

2004 Publications

Alber, Mark

“Two-stage aggregate formation via streams in myxobacteria,” M.S. Alber, M.A. Kiskowski, and Y. Jiang, *Phys. Rev. Lett.* 93, 068301 (2004).

“Lattice gas cellular automaton model for rippling and aggregation in myxobacteria,” M.S. Alber, Y. Jiang, and M.A. Kiskowski., *Physica D* 191, 343-358 (2004).

“Role of Streams in Myxobacteria Aggregate Formation,” M.A. Kiskowski, Y. Jiang, and M.S. Alber, *Physical Biology* 1, 173-183 (2004).

“CompuCell, a multi-model framework for simulation of morphogenesis,” J.A Izaguirre, R. Chaturvedi, C. Huang, T. Cickovski, J. Coffland, G. Thomas, G. Forgacs, M.S. Alber, G. Hentschel, S.A. Newman, and J.A. Glazier, *Bioinformatics* 20, 1129-1137 (2004).

“Interaction between activator-inhibitor coupling and cell-matrix adhesion in a cellular automaton model for chondrogenic patterning,” M.A. Kiskowski, M.S. Alber, G.L. Thomas, J.A. Glazier, N. Bronstein, J. Pu, and S.A. Newman, *Developmental Biology* 271, 372-387 (corresponding authors: M.Alber and S. Newman) (2004).

“A Hybrid Discrete-Continuum Model for 3-D Skeletogenesis of Vertebrate Limb,” R. Chaturvedi, C. Huang, J.A. Izaguirre, S.A. Newman, J.A. Glazier, and M.S. Alber, *Lecture Notes in Computer Science*, Vol. 3305, Springer-Verlag, New York, 543-552 (2004).

“A Cellular Automata Model of Early T Cell Recognition,” A Casal, C. Sumen, T. Reddy, M.S. Alber and P. Lee, *Lecture Notes in Computer Science*, Vol. 3305, Springer-Verlag, New York, 553-560 (corresponding authors: M.S. Alber and P. Lee) (2004).

“Biological Lattice Gas Models in Dynamics and Bifurcation of Patterns in Dissipative Systems,” M.S. Alber, M.A. Kiskowski, Y. Jiang, and S.A. Newman, G. Dangelmayr and I. Oprea (eds.), *World Scientific Series on Nonlinear Science*, Vol. 12, World Scientific, Singapore, 274-291 (2004).

Aprahamian, Ani

“The lowest levels in ^{15}F and shell model potential for drip line nuclei,” V.Z. Goldberg, G.G. Chubarian, G. Tabacaru, L. Trache, R.E. Tribble, A. Aprahamian, G.V. Rogachev, B.B. Skorodumov, and X.D. Tang, *Phys. Rev. C* 69, 031302 (2004).

“Analog states of ^7He observed via the $^6\text{He}(p,n)$ reaction,” G.V. Rogachev, P. Boutachkov, A. Aprahamian, F.D. Becchetti, Y. Chen, G. Chubarian, P.A. DeYoung, V.Z. Goldberg, J.J. Kolata, G.F. Peaslee, M. Quinn, B.B. Skorodumov, and A. Woehr, *Phys. Rev. Lett.* 92, 232502 (2004).

“From ripples to tidal waves: low lying vibrational motion in nuclei,” A. Aprahamian, Nucl. Phys. A731, 291-298 (2004).

“Prediction of Nuclear Masses as a Function of P and F-spin in the shell Z=28-50 and N=28-50,” A. Teymurazyan, A. Aprahamian, A. Georgieva, Transaction of Bulgarian Academy of Sciences, Vol. 9, 165-172 (2004).

“Nuclear Structure Aspects in Nuclear Astrophysics,” A. Aprahamian, K. Langanke, and M. Wiescher, Progress in Part. Nucl. Phys., Vol. 54 (2004).

“The N = Z rp-process waiting-point nucleus ^{68}Se and its astrophysical implications,” A. Wöhr, A. Aprahamian, P. Boutachkov, J.L. Galache, J. Görres, M. Shawcross, A. Teymurazyan, M.C. Wiescher, D.S. Brenner, C.N. Davids, S.M. Fischer, A.M. Heinz, R.V.F. Janssens, and D. Seweryniak, Nucl. Phys. A742, 349-362 (2004).

“ β -Decay Studies of Neutron Rich Nickel Isotopes,” P.T. Hosmer, R.R.C. Clement, A. Estrade, S.N. Liddick, P.F. Mantica, W.F. Mueller, F. Montes, A.C. Morton, M. Ouellette, E. Pellegrini, P. Santi, H. Schatz, M. Steiner, A. Stolz, B.E. Tomlin, O. Arndt, K.-L. Kratz, B. Pfeiffer, W.B. Walter, P. Reeder, A. Aprahamian, and A. Wöhr, Proceedings of r-process Workshop, Institute of Nuclear Theory, Seattle, WA (January 2004).

“Nuclear Structure and Astrophysics,” AIP Conference Proceedings, Proceedings of the International Conference on Nuclear Physics Large and Small: Microscopic Studies of Collective Phenomena, April 19-22, Hacienda Cocoyoc (2004).

“Level Structure of ^{159}Gd from (n, γ)(d,p) and (d,t) reactions,” C. Granja, S. Pospíšil, A. Aprahamian, H. Börner, H. Lehmann, T. von Egidy, H.-F. Wirth, G. Graw, R. Hertenberger, Y. Eisermann, D. Nosek, L. Rubáček, and S.A. Telezhnikov, submitted to Phys. Rev., C70, 034316 (2004).

“New Isomers in the Neutron-rich A ~ 190 Mass Region,” M. Caamaño, P.M. Walker, M. Pfützner, P.H. Regan, J. Gerl, M. Hellström, P. Mayet, K.-H. Schmidt, Zs. Podolyák, M.N. Mineva, A. Aprahamian, J. Benlliure, A.M. Bruce, P.A. Butler, D. Cortina Gil, D.M. Cullen, J. Döring, T. Enquist, C. Fox, J. Garcés Narro, H. Geissel, W. Gelletly, J. Giovinazzo, M. Górska, H. Grawe, R. Grzywacz, A. Kleinböhl, W. Korten, M. Lewitowicz, R. Lucas, H. Mach, C.D. O’Leary, F. De Oliveira, C.J. Pearson, F. Rejmund, M. Rejmund, M. Sawicka, H. Schaffner, Ch. Schlegel, K. Schmidt, P. STeVenson, Ch. Theisen, F. Vivès, D.D. Warner, C. Wheldon, H.J. Wollersheim, S. Wooding, F. Xu, European Physical Journal A, 10079-7 (2004).

“Structure of Exotic ^7He and ^9He ,” 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. Wöhr, and R. Wolski, Proceedings of the Fifth International Conference on Radioactive Nuclear Beams (RNB6),

Argonne National Laboratory, Argonne, Illinois, September 22-26, 2003, Nuclear Physics A746, 229c-235c (2004).

“The Nature of low-lying $K=0+$ Bands in Nuclei,” A. Aprahamian, *Yad. Fiz. (Soviet Journal of Nuclear Physics)* 67, 1 (2004).

“Isomers in neutron-rich $A \approx 190$ nuclides from ^{208}Pb fragmentation,” M. Caama no, P. M. Walker, P. H. Regan, M. Pfützner, Zs. Podolyák, J. Gerl, M. Hellström, P. Mayet, M. N. Mineva, A. Aprahamian, J. Benlliure, et al., *European Physical Journal A*, 1434-6001 (2004).

Balsara, Dinshaw S.

“An Intercomparison Between Divergence-Cleaning and Staggered Mesh Formulations for Numerical Magnetohydrodynamics,” D.S. Balsara, and J.S. Kim, *Ap. J.* 602, 1079-1090 (2004).

“Second Order Accurate Schemes for Magnetohydrodynamics With Divergence-Free Reconstruction,” D.S. Balsara, *Ap. J. Supp.* 151(1), 149-184 (2004).

“High Order WENO Schemes: Investigations on Non-Uniform Convergence for MHD Riemann Problems,” D.S. Balsara, and M. Torrilhon, *J. Comp. Phys.* 201, 586-600 (2004).

“Amplification of Interstellar Magnetic Fields by Supernova - Driven Turbulence,” D.S. Balsara, J. Kim, M.M. MacLow and G.J. Mathews, *Ap. J.* 617, 339-349 (2004).

Barabasi, Albert-Laszlo

“Global organization of metabolic fluxes in the bacterium *Escherichia coli*,” E. Almaas, B. Kovacs, T. Vicsek, Z.N. Oltvai and A.-L. Barabási, *Nature* 427, 839-843 (2004).

“Understanding the cell’s functional organization,” A.-L. Barabási and Z.N. Oltvai, *Network Biology: Nature Reviews Genetics* 5, 101-113 (2004).

“Part IV: Biological Networks in E. Ben-Naim,” A.-L. Barabási, Z.N. Oltvai, and S. Wuchty, H. Frauenfelder, Z. Toroczkai (eds.), *Complex Networks, Lect. Notes Phys.*, 650 (Springer, Berlin Heidelberg, 2004).

“Aggregation of topological motifs in the *Escherichia coli* transcriptional regulatory networks,” R. Dobrin, Q.K. Beg and A.-L. Barabási, *BMC Bioinformatics* 5, 10 (2004).

“Functional and topological characterization of protein interaction networks,” S.Y. Yook, Z.N. Oltvai and A.-L. Barabási, *Proteomics* 4, 928-942 (2004).

“Fluctuations in network dynamics,” M. Argollo de Menezes and A.-L. Barabási, *Physical Review Letters* 92, 028701 (2004).

“Hot spots and universality in network dynamics,” A.-L. Barabási, M. Argollo de Menezes, S. Balensiefer, and J. Brockman, *Europhysics Journal* B38, 169-175 (2004).

“Separating the internal and external dynamics of complex systems,” M. Argollo de Menezes and A.-L. Barabási, *Physical Review Letters* 93, 068701 (2004).

“Effect of surface morphology on the sputtering yields: I. Ion sputtering from self-a±ne surfaces,” M.A. Makeev, and A.-L. Barabási, *Nuclear Instruments & Methods In Physics Research Section B-Beam Interactions with Materials and Atoms* 222, 316-334 (2004).

“Virtual Round Table on ten leading questions for network research,” L.A.N. Amaral, A. Barrat, A.-L. Barabási, G. Caldarelli, P. De los Rios, A. Erzan, B. Kahng, R. Mantegna, J.F.F. Mendes, R. Pastor-Satorras, and A. Vespignani, *European Physics Journal* B38, 143-145 (2004).

“The topological relationship between the large-scale attributes and local interaction patterns of complex networks,” A. Vázquez, R. Dobrin, D. Sergi, J.-P. Eckmann, Z.N. Oltvai and A.-L. Barabási, *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, December 28, 2004, Vol. 101, No. 52, 17940-17945.

Bennett, David Paul

“Potential Direct Single-Star Mass Measurement,” H. Ghosh, D.L. DePoy, et al., *Astrophys. J.* 615, 450 (2004).

“The Mass of the MACHO-LMC-5 Lens Star,” A. Gould, D.P. Bennett, and D.R. Alves, *Astrophys. J.* 614, 404 (2004).

“Search for Low-Mass Exoplanets by Gravitational Microlensing at High Magnification,” F. Abe, D.P. Bennett, et al., *Science* 305, 1264 (2004).

“MOA 2003-BLG-37: A Bulge Jerk-Parallax Microlens Degeneracy,” D.L. Depoy, B.S. Gaudi, et al., *Astrophys. J.* 609, 166 (2004).

“OGLE 2003-BLG-235/MOA 2003-BLG-53: A Planetary Microlensing Event,” I.A. Bond, A. Udalski, et al., *Astrophys. J. Lett.* 606, L155 (2004).

Berry, H. Gordon

“ $1s2s2p^23p^6L-1s2p^33p^6P$ transitions in O IV, F V and Ne VI,” B. Lin, H.G. Berry, T. Shibata, A.E. Livingston, H.-P. Garnir, T. Bastin and J. Désesquelles, *J. of Phys. B: At. Mol. Opt. Phys.* 37, 13, 2797-2809 (2004).

Bigi, Ikaros

“On Extracting Heavy Quark Parameters from Moments with Cuts,” I.I. Bigi, N. Uraltsev, *Phys.Lett.* B579, 340-346 (2004).

“The Discovery of Microscopic Time Reversal Violations in the Decays of Neutral B. Mesons,” I.I. Bigi, C. Jessop, J. LoSecco, *Interactions*, 20-23 (2004).

Blackstead, Howard A.

“Neutron diffraction studies of magnetic and superconducting compounds,” W.B. Yelon, Q. Cai, W.J. James, H.U. Anderson, J.B. Yang, X.D. Zhou and H.A. Blackstead, *Phys. Stat. Sol. (a)* 201, 1428-1435 (2004).

“Magnetic resonance of Cu and of Gd in insulating $GdSr_2Cu_2NbO_8$ and in superconducting $GdSr_2Cu_2RuO_8$,” J.D. Dow, H.A. Blackstead, Z.F. Ren and D.Z. Wang, *JETP Letters* 80, 216-220 (2004).

Bunker, Bruce A.

“Local structure around Cr (III) in dilute acetate and perchlorate aqueous solutions,” M. Boyanov, K.E. Kemner, T. Shibata, and B. Bunker, *J. Phys. Chem.* A108, 5131-5138 (2004).

“EXAFS studies of bimetallic Ag-Pt and Ag-Pd nanoparticles,” S. Chattopadhyay, D. Lahiri, B.A. Bunker, C.M. Doudna, M.F. Bertino, F. Blum, A. Tokuhiko and J. Terry, *Physica Scripta*. (Refereed conference proceedings of XAFS 12, Malmö, Sweden, June 2003.) (2004)

“Local Structure Around Chromium Ions in Aqueous Acetate Solutions,” M. Boyanov, K.E.Kemner, T. Shibata, and B. Bunker, highlight in *Advanced Photon Source Annual Report*, 2004.

Cason, Neal M.

“On the narrow dip structure at 1.9 GeV/c² in diffractive photoproduction,” P.L. Frabetti et al., (J.M. Bishop, N.M. Cason, C.J. Kennedy, G.N. Kim, T.F. Lin, D.L. Puseljic, R.C. Ruchti, W.D. Shephard, J.A. Swiatek, Z.Y. Wu)-I.N.F.N. Bologna-Colorado-Fermilab-I.N.F.N. Frascati-Illinois-I.N.F.N. Milan-Northwestern-I.N.F.N. Pavia-Puerto Rico-California Davis-South Carolina-Vanderbilt-North Carolina Asheville-Tennessee-Korea Collaboration, Phys. Lett. B578, 290-296 (2004).

“Exotic meson production in the $f_1(1285)\pi^-$ system observed in the reaction $\pi^-p \rightarrow \eta\pi^+\pi^-\pi^-p$ at 18 GeV/c,” J. Kuhn et al., Notre Dame (T. Adams, J.M. Bishop, N.M. Cason, E.I. Ivanov, J.M. LoSecco, J.J. Manak, W.D. Shephard, D.L. Stienike, S.A. Taegar), Brookhaven, Florida State, Idaho State, I.H.E.P. Protvino, Massachusetts-Dartmouth, Moscow State, Northwestern, Rensselaer, Thomas Jefferson National Accelerator Facility Collaboration, Phys. Lett. B595, 109-117 (2004).

“Search for Doubly-charged Higgs Boson Pair Production in the Decay to $\mu^+\mu^+\mu^-\mu^-$ in $\bar{p}p$ Collisions at $\sqrt{s}=1.96$ TeV,” Dzero Collaboration, V.M. Abazov et al., Notre Dame (N.M.Cason, L. Coney, E. Galyaev, A. Goussiou, M.D. Hildreth, R. Hooper, A. Kharchilava, M. Lynker, R.Ruchti, W.D. Shephard, J. Torborg, J. Warchol, M. Wayne, N. Xuan, H. Zheng), Phys. Rev. Lett. 93, 141801 (2004).

“Observation and Properties of the $X(3872)$ Decaying to $J/\psi p \bar{p}$ in $\bar{p}p$ Collisions at $\sqrt{s}=1.96$ TeV,” Dzero Collaboration, V.M. Abazov et al., Notre Dame (N.M.Cason, L. Coney, E. Galyaev, A. Goussiou, M.D. Hildreth, R. Hooper, A. Kharchilava, M. Lynker, R.Ruchti, W.D. Shephard, J. Torborg, J. Warchol, M. Wayne, N. Xuan, H. Zheng), Phys. Rev. Lett. 93, 162002 (2004).

Collon, Philippe A.E.H.

“Development of an AMS method to study oceanic circulation characteristics using cosmogenic ³⁹Ar,” P. Collon, M. Bichler, J. Caggiano, et al., Nucl. Inst. and Meth. In Phys. Res. B223-224, 428-434 (2004).

“Ocean Circulation and ECR sources: Measurement of the ³⁹Ar Isotopic ratio in seawater,” M. Gaelens, M. Loiselet, G. Ryckewaert, R.C. Pardo, R.H. Scott, R. Vondrasek, P. Collon, W. Kutschera, Rev. Sci. Instrum. 75, 1916 (2004).

“Tracing Noble Gas Radionuclides in the Environment,” P. Collon, Z-T. Lu, W. Kutschera, Annu. Rev. Nucl. Part. Sci. 54, 39-67 (2004).

“Influence of nuclear structure on sub-barrier hindrance in Ni+Ni fusion,” C.L. Jiang, K.E. Rehm, R.V.F. Janssens, H. Esbensen, I. Ahmad, B.B. Back, P. Collon, et al., Phys. Rev. Lett. 93, 012701 (2004).

Dobrowolska-Furdyna, Malgorzata

“ZnCdSe quantum structures by (110)-cleaved-edge overgrowth: MBE growth and μ -PL characterization,” L.V. Titova, G. Cywinski, M. Kutrowski, T. Wojtowicz, X. Liu, J.K. Furdyna, and M. Dobrowolska, *Physica Status Solidi (b)* 241, 519-522 (2004).

“Magneto-photoluminescence study on magnetic/non-magnetic semiconductor quantum dots,” S. Lee, D.Y. Shin, L. Titova, M. Kutrowski, M. Dobrowolska, and J.K. Furdyna, *Physica Status Solidi (b)* 241, 722-726 (2004).

“MBE growth and magnetotransport studies of ferromagnetic $\text{Ga}_{1-x}\text{Mn}_x\text{Sb}$ semiconductor layers on hybrid ZnTe/GaAs substrates,” W.L. Lim, T. Wojtowicz, X. Liu, M. Dobrowolska, J.K. Furdyna, *Physica E*20, 346-349 (2004).

“Growth and properties of ferromagnetic $\text{In}_{1-x}\text{Mn}_x\text{Sb}$ alloys,” T. Wojtowicz, W.L. Lim, X. Liu, G. Cywinski, M. Kutrowski, L.V. Titova, K. Yee, M. Dobrowolska, J.K. Furdyna, K.M. Yu, W. Walukiewicz, G.B. Kim, M. Cheon, X. Chen, S.M. Wang, H. Luo, I. Vurgaftman, J.R. Meyer, *Physica E*20, 325-332 (2004).

“External control of the direction of magnetization in ferromagnetic InMnAs/GaSb heterostructures,” X. Liu, W.L. Lim, L.V. Titova, T. Wojtowicz, M. Kutrowski, K.J. Yee, M. Dobrowolska, J.K. Furdyna, S.J. Potashnik, M.B. Stone, P. Schiffer, I. Vurgaftman, J.R. Meyer, *Physica E*20, 370-373 (2004).

“Polarization selective magneto-optical study on the coupled quantum dots using resonant excitation,” S. Lee, D.Y. Shin, H.S. Lee, J.Y. Lee, M. Dobrowolska, and J.K. Furdyna, *Physica E*21, 376-380 (2004).

“Direct evidence of the Fermi-energy-dependent formation of Mn interstitials in modulation-doped $\text{Ga}_{1-y}\text{Al}_y\text{As}/\text{Ga}_{1-x}\text{Mn}_x\text{As}/\text{Ga}_{1-y}\text{Al}_y\text{As}$ heterostructures,” K.M. Yu, W. Walukiewicz, T. Wojtowicz, W.L. Lim, M. Dobrowolska, and J.K. Furdyna, *Appl. Phys. Lett.* 84, 4325-4327 (2004).

“Spin polarization of excitons in nonmagnetic quantum dots induced by a neighboring magnetic semiconductor quantum well,” S. Lee, K. Park, M. Dobrowolska, and J.K. Furdyna, *J. Appl. Phys.* 95, 7184-7186 (2004).

“Lattice location of Mn and fundamental Curie temperature limit in ferromagnetic $\text{Ga}_{1-x}\text{Mn}_x\text{As}$,” K.M. Yu, W. Walukiewicz, T. Wojtowicz, W.-L. Lim, X. Liu, M. Dobrowolska, and J.K. Furdyna, *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms* 219-20, 636-641 (2004).

“Influence of inter-dot coupling on spin polarization of carriers in double quantum dots,” S. Lee, S.-R. E. Yang, M. Dobrowolska, and J.K. Furdyna, *Semiconductor Science and Technology* 19, 1125-1130 (2004).

“Exciton dephasing in self-assembled CdSe quantum dots,” P. Palinginis, H. Wang, S.V. Goupalov, D.S. Citrin, M. Dobrowolska, and J.K. Furdyna, *Phys. Rev. B* 70, 073302 (2004).

“Resonant spectroscopy of II-VI self-assembled quantum dots: Excited states and exciton-longitudinal optical phonon coupling,” T.A. Nguyen, S. Mackowski, H.E. Jackson, L.M. Smith, J. Wrobel, K. Fronc, G. Karczewski, J. Kossut, M. Dobrowolska, J.K. Furdyna, and W. Heiss, *Phys. Rev. B* 70, 125306 (2004).

Eskildsen, Morten Ring

“Field-induced magnetic phases in the normal and superconducting states of $\text{ErNi}_2\text{B}_2\text{C}$,” A. Jensen, K. Nørgaard Toft, A.B. Abrahamsen, D.F. McMorrow, M.R. Eskildsen, N.H. Andersen, J. Jensen, P. Hedegård, J. Klenke, S. Danilkin, K. Prokes, V. Sikolenko, P. Smeibidl, S.L. Bud’ko and P.C. Canfield, *Phys. Rev. B* 69, 104527 (2004).

“Vortex lattice reorientation and anisotropy in MgB_2 – effects of two-band superconductivity,” C.D. Dewhurst, R. Cubitt, M.R. Eskildsen, J. Jun, S.M. Kazakov, and J. Karpinski, *Physica C* 404, 135-139 (2004).

“Neutron diffraction study of anomalous high-field magnetic phase in $\text{TmNi}_2\text{B}_2\text{C}$,” K. Nørgaard Toft, A.B. Abrahamsen, M.R. Eskildsen, K. Lefmann, and N.H. Andersen, *Phys. Rev. B* 69, 214507 (2004).

“Magnetic phase diagram of $\text{ErNi}_2\text{B}_2\text{C}$,” A. Jensen, K. Nørgaard Toft, A.B. Abrahamsen, N.H. Andersen, J. Jensen, P. Hedegård, J. Klenke, K. Prokes, P. Smeibidl, S. Danilkin, V. Sikolenko, M.R. Eskildsen, and P.C. Canfield, *Physica C* 408-410, 97-99 (2004).

Frauentorf, Stefan Gottfried

“Quadrupole moments and g factors for high-spin neutron isomers in Pb-193,” M. Ionescu-Bujor, A. Iordachescu, D.L. Balabanski, S. Chmel, G. Neyens, G. Baldsiefen, D. Bazzacco, F. Brandolini, D. Bucurescu, M. Danchev, M. De Poli, G. Georgiev, A. Gorgen, H. Haas, H. Hubel, G. Ilie, N. Marginean, R. Menegazzo, P. Pavan, G. Rainovski, R.V. Ribas, C.R. Alvarez, C.A. Ur, K. Vyvey, S. Frauentorf, *Physical Review C* 70 (3), Art. No. 034305 (SEP 2004).

“Chiral bands in Rh-105,” J.A. Alcantara-Nunez, J.R.B. Oliveira, E.W. Cybulska, N.H. Medina, M.N. Rao, R.V. Ribas, M.A. Rizzutto, W.A. Seale, F. Falla-Sotelo, K.T. Wiedemann, V.I. Dimitrov, S. Frauentorf, *Brazilian Journal of Physics* 34 (3A), 999-1001 (SEP 2004).

“Experimental evidence for chirality in the odd-A Rh-105,” J. Timar, P. Joshi, K. Starosta, V.I. Dimitrov, D.B. Fossan, J. Molnar, D. Sohler, R. Wadsworth, A. Algora, P. Bednarczyk, D. Curien, Z. Dombradi, G. Duchene, A. Gizon, J. Gizon, D.G. Jenkins, T. Koike, A. Krasznahorkay, E.S. Paul, P.M. Raddon, G. Rainovski, J.N. Scheurer, A. Simons, C. Vaman, A.R. Wilkinson, L. Zolnai, S. Frauendorf, *Physics Letters B* 598 (3-4), 178-187 (SEP 30 2004).

“Gross shell structure at high spin in heavy nuclei,” M.A. Deleplanque, S. Frauendorf, V.V. Pashkevich, S.Y. Chu, A. Unzhakova, *Physical Review C* 69 (4), Art. No. 044309, (APR 2004).

“Comment on “Interaction induced deformation of the momentum distribution of spin polarized nuclear matter,” S. Frauendorf, K. Neergard, *Physical Review C* 69 (4), Art. No. 049801 (APR 2004).

“High-spin structure of N similar or equal to Z nuclei around the A=72 region,” N.S. Kelsall, C.E. Svensson, S. Fischer, D.E. Appelbe, R.A.E. Austin, D.P. Balamuth, G.C. Ball, J.A. Cameron, M.P. Carpenter, R.M. Clark, M. Cromaz, M.A. Deleplanque, R.M. Diamond, P. Fallon, D.F. Hodgson, R.F.V. Janssens, D.G. Jenkins, G.J. Lane, C.J. Lister, A.O. Macchiavelli, C.D. O’Leary, D.G. Sarantites, F.S. Stephens, D.C. Schmidt, D. Seweryniak, K. Vetter, J.C. Waddington, R. Wadsworth, D. Ward, A.N. Wilson, A.V. Afanasjev, S. Frauendorf, I. Ragnarsson, *European Physical Journal A* 20 (1), 131-132 (APR 2004).

“Spectroscopic quadrupole moments of high-spin isomers in Pb-193,” D.L. Balabanski, M. Ionescu-Bujor, A. Iordachescu, D. Bazzacco, F. Brandolini, D. Bucurescu, S. Chmel, M. Danchev, M. De Poli, G. Georgiev, H. Haas, H. Hubel, N. Marginean, R. Menegazzo, G. Neyens, P. Pavan, G. Rainovski, C.R. Alvarez, C.A. Ur, K. Vyvey, S. Frauendorf, *European Physical Journal A* 20 (1), 191-192 (APR 2004).

“New insights into neutron rich nuclei from fission,” J.H. Hamilton, S.J. Zhu, A.V. Ramayya, P.M. Gore, J.O. Rasmussen, E.F. Jones, J.K. Hwang, R.Q. Xu, L.Y. Yang, K. Li, Z. Jiang, Z. Zhang, S.D. Ziao, X.Q. Zhang, J. Kormicki, Y.X. Luo, L. Chaturvedi, W.C. Ma, J.D. Cole, M.W. Drigert, I.Y. Lee, P. Fallon, M.A. Stoyer, T.N. Ginter, G.M. Ter-Akopian, A.V. Daniel, Y.T. Oganessian, R. Donangelo, V. Dimitrov, S. Frauendorf, *Nuclear Physics A* 734, 257-260 (APR 5 2004).

“Magnetic dipole and electric quadrupole rotational structures and chirality in Rh-105,” J.R.B. Oliveira, E.W. Cybulska, N.H. Medina, M.N. Rao, R.V. Ribas, M.A. Rizzutto, W.A. Seale, F. Falla-Sotelo, K.T. Wiedemann, V.I. Dimitrov, S. Frauendorf, J.A. Alcantara-Nunez, *Physical Review C* 69 (2), Art. No. 024317 (FEB 2004).

Furdyna, Jacek K.

“Neutron scattering studies of nanomagnetism and artificially structured materials,” M.R. Fitzsimmons, S.D. Bader, J.A. Borchers, G.P. Felcher, J.K. Furdyna, A.Hoffman, J.B. Kortright, I.C. Shuller, T.C. Schulthess, T.C. Sinha, M.F. Toney, D. Weller, and S. Wolf, *J. of Magnetism and Magnetic Materials* 271, 103-146 (2004).

“ZnCdSe quantum structures by (110)-cleaved-edge overgrowth: MBE growth and μ -PL characterization,” L.V. Titova, G. Cywinski, M. Kutrowski, T. Wojtowicz, X. Liu, J.K. Furdyna, and M. Dobrowolska, *Physica Status Solidi (b)* 241, 519-522 (2004).

“Giant polarized optical properties in Type-II ZnTe/CdSe multiple quantum wells induced by interface chemical bonds,” Y.F. Chen, W.S. Su, M.H. Ya, Y.S. Chiu, H. Luo, and J.K. Furdyna, *Physica Status Solidi (b)* 241, 538-541 (2004).

“Magneto-photoluminescence study on magnetic/non-magnetic semiconductor quantum dots,” S. Lee, D.Y. Shin, L. Titova, M. Kutrowski, M. Dobrowolska, and J.K. Furdyna, *Physica Status Solidi (b)* 241, 722-726 (2004).

“Determination of the dielectric functions of MBE-grown ZnMgSe semiconductor alloys,” A.J. Franz, F.C. Peiris, Z. Liu, U. Bindley, and J.K. Furdyna, *Physica Status Solidi (b)* 241, 507-510 (2004).

“Magnetization relaxation in (Ga,Mn)As ferromagnetic semiconductors,” J. Sinova, T. Jungwirth, X. Liu, Y. Sasaki, J.K. Furdyna, W.A. Atkinson, and A.H. MacDonald, *Phys. Rev.* B69, No. 085209 (2004).

“The effect of Mn interstitials on the lattice parameter of $\text{Ga}_{1-x}\text{Mn}_x\text{As}$,” I. Kuryliszyn-Kudelska, J.Z.Domagala, T.Wojtowicz, X.Liu, E. Lusakowska, W. Dobrowolski, and J.K.Furdyna, *J. Appl. Phys.* 95, 603-608 (2004).

“Anomalous behavior of spin-wave resonances in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ thin films,” T.G. Rappoport, P. Redlinski, X. Liu, G. Zarand, B. Janko, and J.K. Furdyna, *Phys. Rev.* B69, No. 125213 (2004).

“Annealing-Dependent Magnetic Depth Profile in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$,” B.J. Kirby, A. Borchers, J.J. Rhyne, S.G.E. te Velthuis, A. Hoffmann, K.V. O’Donovan, T. Wojtowicz, X. Liu, W.L. Lim, and J.K. Furdyna, *Phys. Rev.* B69, No. 081307 (2004).

“High-temperature Hall effect in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$,” D. Ruzmetov, J. Scherschligt, D.V. Baxter, T. Wojtowicz, X. Liu, Y. Sasaki, J.K. Furdyna, K.M. Yu, and W. Walukiewicz, *Phys. Rev.* B69, 155207 (2004).

“MBE growth and magnetotransport studies of ferromagnetic $\text{Ga}_{1-x}\text{Mn}_x\text{Sb}$ semiconductor layers on hybrid ZnTe/GaAs substrates,” W.L. Lim, T. Wojtowicz, X. Liu, M. Dobrowolska, J.K. Furdyna, *Physica* E20, 346-349 (2004).

“Growth and properties of ferromagnetic $\text{In}_{1-x}\text{Mn}_x\text{Sb}$ alloys,” T. Wojtowicz, W.L. Lim, X. Lim, G. Cywinski, M. Kutrowski, L.V. Titova, K. Yee, M. Dobrowolska, J.K. Furdyna, K.M. Yu, W. Walukiewicz, G.B. Kim, M. Cheon, X. Chen, S.M. Wang, H. Luo, I. Vurgaftman, J.R. Meyer, *Physica E* 20, 325-332 (2004).

“External control of the direction of magnetization in ferromagnetic $\text{InMnAs}/\text{GaSb}$ heterostructures,” X. Liu, W.L. Lim, L.V. Titova, T. Wojtowicz, M. Kutrowski, K.J. Yee, M. Dobrowolska, J.K. Furdyna, S.J. Potashnik, M.B. Stone, P. Schiffer, I. Vurgaftman, J.R. Meyer, *Physica E* 20, 370-373 (2004).

“Ferromagnetic GaSb/Mn digital alloys,” G.B. Kim, M. Cheon, S. Wang, H. Luo, B.D. McCombe, X. Liu, Y. Sasaki, T. Wojtowicz, J.K. Furdyna, *Physica E* 20(3-4), 338-345 (2004).

“Electric-field control of ferromagnetism in GaSb/Mn digital alloys,” G.B. Kim, M. Cheon, S. Wang, H. Luo, B.D. McCombe, X. Liu, Y. Sasaki, T. Wojtowicz, J.K. Furdyna, *Physica E* 20 (3-4), 355-359 (2004).

“Magnetotransport and magnetic properties of InAs/Mn digital alloys,” G. Acbas, G.B. Kim, X. Chen, S. Wang, M. Cheon, C.J. Meining, H. Luo, B.D. McCombe, Y. Sasaki, X. Liu, J.K. Furdyna, *Physica E* 20, 382-385 (2004).

“Polarization selective magneto-optical study on the coupled quantum dots using resonant excitation,” S. Lee, D.Y. Shin, H.S. Lee, J.Y. Lee, M. Dobrowolska, and J.K. Furdyna, *Physica E* 21, 376-380 (2004).

“Effect of Annealing on magnetic and magnetotransport properties of $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ epilayers,” I. Kuryliszyn-Kudelska, T. Wojtowicz, X. Liu, J.K. Furdyna, W. Dobrowolski, J.Z. Domagala, E. Lusakowska, M. Goiran, E. Haanappel, and O. Portugall, *J. Mag. Mat.* 272-276, 1575-1577 (2004).

“Measurements of spin Polarization by Andreev Reflection in Ferromagnetic $\text{In}_{1-x}\text{Mn}_x\text{Sb}$ epilayers,” R.P. Panguluri, B. Nadgorny, T. Wojtowicz, W.-L. Lim, X. Liu, and J.K. Furdyna, *Appl. Phys. Lett.* 84, 4947-4949 (2004).

“Direct evidence of the Fermi-energy-dependent formation of Mn interstitials in modulation-doped $\text{Ga}_{1-y}\text{Al}_y\text{As}/\text{Ga}_{1-x}\text{Mn}_x\text{As}/\text{Ga}_{1-y}\text{Al}_y\text{As}$ heterostructures,” K.M. Yu, W. Walukiewicz, T. Wojtowicz, W.L. Lim, M. Dobrowolska, and J.K. Furdyna, *Appl. Phys. Lett.* 84, 4325-4327 (2004).

“Effect of interlayer exchange coupling on the Curie temperature in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ Utrilayer structures,” S.U. Yuldashev, Y. Kim, N. Kim, H. Im, T.W.Kang, S. Lee, Y.Sasaki, X. Liu, and J.K. Furdyna, *Jpn. J. Appl. Phys.* 43, 2093-2096 (2004).

“Possible indication of interlayer exchange coupling in GaMnAs/GaAs ferromagnetic semiconductor superlattices,” S.J.Chung, S. Lee, I.W. Park, X. Liu, J.K. Furdyna, J. Appl. Phys., 95,7402-7404, (2004).

“Spin polarization of excitons in nonmagnetic quantum dots induced by a neighboring magnetic semiconductor quantum well,” S. Lee. K. Park, M. Dobrowolska , and J.K. Furdyna, J. Appl. Phys. 95, 7184-7186 (2004).

“Determination of hole-induced ferromagnetic Mn-Mn exchange in p-type Zn_{1-x}Mn_xTe by inelastic neutron scattering,” H. Keba, L. Van Khoi, C.M. Brown, T. Dietl, J.K. Furdyna, and T. Giebultowicz, Physica B350, 36-39 (2004).

“Uniaxial in-plane magnetic anisotropy of Ga_{1-x}Mn_xAs,” U. Welp, V.K. Vlasko, A. Menzel, H.D. You, X. Liu, J.K. Furdyna, and T. Wojtowicz, Applied Physics Letters 85, 260-262 (2004).

“Properties of arsenic antisite defects in Ga_{1-x}Mn_xAs,” A. Wolos, M. Kaminska, M. Palczewska, A. Twardowski, X. Liu, T. Wojtowicz, and J.K. Furdyna, Journal of Applied Physics 96, 530-533 (2004).

“Lattice location of Mn and fundamental Curie temperature limit in ferromagnetic Ga_{1-x}Mn_xAs,” K.M. Yu, W. Walukiewicz, T. Wojtowicz, W.-L. Lim, X. Liu, M. Dobrowolska, and J.K. Furdyna, Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, 219-20, 636-641 (2004).

“Optical dispersion of ternary II-VI semiconductor alloys,” X. Liu, J.K. Furdyna, Journal of Applied Physics 95, 7754-7764 (2004).

“Temperature dependence of the band-edge photoluminescence of Zn_{1-x}Mn_xSe films,” Y.H. Hwang, Y.H. Um, and J.K. Furdyna, Semiconductor Science and Technology 19, 565-570 (2004).

“Influence of inter-dot coupling on spin polarization of carriers in double quantum dots,” S. Lee, S.-R.E. Yang, M. Dobrowolska, and J.K. Furdyna, Semiconductor Science and Technology 19, 1125-1130 (2004).

“Exciton dephasing in self-assembled CdSe quantum dots,” P. Palinginis, H. Wang, S.V. Goupalov, D.S. Citrin, M. Dobrowolska, and J.K. Furdyna, Phys. Rev. B70, 073302 (2004).

“Dependence of indices of refraction on Mn composition of Zn_{1-x}Mn_xSe thin films using prism coupler technique,” Y.H. Um, Y.H. Hwang, F.C. Peiris, and J.K. Furdyna, Physica Status Solidi B241, 1677-1680 (2004).

“Anomalous Hall effect in insulating GaMnAs,” S.U. Yuldashev, H.C. Jeon, H.S. Im, T.W. Kang, S.H. Lee, and J.K. Furdyna, Phys. Rev. B70, 193203 (2004).

“Resonant spectroscopy of II-VI self-assembled quantum dots: Excited states and exciton-longitudinal optical phonon coupling,” T.A. Nguyen, S. Mackowski, H.E. Jackson, L.M. Smith, J. Wrobel, K. Fronc, G. Karczewski, J. Kossut, M. Dobrowolska, J.K. Furdyna, and W. Heiss, *Phys. Rev. B* 70, 125306 (2004).

“Magnetic Anisotropy in Ferromagnetic III-Mn-V Semiconductors: Issues and Observations,” J.K. Furdyna, X. Liu, T. Wojtowicz, W.L. Lim, U. Welp, and V.K. Vasko-Vlasov, in *Advances in Solid State Physics*, p. 515-530 (Springer, Berlin, 2004, edited by B. Kramer).

“Electronic effects determining the formation of ferromagnetic $\text{III}_{1-x}\text{Mn}_x\text{V}$ alloys during epitaxial growth,” T. Wojtowicz, J.K. Furdyna, X. Liu, K.M. Yu and W. Walukiewicz, *Physica E: Low-dimensional Systems and Nanostructures* 25, 171-180 (2004).

“Fermi level effects on Mn incorporation in modulation-doped ferromagnetic $\text{III}(1-x)\text{Mn}(x)\text{V}$ heterostructures,” J.K. Furdyna, T. Wojtowicz, X. Liu, K.M. Yu, W. Walukiewicz, I. Vurgaftman, and J.R. Meyer, *Journal of Physics - Condensed Matter* 16, S5499-S5508 (2004).

Garg, Umesh

“The Isoscalar Giant Dipole Resonance: A Status Report,” U. Garg, *Nucl. Phys. A* 731, 3-14 (2004).

“The effect of deformation in the isoscalar giant dipole resonance,” M. Itoh, H. Sakaguchi, M. Uchida, T. Ishikawa, T. Kawabata, T. Murakami, H. Takeda, T. Taki, S. Terashima, N. Tsukahara, Y. Yasuda, M. Yosoi, U. Garg, M. Hedden, B. Kharraja, M. Koss, B.K. Nayak, S. Zhu, H. Fujimura, M. Fujiwara, K. Hara, H.P. Yoshida, H. Akimune, M.N. Harakeh, and M. Volkerts, *Nucl. Phys. A* 731, 41-48 (2004).

“Particle decay of the isoscalar giant dipole resonance in ^{208}Pb ,” M. Hunyadi, C. Bäumer, A.M. van den Berg, N. Blasi, M. Csatlós, L. Csige, B. Davids, U. Garg, J. Gulyás, M.N. Harakeh, M. de Huu, B.C. Junk, A. Krasznahorkay, S. Rakers, D. Sohler, and H.J. Wörtche, *Nucl. Phys. A* 731, 49-56 (2004).

“Deformation effects in ^{185}Au ,” P. Joshi, A. Kumar, I.M. Govil, R.P. Singh, G. Mukherjee, S. Muralithar, R.K. Bhowmik, and U. Garg, *Phys. Rev. C* 69, 044304-044308 (2004).

“Systematics of the bimodal isoscalar giant dipole resonance,” M. Uchida, H. Sakaguchi, M. Itoh, M. Yosoi, T. Kawabata, Y. Yasuda, H. Takeda, T. Murakami, S. Terashima, S. Kishi, U. Garg, P. Boutachkov, M. Hedden, B. Kharraja, M. Koss, B.K. Nayak, S. Zhu, M. Fujiwara, H. Fujimura, H.P. Yoshida, K. Hara, H. Akimune, and M.N. Harakeh, *Phys. Rev. C* 69, 051301-1 to 051301-5 (2004).

“Experimental study of nuclear structure of ^{91}Mo at high spin,” S. Ray, N.S. Pattabiraman, R. Goswami, S.S. Ghugre, A.K. Sinha and U. Garg, Phys. Rev. C69, 054314-1 to 054314-8 (2004).

“Excitation energies and spins of the yrast superdeformed band in ^{191}Hg ,” S. Siem, P. Reiter, T.L. Khoo, T. Lauritsen, P.-H. Heenen, M.P. Carpenter, I. Ahmad, H. Amro, I.J. Calderin, T. Døssing, T. Duguet, S.M. Fischer, U. Garg, D. Gassmann, G. Hackman, F. Hannachi, K. Hauschild, R.V.F. Janssens, B. Kharraja, A. Korichi, I-Y. Lee, A. Lopez-Martens, A.O. Macchiavelli, E.F. Moore, D. Nisius, and C. Schück, Phys. Rev. C70, 014303 (2004).

“Lifetime measurements of microsecond isomers in the N=48 nuclei ^{88}Zr and ^{90}Mo using recoil-isomer tagging,” A. Chakraborty, Krishichayan, S.S. Ghugre, R. Goswami, S. Mukhopadhyay, N.S. Pattabiraman, S. Ray, A.K. Sinha, S. Sarkar, P.V. Madhusudhana Rao, U. Garg, S.K. Basu, L. Chaturvedi, A. Dhal, R.K. Sinha, I.M. Govil, M.B. Chatterjee, M. Saha Sarkar, R.K. Bhowmik, A. Jhingan, N. Madhavan, S. Muralithar, S. Nath, R.P. Singh, and P. Sugathan, Phys. Rev. C70, 014311 (2004).

“High-spin states in the odd-odd nucleus ^{146}Tb ,” Krishichayan, A. Chakraborty, S.S. Ghugre, R. Goswami, S. Mukhopadhyay, N.S. Pattabiraman, S. Ray, A.K. Sinha, S. Sarkar, P.V. Madhusudhana Rao, U. Garg, S.K. Basu, B.K. Yogi, L. Chaturvedi, A. Dhal, R.K. Sinha, M. Saha Sarkar, S. Saha, R. Singh, R.K. Bhowmik, A. Jhingan, N. Madhavan, S. Muralithar, S. Nath, R.P. Singh, and P. Sugathan, Phys. Rev., C 70, 044315, (2004).

Garnavich, Peter M

“Evidence for Disappearing Dark Matter in Brane-World Cosmology,” G.J. Mathews, P.M. Garnavich, K. Ichiki, T. Kajino, and M. Yahiro in “SUGRA20: Proc. Int. Conf. 20 Years of SUGRA Search for SUSY and Unification,” P. Nath, Ed. (Rinton Press; New Jersey) pp. 510-516 (2004).

Görres, Joachim

“Gamma spectroscopy using two Clover detectors in close geometry,” S. Dababneh, N. Patronis, P.A. Assimakopoulos, J. Görres, M. Heil, F. Käppeler, D. Karamanis, S. O’Brien, and R. Reifarth, Nucl. Instr. and Meth. A517, 230-239 (2004).

“Complete structure determination of the astrophysically important nucleus Na-20 below the proton threshold,” D. Seweryniak, P.J. Woods, B. Blank, M.P. Carpenter, T. Davinson, S.J. Freeman, J. Görres, A. Heinz, R.V.F. Janssens, H. Mahmud, T.L. Khoo, Z. Liu, G. Mukherjee, E. Rehm, F. Sarazin, J. Shergur, M. Shawcross, S. Sinha, and A. Woehr, Phys. Lett. B590 (3-4) 170-175 (2004).

“The $N = Z$ rp-process waiting-point nucleus ^{68}Se and its astrophysical implications,” A. Wöhr, A. Aprahamian, P. Boutachkov, J.L. Galache, J. Görres, M. Shawcross, A. Teymurazyan, M.C. Wiescher, D.S. Brenner, C.N. Davids, S.M. Fischer, A.M. Heinz, R.V.F. Janssens, and D. Seweryniak, Nucl. Phys. A742, 349-362 (2004).

“Mass Measurement of ^{68}Se ,” A. Woehr, A. Aprahamian, P. Boutachkov, D.S. Brenner, S.M. Fischer, J.L. Galache, J. Goerres, A. Heinz, R.V.J. Janssens, M. Shawcross, D. Seweryniak, A. Teymurazyan, and M. Wiescher, Nucl. Phys. A742, 349-362 (2004).

“Low-energy radioactive ion beam induced nuclear reactions,” A.N. Ostrowski, A.C. Shotton, W. Bradfield-Smith, A.M. Laird, A. di Pietro, T. Davinson, S. Morrow, P.J. Woods, S. Sherubini, W. Galster, J.S. Graulich, P. Leleux, L. Michel, A. Ninane, J. Vervier, M. Aliotta, C. Cali, F. Cappuzzello, A. Cunsolo, C. Spitalieri, J. Görres, M. Wiescher, J. Rahighi, and J. Hinnefeld, Journal of Physics G: Nuclear and Particle Physics 24, 1553-1559 (2004).

“Reaction rate uncertainties and the production of ^{19}F in asymptotic giant branch stars,” M. Lugaro, C. Ugalde, A.I. Karakas, J. Görres, M. Wiescher, J.C. Lattanzio, R.C. Cannon, Astrophysical Journal 615, 934-946 (2004).

“Rates for reactions relevant to fluorine nucleosynthesis,” C. Ugalde, J. Görres, M. Lugano, M. Wiescher, Memorie della Societa Astronomica Italiana 75, 712-716 (2004).

Goussiou, Anna

“A Precision Measurement of the Mass of the Top Quark,” V.M. Abazov et al., (D0 Collaboration), Nature 429 – 638, e-Print Archive: hep-ex/0406031 (2004).

“Observation and Properties of the $X(3872)$ Decaying to $J/\psi \pi^+\pi^-$ in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93 162002, e-Print Archive: hep-ex/0405004 (2004).

“Search for Doubly Charged Higgs Boson Pair Production in the Decay to $\mu^+\mu^-\mu^+\mu^-$ in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93, 141801, e-Print Archive: hep-ex/0404015 (2004).

“Search for Pair Production of Light Scalar Top Quarks in p-pbar Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93, 011801, e-Print Archive: hep-ex/0404028 (2004).

“Combination of CDF and D0 Results on W Boson Mass and Width,” By CDF Collaboration and D0 Collaboration (V.M. Abazov et al.), Phys. Rev. D70, 092008, e-Print Archive: hep-ex/0311039 (2004).

“Search for 3- and 4- body decays of the Scalar Top Quark in Proton Anti-Proton Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Lett. B581, 147 (2004).

“Search for New Particles in the Two Jet Decay Channel with the D0 Detector,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. D69, 111101, e-Print Archive: hep-ex/0308033 (2004).

“Search for Narrow t-tbar Resonances in p-pbar Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 92, 221801, e-Print Archive: hep-ex/0307079 (2004).

Hildreth, Michael D.

“B Physics at D0,” M. D. Hildreth et al., (D0 Collaboration), Eur. Phys. J. C33, S192-S194 (2004).

“The Run IIB Trigger Upgrade For The D0 Experiment,” M. Abolins et al., IEEE Trans. Nucl. Sci. 51, 340-344 (2004).

“A Precision Measurement of the Mass of the Top Quark,” V.M. Abazov et al., (D0 Collaboration), Nature 429 638, e-Print Archive: hep-ex/0406031 (2004).

“Observation and Properties of the X(3872) Decaying to $J/\psi \pi^+ \pi^-$ in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93, 162002 e-Print Archive: hep-ex/0405004 (2004).

“Search for Doubly Charged Higgs Boson Pair Production in the Decay to $\mu^+ \mu^- \mu^+ \mu^-$ IN p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93 141801, e-Print Archive: hep-ex/0404015 (2004).

“Search for Pair Production of Light Scalar Top Quarks in p-pbar Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93 011801, e-Print Archive: hep-ex/0404028, (2004).

“Combination of CDF and D0 Results on W Boson Mass and Width,” by CDF Collaboration and D0 Collaboration (V.M. Abazov et al.), Phys. Rev. D70 092008, e-Print Archive: hep-ex/0311039 (2004).

“Search for 3- and 4-Body Decays of the Scalar Top Quark in Proton Anti-Proton Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Lett. B581, 147 (2004).

“Search for New Particles in the Two Jet Decay Channel with the D0 Detector,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. D69, 111101, e-Print Archive: hep-ex/0308033 (2004).

“Search for Narrow t-tbar Resonances in p-pbar Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 92 221801, e-Print Archive: hep-ex/0307079 (2004).

Jankó, Boldizsár

“Anomalous behavior of spin-wave resonances in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ thin films,” T.G. Rappoport, P. Redlinski, X. Liu, G. Zarand, B. Janko, and J.K. Furdyna, Phys. Rev. B69, No. 125213 (2004).

“Ratchet superconducting vortex cellular automata,” C.J.O. Reichhardt, C. Reichhardt, M.B.Hastings, et al., Physica C-Superconductivity and its Applications 404 (1-4): 266-272, (May 1, 2004).

Jessop, Colin Philip

“The Discovery of Microscopic Time Reversal Violations in the Decays of Neutral B Mesons,” I.I. Bigi, C. Jessop, J. LoSecco, Interactions, 20-23 (2004).

“Observation of direct CP violation in $B^0 \rightarrow K^+ \pi^-$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 131801 (arXiv:hep-ex/0407057) (2004).

“Measurement of time-dependent CP-violating asymmetries in $B^0 \rightarrow K^{*0} \gamma$ ($K^{*0} \rightarrow K^0(S) \pi^0$) decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 201801 (arXiv:hep-ex/0405082) (2004).

“Measurement of the $B \rightarrow X/s1+1-$ branching fraction with a sum over exclusive modes,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 081802, (arXiv:hep-ex/0404006) (2004).

“Measurement of the direct CP asymmetry in $b \rightarrow s \gamma$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 021804 (arXiv:hep-ex/0403035) (2004).

“Measurement of the branching fractions and CP-asymmetry of $B^- \rightarrow D^0(\text{CP}) K^-$ decays with the BaBar detector,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 202002 (arXiv:hep-ex/0311032) (2004).

“Measurement of the inclusive charmless semileptonic branching ratio of B mesons and determination of $|V(ub)|$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 071802 (arXiv:hep-ex/0307062) (2004).

“Search for the radiative decays $B \rightarrow \rho \gamma$ and $B^0 \rightarrow \omega \gamma$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 111801 (arXiv:hep-ex/0306038) (2004).

“Measurement of the $B0 \rightarrow K^*(1430)0$ gamma and $B^+ \rightarrow K^*(1430)^+$ gamma branching fractions,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 091105 (arXiv:hep-ex/0409035) (2004).

Johnson, Walter R.

“Accurate Relativistic Calculations Including QED Contributions for Few-Electron Systems,” W.R. Johnson, K.T. Cheng, and M.H. Chen, in Relativistic Electronic Structure Theory-Part II, Applications (Theoretical and Computational Chemistry #14) Chapter 3, Edited by Peter Schwerdtfeger, Elsevier, ISBN 0444512993 (2004).

“Finite-field evaluation of the Lennard-Jones atom-wall interaction constant C_3 for alkali-metal atoms,” W.R. Johnson, V.A. Dzuba, U.I. Safronova, and M.S. Safronova, Phys. Rev. A69, 022508, 1-6 (2004).

“Relaxation effect and radiative corrections in many-electron atoms,” A. Derevianko, B. Ravaine, and W.R. Johnson, Phys. Rev. A69, 054502, 1-4 (2004).

“Nondipole effects in the photoionization of Xe $4d_{5/2}$ and $4d_{3/2}$: Evidence for quadrupole satellites,” O. Hemmers, R. Guillemin, D. Rolles, A. Wolska, D.W. Lindle, K.T. Cheng, W.R. Johnson, H.L. Zhou, and S.T. Manson, Phys. Rev. Lett. 93, 113001, 1-4 (2004).

“Excitation energies, oscillator strengths, and lifetimes of levels along the gold isoelectronic sequence,” U.I. Safronova and W.R. Johnson, Phys. Rev. A69, 052511, 1-9 (2004).

“Off-diagonal hyperfine interaction between the $6p_{1/2}$ and $6p_{3/2}$ levels in ^{113}Cs ,” W.R. Johnson, H.C. Ho, C.E. Tanner, and A. Derevianko, Phys. Rev. A70, 014501, 1-3 (2004).

Kolata, James J.

“Elastic scattering of ^{10}Be on ^{208}Pb near the Coulomb barrier,” J.J. Kolata, E.F. Aguilera, F.D. Becchetti, Y. Chen, P.A. DeYoung, H. García-Martínez, J.D. Hinnefeld, J.H. Lupton, E. Martinez-Quiroz, and G. Peaslee, Phys. Rev. C69, 047601 (2004).

“Investigation of the α -cluster structure of ^{22}Ne and ^{22}Mg ,” V.Z. Goldberg, G.V. Rogachev, W.H. Trzaska, J.J. Kolata, A. Andreyev, C. Angulo, M.J.G. Borge, S. Cherubini, G. Chubarian, G. Crowley, P. Van Duppen, M. Gorska, M. Gulino, M. Huyse, P. Jesinger, K.-M. Källman, M. Lattuada, T. Lönnroth, M. Mutterer, R. Raabe, S. Romano, M.V. Rozhkov, B.B. Skorodumov, C. Spitaleri, O. Tengblad, and A. Tumino, Phys. Rev. C69, 024602 (2004).

“Resonance scattering $^8\text{He} + p$ and $T=5/2$ states in ^9Li ,” 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, and R. Wolski, Nucl. Phys. A734, 349-356 (2004).

“Analog states of ^7He observed via the $^6\text{He}(p,n)$ reaction,” G.V. Rogachev, P. Boutachkov, A. Aprahamian, F.D. Becchetti, Y. Chen, G. Chubarian, P.A. DeYoung, V.Z. Goldberg, J.J. Kolata, G.F. Peaslee, M. Quinn, B.B. Skorodumov, and A. Wöhr, Phys. Rev. Lett. 92, 232502 (2004).

“ $^{209}\text{Bi}(^6\text{He}, \alpha)$ reaction mechanisms studied near the Coulomb barrier using n-alpha coincidence measurements,” J.P. Bychowski, P.A. DeYoung, B.B. Hilldore, J.D. Hinnefeld, A. Vida, F.D. Becchetti, J. Lupton, T.W. O’Donnell, J.J. Kolata, G. Rogachev, M. Hencheck, Phys. Lett. B596, 26-31 (2004).

“The Structure of Exotic ^7He and ^9He ,” 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. Wöhr, R. Wolski, Proceedings of Radioactive Nuclear Beams 6, Argonne National Laboratory, Argonne, Illinois, September 22-26, 2003, Nuclear Physics A746, 229-235 (2004).

Kolda, Christopher F.

“Review of Particle Physics,” by S. Eidelman, et al., Phys. Lett. B592, 1 (2004).

“Minimal Flavor Violation,” by C. Kolda, Journal of Korean Physical Society 45: S381 (2004).

“B(D) ? Phi K(S) and Supersymmetry,” by G. Kane, P. Ko, C. Kolda, J. Park, H. Wang and L. Wang, Phys. Rev. D70, 035015 (2004).

LaVerne, Jay A.

“Radiation Chemical Effects of Heavy Ions,” in ‘Charged Particle and Photon Interactions with Matter: Chemical, Physicochemical, and Biological Consequences with Applications,’ J.A. LaVerne, edited by A. Mozumder and Y. Hitano, Marcell-Dekker Inc., Chapter 14 (2004).

“Hydrated Electron Yields in the Radiolysis of Water with Protons,” J.A. LaVerne, I. Stefanic, S.M. Pimblott, Proceedings of the Japanese Society for Radiation Chemistry, H. Kozumi, ed., Hokkaido University (October 29-31, 2004).

Livingston, A. E.

“ $1s2s2p^23p^6L-1s2p^33p^6P$ transitions in O IV, F V and Ne VI,” B. Lin, H.G. Berry, T. Shibata, A.E. Livingston, H.-P. Garnir, T. Bastin and J. Désesquelles, J. of Phys. B, At. Mol. Opt. Phys. 37, 13, 2797-2809 (2004).

LoSecco, John M.

“Detector depth dependence of the high energy atmospheric neutrino flux,” J.M. LoSecco, Phys. Rev. D70, 097301 (2004).

“Exotic meson production in the $f_1(1285)\pi^-$ system observed in the reaction $\pi^-p \rightarrow \eta\pi^+\pi^-\pi^-p$ at 18 GeV/c,” J. Kuhn et al., Phys. Lett. B595, 109-117 (2004).

“The Discovery of Microscopic Time Reversal Violations in the Decays of Neutral B Mesons,” I.I. Bigi, C. Jessop, J. LoSecco, Interactions, Pages 20-23 (2004).

“Measurement of the branching fractions for inclusive B- and anti-B0 decays to flavor-tagged D, D/s and Lambda/c,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 091106 (arXiv:hep-ex/0408113) (2004).

“Search for D0 – anti-D0 mixing using semileptonic decay modes,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 091102 (arXiv:hep-ex/0408066) (2004).

“Study of $e^+e^- \rightarrow \pi^+\pi^-\pi^0$ process using initial state radiation with BaBar,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 072004, (arXiv:hep-ex/0408078) (2004).

“Measurement of neutral B decay branching fractions to $K0(S)\pi^+\pi^-$ final states,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 091103 (arXiv:hep-ex/0408054) (2004)

“Study of B \rightarrow D/sJ(*)+ anti-D(*) decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 181801 (arXiv:hep-ex/0408041) (2004).

“Search for flavor-changing neutral current and lepton flavor violating decays of D0 \rightarrow $1+1^-$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 191801 (arXiv:hep-ex/0408023) (2004).

“Search for the decay B0 \rightarrow J/psi gamma,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 091104 (arXiv:hep-ex/0408018) (2004).

“Measurement of the B0 \rightarrow Phi K0 decay amplitudes,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 231804 (arXiv:hep-ex/0408017) (2004).

“Observation of direct CP violation in $B^0 \rightarrow K^+ \pi^-$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 131801 (arXiv:hep-ex/0407057) (2004).

“Detector depth dependence of the high energy atmospheric neutrino flux,” J.M. LoSecco, Phys. Rev. D70, 097301 (arXiv:hep-ex/0406072) (2004).

“Branching fractions and CP asymmetries in $B^0 \rightarrow K^+ K^- K^0(S)$ and $B^+ \rightarrow K^+ K^0(S)$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 181805 (arXiv:hep-ex/0406005) (2004).

“Measurement of time-dependent CP-violating asymmetries in $B^0 \rightarrow K^{*0} \gamma$ ($K^{*0} \rightarrow K^0(S) \pi^0$) decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 201801 (arXiv:hep-ex/0405082) (2004).

“Search for B^0 decays to invisible final states and to ν anti- ν γ ,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 091802 (arXiv:hep-ex/0405071) (2004).

“Study of the decay B^0 (anti- B^0) $\rightarrow \rho^+ \rho^-$ and constraints on the CKM angle α ,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 231801 (arXiv:hep-ex/0404029) (2004).

“Determination of the branching fraction for $B \rightarrow X/c 1 \nu$ decays and of $|V(cb)|$ from hadronic mass and lepton energy moments,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 011803 (arXiv:hep-ex/0404017) (2004).

“Measurement of the $B \rightarrow X/s 1+ 1-$ branching fraction with a sum over exclusive modes,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 081802 (arXiv:hep-ex/0404006) (2004).

“Measurement of the ratio of decay amplitudes for anti- $B^0 \rightarrow J/\psi K^{*0}$ and $B^0 \rightarrow J/\psi K^{*0}$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 081801 (arXiv:hep-ex/0404005) (2004).

“Searches for B^0 decays to combinations of charmless isoscalar mesons,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 181806 (arXiv:hep-ex/0403046) (2004).

“Measurement of the direct CP asymmetry in $b \rightarrow s \gamma$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 021804 (arXiv:hep-ex/0403035) (2004).

“Measurements of moments of the hadronic mass distribution in semileptonic B decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 111103 (arXiv:hep-ex/0403031) (2004).

“Measurement of the electron energy spectrum and its moments in inclusive $B \rightarrow X e \nu$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 111104 (arXiv:hep-ex/0403030) (2004).

“Measurement of the time-dependent CP asymmetry in the $B^0 \rightarrow \Phi K^0$ decay,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 071801 (arXiv:hep-ex/0403026) (2004).

“B meson decays to η (η') K^* , η (η') ρ , η (η') π^0 , $\omega \pi^0$, and $\Phi \pi^0$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 032006 (arXiv:hep-ex/0403025) (2004).

“Branching fraction measurements of $B \rightarrow \eta/c K$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 011101 (arXiv:hep-ex/0403007) (2004).

“Search for the decay $B^0 \rightarrow p \bar{p}$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 091503 (arXiv:hep-ex/0403003) (2004).

“Limits on the decay rate difference of neutral-B mesons and on CP, T, and CPT violation in B^0 anti- B^0 oscillations,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 012007 (arXiv:hep-ex/0403002) (2004).

“Measurements of CP violating asymmetries in $B^0 \rightarrow K(S)^0 \pi^0$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 131805 (arXiv:hep-ex/0403001) (2004).

“Observation of the decay $B \rightarrow J/\psi \eta K$ and search for $X(3872) \rightarrow J/\psi \eta$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 041801 (arXiv:hep-ex/0402025) (2004).

“Search for $B^{+-} \rightarrow (K^- \pi^+) (D) K^{+-}$ and upper limit on the $b \rightarrow u$ amplitude in $B^{+-} \rightarrow D K^{+-}$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 131804 (arXiv:hep-ex/0402024) (2004).

“Study of $B^{+-} \rightarrow J/\psi \pi^{+-}$ and $B^{+-} \rightarrow J/\psi K^{+-}$ decays: Measurement of the ratio of branching fractions and search for direct CP violations,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 241802, (arXiv:hep-ex/0401035) (2004).

“Measurement of the B^+/B^0 production ratio from the Upsilon ($4S$) meson using $B^+ \rightarrow J/\psi K^+$ and $B^0 \rightarrow J/\psi K^0(S)$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 071101 (arXiv:hep-ex/0401028) (2004).

“Study of high momentum η' production in $B \rightarrow \eta' X/s$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 061801 (arXiv:hep-ex/0401006) (2004).

“Exotic meson production in the $f_1(1285) \pi$ -system observed in the reaction $\pi^- p \rightarrow \eta \pi^+ \pi^- p$ at 18-GeV/c,” J. Kuhn et al., (E852 Collaboration), Phys. Lett. B595, 109 (arXiv:hep-ex/0401004) (2004).

“Search for the rare leptonic decay $B^+ \rightarrow \mu^+ \nu/\mu$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 221803 (2004) and Phys. Rev. Lett. 93, 189902 (arXiv:hep-ex/0401002) (2004).

“Measurements of branching fractions and CP-violating asymmetries in B meson decays to charmless two-body states containing a K_0 ,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 201802 (arXiv:hep-ex/0312055) (2004).

“Measurement of the branching fraction for $B^- \rightarrow D_0 K^{*-}$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 051101 (arXiv:hep-ex/0312051) (2004).

“Search for lepton flavor violation in the decay $\tau^- \rightarrow 1^- 1^+ 1^-$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 121801 (arXiv:hep-ex/0312027) (2004).

“Measurement of branching fractions and charge asymmetries in $B^{+-} \rightarrow \rho^{+-} \pi^0$ and $B^{+-} \rightarrow \rho^0 \pi^{+-}$ decays, and search for $B_0 \rightarrow \rho^0 \pi^0$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 93, 051802 (arXiv:hep-ex/0311049) (2004).

“Measurements of the mass and width of the η/c meson and of an $\eta/c(2S)$ candidate,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 142002 (arXiv:hep-ex/0311038) (2004).

“Limits on the decay-rate difference of neutral B mesons and on CP, T, and CPT violation in B_0 anti- B_0 oscillations,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 181801 (arXiv:hep-ex/0311037) (2004).

“Measurement of the branching fractions and CP-asymmetry of $B^- \rightarrow D_0(\text{CP}) K^-$ decays with the BaBar detector,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 202002 (arXiv:hep-ex/0311032) (2004).

“Observation of the decay $B_0 \rightarrow \rho^+ \rho^-$ and measurement of the branching fraction and polarization,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 031102 (arXiv:hep-ex/0311017) (2004).

“Observation of $B_0 \rightarrow \omega K_0$, $B^+ \rightarrow \eta \pi^+$, and $B^+ \rightarrow \eta K^+$ and study of related decays,” B. Aubert et al. (BABAR Collaboration) Phys. Rev. Lett. 92, 061801 (arXiv:hep-ex/0311016) (2004).

“Measurement of the average Phi multiplicity in B meson decay,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 052005 (arXiv:hep-ex/0311008) (2004).

“Observation of a narrow meson decaying to $D/s^+ \pi^0 \gamma$ at a mass of $2.458\text{-GeV}/c^{*2}$,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 031101 (arXiv:hep-ex/0310050) (2004).

“Measurement of time-dependent CP asymmetries and constraints on $\sin(2\beta + \gamma)$ with partial reconstruction of $B_0 \rightarrow D^{*-+} \pi^{+-}$ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 251802 (arXiv:hep-ex/0310037) (2004).

“Measurement of branching fractions of color-suppressed decays of the anti-B⁰ meson to D^{(*)0} π⁰, D^{(*)0} η, D^{(*)0} ω, and D⁰ η,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 032004 (arXiv:hep-ex/0310028) (2004).

“J/ψ production via initial state radiation in e⁺ e⁻ → μ⁺ μ⁻ γ at an e⁺ e⁻ center-of-mass energy near 10.6-GeV,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 011103 (arXiv:hep-ex/0310027) (2004).

“Measurement of the branching fraction for B⁺ → χ_{c0} K⁺,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 071103 (arXiv:hep-ex/0310015) (2004).

“Measurement of sin (2 β) using hadronic J/ψ decays,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 052001 (arXiv:hep-ex/0309039) (2004).

“Measurements of branching fractions in B → Φ K and B → Φ π and search for direct CP violation in B⁺ → Φ K⁺,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D69, 011102 (arXiv:hep-ex/0309025) 2004.

“Measurement of time-dependent CP asymmetries in B⁰ → D^{(*)±} π[±] decays and constraints on sin (2 β + γ),” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 251801 (arXiv:hep-ex/0309017) (2004).

“Measurements of the branching fractions of charged B decays to K⁺ π⁺ π⁺ final states,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 092001 (arXiv:hep-ex/0308065) (2004).

“Measurement of the branching fraction and polarization for the decay B⁻ → D^{0*} K⁻,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 141801 (arXiv:hep-ex/0308057) (2004).

“Measurement of the B⁰ → K^{*2}(1430)⁰ γ and B⁺ → K^{*2}(1430)⁺ γ branching fractions,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. D70, 091105 (arXiv:hep-ex/0409035) (2004).

“Measurement of time dependent CP asymmetry in B⁰ → D^{(*)±} π[±] decays and constraints on |sin (2 β + γ)|,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 251801 (arXiv:hep-ex/0308018) (2004).

“Measurement of the inclusive charmless semileptonic branching ratio of B mesons and determination of |V_{ub}|,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 071802 (arXiv:hep-ex/0307062) (2004).

“Search for the radiative decays B → ρ γ and B⁰ → ω γ,” B. Aubert et al. (BABAR Collaboration), Phys. Rev. Lett. 92, 111801 (arXiv:hep-ex/0306038) (2004).

“Inconsistencies in interpreting the atmospheric neutrino anomaly,” J.M. LoSecco, *Pramana* 62, 635 (arXiv:hep-ph/0305022) (2004).

“Studies of radiative penguin B decays at BaBar,” J.M. LoSecco, *Pramana* 62, 583 (arXiv:hep-ex/0305002) (2004).

Marshalek, Eugene R.

“Commentary on self-consistent cranking plus RPA,” E.R. Marshalek, *J. Phys. G: Nucl. Part. Phys.* 30 1861-1891 (2004).

Mathews, Grant J.

“Constraints on Models for TeV Gamma Rays from Gamma-Ray Bursts,” P.C. Fragile, G.J. Mathews, J. Poirier, and T. Totani, *Astroparticle Physics* 20, 591-607 (2004).

“Flash-Driven Convective Mixing in Low-Mass, Metal-Deficient Asymptotic Giant Branch Stars: A New Paradigm for Lithium Enrichment and a Possible *s*-Process,” N. Iwamoto, T. Kajino, G.J. Mathews, M.Y. Fujimoto, and W. Aoki, *Astrophys. J.* 602, 377-388 (2004).

“Chemical Evolution of Mg Isotopes versus the Time Variation of the Fine Structure Constant,” T. Ashenfelter, G.J. Mathews, and K.A. Olive, *Phys. Rev. Lett.* 92, 041102 (2004).

“Evidence for Disappearing Dark Matter in Brane-World Cosmology,” G.J. Mathews, P.M. Garnavich, K. Ichiki, T. Kajino, and M. Yahiro in “SUGRA20: Proc. Int. Conf. 20 Years of SUGRA Search for SUSY and Unification,” P. Nath, Ed. (Rinton Press; New Jersey) pp. 510-516 (2004).

“Amplification of Interstellar Magnetic Fields by Supernova-driven Turbulence” D.S. Balsara; J. Kim, M.-M. Mac Low, and G.J. Mathews, *The Astrophysical Journal* 617, 339-349 (2004).

“The Fine-Structure Constant as a Probe of Chemical Evolution and Asymptotic Giant Branch Nucleosynthesis in Damped Lyalpha Systems,” T.P. Ashenfelter, G.J. Mathews, and K.A. Olive, *The Astrophysical Journal* Vol. 615, 82-97 (2004).

“Constraints on resonant particle production during inflation from the matter and CMB power spectra,” G.J. Mathews, D.J. Chung, K. Ichiki, T. Kajino, and M. Orito, *Physical Review* D70, 083505 (2004).

“White Dwarfs near Black Holes: A New Paradigm for Type I Supernovae,” J.R. Wilson and G.J. Mathews, *The Astrophysical Journal* 610, 368-377 (2004).

“Neutrino Effects before, during, and after the Freezeout of the r-Process,” M. Terasawa, K. Langanke, T. Kajino, G.J. Mathews, and E. Kolbe, *The Astrophysical Journal* **608**, 470-479 (2004).

“Nucleosynthesis in Supernovae and the Early Universe,” T. Kajino, T. Sasaqui, M. Orito, K. Otsuki, G.J. Mathews, S. Honda, W. Aoki, and S. Chiba, in *Tours Symposium on Nuclear Physics V; Tours 2003*, AIP Conference Proceedings, Vol. 704, 488-500 (2004).

“Fusion Reactions in Supernovae and the Early Universe,” T. Kajino, T. Sasaqui, K. Otsuki, K. Ichiki; M. Orito, G.J. Mathews, S. Chiba, *Progress of Theoretical Physics Supplement*, No. 154, 301-308 (2004).

“An Update on the Hot Supernova Bubble r-Process,” G.J. Mathews, K. Otsuki, J.R. Wilson, and H.E. Dalhed, in *Proceedings of the First Argonne/MSU/JINA/INT RIA Workshop on The r-Process: The Astrophysical Origin of the Heavy Elements and Related Rare Isotope Accelerator Physics*, (World Scientific Publishing: Singapore) 196-203 (2004).

“Origin and Evolution of Matter in Brane World Cosmology,” in *Origin and Evolution of Galaxies 2003*, M. Terasawa, et al., eds., (World Scientific: Singapore) 3-17 (2004).

Merz, James L.

“Nanoindentation and Near-Field Spectroscopy of Single Semiconductor Quantum Dots,” A.M. Mintairov, K. Sun, J.L. Merz, C. Li, P.A. Blagnov, A.S. Vlasov, D.A. Vinokurov, O.V. Kovalenkov, V. Tokranov, and S. Oktyabrsky, *Physical Review* **B69**, 155306 (2004).

“Near-field Magneto-photoluminescence of quantum-dot-like composition fluctuations in GaAsN and InGaAsN alloys,” A.M. Mintairov, P.A. Blagnov, J.L. Merz, V.M. Ustinov, A.S. Vlasov, A.R. Kovsh, J.S. Wang, L. Wei, and J.Y. Chi, *Physica* **E21**, 385-389 (2004).

“Low-dimensional Systems and Nanostructures,” *Proc. 11th Int. Conf. on Modulated Semiconductor Structures*, Nara, Japan, July 2003; edited by Y. Arakawa, H. Ohno, K. Hirakawa, and M. Tanaka (Elsevier 2004).

“Near-Field Magneto-Photoluminescence of Single Self-Organized Quantum Dots,” A.M. Mintairov, A.S. Vlasov, and J.L. Merz, *Progress in Compound Semiconductor Materials III – Electronic and Optoelectronic Applications*, edited by D. Friedman, M.O. Manasreh, I. Buyanova, F.D. Auret, and A. Munkholm; *Proceedings of the Fall Meeting of the Materials Research Society, Boston Mass, December 2003*, (Mater. Res. Soc., Warrendale, PA; 2004) Vol. 799, 351-356 (2004).

“Luminescence anisotropy of InGaP layers grown by liquid phase epitaxy,” P.T. Prutskij, R.-A Brito-Orta, A. Mintairov, T. Kosel, J. Merz, *J. of Physics-D Applied-Physics* **37**(11) 1563-8 (2004).

Pimblott, Simon M.

“Hydrated electron yields in the proton radiolysis of water,” J.A. LaVerne, I. Stefanic and S.M. Pimblott, *Proceeding of the Japanese Radiation Chemistry Society* (2004).

“Modeling of the physicochemical and chemical processes in the interaction of fast charged particles with matter,” in ‘Charged Particle and Photon Interactions with Matter: Chemical, Physicochemical, and Biological Consequences with Applications,’ S.M. Pimblott and A. Mozumder, edited by A. Mozumder and Y. Hitano, Marcell-Dekker Inc., Chapter 4 (2004).

“Yields and migration distances of reducing equivalents in the radiolysis of silica nanoparticles,” B.H. Milosavljevic, S.M. Pimblott and D. Meisel, *J. Phys. Chem. B* 108, 6996-7001 (2004).

Poirier, John A.

“Constraints on models for TeV gamma rays from gamma-ray bursts,” P.C. Fragile, G.J. Mathews, J. Poirier, T. Totani, *Astroparticle Physics* 20, 591-607 (2004).

Rettig, Terrence W.

“Upper Limit for CH₄ in the protostellar disk toward HL Tau,” E. Gibb, T. Rettig, S. Brittain, R. Haywood, T. Simon, C. Kulesa, *ApJL*, 113-116 (2004).

“Discovery of CO gas in the inner disk of TW Hydrae,” T. Rettig, J. Haywood, S. Brittain, T. Simon, C. Kulesa, *ApJ*, 616 (2004).

“Infrared H₃⁺ line absorption toward LkH_101,” S. Brittain, T. Simon, T. Rettig, C. Kulesa, 2003, *ApJ*, 911-916 (May 2004).

“HL Tau, the missing dust,” T. Rettig, S. Brittain, T. Simon, C. Kulesa, J. Haywood, in ‘The Search for Other Worlds,’ AIP Conf. Series, Vol 713, eds. S. Holt and D. Deming (AIP, Melville, NY) 107-110 (2004).

Ruchti, Randal C.

“On the narrow dip structure at 1.9 GeV/c² in diffractive photoproduction,” P.L. Frabetti et al., (J.M. Bishop, N.M. Cason, C.J. Kennedy, G.N. Kim, T.F. Lin, D.L. Pusejlic, R.C. Ruchti, W.D. Shephard, J.A. Swiatek, Z.Y. Wu)-I.N.F.N. Bologna-Colorado-Fermilab-I.N.F.N. Frascati-Illinois-I.N.F.N. Milan-Northwestern-I.N.F.N. Pavia-Puerto Rico-California Davis-South Carolina-Vanderbilt-North Carolina Asheville-Tennessee-Korea Collaboration, Phys. Lett. B578, 290-296 (2004).

Proceedings of the 8th Conference: Astroparticle, Particle and Space Physics, Detectors and Medical Physics Applications, M. Barone, E. Borchini, C. LeRoy, P-G Rancoita, P-L Riboni, and R. Ruchti, Eds, World Scientific (2004).

“Scintillators and wavelength shifters for the detection of ionizing radiation”, M. Albrecht, K. Andert, P. Anselmino, M. Jensen, N. Kamat, D. Karmgard, B. Marchant, J. Marchant, M. McKenna, A. Rozzi, R. Ruchti, A. Slusher, R. Sommese, T. Sparks, M. Vigneault, V. Clendenen, C. Hurlbut, Proceedings of the 8th Conference: Astroparticle, Particle and Space Physics, Detectors and Medical Physics Applications, M. Barone, E. Borchini, C. LeRoy, P-G Rancoita, P-L Riboni, and R. Ruchti, Eds, World Scientific, 502-511 (2004).

“Accelerator Developments,” R. Ruchti, K. Golwitzer, S. Meyers, C. Pagani, and K. Yokoya, Proceedings of the 8th Conference: Astroparticle, Particle and Space Physics, Detectors and Medical Physics Applications, M. Barone, E. Borchini, C. LeRoy, P-G Rancoita, P-L Riboni, and R. Ruchti, Eds, World Scientific, 527-532 (2004).

“A Precision Measurement of the Mass of the Top Quark,” V.M. Abazov et al. (D0 Collaboration), Nature 429, 638, e-Print Archive: hep-ex/0406031 (2004).

“Observation and Properties of the X(3872) Decaying to J/ψ π⁺π⁻ IN p-pbar Collisions at √s = 1.96 TeV,” V.M. Abazov et al., (D0 Collaboration) Phys. Rev. Lett. 93, 162002, e-Print Archive: hep-ex/0405004 (2004).

“Search for Doubly Charged Higgs Boson Pair Production in the Decay to μ⁺μ⁻μ⁺μ⁻ IN p-pbar Collisions at √s = 1.96 TeV,” V.M. Abazov et al., (D0 Collaboration) Phys. Rev. Lett. 93 141801, e-Print Archive: hep-ex/0404015 (2004).

“Search for Pair Production of Light Scalar Top Quarks in p-pbar Collisions at √s = 1.8 TeV,” V.M. Abazov et al., (D0 Collaboration) Phys. Rev. Lett. 93, 011801, e-Print Archive: hep-ex/0404028 (2004).

“Combination of CDF and D0 Results on W Boson Mass and Width,” By CDF Collaboration and D0 Collaboration, (V.M. Abazov et al.) Phys. Rev. D70, 092008, e-Print Archive: hep-ex/0311039 (2004).

“Search for 3- and 4-Body Decays of the Scalar Top Quark in Proton Anti-Proton Collisions at √s = 1.8 TeV,” V.M. Abazov et al., (D0 Collaboration) Phys. Lett. B581, 147 (2004).

“Search for New Particles in the Two Jet Decay Channel with the D0 Detector,”
V.M. Abazov et al., (D0 Collaboration) Phys. Rev. D69, 111101, e-Print Archive: hep-
ex/0308033 (2004).

“Search for Narrow t-tbar Resonances in p-pbar Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et
al., (D0 Collaboration) Phys. Rev. Lett. 92, 221801, e-Print Archive: hep-ex/0307079 (2004).

Ruggiero, Steven T.

“Dilute Al-Mn Alloys for Superconductor Device Applications,” S.T. Ruggiero, A. Williams, W.H. Rippard, A.M. Clark, S.W. Deiker, B.A. Young, L.R. Vale, and J.N. Ullom, Nucl. Instr. and Meth. A520, 274-276 (2004).

“Using ion implantation to adjust the transition temperature of superconducting films,” B.A. Young, J.R. Williams, S.W. Deiker, S.T. Ruggiero, B. Cabrera, Nucl. Instr. and Meth. A520, 307-10 (2004).

“Dilute Al-Mn Alloys for Low-Temperature Device Applications,” S.T. Ruggiero, A. Williams, W.H. Rippard, A. Clark, S.W. Deiker, L.R. Vale, and J.N. Ullom, J. Low Temp. Phys. 134, 973-984 (2004).

“Practical Tunneling refrigerator,” A.M. Clark, A. Williams, S.T. Ruggiero, M.L. van den Berg, J.N. Ullom, Appl. Phys. Lett. 84, 625-7, (This is the cover article for the Jan. 26 edition of Applied Physics Letters) (2004).

“Transition Edge Sensor Using Dilute AlMn Alloys,” S.W. Deiker, W. Doriese, G.C. Hilton, K.D. Irwin, W.H. Rippard, J.N. Ullom, L.R. Vale, S.T. Ruggiero, A. Williams, and B.A. Young, Appl. Phys. Lett. 85, 2137-9 (2004).

Sakimoto, Philip J.

“The NASA Office of Space Science Education and Public Outreach Program,” J. Rosendhal, P. Sakimoto, R. Pertzborn, and L. Cooper, Advances in Space Research 34, 2127-2135 (2004).

Sapirstein, Jonathan R.

“Radiative corrections to one-photon decays of hydrogenic ions,” J. Sapirstein, K. Pachucki and K.T. Cheng, Phys. Rev. A69, 022113 (2004).

“Accurate S-state helium wave functions in momentum space,” J. Sapirstein, Phys. Rev. A69, 042515 (2004).

Shephard, William D.

“On the narrow dip structure at $1.9 \text{ GeV}/c^2$ in diffractive photoproduction,” P.L. Frabetti et al., (J.M. Bishop, N.M. Cason, C.J. Kennedy, G.N. Kim, T.F. Lin, D.L. Pusejic, R.C. Ruchti, W.D. Shephard, J.A. Swiatek, Z.Y. Wu)-I.N.F.N. Bologna-Colorado-Fermilab-I.N.F.N. Frascati-Illinois-I.N.F.N. Milan-Northwestern-I.N.F.N. Pavia-Puerto Rico-California Davis-

South Carolina-Vanderbilt-North Carolina Asheville- Tennessee-Korea Collaboration, Phys.
Lett. B578, 290-296 (2004).

“Exotic meson production in the $f_1(1285)\pi^-$ system observed in the reaction $\pi^- p \rightarrow \eta\pi^+\pi^-\pi^- p$ at 18 GeV/c,” J. Kuhn et al., Notre Dame (T. Adams, J.M. Bishop, N.M. Cason, E.I. Ivanov, J.M. LoSecco, J.J. Manak, W.D. Shephard, D.L. Stienike, S.A. Taegar), Brookhaven, Florida State, Idaho State, I.H.E.P. Protvino, Massachusetts-Dartmouth, Moscow State, Northwestern, Rensselaer, Thomas Jefferson National Accelerator Facility Collaboration, Phys. Lett. B595, 109-117 (2004).

Tanner, Carol E.

“Off-diagonal hyperfine interaction between the $6p_{1/2}$ and $6p_{3/2}$ levels in ^{133}Cs ,” W.R. Johnson, H.C. Ho, C.E. Tanner, and A. Derevianko, Phys. Rev. A70, 014501, 1-3 (2004).

“Optical frequency measurements of $6s\ ^2S_{1/2} - 6p\ ^2P_{3/2}$ transitions in a ^{133}Cs atomic beam using a femtosecond laser frequency comb,” V. Gerginov, C.E. Tanner, S. Diddams, A. Bartels, L. Hollberg, Phys. Rev. A70, 042505, (2004).

“Optical frequency measurements of $6s\ ^2S_{1/2},\ ^2P_{3/2}$ transition in ^{133}Cs using an atomic beam and a femtosecond laser - /frequency comb,” V. Gerginov, C.E. Tanner, S.A. Diddams, A. Bartels, L. Hollberg, Lasers and Electro-Optics, 2004 (CLEO). Conference on, Vol. 1, 788-789 (May 17-19, 2004).

Wayne, Mitchell R.

“A Precision Measurement of the Mass of the Top Quark,” V.M. Abazov et al., (D0 Collaboration), Nature 429, 638, e-Print Archive: hep-ex/0406031 (2004).

“Observation and Properties of the $X(3872)$ Decaying to $J/\psi\ \pi^+\pi^-$ IN p-pbar Collisions at $\sqrt{s} = 1.96\ \text{TeV}$,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93, 162002, e-Print Archive: hep-ex/0405004 (2004).

“Search for Doubly Charged Higgs Boson Pair Production in the Decay to $\mu^+\mu^-\mu^+\mu^-$ IN p-pbar Collisions at $\sqrt{s} = 1.96\ \text{TeV}$,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93, 141801, e-Print Archive: hep-ex/0404015 (2004).

“Search for Pair Production of Light Scalar Top Quarks in p-pbar Collisions at $\sqrt{s} = 1.8\ \text{TeV}$,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 93, 011801, e-Print Archive: hep-ex/0404028 (2004).

“Combination of CDF and D0 Results on W Boson Mass and Width,” by CDF Collaboration and D0 Collaboration, (V.M. Abazov et al.), Phys. Rev. D70, 092008, e-Print Archive: hep-ex/0311039 (2004).

“Search for 3- and 4-Body Decays of the Scalar Top Quark in Proton Anti-Proton Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration) Phys. Lett. B581,147 (2004).

“Search for New Particles in the Two Jet Decay Channel with the D0 Detector,” V.M. Abazov et al., (D0 Collaboration) Phys. Rev. D69, 111101, e-Print Archive: hep-ex/0308033 (2004).

“Search for Narrow t-tbar Resonances in p-pbar Collisions at $\sqrt{s} = 1.8$ TeV,” V.M. Abazov et al., (D0 Collaboration), Phys. Rev. Lett. 92, 221801, e-Print Archive: hep-ex/0307079 (2004).

Wiescher, Michael C.F.

“Models for Type I X-ray Bursts with Improved Nuclear Physics,” S.E. Woosley, A. Heger, A. Cumming, R.D. Hoffman, J. Pruet, T. Rauscher, J.L. Fisker, H. Schatz, B.A. Brown, and M. Wiescher, The Astrophysical Journal Supplement Series 151, 75-102 (2004).

“Using a wide-beam ion source to produce large area sputtered films for low-energy laboratory studies of alpha capture cross-sections,” J.P. Greene, M.C. Wiescher, and M. Paul, Nuclear Instruments & Methods in Physics Research A521, 12-16 (2004).

“The Nuclear Reaction Waiting Points: ^{22}Mg , ^{26}Si , ^{30}S , and ^{34}Ar and Bolometrically Double-Peaked Type I X-Ray Bursts,” J.L. Fisker, F.-K. Thielemann, and M. Wiescher, The Astrophysical Journal 608, L61-64 (2004).

“Nuclear Astrophysics and Nuclei Far from Stability,” K. Langanke, F.-K. Thielemann and M. Wiescher, Lect. Notes Phys. 651, (Springer-Verlag, Berlin, Heidelberg) 383-467 (2004).

“Spectroscopic factors from direct proton capture,” C. Iliadis and M. Wiescher, Phys. Rev. C69, 064305(13) (2004).

“Revidierte Energieausbeute,” K. Langanke and M. Wiescher, Physik Journal 3, 7, 18-19 (2004).

“The $N = Z$ rp-process waiting-point nucleus ^{68}Se and its astrophysical implications,” A. Wöhr, A. Aprahamian, P. Boutachkov, J.L. Galache, J. Görres, M. Shawcross, A. Teymurazyan, M.C. Wiescher, D.S. Brenner, C.N. Davids, S.M. Fischer, A.M. Heinz, R.V.F. Janssens, and D. Seweryniak, Nucl. Phys. A742, 349-362 (2004).

“Low-energy radioactive ion beam induced nuclear reactions,” A.N. Ostrowski, A.C. Shotton, W. Bradfield-Smith, A.M. Laird, A. di Pietro, T. Davinson, S. Morrow, P.J. Woods, S. Sherubini, W. Galster, J.S. Graulich, P. Leleux, L. Michel, A. Ninane, J. Vervier, M. Aliotta, C. Cali, F. Cappuzzello, A. Cunsolo, C. Spitalieri, J. Görres, M. Wiescher, J. Rahighi, and J. Hinfefeld, Journal of Physics G: Nuclear and Particle Physics 24, 1553-1559 (2004).

“New experimental validation of the pulse height weighting technique for capture cross-section measurements,” U. Abbondanno, M. Wiescher et al., Nuclear Instruments and Methods in Physics Research A521, 454-467 (2004).

“Measurement of the n_TOF beam profile with a micromegas detector,” M. Pancin, M. Wiescher et al., Nuclear Instruments and Methods in Physics Research A524, 102-114 (2004).

“Neutron Capture Cross Section Measurement of ^{151}Sm at the CERN Neutron Time of Flight Facility (n_TOF),” U. Abbondanno, M. Wiescher in n_TOF Collaboration, Phys. Rev. Lett. 93, 16, 161103-1 (2004).

“The uncertainties in the $^{22}\text{Ne} + \alpha$ -capture reactions and magnesium production in intermediate-mass AGB stars,” A.I. Karakas, M. Lugaro, C. Ugalde, and M. Wiescher, Mem S.A. It. Vol. 73, 23 (2004).

“Mass Measurement of ^{68}Se ,” A. Woehr, A. Aprahamian, P. Boutachkov, D.S. Brenner, S.M. Fischer, J.L. Galache, J. Goerres, A. Heinz, R.V.J. Janssens, M. Shawcross, D. Seweryniak, A. Teymurazyan, and M. Wiescher, Nucl. Phys. A742, 349-362 (2004).

“Nuclear Structure Aspects in Nuclear Astrophysics,” A. Aprahamian, K. Langanke, and M. Wiescher, Progress in Part. Nucl. Phys. Vol. 54 (2004).

“Reaction rate uncertainties and the production of ^{19}F in asymptotic giant branch stars,” M. Lugaro, C. Ugalde, A.I. Karakas, J. Görres, M. Wiescher, J.C. Lattanzio, R.C. Cannon, Astrophysical Journal 615, 934-946 (2004).

“Rates for reactions relevant to fluorine nucleosynthesis,” C. Ugalde, J. Görres, M. Lugaro, M. Wiescher, Memorie della Societa Astronomica Italiana 75, 712-716 (2004).

Woehr, Andreas

“Radioactive ion beams in the region of ^{100}Sn and ^{78}Ni at the NSCL,” A. Stolz, A. Estrade, A.D. Davies, T.N. Ginter, P.T. Hosmer, E. Kwan, S.N. Liddick, P.F. Mantica, T.J. Mertzimekis, F.A. Montes, D.J. Morrissey, A.C. Morton, M. Ouellette, E. Pellegrini, P. Santi, H. Schatz, M. Steiner, A.E. Stuchberry, B.E. Tomlin, W.B. Walters, A. Woehr, O. Arndt, K.-L. Kratzf, B. Pfeiffer, Proceedings of the Fifth International Conference on Radioactive Nuclear Beams (RNB6), Argonne National Laboratory, Argonne, Illinois, September 22-26, 2003, Nuc. Phys. A 746, 54c-60c (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. Wöhr, and R. Wolski, Proceedings of the Fifth International Conference on Radioactive Nuclear Beams (RNB6), Argonne National Laboratory, Argonne, Illinois, September 22-26, 2003, *Nuc. Phys. A* 746, 229c-235c (2004).

“The $N=Z$ rp-Process Waiting-Point Nucleus ${}^{68}\text{Se}$ and its Astrophysical Implications,” A. Wöhr, A. Aprahamian, P. Boutachkov, J.L. Galache, J. Görres, M. Shawcross, A. Teymurazyan, M.C. Wiescher, D.S. Brenner, C.N. Davids, S.M. Fisher, A.M. Heinz, R.V.F. Janssens and D. Seweryniak, *Nuc. Phys. A* 742, 349 (2004).

“ β -Decay Studies of Neutron Rich Nickel Isotopes,” P.T. Hosmer, R.R.C. Clement, A. Estrade, S.N. Liddick, P.F. Mantica, W.F. Mueller, F. Montes, A.C. Morton, M. Ouellette, E. Pellegrini, P. Santi, H. Schatz, M. Steiner, A. Stolz, B.E. Tomlin, O. Arndt, K.-L. Kratz, B. Pfeiffer, W.B. Walter, P. Reeder, A. Aprahamian, and A. Wöhr, Proceedings of r-process Workshop, Institute of Nuclear Theory, Seattle, WA (January 2004).

“Analog states of ${}^7\text{He}$ observed via the ${}^6\text{He}(p,\gamma)$ 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, and A. Wöhr, *Phys. Rev. Lett.* 92, 232502 (2004).

“Proton decay of the highly deformed nucleus ${}^{135}\text{Tm}$,” P.J. Woods, P. Munro, D. Seweryniak, C.N. Davids, T. Davinson, A. Heinz, H. Mahmud, F. Sarazin, J. Shergur, W.B. Walters and A. Wöhr, *Phys. Rev. C* 69, 051302(R) (2004).

“Complete structure determination of the astrophysically important nucleus ${}^{20}\text{Na}$ below the proton threshold,” D. Seweryniak, P.J. Woods, B. Blank, M.P. Carpenter, T. Davinson, S.J. Freeman, J. Görres, A. Heinz, R.V.F. Janssens, H. Mahmud, T.L. Khoo, Z. Liu, G. Mukherjee, E. Rehem, F. Sarazin, J. Shergur, M. Shawcross, S. Sinha and A. Wöhr, *Phys. Lett. B* 590, 170-175 (2004).