

## PAPERS PUBLISHED

April 1, 2004 – March 31, 2005

**Giant Resonance in  $^{112}\text{Sn}$  and  $^{124}\text{Sn}$ : Isotopic Dependence of Monopole Resonance Energies**, Y.-W. Lui, D.H. Youngblood, Y. Tokimoto, H.L. Clark, and B. John, Phys. Rev. C **70**, 014307 (2004).

**Refractive Effects in the Scattering of Loosely Bound Nuclei**, F. Carstoiu, L. Trache, R.E. Tribble, and C.A. Gagliardi, Phys. Rev. C **70**, 054610 (2004).

**The  $^{17}\text{F}(p,\gamma)^{18}\text{Ne}$  Direct Capture Cross Section**, J.C. Blackmon, D.W. Bardayan, C.R. Brune, F. Carstoiu, A.E. Champagne, R. Crespo, T. Davinson, J.C. Fernandes, C.A. Gagliardi, U. Greife, C.J. Gross, P.A. Hausladen, C. Iliadis, C.C. Jewett, R.L. Kozub, T.A. Lewis, F. Liang, B.H. Moazen, A.M. Mukhamedzhanov, C.D. Nesaraja, F.M. Nunes, P.D. Parker, D.C. Radford, L. Sahin, J.P. Scott, D. Shapira, M.S. Smith, J.S. Thomas, L. Trache, R.E. Tribble, P.J. Woods, and C.-H. Yu, Nucl. Phys. **A746**, 365c (2004).

**Breakup of Loosely Bound Nuclei at Intermediate Energies as Indirect Method in Nuclear Astrophysics:  $^8\text{B}$ ,  $^9\text{C}$  and the  $S_{17}$ ,  $S_{18}$  Astrophysical Factors**, L. Trache, F. Carstoiu, C.A. Gagliardi, A.M. Mukhamedzhanov, and R.E. Tribble, Nucl. Phys. **A746**, 625c (2004).

**Determination of the Direct Capture Contribution for  $^{13}\text{N}(p,\gamma)^{14}\text{O}$  from the  $^{14}\text{O} \rightarrow ^{13}\text{N} + p$  Asymptotic Normalization Coefficient**, X. Tang, A. Azhari, C. Fu, C.A. Gagliardi, A.M. Mukhamedzhanov, F. Pirlpesov, L. Trache, R.E. Tribble, V. Burjan, V. Kroha, F. Carstoiu, and B.F. Irgaziev, Phys. Rev. C **69**, 055807 (2004).

**Quark Mixing, CKM Unitarity**, H. Abele, E. Barberio, D. Dubbers, F. Gluck, J.C. Hardy, W.J. Marciano, A. Serebrov and N. Severijns, Eur. Phys. J. C **33**, 1 (2004).

**Q-Value of the Superaligned Decay of  $^{22}\text{Mg}$  and the Calibration of the  $^{21}\text{Na}(p,\gamma)$  Experiment**, G. Savard, J.A. Clark, F. Buchinger, J.E. Crawford, S. Gulick, J.C. Hardy, A.A. Hecht, V.E. Jacob, J.K.P. Lee, A.F. Levand, B.F. Lundgren, N. Scielzo, K.S. Sharma, I. Tanihata, I.S. Towner, W. Trimble, J.C. Wang, Y. Wang and Z. Zhou, Phys. Rev. C **70**, 042501(R) (2004).

**Precise Measurement of  $\alpha_K$  for the M4 Transition from  $^{193}\text{Ir}^m$ : A Test of Internal-Conversion Theory**, N. Nica, J.C. Hardy, V.E. Jacob, S. Raman, C.W. Nestor, Jr and M.B. Trzhaskovskaya, Phys. Rev. C **70**, 054305 (2004).

**CVC Tests and CKM Unitarity**, J.C. Hardy, Nucl. Phys. **A752**, 101c (2005).

**Superaligned  $0^+ \rightarrow 0^+$   $\beta$  Decays: A Critical Survey with Tests of CVC and the standard Model**, J.C.

Hardy and I.S. Towner, Phys. Rev. C **71**, 044309 (2005).

**New Limits on Fundamental Weak-Interaction Parameters from Superallowed  $\beta$  Decay**, J.C. Hardy and I.S. Towner, Phys. Rev. Lett. **94**, 092502 (2005).

**Precise  $FT$ -Value Measurement for the Superallowed  $0^+$ -to- $0^+$   $\beta$  Decay of  $^{22}\text{Mg}$** , J.C. Hardy, V.E. Jacob, M. Sanchez-Vega, R.G. Neilson, A. Azhari, C.A. Gagliardi, V.E. Mayes, X. Tang, L. Trache and R.E. Tribble, Proceedings of International Conference on the Labyrinth in Nuclear Structure, Crete, July 2003; AIP Conference Proceedings # **701**, 244 (2004).

**Development Plans – The Texas A&M University Cyclotron Institute**, F. Abegglen, A. Azhari, G. Chubaryan, H. Clark, G. Derrig, C.A. Gagliardi, J.C. Hardy, G. Kim, D. May, M. Murray, J.B. Natowitz, R.P. Schmitt, G. Soliotis, R.E. Tribble, R. Wada, R.L. Watson, D.H. Youngblood, and S.J. Yennello Proceedings of the International Symposium, New Projects and Lines of Research in Nuclear Physics (2003) pg 272.

**New Measurements along the rp- and r-Process Paths**, G. Savard, J.A. Clark, R.C. Barber, B. Blank, F. Buchinger, J.E. Crawford, S. Gulick, J.C. Hardy, A. Heinz, J.K.P. Lee, A.F. Levand, R.B. Moore, D. Seweryniak, K.S. Sharma, G.D. Sprouse, W. Trimble, J. Vaz, J.C. Wang, and Z. Zhou, Hirscheegg '03: Nuclear Structure and Dynamics at the Limits. Proceedings of the International Workshop XXXI on Gross Properties of Nuclei and Nuclear Excitations (2003) pg 269.

**Search for Temperature and N/Z Dependent Effects in the Decay of  $A = 98$  Compound Nuclei**, S. Moretto, D. Fabris, M. Lunardon, S. Pesente, V. Rizzi, G. Viesti, M. Barbui, M. Cinausero, E. Fioretto, G. Prete, A. Brondi, E. Vardaci, F. Lucarelli, A. Azhari, X. D. Tang, K. Hagel, Y. Ma, A. Makeev, M. Murray, J. B. Natowitz, L. Qin, P. Smith, L. Trache, R. E. Tribble, R. Wada, and J. Wang, Phys. Rev. C **69**, 044604 (2004).

**Resonance Scattering  $^8\text{He} + p$  and  $T=5/2$  States in  $^9\text{Li}$** , V.Z. Goldberg, G.V. Rogachev, J.J. Kolata, G. Chubarian, D. Aleksandrov, M.S. Golovkov, Yu.Ts. Oganessian, A. Rodin, B. Skorodumov, R.S. Slepnev, G. Ter-Akopian, R. Wolski, Nucl.Phys. **A734**, 349 (2004).

**Analog States of  $^7\text{He}$  Observed via the  $^6\text{He}(p, n)$  Reaction**, G.V. Rogachev, P. Boutachkov, A. Aprahamian, F.D. Becchetti, J.P. Bychowski, Y. Chen, G. Chubarian, P.A. DeYoung, V.Z. Goldberg, J.J. Kolata, L.O. Lamm, G.F. Peaslee, M. Quinn, B.B. Skorodumov, A. Wohr, Phys.Rev.Lett. **92**, 232502 (2004).

**Structure of Exotic  $^7\text{He}$  and  $^9\text{He}$** , G.V. Rogachev, A. Aprahamian, F.D. Becchetti, P. Boutachkov, Y. Chen, G. Chubarian, P.A. DeYoung, A. Fomichev, V.Z. Goldberg, M.S. Golovkov, J.J. Kolata, Yu.Ts. Oganessian, G.F. Peaslee, M. Quinn, A. Rodin, B.B. Skorodumov, R.S. Slepnev, G. Ter-Akopian, W.H. Trzaska, A. Wohr, R. Wolski, Nucl.Phys. **A746**, 229c (2004).

**Reaction Dynamics and Multifragmentation in Fermi Energy Heavy Ion Reactions**, R. Wada, T. Keutgen, K. Hagel, Y. G. Ma, J. Wang, M. Murray, L. Qin, P. Smith, J. B. Natowitz, R. Alfaro, J. Cibor, M. Cinausero, Y. El Masri, D. Fabris, E. Fioretto, A. Keksis, S. Kowalski, M. Lunardon, A. Makeev, N. Marie, E. Martin, Z. Majka, A. Martinez-Davalos, A. Menchaca-Rocha, G. Nebbia, G. Prete, V. Rizzi, A. Ruangma, D. V. Shetty, G. Souliotis, P. Staszal, M. Veselsky, G. Viesti, E. M. Winchester, S. J. Yennello, W. Zipper, and A. Ono, *Phys. Rev. C* **69**, 044610 (2004).

**Fragment Yield Distribution and the Influence of Neutron Composition and Excitation Energy in Multifragmentation Reaction**, D.V. Shetty, A.S. Botvina, S.J. Yennello, G.A. Souliotis, E. Bell, and A. Keksis, *Phys. Rev. C* **71**, 024602 (2005).

**The Decay Time Scale for Highly Excited Nuclei as seen from Asymmetrical Emission of Particles**, M. Jandel, A.S. Botvina, S.J. Yennello, G.A. Souliotis, D.V. Shetty, E. Bell, and A. Keksis *J. Phys. G* **31**, 29 (2005).

**Thermodynamical Properties of Highly Excited Quasi-Projectiles**, M. Veselsky and S.J. Yennello, *Nucl. Phys. A* **749**, 114c (2005).

**Neutron to Proton Ratios of Quasiprojectile and Midrapidity Emission in the  $^{58}\text{Ni} + ^{58}\text{Ni}$  Reaction at 52 MeV/nucleon**, D. Thériault, A. Vallée, L. Gingras, Y. Larochelle, R. Roy, A. April, L. Beaulieu, F. Grenier, F. Lemieux, J. Moisan, M. Samri, C. St-Pierre, S. Turbide, B. Borderie, R. Bougault, P. Buchet, J. L. Charvet, A. Chbihi, J. Colin, D. Cussol, R. Dayras, D. Durand, J. D. Frankland, E. Galichet, D. Guinet, B. Guiot, P. Lantesse, J. F. Lecolley, N. Le Neindre, O. Lopez, A. M. Maskay, L. Nalpas, M. Parlog, P. Pawlowski, M. F. Rivet, E. Rosato, J. C. Steckmeyer, B. Tamain, E. Vient, C. Volant, J. P. Wieleczko, S. J. Yennello, E. Martin, and E. Winchester, *Phys. Rev. C* **71**, 014610 (2005).

**Symmetry Energy and the Isospin Dependent Equation of State**, D.V. Shetty, S.J. Yennello, A.S. Botvina, G.A. Souliotis, M. Jandel, E. Bell, A. Keksis, S. Soisson, B. Stein, and J. Iglío, *Phys. Rev. C* **70**, 011601(R) (2004).

**Neutron-rich Rare Isotope Production and Studies of the N/Z Degree of Freedom in Binary Collisions at Fermi Energies**, G.A. Souliotis, M. Veselsky, D.V. Shetty, L. Trache, and S.J. Yennello, *Nucl. Phys. A* **746**, 526c (2004).

**Heavy Residue Isoscaling as a Probe of the Process of N/Z Equilibration**, G.A. Souliotis, M. Veselsky, D.V. Shetty, and S.J. Yennello, *Phys. Lett. B* **588**, 35 (2004).

**Mid-Rapidity Emission in  $^{124}\text{Sn}$ ,  $^{124}\text{Xe} + ^{124}\text{Sn}$ ,  $^{112}\text{Sn}$  Reactions at 28 MeV/nucleon**, D.V. Shetty, A. Keksis, E. Martin, A. Ruangma, G.A. Souliotis, M. Veselsky, E. Winchester, S.J. Yennello, K. Hagel, Y.G. Ma, A. Makeev, N. Marie, M. Murray, J.B. Natowitz, L. Qin, P. Smith, R. Wada, J. Wang, M. Cinausero, E. Fioretto, G. Prete, D. Fabris, M. Lunardon, G. Nebbia, V. Rizzi, G. Viesti, J. Cibor, Z. Majka, P. Staszal, R. Alfaro, A. Martinez-Davalos, A. Menchaca-Rocha, Y. El Masri, and T. Keutgen Nucl. Phys. **A734**, E100 (2004).

**Isoscaling Studies of Fission: A Sensitive Probe into the Dynamics of Scission**, M. Veselsky, G.A. Souliotis, and M. Jandel, Phys. Rev. C **69**, 044607 (2004).

**Isoscaling in Peripheral Nuclear Collisions Around the Fermi Energy and a Signal of Chemical Separation from its Excitation Energy Dependence**, M. Veselsky, G.A. Souliotis, and S.J. Yennello, Phys. Rev. C **69**, 031602 (2004).

**Neutron-Rich Rare Isotope Production on the Fermi Energy Domain**, G.A. Souliotis, M. Veselsky, G. Chubarian, L. Trache, and S.J. Yennello, Nucl. Phys. **A734**, 557 (2004).

**Target Proximity Effect and Dynamical Projectile Breakup at Intermediate Energies**, R. Moustabchir, L. Beaulieu, L. Gingras, R. Roy, M. Samri, G. Boudreault, J. Gauthier, G.P. Gelinas, F. Grenier, R. Ibbotson, Y. Larochelle, E. Martin, J. Moisan, D. Ouerdane, D. Rowland, A. Ruangma, C. St-Pierre, D. Theriault, A. Vallee, E. Winchester, and S.J. Yennello, Nucl. Phys. **A739**, 15 (2004).

**Effects of In-Medium Cross Sections and Optical Potential on Thermal-Source Formation in  $p + ^{197}\text{Au}$  Reactions at 6.2-14.6 GeV/c**, S. Turbide, L. Beaulieu, P. Danielewicz, V.E. Viola, R. Roy, K. Kwiatkowski, W.-C. Hsi, G. Wang, T. Lefort, D.S. Bracken, H. Breuer, E. Cornell, F. Gimeno-Nogues, D.S. Ginger, S. Gushue, R. Huang, R. Korteling, W.G. Lynch, K.B. Morley, E. Ramakrishnan, L.P. Remsberg, D. Rowland, M.B. Tsang, H. Xi, and S.J. Yennello, Phys. Rev. C **70**, 014608 (2004).

**Breakup Densities of Hot Nuclei**, V.E. Viola, K. Kwiatkowski, J.B. Natowitz, and S.J. Yennello, Phys. Rev. Lett. **93**, 132701 (2004).

**Forward and Midrapidity Like-Particle Ratios from  $p+p$  Collisions at  $\sqrt{s} = 200$  GeV**, BRAHMS Collaboration, I.G. Bearden, D. Beavis, C. Besliu, B. Budick, H. Bøggild, C. Chasman, C.H. Christensen, P. Christiansen, J. Cibor, R. Debbe, E. Enger, J. J. Gaardhøje, M. Germinario, K. Hagel, A. Holm, A.K. Holme, H. Ito, E. Jakobsen, A. Jipa, F. Jundt, J.I. Jørdre, C.E. Jørgensen, R. Karabowicz, T. Keutgen, E.J. Kim, T. Kozik, T.M. Larsen, J.H. Lee, Y.K. Lee, G. Løvholden, Z. Majka, A. Makeev, M. Mikelsen, M.J. Murray, J. Natowitz, B.S. Nielsen, J. Norris, K. Olchanski, D. Ouerdane, R. Płaneta, F. Rami, C. Ristea, D. Röhrich, B.H. Samset, D. Sandberg, S.J. Sanders, R.A. Scheetz, P. Staszal, T.S. Tveter, F. Videbæk, R. Wada, A. Wieloch, Z. Yin and I.S. Zgura, Phys. Lett. B **607**, 42 (2005).

**Charged Meson Rapidity Distributions in central Au+Au Collisions at  $\sqrt{s} = 200$  GeV**, I. G. Bearden, D. Beavis, C. Besliu, B. Budick, H. Bøggild, C. Chasman, C. H. Christensen, P. Christiansen, J. Cibor, R. Debbe, E. Enger, J. J. Gaardhøje, M. Germinario, K. Hagel, O. Hansen, A. Holm, A. K. Holme, H. Ito, A. Jipa, F. Jundt, J. I. Jørdre, C. E. Jørgensen, R. Karabowicz, E. J. Kim, T. Kozik, T. M. Larsen, J. H. Lee, Y. K. Lee, G. Løvhøiden, Z. Majka, A. Makeev, M. Mikelsen, M. Murray, J. Natowitz, B. S. Nielsen, J. Norris, K. Olchanski, D. Ouerdane, R. Płaneta, F. Rami, C. Ristea, D. Röhrich, B. H. Samset, D. Sandberg, S. J. Sanders, R. A. Sheetz, P. Staszczel, T. S. Tveter, F. Videbaek, R. Wada, Z. Yin, and I. S. Zgura (BRAHMS Collaboration), *Phys. Rev. Lett.* **94**, 162301 (2005).

**On the Evolution of the Nuclear Modification Factors with Rapidity and Centrality in d+Au Collisions at  $\sqrt{s} = 200$  GeV**, I. Arsene, I. G. Bearden, D. Beavis, C. Besliu, B. Budick, H. Bøggild, C. Chasman, C. H. Christensen, P. Christiansen, J. Cibor, R. Debbe, E. Enger, J. J. Gaardhøje, M. Germinario, K. Hagel, H. Ito, A. Jipa, F. Jundt, J. I. Jørdre, C. E. Jørgensen, R. Karabowicz, E. J. Kim, T. Kozik, T. M. Larsen, J. H. Lee, Y. K. Lee, S. Lindal, R. Lystad, G. Løvhøiden, Z. Majka, A. Makeev, M. Mikelsen, M. Murray, J. Natowitz, B. Neumann, B. S. Nielsen, D. Ouerdane, R. Płaneta, F. Rami, C. Ristea, D. Röhrich, B. H. Samset, D. Sandberg, S. J. Sanders, R. A. Sheetz, P. Staszczel, T. S. Tveter, F. Videbaek, R. Wada, Z. Yin, and I. S. Zgura (BRAHMS Collaboration), *nucl-ex/0403005*, I. Arsene *et al.*, *Phys. Rev. Lett.* **93**, 242303 (2004).

**Centrality Dependence of Charged-Particle Pseudorapidity Distributions from d+Au Collisions at  $\sqrt{s} = 200$  GeV**, I. Arsene, I. G. Bearden, D. Beavis, C. Besliu, B. Budick, H. Bøggild, C. Chasman, C. H. Christensen, P. Christiansen, J. Cibor, R. Debbe, E. Enger, J. J. Gaardhøje, M. Germinario, K. Hagel, H. Ito, A. Jipa, J. I. Jørdre, F. Jundt, C. E. Jørgensen, R. Karabowicz, E. J. Kim, T. Kozik, T. M. Larsen, J. H. Lee, Y. K. Lee, S. Lindal, R. Lystad, G. Løvhøiden, Z. Majka, A. Makeev, M. Mikelsen, M. Murray, J. Natowitz, B. Neumann, B. S. Nielsen, D. Ouerdane, R. Płaneta, F. Rami, C. Ristea, D. Röhrich, B. H. Samset, D. Sandberg, S. J. Sanders, R. A. Sheetz, P. Staszczel, T. S. Tveter, F. Videbaek, R. Wada, Z. Yin, and I. S. Zgura (BRAHMS Collaboration), *nucl-ex/0401025*, *Phys. Rev. Lett.* **94**, 032301 (2005).

**Measurement of Muon Decay Parameter  $\delta$** , A. Gaponenko, R. Bayes, Yu.I. Davydov, P. Depommier, J. Doornbos, W. Faszler, M.C. Fujiwara, C.A. Gagliardi, D.R. Gill, P. Green, P. Gumplinger, M.D. Hasinoff, R.S. Henderson, J. Hu, B. Jamieson, P. Kitching, D.D. Koetke, A.A. Krushinsky, Yu.Yu. Lachin, J.A. Macdonald, R.P. MacDonald, G.M. Marshall, E.L. Mathie, L.V. Miasoedov, R.E. Mischke, J.R. Musser, P.M. Nord, M. Nozar, K. Olchanski, A. Olin, R. Openshaw, T.A. Porcelli, J.-M. Poutissou, R. Poutissou, M.A. Quraan, N.L. Rodning, V. Selivanov, G. Sheffer, B. Shin, F. Sobratee, T.D.S. Stanislaus, R. Tacik, V.D. Torokhov, R.E. Tribble, M.A. Vasiliev, and D.H. Wright (TWIST Collaboration), *Phys. Rev. D* **71**, 071101(R) (2005).

**Measurement of the Michel Parameter  $\rho$  in Muon Decay**, J.R. Musser, R. Bayes, Yu.I. Davydov, P. Depommier, J. Doornbos, W. Faszler, C.A. Gagliardi, A. Gaponenko, D.R. Gill, P. Green, P. Gumplinger, M.D. Hasinoff, R.S. Henderson, J. Hu, B. Jamieson, P. Kitching, D.D. Koetke, A.A. Krushinsky, Yu.Yu. Lachin, J.A. Macdonald, R.P. MacDonald, G.M. Marshall, E.L. Mathie, L.V. Miasoedov, R.E. Mischke, P.M. Nord, K. Olchanski, A. Olin, R. Openshaw, T.A. Porcelli, J.-M. Poutissou, R. Poutissou, M.A. Quraan, N.L. Rodning, V. Selivanov, G. Sheffer, B. Shin, F. Sobratee, T.D.S. Stanislaus, R. Tacik, V.D. Torokhov, R.E. Tribble, M.A. Vasiliev, and D.H. Wright (TWIST Collaboration), *Phys. Rev. Lett.* **94**, 101805 (2005). [This paper, together with the companion paper describing the measurement of  $\delta$ , was featured in the News section of the CERN Courier **45**(4), 8 (2005).]

**Open Charm Yields in d+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. Lett.* **94**, 062301 (2005).

**Transverse-Momentum Dependent Modification of Dynamic Texture in Central Au+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. C* **71**, 031901(R) (2005).

**Pseudorapidity Asymmetry and Centrality Dependence of Charged Hadron Spectra in d+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. C* **70**, 064907 (2004).

**Azimuthal Anisotropy and Correlations at Large Transverse Momentum in p+p and Au+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. Lett.* **93**, 252301 (2004).

**Measurements of Transverse Energy Distributions in Au+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. C* **70**, 054907 (2004).

**Rapidity and Centrality Dependence of Proton and Antiproton Production from  $^{197}\text{Au}+^{197}\text{Au}$  Collisions at  $\sqrt{s_{NN}} = 130$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. C* **70**, 041901(R) (2004).

**Centrality and Pseudorapidity Dependence of Charged Hadron Production at Intermediate  $p_T$  in Au+Au Collisions at  $\sqrt{s_{NN}} = 130$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. C* **70**, 044901 (2004).

**Production of  $e^+e^-$  Pairs Accompanied by Nuclear Dissociation in Ultra-Peripheral Heavy Ion Collisions**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. C* **70**, 031902(R) (2004).

**Photon and Neutral Pion Production in Au+Au Collisions at  $\sqrt{s_{NN}} = 130$  GeV**, J. Adams *et al.* (STAR Collaboration), *Phys. Rev. C* **70**, 044902 (2004).

**Azimuthally Sensitive Hanbury Brown-Twiss Interferometry in Au+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV**, J. Adams *et al.* (STAR Collaboration), Phys. Rev. Lett. **93**, 012301 (2004).

**Cross Sections and Transverse Single-Spin Asymmetries in Forward Neutral-Pion Production from Proton Collisions at  $\sqrt{s} = 200$  GeV**, J. Adams *et al.* (STAR Collaboration), Phys. Rev. Lett. **92**, 171801 (2004).

**Kaon Production and Kaon to Pion Ratio in Au+Au Collisions at  $\sqrt{s_{NN}} = 130$  GeV**, C. Adler *et al.* (STAR Collaboration), Phys. Lett. B **595**, 143 (2004).

**Multistrange Baryon Production in Au-Au Collisions at  $\sqrt{s_{NN}} = 130$  GeV**, J. Adams *et al.* (STAR Collaboration), Phys. Rev. Lett. **92**, 182301 (2004).

**Projectile Electron Loss and Capture in MeV/u Collisions of  $U^{28+}$  with  $H_2$ ,  $N_2$ , and Ar**, R. E. Olson, R. L. Watson, V. Horvat, A. N. Perumal, Y. Peng, and Th. Stöhlker, J. Phys. B **37**, 4539 (2004).

**Cross Sections for Charge Change in Argon and Equilibrium Charge States of 3.5 MeV/amu Uranium Ions Passing Through Argon and Carbon Targets**, A. N. Perumal, V. Horvat, R. L. Watson, Y. Peng, and K. S. Fruchey, Nucl. Instrum. Methods Phys. Res. **B227**, 251 (2005).

**Photoproduction of Pentaquark Cascades from Nucleons**, W. Liu and C. M. Ko, Phys. Rev. C **69**, 045204 (2004).

**Effects of Momentum-Dependent Potential on Two-Nucleon Correlation Functions and Light Cluster Production in Intermediate-Energy Heavy-Ion Collisions**, L. W. Chen, B. A. Li, and C. M. Ko, Phys. Rev. C **69**, 054606 (2004).

**Momentum Anisotropies in the Quark Coalescence Model**, P. P. R. Kolb, L. W. Chen, V. Greco, and C. M. Ko, Phys. Rev. C **69**, 051901(R) (2004).

**$\Xi$  Production at AGS Energies**, S. Pal, C. M. Ko, J. M. Alexander, P. Chung, and R. A. Lacey, Phys. Lett. B **595**, 158 (2004).

**Quark Coalescence Model for Charmed Mesons in Ultrarelativistic Heavy Ion Collisions Production**, V. Greco, C. M. Ko, and R. Rapp, Phys. Lett. B **595**, 202 (2004).

**Pentaquark  $\Theta^+$  Production from Photon-Nucleon Reactions**, W. Liu and C. M. Ko, Nucl. Phys. **A741**, 215 (2004).

**Effect of Resonance Decays on Hadron Elliptic Flows**, V. Greco and C. M. Ko, Phys. Rev. C **70**, 024901 (2004).

**Pentaquark Brayon Production at the Relativistic Heavy Ion Collider**, L. W. Chen, V. Greco, C. M. Ko, S. H. Lee, and W. Liu, Phys. Lett. B **601**, 34 (2004).

**Determination of the Stiffness of the Nuclear Symmetry Energy from Isospin Diffusion**, L. W. Chen, C. M. Ko, and B. A. Li, Phys. Rev. Lett. **94**, 032701 (2005).

**Pseudorapidity Dependence of Anisotropic Flows in Relativistic Heavy Ion Collisions**, L. W. Chen, V. Greco, C. M. Ko, and P. Koch, Phys. Lett. B **605**, 95 (2005).

**Partonic Effects on Anisotropic Flows at RHIC**, L. W. Chen and C. M. Ko, J. Phys. G **31**, S49 (2005).

**Quark Coalescence at RHIC**, V. Greco and C. M. Ko, J. Phys. G **31**, S407 (2005).

**In-Medium Effects on Charmonium Production in Heavy-Ion Collisions**, L. Grandchamp, R. Rapp and G.E. Brown, Phys. Rev. Lett. **92**, 212301 (2004).

**Theory Highlights of Quark Matter 2004**, R. Rapp, J. Phys. G **30**, S951 (2004).

**Medium Modifications of Charm and Charmonium in High-Energy Heavy-Ion Collisions**, L. Grandchamp, R. Rapp and G.E. Brown, J. Phys. G **30**, S1355 (2004).

**Thermal Photons in Strong Interactions**, R. Rapp, Mod. Phys. Lett. A **19**, 1717 (2004).

**$\Delta(1232)$  and Nucleon Spectral Functions in Hot Hadronic Matter**, H. van Hees and R. Rapp, Phys. Lett. B **606**, 59 (2005).

**Photon Production in Relativistic Nuclear Collisions at SPS and RHIC Energies**, S. Turbide, R. Rapp and C. Gale, Int. J. Mod. Phys. A **19**, 5351 (2004).

**The  $\Delta(1232)$  at RHIC**, H. van Hees and R. Rapp, J. Phys. G **31**, S203 (2005).

**The Vector Probe in Heavy-Ion Reactions**, R. Rapp, J. Phys. G **31**, S217 (2005).

**Thermalization of Heavy Quarks in the Quark-Gluon Plasma**, H. van Hees and R. Rapp, Phys. Rev. C **71**, 034907 (2005).

**Three-Body Coulomb Final-State Interaction Effects in the Coulomb Breakup of Light Nuclei**, E. O. Alt, B. F. Irgaziev, A. M. Mukhamedzhanov, Mod. Phys. Lett. A **20**, 947 (2005).



**Three-Body Coulomb Interaction Effects in the Final State of the  $^{208}\text{Pb}(^8\text{B}, ^7\text{Be p})^{208}\text{Pb}$  Coulomb Breakup Reaction**, E. O. Alt, B. F. Irgaziev, A. M. Mukhamedzhanov, Phys. Rev. C **71**, 024605 (2005).

**Theory of Electron-Impact Ionization of Atoms**, A.S. Kadyrov, A.M. Mukhamedzhanov, A. T. Stelbovics and I. Bray, Phys. Rev. A **70**, 062703 (2004).

**Insight into Continuum Couplings**, F.M.Nunes, A.M. Mukhamedzhanov, C.C. Rosa, B. F. Irgaziev, Nucl. Phys. **A736**, 255 (2004).

**Hot Nuclei**, S. Shlomo, and V.M. Kolomietz, Rep. Prog. Phys. **68**, 1 (2005).

**Critical Densities for the Skyrme Type Effective Interactions**, B.K. Agrawal, S. Shlomo, and V.K. Au, Phys. Rev. C **70**, 014308 (2004).

**Consequences of Self-Consistency Violations in Hartree-Fock Random-Phase Approximation Calculations of the Nuclear Breathing Mode Energy**, B.K. Agrawal and S. Shlomo, Phys. Rev. C **70**, 014308 (2004).

**Flow Effects on Multifragmentation in the Canonical Model**, S.K. Samaddar, J.N. De, and S. Shlomo, Phys. Rev. C **69**, 064615 (2004).

**Status of the Nuclear Matter Equation of State as Determined from Compression Modes**, S. Shlomo, B.K. Agrawal, and A.V. Kim, Nucl. Phys. **A734**, 589 (2004).