

PAPERS PUBLISHED
April 1, 2013 – March 31, 2014

Unexpected characteristics of the isoscalar monopole resonance in the $A \approx 90$ region: Implications for nuclear incompressibility, D.H. Youngblood, Y.-W. Lui, Krishichayan, J. Button, M.R. Anders, M. L. Gorelik, M.H. Urin, and S. Shlomo, *Phys. Rev. C* **88**, 021301(R) (2013).

Astrophysical reaction rate for $^{17}\text{F}(p,\gamma)^{18}\text{Ne}$ from the transfer reaction $^{13}\text{C}(^{17}\text{O},^{18}\text{O})^{12}\text{C}$, T. Al-Abdullah, F. Carstoiu, X. Chen, H.L. Clark, C.A. Gagliardi, Y.-W. Lui, A. Mukhamedzhanov, G. Tabacaru, Y. Tokimoto, L. Trache, R.E. Tribble, and Y. Zhai, *Phys. Rev. C* **89**, 025809 (2014).

AstroBox: a novel detection system for very low-energy protons from β -delayed proton decay, E. Pollacco, L. Trache, E. Simmons, A. Spiridon, M. McCleskey, B.T. Roeder, A. Saastamoinen, R.E. Tribble, G. Pascovici, M. Kebbiri, J.P. Mols, and M. Raillot, *Nucl. Instrum. Methods Phys. Res. A* **723**, 102 (2013).

Digital beta counting for high-precision nuclear beta-decay lifetime measurements: Tested on ^{26}mAl , L. Chen, J.C. Hardy, M. Bencomo, V. Horvath, V.E. Iacob, N. Nica, and H.I. Park, *Nucl. Instrum. Methods Phys. Res. A* **728**, 81 (2013).

CKM unitarity normalization tests, present and future, (invited review article) J.C. Hardy and I.S. Towner, *Annalen der Physik* **525**, 443 (2013).

f_t values measured to $\pm 0.1\%$ for superallowed beta transitions: Metrology at sub-second time scales, J.C. Hardy, V.E. Iacob, H.I. Park, L. Chen, N. Nica, V. Horvat, R.E. Tribble and I.S. Towner, *Appl. Rad. and Isot.* **87**, 297 (2014).

Precise test of internal-conversion theory: Transitions measured in five nuclei spanning $50 \leq Z \leq 78$, J.C. Hardy, N. Nica, V.E. Iacob, S. Miller, M. Maguire, and M.B. Trzhaskovskaya, *Appl. Rad. and Isot.* **87**, 87 (2014).

Precise measurement of α_K for the 65.7-keV $M4$ transition in ^{119}Sn : Extended test of internal-conversion theory, N. Nica, J.C. Hardy, V.E. Iacob, M. Bencomo, V. Horvat, H.I. Park, M. Maguire, S. Miller, and M.B. Trzhaskovskaya, *Phys. Rev. C* **89**, 014303 (2014).

The β decay of ^{38}Ca : Sensitive test of isospin symmetry-breaking corrections from mirror superallowed $0^+ \rightarrow 0^+$ transitions, H.I. Park, J.C. Hardy, V.E. Iacob, M. Bencomo, L. Chen, V. Horvat, N. Nica, B.T. Roeder, E. Simmons, R.E. Tribble, and I.S. Towner, *Phys. Rev. Lett.* **112**, 102502 (2014).

Measurement of V_{ud} with $0^+ \rightarrow 0^+$ nuclear beta decays, J.C. Hardy and I.S. Towner, 11th International Conference on the Intersections of Particle and Nuclear Physics, AIP Conference Proceedings **1560**, 109 (2013).

Monitoring detachment and diffusion of metallic species in polycarbonate, M. Bencomo, M. Castro-Colin, J.A. López, and E. Ramirez-Homs, IX International Symposium on Radiation Physics, AIP Conference Proceedings **1544**, 19 (2013).

Nuclear data sheets for $A = 148$, N. Nica, Nuclear Data Sheets **117**, 1 (2014).

Transverse momentum of ionized atoms and diatomic molecules acquired in collisions with fast highly charged heavy ions, V. Horvat and R.L. Watson, Phys. Rev. A **88**, 022703 (2013).

Photoneutron cross sections for Mo isotopes: A step toward a unified understanding of (γ, n) and (n, γ) reactions, H. Utsunomiya, S. Goriely, T. Kondo, C. Iwamoto, H. Akimune, T. Yamagata, H. Toyokawa, H. Harada, F. Kitatani, Y.-W. Lui, A.C. Larsen, M. Guttormsen, P.E. Koehler, S. Hilaire, S. Péru, M. Martini, and A.J. Koning, Phys. Rev. C **88**, 015805 (2013).

Total absorption study of the β decay of $^{102,104,105}\text{Tc}$, D. Jordan, A. Algora, J.L. Ta, B. Rubio, J. Agramunt, A.B. Perez-Cerdan, F. Molina, L. Caballero, E. Nacher, A. Krasznahorkay, M.D. Hunyadi, J. Gulyas, A. Vitez, M. Csatlos, L. Csige, J. Äystö, H. Penttilä, I.D. Moore, T. Eronen, A. Jokinen, A. Nieminen, J. Hakala, P. Karvonen, A. Kankainen, A. Saastamoinen, J. Rissanen, T. Kessler, C. Weber, J. Ronkainen, S. Rahaman, V. Elomaa, U. Hager, S. Rinta-Antila, T. Sonoda, K. Burkard, W. Huller, L. Batist, W. Gelletly, A.L. Nichols, T. Yoshida, A.A. Sonzogni, K. Peräjärvi, A. Petrovici, K.W. Schmid, and A. Faessler, Phys. Rev. C **87**, 044318 (2013).

Relative proton and γ widths of astrophysically important states in ^{30}S studied in the β -delayed decay of ^{31}Ar , G.T. Koldste, B. Blank, M.J.G. Borge, J.A. Briz, M. Carmona-Gallardo, L.M. Fraile, H.O.U. Fynbo, J. Giovinazzo, J.G. Johansen, A. Jokinen, B. Jonson, T. Kurturkian-Nieto, J.H. Kusk, T. Nilsson, A. Perea, V. Pesudo, E. Picado, K. Riisager, A. Saastamoinen, O. Tengblad, J.-C. Thomas, and J. Van de Walle, Phys. Rev. C **87**, 055808 (2013).

Towards commissioning the new IGISOL-4 facility, I.D. Moore, T. Eronen, D. Gorelov, J. Hakala, A. Jokinen, A. Kankainen, V.S. Kolhinen, J. Koponen, H. Penttilä, I. Pohjalainen, M. Reponen, J. Rissanen, A. Saastamoinen, S. Rinta-Antila, V. Sonnenschein, and J. Äystö, Nucl. Instrum. Methods Phys. Res. **B317**, 208 (2013).

Light element quantification by lithium elastic scattering, F.E. Portillo, J.A. Liendo, A.C. Gonzalez, D.D. Caussyn, N.R. Fletcher, O.A. Momotyuk, B.T. Roeder, I. Wiedenhoever, K.W. Kemper, P. Barber, and L. Sajo-Bohus, Nucl. Instrum. Methods Phys. Res. **B305**, 16 (2013).

Proton decay of excited states in ^{12}N and ^{13}O and the astrophysical $^{11}\text{C}(p,\gamma)^{12}\text{N}$ reaction rate, L.G. Sobotka, W.W. Buhro, R.J. Charity, J.M. Elson, M.F. Jager, J. Manfredi, M.H. Mahzoon, A.M. Mukhamedzhanov, V. Eremenko, M. McCleskey, R.G. Pizzone, B.T. Roeder, A. Spiridon, E. Simmons, L. Trache, M. Kurokawa, and P. Navratil, Phys. Rev. C **87**, 054329 (2013).

Implantation-decay station for low-energy β -delayed proton measurements, M. McCleskey, L. Trache, A. Saastamoinen, A. Banu, E. Simmons, B. Roeder, G. Tabacaru, R.E. Tribble, T. Davinson, P.J. Woods, and J. Aysto, Nucl. Instrum. Methods Phys. Res. **A700**, 124 (2013).

High-statistics measurement of the β -delayed α spectrum of ^{20}Na , K.L. Laursen, O.S. Kirsebom, H.O.U. Fynbo, A. Jokinen, M. Madurga, K. Riisager, A. Saastamoinen, O. Tengblad, and J. Äystö, Eur. Phys. J. A **49**, 79 (2013).

Measurement of characteristic prompt gamma rays emitted from oxygen and carbon in tissue-equivalent samples during proton beam irradiation, J.C. Polf, R. Panthi, D.S. Mackin, M. McCleskey, A. Saastamoinen, B.T. Roeder, and S. Beddar, Phys. Med. Biol. **58**, 5821 (2013).

Recommissioning of JYFLTRAP at the new IGISOL-4 facility, V.S. Kolhinen, T. Eronen, D. Gorelov, J. Hakala, A. Jokinen, K. Jokiranta, A. Kankainen, M. Koikkalainen, J. Koponen, H. Kulmala, M. Lantz, A. Mattera, I.D. Moore, H. Penttilä, T. Pikkarainen, I. Pohjlainen, M. Reponen, S. Rinta-Antila, J. Rissanen, C. Rodríguez Triguero, K. Rytönen, A. Saastamoinen, A. Solders, V. Sonnenschein, and J. Äystö, Nucl. Instrum. Methods Phys. Res. **B317**, 506 (2013).

TRINAT: Measuring β -decay correlations with laser-trapped atoms, J.A. Behr *et al.*, ISAC and ARIEL: The TRIUMF Radioactive Beam Facilities and the Scientific Program, Hyperfine Interact. **225**, 115 (2014).

Isospin-symmetry-breaking effects in nuclear β decay, D. Melconian, 11th Conference on the Intersections of Particle and Nuclear Physics, AIP Conference Proceedings **1560**, 604 (2013).

The Francium facility at TRIUMF, S. Aubin *et al.*, 22nd Conference on Applications of Accelerators in Research and Industry, AIP Conference Proceedings **1525**, 530 (2013).

Atomic parity non-conservation: The Francium anapole project of the FrPNC collaboration at TRIUMF, S. Aubin *et al.*, 5th International Symposium on Symmetries in Subatomic Physics, Hyperfine Interact. **214**, 163 (2013).

Structure of ${}^8\text{B}$ from elastic and inelastic ${}^7\text{Be}+p$ scattering, J.P. Mitchell, G.V. Rogachev, E.D. Johnson, L.T. Baby, K.W. Kemper, A.M. Moro, P. Peplowski, A.S. Volya, and I. Wiedenher, Phys. Rev. C **87**, 054617 (2013).

How much cooler would it be with some more neutrons? Exploring the asymmetry dependence of the nuclear caloric curve and the liquid-gas phase transition, A.B. McIntosh, J. Mabiála, A. Bonasera, P. Cammarata, K. Hagel, Z. Kohley, L. Heilborn, L.W. May, P. Marini, A. Raphelt, G.A. Souliotis, S. Wuenschel, A. Zarrella, H. Zheng, and S.J. Yennello, Eur. Phys. J. A **50**, 35 (2014).

Heavy-ion collisions: Direct and indirect probes of the density and temperature dependence of E_{sym} , Z. Kohley and S.J. Yennello, Eur. Phys. J. A **50**, 31 (2014)

Quantum suppression of fluctuations and temperatures of reconstructed $A\sim 30$ quasi-projectiles, B.C. Stein, A. Bonasera, G.A. Souliotis, H. Zheng, P.J. Cammarata, A.J. Echeverria, L. Heilborn, A.L. Keksis, Z. Kohley, J. Mabiála, P. Marini, L.W. May, A.B. McIntosh, C. Richers, D.V. Shetty, S.N. Soisson, R. Tripathi, S. Wuenschel, and S.J. Yennello, J. Phys. G **41**, 025108 (2014).

Critical scaling of two-component systems from quantum fluctuations, J. Mabiála, A. Bonasera, H. Zheng, A.B. McIntosh, Z. Kohley, P. Cammarata, K. Hagel, L. Heilborn, L.W. May, A. Raphelt, G.A. Souliotis, A. Zarrella, and S.J. Yennello, Int. J. Mod. Phys. E **22**, 1350090 (2013)

Density determinations in heavy ion collisions, G. Röpke, S. Shlomo, A. Bonasera, J.B. Natowitz, S.J. Yennello, A.B. McIntosh, J. Mabiála, L. Qin, S. Kowalski, K. Hagel, M. Barbui, K. Schmidt, G. Giuliani, H. Zheng, and S. Wuenschel, Phys. Rev. C **88**, 024609 (2013)

Experimental determination of the quasi-projectile mass with measured neutrons, P. Marini, A. Zarrella, A. Bonasera, G. Bonasera, P. Cammarata, L. Heilborn, Z. Kohley, J. Mabiála, L.W. May, A.B. McIntosh, A. Raphelt, G.A. Souliotis, and S.J. Yennello, Nucl Instrum. Methods Phys. Res. **A707**, 80 (2013).

Novel determination of density, temperature, and symmetry energy for nuclear multifragmentation through primary fragment-yield reconstruction, W. Lin, X. Liu, M.R.D. Rodrigues, S. Kowalski, R. Wada, M. Huang, S. Zhang, Z. Chen, J. Wang, G.Q. Xiao, R. Han, Z. Jin, J. Liu, F. Shi, T. Keutgen, K. Hagel, M. Barbui, C. Bottosso, A. Bonasera, J.B. Natowitz, E.J. Kim, T. Materna, L. Qin, P.K. Sahu, K.J. Schmidt, S. Wuenschel, and H. Zheng, Phys. Rev. C **89**, 021601 (2014).

Experimental search for super and hyper heavy nuclei at Cyclotron Institute Texas A&M University, Z. Majka, M. Barbui, F. Becchetti, G. Chubaryan, M. Cinausero, D. Fabris, G. Giuliani, H. Griffin, K. Hagel, J. Kallunkathariyil, E.-J. Kim, S. Kowalski, P. Lasko, M. Lunardon, T. Materna, S. Moretto, R. Murthy, J.B. Natowitz, G. Nebbia, and T. O'Donnel, Acta Physica Polonica B **45**, 279 (2014).

Exploring the alpha cluster structure of nuclei using the thick target inverse kinematics technique for multiple alpha decays, M. Barbui, K. Hagel, V.Z. Goldberg, J.B. Natowitz, H. Zheng, G. Giuliani, G.G. Rapisarda, S. Wuenschel, and X. Liu, *Eur. Phys. J. Web of Conferences* **66**, 03005 (2014).

The equation of state and symmetry energy of low density nuclear matter, K. Hagel, J.B. Natowitz and G. Röpke, *Eur. Phys. J. A* **50**, 39 (2014).

Experimental reconstruction of excitation energies of primary hot isotopes in heavy ion collisions near the Fermi energy, M.R.D. Rodrigues, W. Lin, X. Liu, M. Huang, S. Zhang, Z. Chen, J. Wang, R. Wada, S. Kowalski, T. Keutgen, K. Hagel, M. Barbui, C. Bottosso, A. Bonasera, J.B. Natowitz, T. Materna, L. Qin, P.K. Sahu, and K.J. Schmidt, *Phys. Rev. C* **88**, 034605 (2013).

Experimental study of fusion neutron and proton yields produced by petawatt-laser-irradiated D₂-³He or CD₄-³He clustering gases, W. Bang, M. Barbui, A. Bonasera, H.J. Quevedo, G. Dyer, A.C. Bernstein, K. Hagel, K. Schmidt, E. Gaul, M.E. Donovan, F. Consoli, R. De Angelis, P. Andreoli, M. Barbarino, S. Kimura, M. Mazzocco, J.B. Natowitz, and T. Ditmire, *Phys. Rev. E* **88**, 033108 (2013).

Temperature measurements of fusion plasmas produced by petawatt-laser--irradiated D₂-³He or CD₄-³He clustering gases, W. Bang, M. Barbui, A. Bonasera, G. Dyer, H.J. Quevedo, K. Hagel, K. Schmidt, F. Consoli, R. De Angelis, P. Andreoli, E. Gaul, A.C. Bernstein, M. Donovan, M. Barbarino, S. Kimura, M. Mazzocco, J. Sura, J.B. Natowitz, and T. Ditmire, *Phys. Rev. Lett.* **111**, 055002 (2013).

Measurement of the plasma astrophysical S factor for the ³He (d, p)⁴He reaction in exploding molecular clusters, M. Barbui *et al.*, *Phys. Rev. Lett.* **111**, 082502 (2013).

Average neutron detection efficiency for DEMON detectors, S. Zhang, W. Lin, M.R.D. Rodrigues *et al.*, *Nucl. Instrum. Methods Phys. Res.* **A709**, 68 (2013).

Suppression of the centrifugal barrier effects in the off-energy-shell neutron + ¹⁷O interaction, M. Gulino, C. Spitaleri, X.D. Tang, G.L. Guardo, L. Lamia, S. Cherubini, B. Bucher, V. Burjan, M. Couder, P. Davies, R. de Boer, X. Fang, V.Z. Goldberg, Z. Hons, V. Kroha, L. Lamm, M. La Cognata, C. Li, C. Ma, J. Mrazek, A.M. Mukhamedzhanov, M. Notani, S. O'Brien, R.G. Pizzone, G.G. Rapisarda, D. Roberson, M.L. Sergi, W. Tan, I.J. Thompson, and M. Wiescher, *Phys. Rev. C* **87**, 012801 (2013).

Structure of light nuclei in resonance scattering experiments, G.V. Rogachev, M. Avila, L.T. Baby, J. Blackmon, V.Z. Goldberg, E.D. Johnson, M. Matos, K. Macon, J.P. Mitchell, L. Linhardt, A. Kuchera, E. Koshchiy, K. Kemper, D. Santiago-Gonzales, A. Volya, and I. Wiedenhoever, *AIP Conf. Proc.* **1524**, 58 (2013).

Clustering in A=10 nuclei, G.V. Rogachev, L. Baby, J. Belarge, J.C. Blackmon, V.Z. Goldberg, E.D.

Johnson, E. Koshchiy, A.N. Kuchera, L. Linhardt, K. Macon, M. Matos, D. Santiago-Gonzalez, and I. Wiedenhöver, *J. Phys.* **436**, 012041(2013).

Test of modern theoretical approaches using modern experimental methods, V.Z. Goldberg, G.V. Rogachev, and R.E. Tribble, *Acta Phys. Polo. B.* **45** 309 (2014).

Application of the Trojan Horse method to study neutron induced reactions: the $^{17}\text{O}(n, \alpha)^{14}\text{C}$ reaction, M. Gulino, C. Spitaleri, X.D. Tang, G.L. Guardo, L. Lamia, S. Cherubini, B. Bucher, V. Burjan, M. Couder, P. Davies, R. de Boer, X. Fang, V.Z. Goldberg, Z. Hons, V. Kroha, L. Lamm, and M. La Cognata, *Eur. Phys. J. Web of Conferences* **66**, 07008 (2014).

New determination of the $^2\text{H}(d,p)^3\text{H}$ and $^2\text{H}(d,n)^3\text{He}$ and reaction rates at astrophysical energies, A. Tumino, R. Spartá, C. Spitaleri, A.M. Mukhamedzhanov, S. Typel, R.G. Pizzone, E. Tognelli, S. Degl'Innocenti, V. Burjan, V. Kroha, Z. Hons, M. La Cognata, L. Lamia, J. Mrazek, S. Piskor, P.G. Prada Moroni, G.G. Rapisarda, S. Romano, and M.L. Sergi, *Astrophys. J.* **785**, 96 (2014).

On the measurement of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ *S*-factor at negative energies and its influence on the *s*-process, M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, G.V. Rogachev, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago, and R. Spartà, *Astrophys. J.* **777**, 143 (2013).

Anomalous asymptotics of radial overlap functions for bound systems of three or more particles, L.D. Blokhintsev, A.M. Mukhamedzhanov, and R. Yarmukhamedov, *Eur. Phys. J. A* **49**, 108 (2013).

Quantitative sum rule analysis of low-temperature spectral functions, N.P.M. Holt, P.M. Hohler, and R. Rapp, *Phys. Rev. D* **87**, 076010 (2013).

Dilepton spectroscopy of QCD matter at collider energies, R. Rapp, *Adv. High Energy Phys.* 2013, 148253 (2013).

Relativistic Langevin dynamics in expanding media, M. He, H. Van Hees, P.B. Gossiaux, R.J. Fries, and R. Rapp, *Phys. Rev. E* **88**, 032138 (2013).

The $\pi\rho$ could contribution to the ω width in nuclear matter, D. Cabrera and R. Rapp, *Phys. Lett. B* **729**, 67 (2014).

Dilepton emission in high-energy heavy-ion collisions with viscous hydrodynamics, G. Vujanovic, C. Young, B. Schenke, R. Rapp, S. Jeon, and C. Gale, *Phys. Rev. C* **89**, 034904 (2014).

In-medium quarkonia at SPS, RHIC and LHC, X. Zhao, A. Emerick, and R. Rapp, *Nucl. Phys.* **A904**, 611c (2013).

Dilepton production in high-energy heavy-ion collisions with 3+1D viscous hydrodynamics, G. Vujanovic, C. Young, B. Schenke, S. Jeon, R. Rapp, and C. Gale, Nucl. Phys. **A904**, 557c (2013).

Dilepton production in heavy-ion collisions, R. Rapp, Proceedings of Science **CPOD 2013**, 9 (2013).

Nonperturbative heavy-flavor transport at RHIC and LHC, M. He, R.J. Fries and R. Rapp, Nucl. Phys. **A910**, 409 (2013).

The many facets of the (non-relativistic) Nuclear Equation of State, G. Giuliani, H. Zheng, and A. Bonasera, Prog. Part. Nucl. Phys. **76**, 116 (2014).

Coulomb corrections to the extraction of the density and temperature in non-relativistic heavy ion collisions, H. Zheng, G. Giuliani, and A. Bonasera, J. Phys. G **41**, 055109 (2014).

Diagnostics improvement in the ABC facility and preliminary tests on laser interaction with light-atom clusters and $p+^{11}\text{B}$ targets, F. Consoli *et al.*, Nucl. Instrum. Methods Phys. Res. **A720**, 149 (2013).

Density and temperature of fermions and bosons from quantum fluctuations, H. Zheng, G. Giuliani, and A. Bonasera, Nucl. Sci. Techniques **24**, 050512 (2013).

Coulomb corrections to density and temperature of bosons in heavy ion collisions, H. Zheng, G. Giuliani, and A. Bonasera, Phys. Rev. C **88**, 024607 (2013).

Gamow peak approximation near strong resonances, S. Kimura and A. Bonasera, Phys. Rev. C **87**, 058801 (2013).

Effects of initial state fluctuations on jet quenching, H.Z. Zhang, T. Song, and C.M. Ko, Phys. Rev. C **87**, 054902 (2013).

Energy dependence of pion in-medium effects on π^-/π^+ ratio in heavy ion collisions, J. Xu, L.W. Chen, C.M. Ko, B.A. Li, and Y.G. Ma, Phys. Rev. C **87**, 06701 (2013).

Quarkonia production in heavy ion collisions, C.M. Ko, K.C. Han, and T. Song, Nucl. Phys. **A910-911**, 474 (2013).

Exotic hadrons and hadron-hadron interactions in heavy-ion collisions, A. Ohnishi, S. Cho, T. Furumoto, T. Hyodo, D. Jido, C.M. Ko, K. Morita, S.H. Lee, M. Nielsen, T. Sekihara, S. Yasui, and K. Yazaki, Nucl. Phys. **A914**, 377 (2013).

Mean-field effects on matter and antimatter elliptic flows, C.M. Ko, L.W. Chen, V. Greco, F. Li, Z. W. Lin, S. Plumari, T. Song, and J. Xu, Nucl. Sci. Tech. **24**, 050525 (2013).

ψ' production and B decay in heavy ion collisions at LHC, B. Chen, Y. Liu, K. Zhou, and P.Z. Huang, Phys. Lett. B **726**, 725 (2013).

Shear viscosity of neutron-rich nucleonic matter near liquid-gas phase transition, J. Xu, L.W. Chen, C.M. Ko, B.A. Li, and Y.G. Ma, Phys. Lett. B **727**, 244-248 (2013).

Gluon dissociation of J/ ψ beyond the dipole approximation, Y.P. Liu, C.M. Ko, and T. Song, Phys. Rev. C **88**, 064902 (2013).

Hot medium effects on J/ ψ production in p+Pb collisions at $s_{NN}^{1/2} = 5.02$ TeV", Y.P. Liu, C.M. Ko, and T. Song, Phys. Lett. B **728**, 437 (2013).

Elliptic flow splitting as a probe of the QCD phase structure at finite baryon chemical potential, J. Xu, T. Song, C.M. Ko, and F. Li, Phys. Rev. Lett. **112**, 012301 (2014).

Probing isospin- and momentum-dependent nuclear effective interactions in neutron-rich matter, L.W. Chen, C.M. Ko, B.A. Li, C. Xu, and J. Xu, Euro. Phys. J. A **50**, 29 (2014).

Elliptic flow difference between particles and antiparticles and the EOS of baryon-rich matter, C.M. Ko, L.W. Chen, V. Greco, F. Li, Z.W. Lin, S. Plumari, T. Song, and J. Xu, Proceedings of XXXI Max Born Symposium and HIC for FAIR Workshop on Critical Behavior in Hot and Dense Matter, Wroclaw, Poland (June 2013), edited by D. Blaschke and L. Turko, Acta Phys. Polo. B Proc. Suppl., **7**, 183 (2013).

Rapidity profile of the initial energy density in heavy-ion collisions, S. Ozonder and Rainer J. Fries, Phys. Rev. C **89**, 034902 (2014).

Jet-tagged back-scattering photons for quark gluon plasma tomography, Rainer J. Fries, Somnath De, and Dinesh K. Srivastava, Nucl. Phys. **A904-905**, 569 (2013).

Initial conditions with flow from a McLerran Venugopalan model with transverse dynamics, Guangyao Chen and Rainer J. Fries, J. Phys. Conf. Ser. **446**, 012021 (2013).

Azimuthal asymmetries from jets quenched in fluctuating backgrounds, Ricardo Rodriguez-Pedraza and Rainer J. Fries, J. Phys. Conf. Ser. **446** 012003 (2013).

Proceedings of workshop for young scientists on the physics of ultrarelativistic nucleus-nucleus collisions (Hot Quarks 2012), Copamarina, Puerto Rico, October 2012, edited by Markus Bleicher, Rainer J. Fries *et al.*, J. Phys. Conf. Ser. **446** (2013)

Energy dependence of moments of net-proton multiplicity distributions at RHIC, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. Lett. **112**, 032302 (2014).

Neutral pion cross section and spin asymmetries at intermediate pseudorapidity in polarized proton collisions at $\sqrt{s} = 200$ GeV, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. D **89**, 012001 (2014).

Transverse-energy distributions at midrapidity in p + p, d + Au, and Au + Au collisions at $\sqrt{s_{NN}} = 62.4 - 200$ GeV and implications for particle-production models, S.S. Adler *et al.* (PHENIX Collaboration), Phys. Rev. C **89**, 044905 (2014).

Jet-hadron correlations in $\sqrt{s_{NN}} = 200$ GeV Au + Au and p + p collisions, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. Lett. **112**, 122301 (2014).

Fluctuations of charge separation perpendicular to the event plane and local parity violation in $\sqrt{s_{NN}} = 200$ GeV Au+Au collisions at the BNL Relativistic Heavy Ion Collider, L. Adamczyk *et al.* [STAR Collaboration], Phys. Rev. C **88**, 064911 (2013).

Freeze-out dynamics via charged kaon femtoscopy in $\sqrt{s_{NN}} = 200$ GeV central Au+Au collisions, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. C **88**, 034906 (2013).

Third harmonic flow of charged particles in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. C **88**, 014904 (2013).

Elliptic flow of identified hadrons in Au+Au collisions at $\sqrt{s_{NN}} = 7.7-62.4$ GeV, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. C **88**, 014902 (2013).

Medium modification of jet fragmentation in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV measured in direct photon-hadron correlations, S.S. Adler *et al.* (PHENIX Collaboration), Phys. Rev. Lett. **111**, 032301 (2013).

Measurement of J/psi azimuthal anisotropy in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. Lett. **111**, 052301 (2013).

Experimental studies of di-jets in Au + Au collisions using angular correlations with respect to back-to-back leading hadrons, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. C **87**, 044903 (2013).

J/psi production at high transverse momenta in p+p and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, L. Adamczyk *et al.* (STAR Collaboration), Phys. Lett. B **722**, 55 (2013).

Direct photon production in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, S.S. Adler *et al.* (PHENIX Collaboration), Phys. Rev. C **87**, 054907 (2013).

System-size dependence of transverse momentum correlations at RHIC, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. C **87**, 064902 (2013).

Observation of an energy-dependent difference in elliptic flow between particles and anti-particles in relativistic heavy ion collisions, L. Adamczyk *et al.* (STAR Collaboration), Phys. Rev. Lett. **110**, 142301 (2013).

Isoscalar and isovector dipole strength distributions in nuclei and the Schiff moment, N. Auerbach., Ch. Stoyanov, M.R. Anders, and S. Shlomo, Phys. Rev. C **89**, 014335 (2014).

Modern energy density functional for nuclei and the equation of state of nuclear matter, S. Shlomo, Invited Review Article in *The Universe Evolution: Astrophysical and Nuclear Aspects*, Editors, L. Blokhintsev and I. Strakovsky, (Nova Science Publishers, 2013).

Modern energy density functional for nuclei and the equation of state of nuclear matter, S. Shlomo, Proceedings of the 4th International Conference on “Current Problems in Nuclear Physics and Atomic Energy,” Kyiv, Ukraine, Part I, 72 (2013).