

**PAPERS PUBLISHED**  
**April 1, 2018– March 31, 2019**

**Connection between asymptotic normalization coefficients and resonance widths of mirror states,**  
A.M. Mukhamedzhanov, Phys. Rev. C **99**, 024311 (2019).

**Equilibration chronometry and reaction dynamics,** A.R. Manso, A.B. McIntosh, K. Hagel, L. Heilborn, A. Jedelev, A. Wakhle, A. Zarrella, and S.J. Yennello, Il Nuovo Cimento C **41**, 180 (2019).

**Examination of evidence for resonances at high excitation energy in the  $7\alpha$  disassembly of  $^{28}\text{Si}$ ,** X.G. Cao, E. Kim, K. Schmidt, K. Hagel, M. Barbui, J. Gauthier, S. Wuenschel, G. Giuliani, M.R.D. Rodrigues, S. Kowalski, H. Zheng, M. Huang, A. Bonasera, R. Wada, N. Blando, G. Zhang, C.Y. Wong, A. Staszczak, Z.X. Ren, Y.K. Wang, S.Q. Zhang, J. Meng, and J.B. Natowitz, Phys. Rev. C **99**, 014606 (2019).

**Experimental liquid-gas phase transition signals and reaction dynamics,** R. Wada, W. Lin, P. Ren, H. Zheng, X. Liu, M. Huang, K. Yang, and K. Hagel, Phys. Rev. C **99**, 024616 (2019).

**Isospin effects in nuclear reactions,** S. Yennello, Il Nuovo Cimento C **41**, 170 (2019).

**Spectral characterization by CVD diamond detectors of energetic protons from high-repetition rate laser for aneutronic nuclear fusion experiments,** M. Cipriani, F. Consoli, P.L. Andreoli, D. Batani, A. Bonasera, G. Boutoux, F. Burgy, G. Cristofari, R.D. Angelis, G.D. Giorgio, J.E. Ducret, A. Flamigni, D. Giulietti, K. Jakubowska, C. Verona, G. Verona-Rinati, J. Instrum. **14**, C01027 (2019).

**The partial truncated icosa- hedron phoswich array for detection of low energy charged pions and light charged particles,** A. Zarrella, E. Churchman, J. Gauthier, K. Hagel, L. Heilborn, A. Jedelev, Y. Lui, A.B. McIntosh, A.R. Manso, A. Wakhle, M.D. Youngs, and S.J. Yennello, Nucl. Instrum. Methods Phys. Res. **A915**, 47 (2019).

**$\beta$ -delayed  $\gamma$  decay of  $^{20}\text{Mg}$  and the  $^{19}\text{Ne}(\text{p}, \gamma)^{20}\text{Na}$  breakout reaction in Type I X-ray bursts,** B.E. Glassman, D. Pérez-Loureiro, C. Wrede, J. Allen, D.W. Bardayan, M.B. Bennett, B.A. Brown, K.A. Chipps, M. Febbraro, M. Friedman, C. Fry, M.R. Hall, O. Hall, S.N. Liddick, P.O'Malley, W.J. Ong, S.D. Pain, C. Prokop, S.B. Schwartz, P. Shidling, H. Sims, P. Thompson, H. Zhang, Phys. Lett. B **778**, 397 (2018).

**$^7\text{Li}(^{15}\text{N}, ^{14}\text{C})^8\text{Be}$  reaction at 81 MeV and  $^{14}\text{C} + ^8\text{Be}$  interaction versus that of  $^{13}\text{C} + ^8\text{Be}$ ,** A.T. Rudchik, A.A. Rudchik, L.M. Muravynets, K.W. Kemper, K. Rusek, E.I. Koshchy, E. Piasecki, A. Trzcińska, V.M. Pirnak, O.A. Ponkratenko, I. Strojek, A. Stolarz, V.A. Plujko, S.B. Sakuta, R. Siudak, A.P. Ilyin, Y.M. Stepanenko, Y.O. Shyrma, and V.V. Uleshchenko, Nucl. Phys. **A971**, 138 (2018).

**AstroBox2E: a detection system for very low energy  $\beta$ -delayed proton decay**, I.C. Stefanescu, A. Spiridon, L. Trache, E. Pollacco, A. Saastamoinen, and B. Roeder, J. Phys. Conf. Series **1024**, 012007 (2018).

**Computational and experimental forensics characterization of weapons-grade plutonium produced in a thermal neutron environment**, J.M. Osborn, K.J. Glennon, E.D. Kitcher, J.D. Burns, C.M. Folden, S.S. Chirayath, Nucl. Eng. Technology **50**, 820 (2018).

**Constraining neutron capture cross sections for unstable nuclei with surrogate reaction data and theory**, J.E. Escher, J.T. Burke, R.O. Hughes, N.D. Scielzo, R.J. Casperson, S. Ota, H.I. Park, A. Saastamoinen, T.J. Ross, Phys. Rev. Lett. **121**, 052501 (2018).

**Direct measurement of astrophysically important resonances in  $^{38}\text{K}(\text{p}, \gamma)^{39}\text{Ca}$** , G. Christian, G. Lotay, C. Ruiz, C. Akers, D.S. Burke, W.N. Catford, A.A. Chen, D. Connolly, B. Davids, J. Fallis, U. Hager, D. Hutcheon, A. Mahl, A. Rojas, and X. Sun, Phys. Rev. C **97**, 025802 (2018).

**Entry-level spin distributions and relative  $\gamma$ -neutron branching ratios of samarium isotopes populated by the  $(\text{p}, \text{t})$  reaction**, N. Cooper, C.W. Beausang, P. Humby, A. Simon, J.T. Burke, R.O. Hughes, S. Ota, C. Reingold, A. Saastamoinen, E. Wilson, Phys. Rev. C **98**, 044618 (2018).

**Evidence for prevalent  $Z = 6$  magic number in neutron-rich carbon isotopes**, D.T. Tran, H.J. Ong, G. Hagen, T.D. Morris, N. Aoi, T. Suzuki, Y. Kanada-En'yo, L.S. Geng, S. Terashima, I. Tanihata, T.T. Nguyen, Y. Ayyad, P.Y. Chan, M. Fukuda, H. Geissel, M.N. Harakeh, T. Hashimoto, T.H. Hoang, E. Ideguchi, A. Inoue, G.R. Jansen, R. Kanungo, T. Kawabata, L.H. Khiem, W.P. Lin, K. Matsuta, M. Mihara, S. Momota, D. Nagae, N.D. Nguyen, D. Nishimura, T. Otsuka, A. Ozawa, P.P. Ren, H. Sakaguchi, C. Scheidenberger, J. Tanaka, M. Takechi, R. Wada, and T. Yamamoto, Nature Communications **9**, 1594 (2018).

**Excited levels in the multishaped  $^{117}\text{Pd}$  nucleus studied via  $\beta$  decay of  $^{117}\text{Rh}$** , J. Kurpeta, A. Płochocki, W. Urban, T. Eronen, A. Jokinen, A. Kankainen, V.S. Kolhinen, I.D. Moore, H. Penttilä, M. Pomorski, S. Rinta-Antila, T. Rząca-Urban, J. Wiśniewski, Phys. Rev. C **98**, 024318 (2018).

**Experimental survey of the production of  $\alpha$ -decaying heavy elements in  $^{238}\text{U} + ^{232}\text{Th}$  reactions at 7.5-6.1 MeV/nucleon**, S. Wuenschel, K. Hagel, M. Barbui, J. Gauthier, X.G. Cao, R. Wada, E. Kim, Z. Majka, R. Płaneta, Z. Sosin, A. Wieloch, K. Zelga, S. Kowalski, K. Schmidt, C. Ma, G. Zhang, J.B. Natowitz, Phys. Rev. C **97**, 064602 (2018).

**High-precision half-life measurement of the  $\beta^+$  decay of  $^{21}\text{Na}$** , P.D. Shidling, R.S. Behling, B. Fenker, J.C. Hardy, V.E. Iacob, M. Mehlman, H.I. Park, B.T. Roeder, and D. Melconian, Phys. Rev. C **98**, 015502 (2018).

**Neutron-proton equilibration in 35 MeV/u collisions of  $^{64,70}\text{Zn} + ^{64,70}\text{Zn}$  and  $^{64}\text{Zn}, ^{64}\text{Ni} + ^{64}\text{Zn}, ^{64}\text{Ni}$  quantified using triplicate probes**, L.W. May, A. Wakhle, A.B. McIntosh, Z. Kohley, S. Behling, A. Bonasera, G. Bonasera, P. Cammarata, K. Hagel, L. Heilborn, A. Jedele, A. Raphelt, A.R. Manso, G. Souliotis, R. Tripathi, M.D. Youngs, A. Zarrella, S.J. Yennello, Phys. Rev. C **98**, 044602 (2018).

**Neutron-rich rare isotope production with stable and radioactive beams in the mass range  $A \sim 40 - 60$  at beam energy around 15 MeV/nucleon**, A. Papageorgiou, G.A. Souliotis, K. Tshoo, S.C. Jeong, B.H. Kang, Y.K. Kwon, M. Veselsky, S.J. Yennello, and A. Bonasera, J. Phys. G **45**, 095105 (2018).

**New result for the neutron  $\beta$ -asymmetry parameter  $A_0$  from UCNA**, M.A. Brown, E.B. Dees, E. Adamek, B. Allgeier, M. Blatnik, T.J. Bowles, L.J. Broussard, R. Carr, S. Clayton, C. Cude-Woods, S. Currie, X. Ding, B.W. Filippone, A. García, P. Gel- tenbort, S. Hasan, K.P. Hickerson, J. Hoagland, R. Hong, G.E. Hogan, A.T. Holley, T.M. Ito, A. Knecht, C. Liu, J. Liu, M. Makela, J.W. Martin, D. Melconian, M.P. Mendenhall, S.D. Moore, C.L. Morris, S. Nepal, N. Nouri, R.W. Pattie, A. Pérez Galván, D.G. Phillips, R. Picker, M.L. Pitt, B. Plaster, J.C. Ramsey, R. Rios, D.J. Salvat, A. Saunders, W. Sondheim, S.J. Seestrom, S. Sjue, S. Slutsky, X. Sun, C. Swank, G. Swift, E. Tatar, R.B. Vogelaar, B. VornDick, Z. Wang, J. Wexler, T. Womack, C. Wrede, A.R. Young, B.A. Zeck, Phys. Rev. C **97**, 035505 (2018).

**Nuclear beta decays and CKM unitarity**, J.C. Hardy and I.S. Towner, eConf **C18-05-09**, 63 (2018).

**Precise half-life measurement of the superallowed emitter  $^{30}\text{S}$** , V.E. Iacob, J.C. Hardy, L. Chen, V. Horvat, M. Bencomo, N. Nica, H.I. Park, B.T. Roeder, A. Saastamoinen, Phys. Rev. C **97**, 035501 (2018).

**Precise measurement of  $\alpha_K$  and  $\alpha_T$  for the 39.8-keV E3 transition in  $^{103}\text{Rh}$ : Test of internal-conversion theory**, N. Nica, J.C. Hardy, V.E. Iacob, V. Horvat, H.I. Park, T.A. Werke, K.J. Glennon, C.M. Folden, V.I. Sabla, J.B. Bryant, X.K. James, M.B. Trzhaskovskaya, Phys. Rev. C **98**, 054321 (2018).

**Precise test of internal- conversion theory:  $\alpha_K$  measurements for transitions in nine nuclei spanning  $45 \leq Z \leq 78$** , J.C. Hardy, N. Nica, V.E. Iacob, and M.B. Trzhaskovskaya, Appl. Radiat. Isot. **134**, 406 (2018).

**Nuclear Data Sheets for  $A = 140$** , N. Nica, Nucl. Data Sheets **154**, 1 (2018).

**Reexamination of a novel determination of density, temperature, and symmetry energy based on a modified Fisher model**, X. Liu, H. Zheng, W. Lin, M. Huang, Y.Y. Yang, J.S. Wang, R. Wada, A. Bonasera, and J.B. Natowitz, Phys. Rev. C **97**, 014613 (2018).

**Use of a nucleation based ternary fission model to reproduce neck emission in heavy-ion reactions**, J. Gauthier, M. Barbui, X.-G. Cao, K. Hagel, R. Wada, S. Wuenschel, and J.B. Natowitz, AIP Conference Proceedings **2038**, 020036 (2018).

**Searching for states analogous to the  $^{12}\text{C}$  Hoyle state in heavier nuclei using the thick target inverse kinematics technique**, M. Barbui, K. Hagel, J. Gauthier, S. Wuenschel, R. Wada, V.Z. Goldberg, R.T. de Souza, S. Hudan, D. Fang, X.-G. Cao and J.B. Natowitz, AIP Conference Proceedings **2038**, 020027 (2018).

**Evidence for resonances in the  $7\alpha$  disassembly of  $^{28}\text{Si}$** , X.G. Cao, E.J. Kim, K Schmidt, K. Hagel, M. Barbui, J. Gauthier, S. Wuenschel, G. Giuliani, M.R.D. Rodriguez, S. Kowalski, H. Zheng, M. Huang, A. Bonasera, R. Wada, G.Q. Zhang, C.Y. Wong, A. Staszczak, Z.X. Ren, Y.K. Wang, S.Q. Zhang, J. Meng, and J.B. Natowitz, AIP Conference Proceedings **2038**, 020021 (2018).

**$\gamma$ -ray strength function for thallium isotopes relevant to the  $^{205}\text{Pb}$ – $^{205}\text{Tl}$  chronometry**, H. Utsunomiya, T. Renstrøm, G.M. Tveten, S. Goriely, T. Ari-izumi, D. Filipescu, J. Kaur, Y.-W. Lui, W. Luo, S. Miyamoto, A.C. Larsen, S. Hilaire, S. Péru, and A.J. Koning, Phys. Rev. C **99**, 024609 (2019).

**Photoneutron cross sections for Ni isotopes: Toward understanding  $(n,\gamma)$  cross sections relevant to weak s-process nucleosynthesis**, H. Utsunomiya, T. Renstrøm, G.M. Tveten, S. Goriely, S. Katayama, T. Ari-izumi, D. Takenaka, D. Symochko, B.V. Kheswa, V.W. Ingeberg, T. Glodariu, Y.-W. Lui, S. Miyamoto, A.C. Larsen, J.E. Midtbø, A. Görgen, S. Siem, L. Crespo Campo, M. Guttormsen, S. Hilaire, S. Péru, and A.J. Koning, Phys. Rev. C **98**, 054619 (2018).

**Verification of detailed balance for  $\gamma$  absorption and emission in Dy isotopes**, T. Renstrøm, H. Utsunomiya, H.T. Nyhus, A.C. Larsen, M. Guttormsen, G.M. Tveten, D.M. Filipescu, I. Gheorghe, S. Goriely, S. Hilaire, Y.-W. Lui, J.E. Midtbø, S. Péru, T. Shima, S. Siem, and O. Tesileanu, Phys. Rev. C **98**, 054310 (2018).

**Search for dark matter decay of the free neutron from the UCNA experiment:  $n \rightarrow \chi + e^+e^-$** , X. Sun, E. Adamek, B. Allgeier, M. Blatnik, T.J. Bowles, L.J. Broussard, M.A. Brown, R. Carr, S. Clayton, C. Cude-Woods, S. Currie, E.B. Dees, X. Ding, B.W. Filippone, A. García, P. Geltenbort, S. Hasan, K.P. Hickerson, J. Hoagland, R. Hong, G.E. Hogan, A.T. Holley, T.M. Ito, A. Knecht, C. Liu, J. Liu, M. Makela, R. Mammei, J.W. Martin, D. Melconian, M.P. Mendenhall, S.D. Moore, C.L. Morris, S. Nepal, N. Nouri, R.W. Pattie, A. Pérez Galván, D.G. Phillips, R. Picker, M.L. Pitt, B. Plaster, J.C. Ramsey, R. Rios, D.J. Salvat, A. Saunders, W. Sondheim, S. Sjue, S. Slutsky, C. Swank, G. Swift, E. Tatar, R.B. Vogelaar, B. VornDick, Z. Wang, W. Wei, J. Wexler, T. Womack, C. Wrede, A.R. Young, and B.A. Zeck, Phys. Rev. C **97**, 052501 (2018).

**Sensitivity study of experimental measures for the nuclear liquid-gas phase transition in the statistical multifragmentation model**, W. Lin, P. Ren, H. Zheng, X. Liu, M. Huang, R. Wada, G. Qu, Phys. Rev. C **97**, 054615 (2018).

**Statistical analysis of experimental multifragmentation events in  $^{64}\text{Zn} + ^{112}\text{Sn}$  at 40 MeV/nucleon**, W. Lin, H. Zheng, P. Ren, X. Liu, M. Huang, R. Wada, Z. Chen, J. Wang, G.Q. Xiao, G. Qu, Phys. Rev. C **97**, 044603 (2018).

**Study of excited states of  $^{35}\text{Ar}$  through  $\beta$ -decay of  $^{35}\text{K}$  for nucleosynthesis in novae and X-ray bursts**, A. Saastamoinen, G.J. Lotay, A. Kankainen, B.T. Roeder, R. Chyzh, M. Dag, E. McCleskey, A. Spiridon, and R.E. Tribble, J. Phys. Conference Series **940**, 012004 (2018).

**Sub-Coulomb  $^3\text{He}$  transfer and its use to extract three-particle asymptotic normalization coefficients**, M.L. Avila, L.T. Baby, J. Belarge, N. Keeley, K.W. Kemper, E. Koshchiy, A.N. Kuchera, G.V. Rogachev, K. Rusek, and D. Santiago-Gonzalez, Phys. Rev. C **97**, 014313 (2018).

**Supplemental material for precision measurement of the  $\beta$  asymmetry in spin-polarized  $^{37}\text{K}$  decay**, B. Fenker, A. Gorelov, D. Melconian, J.A. Behr, M. Anholm, D. Ashery, R.S. Behling, I. Cohen, I. Craiciu, G. Gwinner, J. McNeil, M. Mehlman, K. Olchanski, P.D. Shidling, S. Smale, and C.L. Warner, Phys. Rev. Lett. **120**, 062502 (2018).

**Searching for states analogous to the  $^{12}\text{C}$  Hoyle state in heavier nuclei using the thick target inverse kinematics technique**, M. Barbui, K. Hagel, J. Gauthier, S. Wuenschel, R. Wada, V.Z. Goldberg, R.T. deSouza, S. Hudan, D. Fang, X-G Cao and J. B. Natowitz, Phys. Rev. C **98**, 044601 (2018).

**Dilepton radiation in heavy-ion collisions at small transverse momentum**, M. Klusek-Gawenda, R. Rapp, W. Schäfer, and A. Szczurek, Physics Letters B **790**, 339 (2019).

**From in-medium color forces to transport properties of QGP**, S.Y.F. Liu and R. Rapp, Nucl. Phys. **A982**, 215 (2019).

**Hot and dense homogeneous nucleonic matter constrained by observations, experiment, and theory**, X. Du, A.W. Steiner, and J.W. Holt, Phys. Rev. C **99**, 025803 (2019).

**In-medium charmonium production in proton-nucleus collisions**, X. Du and R. Rapp, J. High Energy Phys. **03**, 015 (2019).

**Proton-beam stopping in hydrogen**, J.J. Bailey, I.B. Abdurakhmanov, A.S. Kadyrov, I. Bray, and A.M. Mukhamedzhanov, Phys. Rev. A **99**, 042701 (2019).

**Strongly resonating bosons in hot nuclei**, S. Zhang, A. Bonasera, M. Huang, H. Zheng, D.X. Wang, J.C. Wang, L. Lu, G. Zhang, Z. Kohley, Y.G. Ma, and S.J. Yennello, Phys. Rev. C **99**, 044605 (2019).

**Theory of surrogate nuclear and atomic reactions with three charged particles in the final state proceeding through a resonance in the intermediate subsystem**, A.M. Mukhamedzhanov, and A.S. Kadyrov, Few-Body Systems **60**, 9 (2019).

**T -matrix approach to quark-gluon plasma**, S.Y.F. Liu and R. Rapp, Phys. Rev. C **97**, 034918 (2018).

**Analysis of pairing correlations in neutron transfer reactions and comparison to the constrained molecular dynamics model**, C. Agodi, G. Giuliani, F. Cappuzzello, A. Bonasera, D. Carbone, M. Cavallaro, A. Foti, R. Linares, and G. Santagati, Phys. Rev. C **97**, 034616 (2018).

**Cluster correlation and fragment emission in  $^{12}\text{C} + ^{12}\text{C}$  at 95 MeV/nucleon**, G. Tian, Z. Chen, R. Han, F. Shi, F. Luo, Q. Sun, L. Song, X. Zhang, G.Q. Xiao, R. Wada, A. Ono, Phys. Rev. C **97**, 034610 (2018).

**Decay modes of the Hoyle state in  $^{12}\text{C}$** , H. Zheng, A. Bonasera, M. Huang, S. Zhang, Phys. Lett. B **779**, 460 (2018).

**Effect of short-range correlations on the single proton  $3s_{1/2}$  wave function in  $^{206}\text{Pb}$** , S. Shlomo, I. Talmi, M.R. Anders, G. Bonasera, J. Phys. Conference Series **966**, 012013 (2018).

**Extraction of heavy-flavor transport coefficients in QCD matter**, R. Rapp, P.B. Gossiaux, A. Andronic, R. Averbeck, S. Masciocchi, A. Beraudo, E. Bratkovskaya, P. Braun-Munzinger, S. Cao, A. Dainese, S.K. Das, M. Djordjevic, V. Greco, M. He, H. Hees, G. Inghirami, O. Kaczmarek, Y.-. Lee, J. Liao, S.Y.F. Liu, G. Moore, M. Nahrgang, J. Pawłowski, P. Petreczky, S. Plumari, F. Prino, S. Shi, T. Song, J. Stachel, I. Vitev, X. Wang, Nucl. Phys. **A979**, 21 (2018).

**Extrapolation of scattering data to the negative-energy region. III. Application to the  $\text{p} - ^{16}\text{O}$  system**, L.D. Blokhintsev, A.S. Kadyrov, A.M. Mukhamedzhanov, D.A. Savin, Phys. Rev.C **98**, 064610 (2018).

**Extrapolation of scattering data to the negative-energy region. II. Applicability of effective range functions within an exactly solvable model**, L.D. Blokhintsev, A.S. Kadyrov, A.M. Mukhamedzhanov, D.A. Savin, Phys. Rev. C **97**, 024602 (2018).

**Impact of the  $^7\text{Be}(\alpha, \gamma)^{11}\text{C}$  reaction on the primordial abundance of  $^7\text{Li}$** , M. Hartos, C.A. Bertulani, Shubhchintak, A.M. Mukhamedzhanov, and S. Hou, Astrophysical J. **862**, 62 (2018).

**Neutron star tidal deformabilities constrained by nuclear theory and experiment**, Y. Lim and J.W. Holt, Phys. Rev. Lett. **121**, 062701 (2018).

**Neutron enhancement from laser interaction with a critical fluid**, H.J. Quevedo, G. Zhang, A. Bonasera, M. Donovan, G. Dyer, E. Gaul, G.L. Guardo, M. Gulino, M.L. Cognata, D. Lattuada, S. Palmerini, R.G.

Pizzone, S. Romano, H. Smith, O. Trippella, Anzalone, C. Spitaleri, and T. Ditzmire, Phys. Lett. A **382**, 94 (2018).

**Non-perturbative approach to equation of state and collective modes of the QGP**, S.Y.F. Liu and R. Rapp, Eur. Phys. J. Web of Conferences **172**, 05001 (2018).

**Nuclear dipole polarizability from mean-field modeling constrained by chiral effective field theory**, Z. Zhang, Y. Lim, J.W. Holt, and C.M. Ko, Phys. Lett. B **777**, 73 (2018).

**On unitarity of the particle-hole dispersive optical model**, M.L. Gorelik, S. Shlomo, B.A. Tulupov, and M.H. Urin, Nucl. Phys. **A970**, 353 (2018).

**Self-consistent mean-field approach to the statistical level density in spherical nuclei**, V.M. Kolomietz, A.I. Sanzhur, and S. Shlomo, Phys. Rev. C **97**, 064302 (2018).

**Tensor Fermi liquid parameters in nuclear matter from chiral effective field theory**, J.W. Holt, N. Kaiser, T.R. Whitehead, Phys. Rev. C **97**, 054325 (2018).

**Thermal dileptons as QCD matter probes at SIS**, F. Seck, T. Galatyuk, R. Rapp, J. Stroth, J. Phys. Conference Series **1024**, 012011 (2018).

**Three-body Faddeev equations in two-particle Alt-Grassberger- Sandhas form with distorted-wave-Born-approximation amplitudes as effective potentials**, A.M. Mukhamedzhanov, Phys. Rev. C **98**, 044626 (2018).

**Trojan Horse cross section measurements and their impact on primordial nucleosynthesis**, R.G. Pizzone, R. Spartá, C. Bertulani, C. Spitaleri, M.L. Cognata, L. Lamia, A. Mukhamedzhanov, A. Tumino, J. Phys. Conference Series **940**, 012017 (2018).

**Universal correlations in the nuclear symmetry energy, slope parameter, and curvature**, J.W. Holt and Y. Lim, Phys. Lett. B **784**, 77 (2018).

**Tidal deformability of neutron stars with realistic nuclear energy density functionals**, Young-Min Kim, Yeunghan Lim, Kyujin Kwak, Chang Ho Hyun, Chang-Hwan Lee, Phys. Rev. C **98**, 065805 (2018).

**Light nuclei production in Pb+Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV**, L.L. Zhu, H. Zheng, C.M. Ko, and Y. Sun, Euro. J. Phys. A **54**, 175 (2018).

**Light nuclei production as a probe of the QCD phase diagram**, K.J. Sun, L.W. Chen, C.M. Ko, J. Pu, and Z. Xu, Phys. Lett. B **781**, 499 (2018).

**Chiral kinetic approach to chiral magnetic effect in isobaric collisions**, Y. Sun and C.M. Ko, Phys. Rev. C **98**, 014911 (2018).

**Spectra and flow of light Nuclei in relativistic heavy ion collisions at RHIC and the LHC**, W. Zhao, L. Zhu, H. Zheng, C.M. Ko, and H. Song, Phys. Rev. C **98**, 054905 (2018).

**Pion production in a transport model based on mean fields from chiral effective theory**, Z. Zhang and C.M. Ko, Phys. Rev. C **98**, 054614 (2018).

**Probing the topological charge in QCD matter via multiplicity up-down Asymmetry**, Y. Sun and C.M. Ko, Phys. Lett. B **789**, 228-232 (2019).

**Azimuthal angle dependence of the longitudinal spin polarization in relativistic heavy ion collisions**, Y. Sun and C.M. Ko, Phys. Rev. C **99**, 011903(R) (2019).

**Suppression of light nuclei production in collisions of small systems at the Large Hadron Collider**, K. J. Sun, C.M. Ko, and B. Donigus, Phys. Lett. B **792**, 132 (2019).

**Initial angular momentum and flow in high energy nuclear collisions**, Rainer J. Fries, Guangyao Chen, and Sidharth Somanathan, Phys. Rev. C **97**, 034903 (2018)

**Hybrid hadronization**, Rainer J Fries and Michael Kordell. Proceedings of Science, Hard Probes 2018, 046 (2019).

**Jet substructure modification in a QGP from a multi-scale description of jet evolution with JETSCAPE**, Yasuki Tachibana *et al.*, Proceedings of Science, Hard Probes 2018, 099 (2019)

**Centrality and transverse momentum dependence of D<sup>0</sup>-meson production at mid-rapidity in Au + Au collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adam, D.M. Anderson, C.A. Gagliardi, A. Hamed, L. He, T. Lin, Y. Liu, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. C **99**, 034908 (2019).

**Constraining the initial conditions and temperature dependent viscosity with three-particle correlations in Au+Au collisions**, L. Adamczyk, D.M. Anderson, Z. Chang, C.A. Gagliardi, A. Hamed, T. Lin, Y. Liu, S. Mioduszewski, N.R. Sahoo, R.E. Tribble, Physics Letters B **790**, 81 (2019).

**Measurement of the longitudinal spin asymmetries for weak boson production in proton-proton collisions at  $\sqrt{s} = 510$  GeV**, J. Adam, D.M. Anderson, C.A. Gagliardi, A. Hamed, L. He, T. Lin, Y. Liu, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. D **99**, 051102 (2019).

**The proton–Ω correlation function in Au+Au collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adam, D.M. Anderson, C.A. Gagliardi, A. Hamed, T. Lin, Y. Liu, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Lett. B **790**, 490 (2019).

**J/ψ production cross section and its dependence on charged-particle multiplicity in p + p collisions at s =200 GeV**, J. Adam, C.A. Gagliardi, A. Hamed, L. He, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, and R.E. Tribble, Phys. Lett. B **786**, 87 (2018).

**Azimuthal anisotropy in Cu + Au collisions at  $\sqrt{s_{NN}} = 200$  GeV**, L. Adamczyk, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, and R.E. Tribble, Phys. Rev. C **98**, 014915 (2018).

**Azimuthal transverse single-spin asymmetries of inclusive jets and charged pions within jets from polarized-proton collisions at  $\sqrt{s} = 500$  GeV**, L. Adamczyk, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. D **97**, 032004 (2018).

**Beam Energy Dependence of Jet-Quenching Effects in Au + Au Collisions at  $\sqrt{s_{NN}} = 7.7, 11.5, 14.5, 19.6, 27.39$ , and  $62.4$  GeV**, L. Adamczyk, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. Lett. **121**, 032301 (2018).

**Beam energy dependence of rapidity-even dipolar flow in Au + Au collisions**, J. Adam, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Lett. B **784**, 26 (2018).

**Beam-energy dependence of directed flow of  $A$ ,  $\bar{A}$ ,  $K^\pm$ ,  $K_s^0$  and  $\phi$  in Au + Au collisions**, L. Adamczyk, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. Lett. **120**, 062301 (2018).

**Collision energy dependence of moments of net-kaon multiplicity distributions at RHIC**, L. Adamczyk, C.A. Gagliardi, A. Hamed, L. He, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Lett. B **785**, 551 (2018).

**Correlation measurements between flow harmonics in Au + Au collisions at RHIC**, J. Adam, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Lett. B **783**, 459 (2018).

**Global polarization of Λ hyperons in Au + Au collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adam, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. C **98**, 014910 (2018).

**Harmonic decomposition of three-particle azimuthal correlations at energies available at the BNL Relativistic Heavy Ion Collider**, L. Adamczyk, C.A. Gagliardi, A. Hamed, L. He, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. C **98**, 034918 (2018).

**Improved measurement of the longitudinal spin transfer to  $\Lambda$  and  $\bar{\Lambda}$  hyperons in polarized proton-proton collisions at  $s=200$  GeV**, J. Adam, C.A. Gagliardi, A. Hamed, L. He, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. D **98**, 112009 (2018).

**Longitudinal double-spin asymmetries for  $\pi^0$ s in the forward direction for 510 GeV polarized pp collisions**, J. Adam, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. D **98**, 032013 (2018).

**Longitudinal double-spin asymmetries for dijet production at intermediate pseudorapidity in polarized pp collisions at  $\sqrt{s} = 200$  GeV**, J. Adam, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. D **98**, 032011 (2018).

**Low- $p_T$   $e^+e^-$  Pair Production in Au + Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV and U + U Collisions at  $\sqrt{s_{NN}} = 193$  GeV at STAR**, J. Adam, C.A. Gagliardi, A. Hamed, L. He, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, and R.E. Tribble, Phys. Rev. Lett. **121**, 132301 (2018).

**Measurement of the  $^3\text{He}$  lifetime in Au + Au collisions at the BNL Relativistic Heavy Ion Collider**, L. Adamczyk, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. C **97**, 054909 (2018).

**Transverse spin transfer to  $\Lambda$  and  $\bar{\Lambda}$  hyperons in polarized proton-proton collisions at  $s=200$  GeV**, J. Adam, C.A. Gagliardi, A. Hamed, L. He, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, R.E. Tribble, Phys. Rev. D **98**, 091103 (2018).

**Transverse spin-dependent azimuthal correlations of charged pion pairs measured in  $p^\uparrow + p$  collisions at  $\sqrt{s} = 500$  GeV**, L. Adamczyk, STAR Collaboration, C.A. Gagliardi, A. Hamed, S. Mioduszewski, N.R. Sahoo, P.K. Sahu, and R.E. Tribble, Phys. Lett. B **780**, 332 (2018).