowicz, T. Van Cuyck, J. Ryckebusch, and M. Martini

Isotopic yields of spallation residues produced in ^{136}Xe-induced reactions on deuterium at 500A MeV *(15 pages)* 024607
J. Alcántara-Núñez, J. Benlliure, C. Paradela, C. Pérez-Loureiro, J. L. Rodríguez-Sánchez, L. Audouin, A. Boudard, E. Casarejos, T. Enqvist, F. Farget, M. Fernández-Ordóñez, A. Heinz, V. Henzl, D. Henzlova, A. Kelić-Heil, A. Lafriaskh, S. Leray, P. Napolitani, J. Pereira, M. V. Ricciardi, C. Stéphan, K.-H. Schmidt, C. Schmitt, L. Tassan-Got, C. Villagrasa, C. Volant, and O. Yordanov

Velocity-dependent transverse momentum distribution of fragments produced from ^{40}Ar+ ^{9}Be at 95 MeV/nucleon *(15 pages)* 024608
S. Momota, I. Tanihata, A. Ozawa, M. Notani, K. Yoshida, K. Morimoto, T. Yamaguchi, T. Onishi, A. Yoshida, Y. X. Watanabe, Z. Liu, and A. Ono

Analysis of proton + ^{12}C scattering by microscopic coupled-channels calculations *(10 pages)* 024609
M. Tomita, M. Iwasaki, R. Otani, K. Horio, and M. Ito

Fission fragment mass distributions in ^{35}Cl + ^{144,154}Sm reactions *(5 pages)* 024610
R. Tripathi, S. Sodaye, K. Sudarshan, B. K. Nayak, A. Jhingan, P. K. Pujari, K. Mahata, S. Santra, A. Saxena, E. T. Mirgule, and R. G. Thomas

Correlation between nuclear charge radii of Ti and reaction cross sections for p-Ti *(6 pages)* 024611
M. Hemalatha, N. Maladkar, and S. Kailas

Internal and kinetic temperatures of fragments in the framework of a nuclear statistical multifragmentation model *(8 pages)* 024612
S. R. Souza, B. V. Carlson, R. Donangelo, W. G. Lynch, and M. B. Tsang

(Continued)

The editors and referees of PRC find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. C 86, 010001 (2012).

PHYSICAL REVIEW C **THIRD SERIES, VOLUME 92, NUMBER 2** **AUGUST 2015**

Production mechanism of neutron-rich transuranium nuclei in $^{238}U + ^{238}U$ collisions at near-barrier energies *(7 pages)* 024613
Kai Zhao, Zhuxia Li, Ning Wang, Yingxun Zhang, Qingfeng Li, Yongjia Wang, and Xizhen Wu

Energy-dependent fragmentation cross sections of relativistic ^{12}C *(14 pages)* 024614
T. Ogawa, T. Sato, S. Hashimoto, D. Satoh, S. Tsuda, and K. Niita

Direct and compound-nucleus reaction mechanisms in the $^{7}Be + ^{58}Ni$ system at near-barrier energies *(14 pages)* 024615
M. Mazzocco, D. Torresi, D. Pierroutsakou, N. Keeley, L. Acosta, A. Boiano, C. Boiano, T. Glodariu, A. Guglielmetti, M. La Commara, J. A. Lay, I. Martel, C. Mazzocchi, P. Molini, C. Parascandolo, A. Pakou, V. V. Parkar, M. Romoli, K. Rusek, A. M. Sánchez-Benítez, M. Sandoli, O. Sgouros, C. Signorini, R. Silvestri, F. Soramel, V. Soukeras, E. Stiliaris, E. Strano, L. Stroe, and K. Zerva

Microscopic dynamical description of proton-induced fission with the constrained molecular dynamics model *(18 pages)* 024616
N. Vonta, G. A. Souliotis, M. Veselsky, and A. Bonasera

Measurement of π^0 photoproduction on the proton at MAMI C *(12 pages)* 024617
P. Adlarson *et al.* (A2 Collaboration at MAMI)

Microscopic calculations based on chiral two- and three-nucleon forces for proton- and ^{4}He-nucleus scattering *(6 pages)* 024618
Masakazu Toyokawa, Masanobu Yahiro, Takuma Matsumoto, Kosho Minomo, Kazuyuki Ogata, and Michio Kohno

Light and heavy transfer products in $^{136}Xe + ^{238}U$ multinucleon transfer reactions *(12 pages)* 024619
A. Vogt *et al.*

Cosmogenic-neutron activation of TeO_2 and implications for neutrinoless double-β decay experiments *(11 pages)* 024620
B. S. Wang, E. B. Norman, N. D. Scielzo, A. R. Smith, K. J. Thomas, and S. A. Wender

Shape evolution and collective dynamics of quasifission in the time-dependent Hartree-Fock approach *(9 pages)* 024621
A. S. Umar, V. E. Oberacker, and C. Simenel

Dynamics of neutron-induced fission of ^{235}U using four-dimensional Langevin equations *(5 pages)* 024622
M. R. Pahlavani and S. M. Mirfathi

Decay analysis of compound nuclei with masses $A \approx 30$–200 formed in reactions involving loosely bound projectiles *(8 pages)* 024623
Mandeep Kaur, BirBikram Singh, Manoj K. Sharma, and Raj K. Gupta

Airy structure in $^{16}O + ^{14}C$ nuclear rainbow scattering *(5 pages)* 024624
S. Ohkubo and Y. Hirabayashi

Relativistic Nuclear Collisions

Quarkonium dissociation at finite chemical potential *(7 pages)* 024901
Uttam Kakade and Binoy Krishna Patra

UrQMD study of the effects of centrality definitions on higher moments of net protons at energies available at the BNL Relativistic Heavy Ion Collider *(7 pages)* 024902
Gary D. Westfall

$K^*(892)^+$ production in proton-proton collisions at $E_{beam} = 3.5$ GeV *(7 pages)* 024903
G. Agakishiev *et al.* (HADES Collaboration)

(Continued)

The editors and referees of PRC find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. C 86, 010001 (2012).

PHYSICAL REVIEW C **THIRD SERIES, VOLUME 92, NUMBER 2** **AUGUST 2015**

Centrality dependence of mapping the hydrodynamic response to the initial geometry in heavy-ion collisions *(9 pages)* 024904
Jinghua Fu

Differential Hanbury-Brown–Twiss approach for an exact hydrodynamic model with rotation *(4 pages)* 024905
S. Velle and L. P. Csernai

Squeezed correlations of ϕ meson pairs for hydrodynamic sources in high-energy heavy-ion collisions *(9 pages)* 024906
Yong Zhang, Jing Yang, and Wei-Ning Zhang

Energy loss, hadronization, and hadronic interactions of heavy flavors in relativistic heavy-ion collisions *(12 pages)* 024907
Shanshan Cao, Guang-You Qin, and Steffen A. Bass

Quarkonia suppression in PbPb collisions at $\sqrt{s_{NN}} = 2.76$ TeV *(9 pages)* 024908
Vineet Kumar, Prashant Shukla, and Ramona Vogt

Centrality and system-size dependencies of temperatures of soft and hard components of p_t distributions of negative pions in $^4\mathrm{He} + ^{12}\mathrm{C}$, $^{12}\mathrm{C} + ^{12}\mathrm{C}$, and $^{12}\mathrm{C} + ^{181}\mathrm{Ta}$ collisions at $\sqrt{s_{NN}} = 3.14$ GeV *(16 pages)* 024909
Kh. K. Olimov, Akhtar Iqbal, Mahnaz Q. Haseeb, S. L. Lutpullaev, and B. S. Yuldashev

Impact of the energy-loss spatial profile and shear-viscosity to entropy-density ratio for the Mach cone versus head-shock signals produced by a fast-moving parton in a quark-gluon plasma *(11 pages)* 024910
Alejandro Ayala, Jorge David Castaño-Yepes, Isabel Dominguez, and Maria Elena Tejeda-Yeomans

Limitation of multiparticle correlations for studying the event-by-event distribution of harmonic flow in heavy-ion collisions *(7 pages)* 024911
Jiangyong Jia and Sooraj Radhakrishnan

Measurements of dielectron production in Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV from the STAR experiment *(35 pages)* 024912
L. Adamczyk *et al.* (STAR Collaboration)

Multibin correlations in a superposition approach to relativistic heavy-ion collisions *(11 pages)* 024913
Adam Olszewski and Wojciech Broniowski

Jet-dilepton conversion in expanding quark-gluon plasma *(7 pages)* 024914
Yong-Ping Fu and Qin Xi

Eventwise mean-p_t fluctuations versus minimum-bias jets (minijets) at energies available at the CERN Large Hadron Collider *(18 pages)* 024915
Thomas A. Trainor

Robustness of the baryon-stopping signal for the onset of deconfinement in relativistic heavy-ion collisions *(7 pages)* 024916
Yu. B. Ivanov and D. Blaschke

Freezeout hypersurface at energies available at the CERN Large Hadron Collider from particle spectra: Flavor and centrality dependence *(10 pages)* 024917
Sandeep Chatterjee, Bedangadas Mohanty, and Ranbir Singh

Predictions of heavy-flavor suppression at 5.1 TeV Pb + Pb collisions at the CERN Large Hadron Collider *(6 pages)* 024918
Magdalena Djordjevic and Marko Djordjevic

(Continued)

The editors and referees of PRC find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. C 86, 010001 (2012).

PHYSICAL REVIEW C THIRD SERIES, VOLUME 92, NUMBER 2 AUGUST 2015

Hadronic Physics and QCD

Asymmetric nuclear matter in a parity doublet model with hidden local symmetry *(8 pages)* 025201
Yuichi Motohiro, Youngman Kim, and Masayasu Harada

Strange and nonstrange baryon spectra in the relativistic interacting quark-diquark model with a Gürsey and Radicati-inspired exchange interaction *(9 pages)* 025202
E. Santopinto and J. Ferretti

Compton scattering from the deuteron below pion-production threshold *(12 pages)* 025203
L. S. Myers, J. R. M. Annand, J. Brudvik, G. Feldman, K. G. Fissum, H. W. Grießhammer, K. Hansen, S. S. Henshaw, L. Isaksson, R. Jebali, M. A. Kovash, M. Lundin, D. G. Middleton, A. M. Nathan, B. Schröder, and S. C. Stave (COMPTON@MAX-lab Collaboration)

Cavitation in a quark gluon plasma with finite chemical potential and several transport coefficients *(9 pages)* 025204
S. M. Sanches, Jr., D. A. Fogaça, F. S. Navarra, and H. Marrochio

Dynamical coupled-channels model of $K^- p$ reactions. II. Extraction of Λ^* and Σ^* hyperon resonances *(16 pages)* 025205
H. Kamano, S. X. Nakamura, T.-S. H. Lee, and T. Sato

Quantum-mechanical picture of peripheral chiral dynamics *(5 pages)* 025206
C. Granados and C. Weiss

Electroweak Interaction, Symmetries

Estimate of the theoretical uncertainty of the cross sections for nucleon knockout in neutral-current neutrino-oxygen interactions *(6 pages)* 025501
Artur M. Ankowski, Maria B. Barbaro, Omar Benhar, Juan A. Caballero, Carlotta Giusti, Raúl González-Jiménez, Guillermo D. Megias, and Andrea Meucci

High-precision half-life measurements for the superallowed Fermi β^+ emitter ^{18}Ne *(10 pages)* 025502
A. T. Laffoley, C. E. Svensson, C. Andreoiu, G. C. Ball, P. C. Bender, H. Bidaman, V. Bildstein, B. Blank, D. S. Cross, G. Deng, A. Diaz Varela, M. R. Dunlop, R. Dunlop, A. B. Garnsworthy, P. E. Garrett, J. Giovinazzo, G. F. Grinyer, J. Grinyer, G. Hackman, B. Hadinia, D. S. Jamieson, B. Jigmeddorj, D. Kisliuk, K. G. Leach, J. R. Leslie, A. D. MacLean, D. Miller, B. Mills, M. Moukaddam, A. J. Radich, M. M. Rajabali, E. T. Rand, J. C. Thomas, J. Turko, C. Unsworth, and P. Voss

Nuclear Astrophysics

Thermal properties of hot and dense matter with finite range interactions *(38 pages)* 025801
Constantinos Constantinou, Brian Muccioli, Madappa Prakash, and James M. Lattimer

Neutron stars in the Bogomol'nyi-Prasad-Sommerfield Skyrme model: Mean-field limit versus full field theory *(18 pages)* 025802
C. Adam, C. Naya, J. Sanchez-Guillen, R. Vazquez, and A. Wereszczynski

Hypernuclei and the hyperon problem in neutron stars *(7 pages)* 025803
Paulo F. Bedaque and Andrew W. Steiner

Proton capture cross section of ^{72}Ge and astrophysical implications *(6 pages)* 025804
F. Naqvi, S. J. Quinn, A. Spyrou, A. Battaglia, M. Couder, P. A. DeYoung, A. C. Dombos, X. Fang, J. Görres, A. Kontos, Q. Li, S. Lyons, D. Robertson, A. Simon, K. Smith, M. K. Smith, E. Stech, W. P. Tan, and M. Wiescher

Measurement of the ^{2}H$(d,p)^3$H reaction at astrophysical energies via the Trojan-horse method *(5 pages)* 025805
Chengbo Li, Qungang Wen, Yuanyong Fu, Jing Zhou, Shuhua Zhou, Qiuying Meng, C. Spitaleri, A. Tumino, R. G. Pizzone, and L. Lamia

(Continued)

The editors and referees of PRC find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. C 86, 010001 (2012).

PHYSICAL REVIEW C **THIRD SERIES, VOLUME 92, NUMBER 2** **AUGUST 2015**

Systematic study of (α,γ) reactions for stable nickel isotopes *(9 pages)* 025806
A. Simon, M. Beard, A. Spyrou, S. J. Quinn, B. Bucher, M. Couder, P. A. DeYoung, A. C. Dombos, J. Görres, A. Kontos, A. Long, M. T. Moran, N. Paul, J. Pereira, D. Robertson, K. Smith, E. Stech, R. Talwar, W. P. Tan, and M. Wiescher

Width of ^{27}P(1.19 MeV) and the ^{26}Si(p,γ) reaction rate *(2 pages)* 025807
H. T. Fortune

Swelling of nuclei embedded in neutron-gas and consequences for fusion *(7 pages)* 025808
A. S. Umar, V. E. Oberacker, C. J. Horowitz, P.-G. Reinhard, and J. A. Maruhn

ERRATA

Publisher's Note: New decay scheme of the $^{136}_{51}Sb_{85}$ 6^- isomer [Phys. Rev. C **92**, 024304 (2015)] *(1 page)* . . . . . 029901(E)
R. Lozeva *et al.*

Erratum: Mass yield distributions and fission modes in photofission of ^{238}U below 20 MeV
[Phys. Rev. C **91**, 034603 (2015)] *(1 page)* . . . . . 029902(E)
S. S. Belyshev, B. S. Ishkhanov, A. A. Kuznetsov, and K. A. Stopani

Erratum: Phase-space factors and half-life predictions for Majoron-emitting $\beta^-\beta^-$ decay
[Phys. Rev. C **91**, 064310 (2015)] *(1 page)* . . . . . 029903(E)
J. Kotila, J. Barea, and F. Iachello

Publisher's Note: Energy-dependent fragmentation cross sections of relativistic ^{12}C
[Phys. Rev. C **92**, 024614 (2015)] *(1 page)* . . . . . 029904(E)
T. Ogawa, T. Sato, S. Hashimoto, D. Satoh, S. Tsuda, and K. Niita