

Bibliography

- Abeles, J. H., & Luryi, S. (2012, August). *Patent No. 8,253,109*.
- Adams, A. L. (2013). *Thermodynamics of Post-Growth Annealing of Cadmium Zinc Telluride Nuclear Radiation Detectors*. The University of Alabama, Mechanical Engineering Department. Tuscaloosa, AL: The University of Alabama.
- Adams, A. L., Ashford, M. D., Radja, A., Kassu, A., Drabo, M. L., Chan, W., . . . James, R. B. (2012). Thermal Annealing Improves the Performance of Cadmium Zinc Telluride (CZT) Semiconductor Material Used for Nuclear Radiation Detectors. *ASME Early Career Technical Journal*, 11, 47 - 51.
- Adams, A. L., Kassu, A., Chan, W., Drabo, M., Pinder, R., Egarievwe, S., . . . James, R. B. (2012). Thermal Annealing: A Technique to Improve the Performance of Cadmium Zinc Telluride (CZT) Material for Semiconductor Radiation Detector Applications. *ASME 2012 International Mechanical Engineering Congress and Exposition*, 7, 29 - 33.
- Allee, D., Forsythe, E., Morton, D., & Hull, D. (2014). Flexible hybrid electronics for large area sensing arrays: x-rays, neutrons, and low frequency electric fields. *Military Sensing Symposium, Battlespace, Acoustic, Seismic, Magnetic and Electric-field Sensing and Signatures*. Springfield, VA.
- Ambers, S. D., Flaska, M., & Pozzi, S. A. (2009). Neutron/Gamma-Ray Pulse Shape Discrimination with Liquid Scintillation Detectors Based on Average Pulses. *Journal of Nuclear Materials Management*, 38(1), 48.
- Ambers, S. D., Flaska, M., & Pozzi, S. A. (2011). A hybrid pulse shape discrimination technique with enhanced performance at neutron energies below 500 keV. *Nuclear Instruments and Methods in Physics Research A*, 638, 116 - 121.
- Androulakis, J., Peter, S. C., Li, H., Malliakas, C. D., Peters, J. A., Liu, Z. F., . . . Kanatzidis, M. G. (2011). Dimensional Reduction: A Design Tool for New Radiation Detection Materials. *Advanced Materials*, 23, 4163.
- Armstrong, H. (2012). *Parameterization and decomposition of radiation transport simulations for active photon-neutron interrogation scenarios*. The University of Texas at Austin. Austin, TX: The University of Texas at Austin.
- Armstrong, H., & Schneider, E. A. (2012). Linear accelerator Bremsstrahlung source modeling for active interrogation systems. *Transactions of the American Nuclear Society*, 107.
- Armstrong, H., & Schneider, E. A. (2012). Rapid analysis of the SNM smuggling threat space for active interrogation using a Green's function approach. *Journal of Nuclear Materials Management*, 41, 27 - 31.

- Armstrong, H., & Schneider, E. A. (2012). Rapid analysis of the SNM smuggling threat space for active interrogation using a Green's function approach. *Proceedings of the Institute for Nuclear Materials Management (INMM), 53rd Annual Meeting*.
- Armstrong, H., James, M., & McKinney, G. (2012). Delayed neutron and photon energy biasing in MCNP6. *Transactions of the American Nuclear Society, 107*.
- Armstrong, H., Schneider, E. A., & Thoreson, G. G. (2011). Testing NORM discriminating energy windowing algorithms. *Transactions of the American Nuclear Society, 104*.
- Aucott, T., Bandstra, M., Chivers, D., Negut, V., Cooper, R., & Vetter, K. (2013). Routine Surveys for Gamma-Ray Background Characterization. *IEEE Transactions in Nuclear Science, 60*, 1147.
- Aucott, T., Bandstra, M., Negut, V., Curtis, J., & Vetter, K. (2014). Effects of Background on Gamma-Ray Detection for Mobile Spectroscopy and Imaging Systems. *IEEE Transactions in Nuclear Science, 60*, 985.
- Aucott, T., Bandstra, M., Negut, V., Curtis, J., Chivers, D., & Vetter, K. (2015). Effects of Detector Efficiency and Energy Resolution on Gamma-Ray Background Rejection in Mobile Spectroscopy and Imaging Systems. *Nuclear Instruments and Methods in Physics Research A, 789*, 128.
- Bandstra, M., Aucott, T., Chivers, D. H., Siegrist, J., & Vetter, K. (2011). The Machine Vision Radiation Detection Framework. *IEEE Transactions on Nuclear Science, 52*(1), 326.
- Banstra, M., & Vetter, K. (2011). Measurements of Fukushima Fallout by the Berkeley Radiological Air and Water Monitortring Project. *IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC)*, (p. 18).
- Barnowski, R., Haefner, A., Mihailescu, L., & Vetter, K. (2015). Scene Data Fusion: Enabling Real-Time Volumetric Gamma-Ray Imaging. *Nuclear Instruments and Methods in Physics Research A, 800*, 65.
- Becchetti, M. F., Flaska, M., Clarke, S. D., & Pozzi, S. A. (2015). Measurements and simulations of the cosmic-ray-induced neutron background. *Nuclear Instruments and Methods in Physics Research A, 777*, 1 - 5.
- Benson, A., Bandstra, M., Chivers, D., Aucott, T., Augarten, B., Bates, C., . . . Yee, B. (2013). The GammaRay Imaging Framework. *IEEE Transactions on Nuclear Science, 60*, 528.
- Bhaladhare, S. (2013). *Characterization of Secondary Phases in Cd0.9Zn0.1Te Detector Grade Semiconductor by IR Transmission Microscope and Implementation of Ampoule Rotation Technique in Modified Vertical Bridgman Growth to Minimize the Secondary Phases*. Washington State University, Material Science and Engineering Program. Pullman, WA: Washington State University.

- Bhaladhare, S., Munge, W. G., Swain, S., Datta, A., Havrilak, C. J., Jones, K., . . . Lynn, K. G. (2011). Correlations of secondary phases (SPs) with mobility lifetime (μte) of the electrons in CZT crystals using IP microscopy. *Proceedings of SPIE*, 8142, 814210-1-13.
- Boon, K. W., Joly, A. G., & Chen, W. (2011). Observation of Green Emission From Ce³⁺-Doped Gadolinium Oxide Nanoparticles. *Journal of Luminescence*, 131, 49 - 53.
- Bourne, M. M., Mussi, C., Miller, E. C., Clarke, S. D., Pozzi, S. A., & Georgiev, A. (2014). Characterization of the CLYC detector for neutron and photon detection. *Nuclear Instruments and Methods in Physics Research A*, 736, 124 - 127.
- Bourne, M. M., Whaley, J., Dolan, J. L., Flaska, M., Clarke, S. D., Tomanin, A., . . . Pozzi, S. A. (2015). Cross-correlation measurements with the EJ-299-33 plastic scintillator. *Nuclear Instruments and Methods in Physics Research A*, 784, 460 - 464.
- Bruss, D. (2012). *DSA Preconditioning for the Sn Equations with Strictly Positive Spatial Discretization*. Texas A&M University. College Station, TX: Texas A&M University.
- Cao, X. K., Clubine, B., Edgar, J. H., Lin, J. Y., & Jiang, H. X. (2013). Two-dimensional excitons in three-dimensional hexagonal boron nitride. *Applied Physics Letters*, 103, 199106.
- Cao, X. K., Majety, S., Li, J., Lin, J. Y., & Jiang, H. X. (2013). Optoelectronic properties of hexagonal boron nitride epilayers. *Proc. SPIE*, 8613, 863128. doi:10.1117/12.2009115
- Caramanis, C., Dimitrov, N. B., & Morton, D. P. (2014). Efficient algorithms for budget-constrained Markov decision processes. *IEEE Transactions on Automatic Control*, 59, 2813 - 2817.
- Chan, W., Sams, V., Kim, K., Kassu, A., & James, R. (2012). Comparative study of dislocation densities in CdZnTe ingots grown with different carbon coatings. *IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) Record*, 4241 - 4244.
- Chang, Z., Okoye, N. C., Uffer, M. J., Green, A. D., Childs, K. E., & Miller, L. F. (2015). On the scintillation efficiency of carborane-loaded liquid scintillators for thermal neutron detection. *Nuclear Instruments & Methods in Physics Research Section A*, 769, 112 - 122.
- Chen, W. (2013). Optical Storage Based on Reversible Optical Processes in Eu³⁺ Doped Nanoparticles. *Review of Nanoscience and Nanotechnology*, 2(2), 143 - 146.
- Chen, W., Wang, S., Westcott, S., & Liu, Y. (2008). Dose Dependent X-Ray Luminescence in MgF₂:Eu²⁺, Mn²⁺ Phosphors. *Journal of Applied Physics*, 103, 113103.
- Chen, W., Westcott, S. L., & Zhang, J. (2007). Dose Dependence of X-Ray Luminescence from CaF₂:Eu²⁺, Mn²⁺ Phosphors. *Applied Physics Letters*, 91, 211103-1-3.

- Chivers, D. H., Coffer, A., Plimley, B., & Vetter, K. (2011). Impact of Measuring Electron Tracks in High-Resolution Scientific Charge-Coupled Devices within Compton Imaging Systems. *Nuclear Instruments and Methods in Physics Research A*, 654, 244.
- Cho, N. K., Peters, J. A., Liu, Z., Wessels, B. W., Johnsen, S., Kanatzidis, M. G., . . . Freeman, A. (2012). Photoluminescent properties of semiconducting Tl₆I₄Se. *Semiconductor Science and Technology*, 27(015016).
- Chriayath, S. S., & et. al. (2015). Trace Fission Product Ratios for Nuclear Forensics Attribution of Weapons-Grade Plutonium from Fast and Thermal Reactors. *Journal of Science & Global Security*, 23(1), 48 - 67.
- Clarke, S. D., Flaska, M., Pozzi, S. A., & Perrani, P. (2009). Neutron and Gamma-Ray Cross-Correlation Measurements of Plutonium Oxide Powder. *Nuclear Instruments and Methods in Physics Research A*, 604, 618 - 623.
- Clinton, J. (2011). *Optimization and Characterization of a Novel Self Powered Solid State Neutron Detector*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Coates, N. E., Zhou, H., Krämer, S., Li, L., & Moses, D. (2010). Solution-Based In Situ Synthesis and Fabrication of Ultrasensitive CdSe Photoconductors. *Advanced Materials*, 22, 5366.
- Coles, T. M. (2014). *Computational nuclear forensics analysis of weapons-grade plutonium separated from fuel irradiated in a thermal reactor*. Texas A&M University, Nuclear Engineering Department. College Station, TX: Texas A&M University.
- Coles, T. M., & et. al. (2013). Nuclear forensics signature analysis of thermal reactor produced weapons-grade plutonium. *Proc. 54th INMM Annual meeting*. Palm Desert, CA.
- Dahal, R., Huang, K.-C., Lu, J. J.-Q., Weltz, A., Danon, Y., & Bhat, I. B. (2014). Development of Large Area Micro-Structured Neutron Detector at Low Cost. *Conference Recording, IEEE NSS/MIC, 21st Symposium on Room Temperature Semiconductor X-ray and Gamma ray detectors*. Seattle, WA.
- Danon, Y., Dahal, R., Huang, K.-C., Lu, J. J.-Q., Weltz, A., & Bhat, I. B. (2014). Large Area Zero Bias Solid-state Neutron Detectors. *Transactions of the American Nuclear Society*, 110. Reno, NV.
- Datta, A. (2013). *Approaches Towards Solving Critical Challenges in Crystal Growth of Detector Grade Cd_{0.9}Zn_{0.1}Te including Melt Mixture Techniques*. Washington State University, Material Science and Engineering Program. Pullman, WA: Washington State University.
- Datta, A., Bhaladhare, S., Rao, M. R., Burger, A., Lynn, K. G., Swain, S. K., & Cui, Y. (2014). Bulk growth of uniform and near stoichiometric cadmium telluride. *Journal of Crystal Growth*, 289, 134 - 138.
- Datta, A., Swain, S., Bhaladhare, S., & Lynn, K. G. (2011). Experimental studies on control of growth interface in MVB grown CdZnTe and its consequences. *IEEE Nuclear Science Symposium Conference Record, ISBN 978-1-4673-0118-3*, 4720 - 4726.

- Datta, A., Swain, S., Cui, Y., & Burger, A. (2012). Preliminary results on Bridgman grown CdZnTe detector crystals assisted by ampoule rotation. *Proceedings of SPIE*, 8507, 850711.
- Datta, A., Swain, S., Cui, Y., Burger, A., & Lynn, K. (2012). Preliminary results on Bridgman grown CdZnTe detector crystals assisted by ampoule rotation. *Proceedings of SPIE*, 8507, 850711.
- Datta, A., Swain, S., Cui, Y., Burger, A., & Lynn, K. (2013). Correlations of Bridgman-Grown Cd0.9Zn0.1Te Properties with Different Ampoule Rotation Schemes. *Journal of Electronic Materials*, 42(11), 3041 - 3053.
- Destefano, N. E., Bernard, E., Edwards, B., Gai, M., Horn, M., Larsen, N., . . . Wahl, C. (2013). Development and First Results of the Yale 'PIXeY' Two-Phase Xenon Detector. *Proceedings of the SPIE - The International Society for Optical Engineering*, (p. 885201). San Diego, CA.
- Dimitrov, N. B., & Morton, D. P. (2009). Combinatorial design of a stochastic Markov decision process. In M. J. Saltzman, J. W. Chinnek, & B. Kristjansson (Eds.), *Operations Research and Cyber-Infrastructure* (pp. 167 - 193). New York: Springer.
- Dimitrov, N. B., & Morton, D. P. (2012). Interdiction Models and Applications. In J. W. Herrmann (Ed.), *Handbook of Operations Research for Homeland Security*. Springer.
- Dimitrov, N. B., Gonzalez, M. A., Michalopoulos, D. P., Morton, D. P., Nehme, M. V., Pan, F., . . . Thoreson, G. G. (2008). Interdiction of smuggled nuclear material. *Transactions of the American Nuclear Society*, 99.
- Dimitrov, N. B., Gonzalez, M. A., Michalopoulos, D. P., Morton, D. P., Nehme, M. V., Popova, E., . . . Thoreson, G. G. (2008). Interdiction modeling for smuggled nuclear material. *Proceedings of the 49th Annual Meeting of the Institute for Nuclear Materials Management*.
- Dimitrov, N. B., Michalopoulos, D., Morton, D. P., Nehme, M. V., Pan, F., Popova, E., . . . Thoreson, G. G. (2011). Network deployment of radiation detectors with physics-based detection probability calculations. *Annals of Operations Research*, 187, 207 - 228.
- Dingley, J., Danon, Y., LiCausi, N., Lu, J.-Q., & Bhat, I. B. (2010). Directional Response of Microstructure Solid State Thermal Neutron Detectors. *Transactions of the American Nuclear Society and Embedded Topical Meeting Isotopes for Medicine and Industry*, 103. Las Vegas, NV.
- Doan, T. C., Majety, S., Grendadier, S., Li, J., Lin, J. Y., & Jiang, H. X. (2014). Fabrication and characterization of solid-state thermal neutron detectors based on hexagonal boron nitride epilayers. *Nuclear Instruments and Methods in Physics Research Section A*, 748, 84.
- Doan, T. C., Majety, S., Grendadier, S., Li, J., Lin, J. Y., & Jiang, H. X. (2015). Hexagonal boron nitride thin film thermal neutron detectors with high energy resolution of the reaction products. *Nuclear Instruments and Methods in Physics Research Section A*, 783, 121.

- Dolan, J. L., Flaska, M., Pozzi, S. A., & Chichester, D. (2009). Measurement and Characterization of Nuclear Material at Idaho National Laboratory. *Journal of Nuclear Materials Management*, 38(1), 40.
- Dolan, J. L., Marcath, M. J., Flaska, M., Pozzi, S. A., Chichester, D. L., Tomanin, A., & Perrani, P. (2014). Active-interrogation measurements of fast neutrons from induced fission in low-enriched uranium. *Nuclear Instruments and Methods in Physics Research A*, 738, 99 - 105.
- Du, X. Z., Frye, C. D., Edgar, J. H., Lin, J. Y., & Jiang, H. X. (2014). Temperature dependence of the energy bandgap of two-dimensional hexagonal boron nitride probed by excitonic photoluminescence. *Journal of Applied Physics*, 115, 053503.
- Du, X. Z., Li, J., Lin, J. Y., & Jiang, H. X. (2015). The origin of deep-level impurity transitions in hexagonal boron nitride. *Applied Physics Letters*, 106, 021110.
- Edgar, J. H., Hoffman, T. B., Clubine, B., Currie, M., Du, X. Z., Lin, J. Y., & Jiang, H. X. (2014). Characterization of bulk hexagonal boron nitride single crystals grown by the metal flux technique. *Journal of Crystal Growth*, 403, 110.
- Egarievew, S. U. (2013). Securing the Homeland. *International Innovation, North American Edition*, 166 - 168.
- Egarievew, S. U., Jow, J. O., Egarievwe, A. A., Gul, R., Martin, R. D., Hales, Z. M., . . . James, R. B. (2015). Effects of Etching and Chemomechanical Polishing on the Electrical Properties of CdZnTe Nuclear Detectors. *American Journal of Materials Science*, 5(3A), 16 - 20.
- Egarievwe, S. U. (2014). Nuclear Initiatives. *International Innovation*(144), 54 - 56.
- Egarievwe, S. U. (2015). Vertical Education Enhancement – A Model for Enhancing STEM Education and Research. *Procedia - Social and Behavioral Sciences*, 177, 336 - 344.
- Egarievwe, S. U., Adams, A. L., Drabo, M. L., Ashford, M. D., Pinder, R., Jones, D. E., . . . James, R. B. (2012). Study of the diffusion of Te inclusions in CdZnTe nuclear detectors in post-growth annealing. *IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) Record*, 4226 - 4228.
- Egarievwe, S. U., Hossain, A., Okwechime, I. O., Gul, R., & James, R. B. (2015). Effects of Chemo-Mechanical Polishing on CdZnTe X-Ray and Gamma-Ray Detectors. *Journal of Electronic Materials*, 44(9), 3194 - 3201.
- Egarievwe, S. U., Yang, G., Egarievwe, A. A., Okwechime, I. O., Gray, J., Hales, Z. M., . . . James, R. B. (2015). Post-Growth Annealing of Bridgman-Grown CdZnTe and CdMnTe Crystals for Room-Temperature Nuclear Radiation Detectors. *Nuclear Instrumentation and Methods in Physics Research A*, 784, 51 - 55.

- Elshennawy, A., Marianno, C., & Khatri, S. (2012). Efficient Solid State Gamma Radiation Detector. *Symposium on Radiation Measurements and Applications (SORMA) 2012*. Berkeley, CA.
- Engliss, E. (2015). *Development of Front-End Electronics for Large Area Solid-State Neutron Detector Arrays*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Enqvist, A. L., Wieger, B. M., Pozzi, S. A., & Massey, T. N. (2013). Neutron light output response and resolution functions in EJ-309 liquid scintillation detectors. *Nuclear Instruments and Methods in Physics Research A*, 715, 79.
- Enqvist, A., Flaska, M., Dolan, J. L., Chichester, D. L., & Pozzi, S. A. (2011). A combined neutron and gamma ray multiplicity counter based on liquid scintillation detectors. *Nuclear Instruments and Methods in Physics Research A*, 652, 48 - 51.
- Evans, M. (2010). *Basic Properties of Pyroelectric Crystals*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Faheem, M., & Lynn, K. (2014). Structure and Thermal Properties of Tb, Ce Doped Y₂97Gd0.03A12Ga3O12, Single Crystals. *American Journal of Analytical Chemistry*, 5(11), 695 - 700.
- Faisal, M., Schiffer, R. T., Flaska, M., Pozzi, S. A., & Wentzloff, D. D. (2011). A Correlation-based pulse detection technique for gamma/neutron detectors. *Nuclear Instruments and Methods in Physics Research A*, 652, 479 - 482.
- Faisal, M., Schiffer, R. T., Haling, M. J., Flaska, M., Pozzi, S. A., & Wentzloff, D. D. (2013). A data processing system for real-time pulse processing and timing enhancement for nuclear particle detection systems. *IEEE Transactions on Nuclear Science*, 60(2), 619 - 623.
- Febbraro, M. T. (2014). *A Deuterated Neutron Detector Array for the Study of Nuclear Reactions with Stable and Rare Isotope Beams*. University of Michigan. Ann Arbor: University of Michigan.
- Febbraro, M., Becchetti, F. D., Torres-Isea, R. O., Ojaruega, M., Howard, A., Kolata, J. J., . . . Villano, A. N. (2013). Neutron Spectroscopy without Time-of-flight: A DSP-Based Deuterated Scintillator Array. *IEEE - Trans. Nucl. Sci.*, 60, 890-896.
- Febbraro, M., Lawrence, C. C., Zui, H., Pierson, B., Torres-Isea, R. O., Becchetti, F. D., . . . Riggins, J. (2015). Deuterated Scintillators and Their Applications to Neutron Spectroscopy. *Nuclear Instruments and Methods in Physics Research A*, 784, 184-188.
- Flaska, M., Faisal, M., Wentzloff, D. D., & Pozzi, S. A. (2013). Influence of sampling properties of fast-waveform digitizers on neutron-gamma-ray, pulse-shape discrimination for organic scintillation detectors. *Nuclear Instruments and Methods in Physics Research A*, 729, 456 - 462.

- Fullem, T. Z., Kovanen, A. M., Gillich, D. J., & Danon, Y. (2009). Focused Ion Beam Production Using a Pyroelectric Crystal and a Resistive Glass Tube. *IEEE Nuclear Science Symposium and Medical Imaging Conference*. Orlando, FL.
- Galloway, M., Amman, M., Adawalla, S., Bindley, G., Boggs, S., Chen, H., . . . Zoglauer, A. (2011). Status of the High-Efficiency Multimode Imager. *IEEE Transactions on Nuclear*, 52(1), 1290.
- Gaukler, G. M. (2011). A Framework for Modeling the Detection of Smuggled Nuclear Materials. *INFORMS Annual Conference*. Charlotte, NC.
- Gaukler, G. M., Li, C., Chirayath, S., & Ding, Y. (2011). Detecting Nuclear Materials Smuggling: Using Radiography to Improve Container Inspection Policies. *Annals of Operations Research*, 187(1).
- Geuther, J. (2009). *Radiation Generation with Pyroelectric Crystals*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Gillich, D. (2009). *Particle Acceleration with Pyroelectric Crystals*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Gillich, D. J., Kovanen, A., & Danon, Y. (2010). Deuterated target comparison for pyroelectric crystal D–D nuclear fusion experiments. *Journal of Nuclear Materials*, 405, 181 - 185.
- Gillich, D. J., Teki, R., Fullem, T. Z., Kovanen, A., Blain, E., Chrisey, D. B., . . . Danon, Y. (2009). Enhanced pyroelectric crystal D–D nuclear fusion using tungsten nanorods. *Nano Today*. doi:10.1016/j.nantod.2009.04.004.
- Gillich, D., Danon, Y., Geuther, J. A., Marus, B., & McDermott, B. (2007). Deuterium Ionization For Pyroelectric Crystal Accelerators. *Transactions of the American Nuclear Society and the European Nuclear Society 2007 International Conference on Making The Renaissance Real*, 97. Washington, DC.
- Gillich, D., Danon, Y., Kovanen, A., & Herman, B. (2008). Pyroelectric Crystal-Generated Neutron Production: Preliminary Results Using a Portable Vacuum System. *ANS annual meeting, ANS Transaction no 99*, pp. 283 - 384. Reno, NV.
- Gillich, D., Danon, Y., Kovanen, A., Herman, B., & Labarre, W. (2008). Tip Length Optimization for a Pyroelectric Crystal Neutron Source. *ANS Transactions*, 98, pp. 393 - 394. Anaheim, CA.
- Gillich, D., Kovanen, A., Herman, B., Fullem, T., & Danon, Y. (2009). Pyroelectric Crystal Neutron Production in a Portable Prototype Vacuum System. *Nuclear Instruments and Methods in Physics Research A*, 602(2), 306 - 310.
- Goodsell, A. V., & Charlton, W. S. (2011). Quartz-Crystal Spectrometer for the Analysis of Plutonium K X-Rays. *Proceedings of GLOBAL 2011*. Makuhari, Japan.

- Goodsell, A. V., & Charlton, W. S. (2012). Optimization of a Quartz-Crystal Spectrometer Design for Analyzing K X-rays from Pu and U. *53rd Annual Meeting of the Institute of Nuclear Materials Management*. Orlando, Fl.
- Goshev, S. (2011). *Analysis of smuggler movement on multiple transportation networks*. University of Texas at Austin. Austin, TX: University of Texas at Austin.
- Grenadier, S., Li, J., Lin, J. Y., & Jiang, H. X. (2013). Dry etching techniques for active devices based on hexagonal boron nitride epilayers. *Journal of Vacuum Science and Technology*, 31, 061517.
- Grypp, M., & Marianno, C. (2012). Gamma Radiation Detection from a Spreader Bar Crane at the Port of Tacoma. *Annual Meeting of the Health Physics Society*.
- Grypp, M., & Marianno, C. (2012). Gamma Radiation Detection from a Spreader Bar Crane at the Port of Tacoma. *South Texas Chapter of the Health Physics Society Meeting*.
- Haefner, A., Gunter, D., Barnowski, R., & Vetter, K. (2015). A Filtered Back-projection Algorithm for 4π Compton Camera Data. *IEEE Transactions in Nuclear Science*, 62, 1911.
- Haefner, A., Gunter, D., Plimley, B., Pavlovsky, R., & Vetter, K. (2014). Gamma-ray Momentum Reconstruction from Compton Electron Trajectories by Filtered Back-projection. *Applied Physics Letters*, 105, 184101.
- Hawkins, W. D., Smith, T., Adams, M. P., Rauchwerger, L., Amato, N. M., & Adams, M. L. (2012). Efficient Massively Parallel Transport Sweeps. *Trans. Amer. Nucl. Soc*, 107, 477 - 481.
- Hawley, M. (2012). *Interdicting smuggler movement with transparent and non-transparent assets*. University of Texas at Austin. Austin, TX: University of Texas at Austin.
- Hernandez-Sosa, G., Coates, N. E., Valouch, S., & Mose, D. (2011). High photoconductive responsivity in solution-processed poly-crystalline organic composite films. *Advanced Functional Materials*, 21, 927.
- Hernandez-Sosa, G., Tong, M., Coates, N. E., Valouch, S., & Moses, D. (2011). Extension of the spectral responsivity of the photocurrent in solution-processed small molecule composite via a charge transfer excitation. *Applied Physics Letters*, 99, 163306.
- Hoffman, T. B., Clubine, B., Zhang, Y., Snow, K., & Edgar, J. H. (2014). Optimization of Ni-Cr flux growth for hexagonal boron nitride single crystals. *Journal of Crystal Growth*, 393, 114 - 118.
- Hoffman, T. B., Zhang, Y., Edgar, J. H., & Gaskill, D. K. (2014). Growth of hBN using metallic boron: isotopically enriched h10BN and h11BN. *Mater. Res. Soc. Symp. Proc*, (p. 1635).
- Hoffman, T. B., Zhang, Y., Edgar, J. H., Khan, N., & Szoskiewicz, R. (2014). Morphology of bulk hexagonal boron nitride grown from Ni-Cr flux. *Materials Science and Technology Conference and Exhibition 2014, MS and T 2014, Association for Iron and Steel Technology*, 3, 1591 - 1598.

- Holewa, L., & Charlton, W. S. (2011). Angular Anisotropy of Correlated Neutrons and Application to Detection and Verification. *Proceedings of the 2011 Annual Meeting of the Institute of Nuclear Materials Management*. Palm Springs, CA.
- Holewa, L., Miller, E., Charlton, W., & Pozzi, S. (2012). Using Neutron Angular Anisotropy Information to Dynamically Determine the Ratio of the (α, n) Rate to Spontaneous Fission Rate for Coincidence Counting Applications. *Nuclear Instruments and Methods in Physics Research A*, 701, 249 - 253.
- Hossain, A., Dowdy, A., Bolotnikov, A. E., Camarda, G. S., Cui, Y., Roy, U. N., . . . James, R. B. (2014). Topographic Evaluation of the Effect of Passivation in Improving the Performance of CdZnTe Detectors. *Journal of Electronic Materials*, 43(8), 2941 - 2946.
- Hossian, A., Bolotnikov, A. E., Camarda, G. S., Cui, Y., Jones, D., Hall, J., . . . James, R. B. (2014). Novel Approach to Surface Processing for Improving the Efficiency of CdZnTe Detectors. *Journal of Electronic Materials*, 43(8), 2771 - 2777.
- Hossu, M., Liu, Z., Yao, M., Ma, L., & Chen, W. (2012). X-Ray Luminescence of CdTe Nanostructures in LaF₃:Ce/CdTe Nanocomposites. *Applied Physics Letters*, 100, 013109.
- Hossu, M., Schaeffer, R. O., Ma, L., Chen, W., Zhu, Y., Sammynaiken, R., & Joly, A. G. (2013). On the Luminescence Enhancement of Mn²⁺ By Co-doping of Eu²⁺ in ZnS:Mn,Eu. *Optical Materials*, 35, 1513 - 1519.
- Huang, K.-C. (2014). *Fabrication and Characterization of a Novel Self-Powered Solid-State Neutron Detector*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Huang, K.-C., Dahal, R., LiCausi, N., Lu, J. J.-Q., Danon, Y., & Bhat, I. B. (2012). Boron filling of high aspect ratio holes by chemical vapor deposition for solid-state neutron detector applications. *Journal of Vacuum Science & Technology B*, 30(5).
- Huang, K.-C., Dahal, R., Lu, J. J.-Q., Danon, Y., & Bhat, I. B. (2013). High detection efficiency micro-structured solid-state neutron detector with extremely low leakage current fabricated with continuous p-n junction. *Applied Physics Letters*, 102, 152107.
- Huang, K.-C., Dahal, R., Lu, J. J.-Q., Weltz, A., Danon, Y., & Bhat, I. B. (2014). Scalable large-area solid-state neutron detector with continuous p-n junction and extremely low leakage current. *Nuclear Instruments and Methods in Physics Research A*, 763, 260 - 265. Retrieved from <http://dx.doi.org/10.1016/j.nima.2014.06.047>
- Jason, M. J. (2012). *Compton Imaging Algorithms for Position-Sensitive Gamma-Ray Detectors in the Presence of Motion*. University of Michigan. Ann Arbor: University of Michigan.
- Jaworski, J. M., Wahl, C. G., Wang, W., Fessler, J. A., & He, Z. (2013, October). Model-Based Reconstruction of Spectral and Spatial Source Distribution for Objects with Known Motion. *IEEE Transactions on Nuclear Science*, 60(5), IEEE Transactions on Nuclear Science.

- Johnsen, S., Liu, Z. F., Peters, J. A., Song, J. H., Nguyen, S., Malliakas, C. D., . . . Kanatzidis, M. G. (2011). Thallium Chalcohalides for X-ray and gamma-ray Detection. *Journal of the American Chemical Society*, 133, 10030 - 10033.
- Johnsen, S., Liu, Z. F., Peters, J. A., Song, J. H., Peter, S. C., Malliakas, C. D., . . . Kanatzidis, M. G. (2011). Thallium Chalcogenide-Based Wide-Band-Gap Semiconductors: TlGaSe₂ for Radiation Detectors. *Chemistry of Materials*, 23, 3120 - 3128.
- Jones, D. E., Egarievwe, S. U., Hossain, A., Okwechime, I. O., Drabo, M. L., Hall, J., . . . James, R. B. (2012). Study of Surface Passivation and Contact Deposition Techniques in CdZnTe X-Ray and Gamma-Ray Detectors. *IEEE Records of Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) Record*, 4124 - 4127.
- Kaplan, A. C., Flaska, M., Enqvist, A., Dolan, J. L., & Pozzi, S. A. (2013). EJ-309 pulse shape discrimination performance with a high gamma-ray-to-neutron ratio and low threshold. *Nuclear Instruments and Methods in Physics Research A*, 729, 463 - 468.
- Kaplan, A. C., Henzl, V., Menlove, H. O., Swinhoe, M. T., Belian, A. P., Flaska, M., & Pozzi, S. A. (2014). Determination of total plutonium content in spent nuclear fuel assemblies with the differential die-away self-interrogation instrument. *Nuclear Instruments and Methods in Physics Research A*, 764, 347 - 351.
- Kaye, S. J. (2014). *Coded Aperture Gamma-Ray Imaging using 3-Dimensional Position-Sensitive Detectors*. University of Michigan. Ann Arbor: University of Michigan.
- Koc, A., & Morton, D. P. (2015). Prioritization via stochastic optimization. *Management Science*, 61, 586 - 603.
- Kovanen, A. (2009). *Generation of Radiation from Pyroelectric Crystals*. Generation of Radiation from Pyroelectric Crystals. Troy, NY: Generation of Radiation from Pyroelectric Crystals.
- Kovanen, A. M., Gillich, D. J., & Danon, Y. (2009). D-D Nuclear Fusion Using Different Sized Pyroelectric Crystals. *IEEE Nuclear Science Symposium and Medical Imaging Conference*. Orlando, FL.
- Kovanen, A., Danon, Y., & Gillich, D. (2008). X-Ray Production Using Stacked Pyroelectric Crystals. *ANS Transactions*, 98, pp. 406 - 407. Anaheim, CA.
- Kristianpoller, N., Chen, W., Chen, R., & Liu, Y. (2010). Irradiation effects in CaF₂: ZnO nanostructured crystals. *IOP Conf. Series: Materials Science and Engineering*, 15, p. 012049.
- Kristianpoller, N., Chen, W., Khaidukov, N., & Chen, R. (2009). Optical properties of some fluoride compounds and their application to dosimetry. *Radiation Measurement*. doi:10.1016/j.radmeas.2009.09.006

- Kunnen, G. R., Pressler, D., Lee, E. H., Allee, D. R., Murphy, J. W., Mejia, I., . . . Gande, B. (2012). Large area sensing arrays for detection of thermal neutrons. *IEEE Nuclear Science Symposium*. Anaheim, CA.
- Kunnen, G. R., Smith, J., Chung, H., & Allee, D. R. (2014). A TFT-based, Multi-Stage, Active Pixel Sensor for Alpha Particle Detection. *Electronic Letters*, 50(9), 2.
- Kuo, Y. (2011). Nonvolatile Memories for Nano and Giga Electronics Applications. *ECS Trans. ULSIC vs. TFT*, 37(1), 157 - 166.
- Kuo, Y. (2011). Post Deposition Annealing Effects on Thin Film Material, Process, and Device Properties. *AVS Post-Deposition Processing of Thin Films Symposium*. Nashville, TN.
- Larsen, N. A., Bernard, E. P., Chan, S. B., Edwards, B., Linck, E., Lyashenko, A., . . . De Silva, M. S. (2012). Liquid Xenon for Gamma-Ray Imaging of Special Nuclear Material. *Proceedings of 2012 IEEE International Conference on Technologies for Homeland Security (HST)*, (pp. 378-383). Waltham, MA.
- Lawrence, C. C. (2014). *Neutron Spectrum Unfolding with Organic Scintillators for Arms-control Verification*. University of Michigan, Nuclear Engineering. Ann Arbor: University of Michigan.
- Lawrence, C. C., Enqvist, A. P., Flaska, M., Pozzi, S. A., & Becchetti, F. D. (2013). Comparison of Spectrum-unfolding Performance of (EJ309) and (EJ315) Liquid Scintillators on Measured ^{252}Cf Pulse-height Spectra. *Nuclear Instruments and Methods in Physics Research A*, 729, 924-929.
- Lawrence, C. C., Enqvist, A. P., Flaska, M., Pozzi, S. A., Howard, A. M., Kolata, J. J., & Becchetti, F. D. (2013). Response Characterization for an EJ315 Deuterated Organic-liquid Scintillation Detector for Neutron Spectroscopy. *Nuclear Instruments and Methods in Physics Research A*, 727, 21-28.
- Lawrence, C. C., Enqvist, A., Flaska, M., Pozzi, S. A., & Becchetti, F. D. (2013). Comparison of spectrum-unfolding performance of (EJ315) and (EJ309) liquid scintillators on measured ^{252}Cf pulse-height spectra. *Nuclear Instruments and Methods in Physics Research A*, 729, 924 - 929.
- Lawrence, C. C., Enqvist, A., Flaska, M., Pozzi, S. A., Howard, A. M., Kolata, J. J., & Becchetti, F. D. (2013). Response characterization for an EJ315 deuterated organic-liquid scintillation detector for neutron spectroscopy. *Nuclear Instruments and Methods in Physics Research A*, 727, 21 - 28.
- Lawrence, C. C., Febbraro, M., Massey, T. N., Flaska, M., Becchetti, F. D., & Pozzi, S. A. (2014). Neutron response characterization for the EJ299-33 plastic scintillation detector. *Nuclear Instruments and Methods in Physics Research A*, 759, 16 - 22.
- Lawrence, C. C., Febbraro, M., Massey, T. N., Flaska, M., Becchetti, F. D., & Pozzi, S. A. (2014). Neutron Response Characterization for the EJ299-33 Plastic Scintillation Detector. *Nuclear Instruments and Methods in Physics Research A*, 759, 16-22.

- Lee, E., Kunnen, G., Dominguez, A., & Allee, D. R. (2012). A low noise dual stage a-Si:H active pixel sensor. *IEEE Transactions on Electron Devices*, 59(6), 1679-1685.
- Li, J., Dahal, R., Majety, S., Lin, J. Y., & Jiang, H. X. (2011). Hexagonal boron nitride epitaxial layers as neutron detector materials. *Nuclear Instruments and Methods in Physics Research Section A*, 654, 417.
- Li, J., Majety, S., Dahal, R., Zhao, W. P., Lin, J. Y., & Jiang, H. X. (2012). Dielectric strength, optical absorption, and deep ultraviolet detectors of hexagonal boron nitride epilayers. *Applied Physics Letters*, 101, 171112.
- Li, L., Coates, N. E., & Moses, D. (2010). Solution-Processed Inorganic Solar Cell Based on in Situ Synthesis and Film Deposition of CuInS₂ Nanocrystals. *Journal of the American Chemical Society*, 132, 22.
- Li, Q., Fuhrmann, M., Early, B. R., & Vedlitz, A. (2012). Preferences, knowledge, and citizen probability assessments of the terrorism risk of nuclear power. *Review of Policy Research*, 29(2), 207 - 227. Retrieved from <http://dx.doi.org/10.1111/j.154101338.2011.00552.x>
- Li, Q., Fuhrmann, M., Early, B., & Vedlitz, A. (2011). Preferences, Knowledge, and Citizen Assessments of the Terrorism Risks of Nuclear Power. *Review of Policy Research*, 29(2), 207 - 227.
- LiCausi, N. (2011). *A novel solid-state self-powered neutron detector*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- LiCausi, N., Clinton, J., Danon, Y., Lu, J. J.-Q., & Bhat, I. (2010). Deposition and Etching of Conformal Boron Films for Neutron Detector Applications. *MRS Proc., Symp.* Boston, MA.
- LiCausi, N., Dingley, J., Danon, Y., Lu, J. J.-Q., & Bhat, I. B. (2008). Novel Solid-State Self Powered Neutron Detector. *Hard X-Ray, Gamma-Ray, and Neutron Detector Physics X, SPIE Symposium on Optical Engineering + Applications*. San Diego, CA.
- Lingefelter, D. J., Fessler, J. A., Scott, C. D., & He, Z. (2013, February). Source Detection Performance Prediction for a CdZnTe Array. *IEEE Transactions on Nuclear Science*, 60(1), 204 – 212.
- Lingefelter, D. J. (2011). *Source Detection and Image Reconstruction with Position-Sensitive Gamma-Ray Detectors*. University of Michigan. Ann Arbor: University of Michigan.
- Lingefelter, D. J., Fessler, J. A., Scott, C. D., & He, Z. (2010, September). Benefits of Position-Sensitive Detectors for Radioactive Source Detection. *IEEE Transactions on Signal Processing*, 58(9), 4473-4483.
- Lingefelter, D. J., Fessler, J. A., Scott, C. D., & He, Z. (2011, November). Asymptotic Source Detection Performance of Gamma-Ray Imaging Systems Under Model Mismatch. *IEEE Transactions on Signal Processing*, 59(11), 5141 – 5151.

- Liu, C., Hajagos, T. J., Kishpaugh, D., Jin, Y., Hu, W., Chen, Q., & Pei, Q. (2015). Facile Single-Precursor Synthesis and Surface Modification of Hafnium Oxide Nanoparticles for Nanocomposite γ -Ray Scintillators. *Adv. Funct. Mater.*, 25(29), 4607 - 4616.
- Liu, Y., Chen, W., Wang, S., Joly, A. G., Westcott, S., & Woo, B. K. (2008). X-ray Luminescence of LaF₃:Tb and LaF₃:Ce, Tb Water Soluble Nanoparticles. *Journal of Applied Physics*, 103(6), 063105 1-7.
- Liu, Z. F., Peters, J. A., Nguyen, S., Sebastian, M., Wessels, B. W., Wang, S. C., . . . Kanatzidis, M. G. (2012). Characterization of Thallium-Based Ternary Semiconductor Compounds for Radiation Detection. *Hard X-Ray, Gamma-Ray, and Neutron Detector Physics*, XIV, 8507.
- Liu, Z. F., Peters, J. A., Stoumpos, C. C., Sebastian, M., Wessels, B. W., Im, J., . . . Kanatzidis, M. G. (2013). Heavy metal ternary halides for room-temperature x-ray and gamma-ray detection. *Hard X-Ray, Gamma-Ray, and Neutron Detector Physics*, XV, 8852.
- Liu, Z. F., Peters, J. A., Wessels, B. W., Johnsen, S., & Kanatzidis, M. G. (2011). Thallous chalcogenide (Tl₆I₄Se) for radiation detection at X-ray and gamma-ray energies. *Nuclear Instruments & Methods in Physics Research Section a-Accelerators Spectrometers Detectors and Associated Equipment*, 659, 333 - 335.
- Liu, Z. F., Peters, J. A., Zang, C., Cho, N. K., Wessels, B. W., Johnsen, S., . . . Freeman, A. J. (2011). Tl-based wide gap semiconductor materials for x-ray and gamma ray detection. *Chemical, Biological, Radiological, Nuclear, and Explosives (Cbrne) Sensing*, XII, 8018.
- Luryi, S. (2011, December). Patent No. 8,084,838.
- Luryi, S., & Subashiev, A. (2010). Epitaxial InGaAsP/InP photodiode for registration of InP scintillation. *Future Trends in Microelectronics: From Nanophotonics to Sensors to Energy* (pp. 331-346). Hoboken, NJ: Wiley.
- Luryi, S., & Subashiev, A. (2011). Semiconductor Scintillator Based on Photon Recycling. *Nuclear Instruments and Methods in Physics Research A*, 652, 292-294.
- Luryi, S., & Subashiev, A. (2012). Levy Flight of Holes in InP Semiconductor Scintillator. *International Journal of High Speed Electronics and Systems*, 21(1), 1 - 31.
- Luryi, S., & Subashiev, A. (2014, March). Patent No. 8,664,612.
- Luryi, S., Kastalsky, A., Gouzman, M., Lifshitz, N., Semyonov, O., Stanacevic, M., . . . Shellenbarger, Z. A. (2010). Epitaxial InGaAsP/InP photodiode for registration of InP scintillation. *Nuclear Instruments and Methods in Physics Research A*, 662, 113-119.
- Luryi, S., Semyonov, O., Subashiev, A. V., Abeles, J. H., Chan, W. K., Shellenbarger, Z. A., . . . Lourdudoss, S. (2014). Effects of Thermal Treatment on Radiative Properties of HVPE Grown InP Layers. *Solid State Electronics*, 95, 15 - 18.

- Luryi, S., Semyonov, O., Subashiev, A., & Chen, Z. (2012). Direct Observation of Levy Flight of Holes in Bulk n-InP. *Physics Review B*, 86, 201201R.
- Ma, L., & Chen, W. (2010). Luminescence Enhancement And Quenching in ZnS:Mn By Au Nanoparticles. *Journal of Applied Physics*, 107, 123513.
- Ma, L., Jiang, K., Liu, X.-t., & Chen, W. (2014). An Violet Emission in ZnS:Mn,Eu: Luminescence and Applications for Radiation Detection. *Journal of Applied Physics*, 115, 103104 1-6.
- Mabe, A. N., Auxier, J. D., Uffer, M. J., Penumadu, D., Schweitzer, G. K., & Miller, L. F. (2013). Transparent lithiated polymer films for thermal neutron detection. *Nuclear Instruments & Methods in Physics Research Section A*, 722, 29 - 33.
- Mabe, A. N., Auxier, J. D., Uffer, M., Young, S. A., Penumadu, D., Schweitzer, G. K., & Miller, L. F. (2013). Thin Film Polymer Composite Scintillators for Thermal Neutron Detection. *Journal of Composites*, 1 - 8.
- Majety, S., Cao, X. K., Dahal, R., Pantha, B. N., Li, J., Lin, J. Y., & Jiang, H. X. (2012). Semiconducting hexagonal boron nitride for deep ultraviolet photonics. *Proc. SPIE*, 8268, 82682R.
- Majety, S., Doan, T. C., Li, J., Lin, J. Y., & Jiang, H. X. (2013). Electrical transport properties of Si-doped hexagonal boron nitride epilayers. *AIP Advances*, 3, 122116.
- Majety, S., Li, J., Cao, X. K., Dahal, R., Lin, J. Y., & Jiang, H. X. (2012). Metal-semiconductor-metal neutron detectors based on hexagonal boron nitride epitaxial layers. *Proc. SPIE*, 8507, 85070R.
- Majety, S., Li, J., Cao, X. K., Dahal, R., Pantha, B. N., Lin, J. Y., & Jiang, H. X. (2012). Epitaxial growth and demonstration of hexagonal BN/AlGaN p-n junctions for deep ultraviolet photonics. *Applied Physics Letters*, 100, 061121.
- Majety, S., Li, J., Zhao, W. P., Huang, B., Wei, S. H., Lin, J. Y., & Jiang, H. X. (2013). Hexagonal boron nitride and 6H-SiC heterostructures. *Applied Physics Letters*, 102, 213505.
- Marcath, M. J., Clarke, S. D., Wieger, B. M., Padovani, E., Larsen, E. W., & Pozzi, S. A. (2015). An implicit correlation method for cross-correlation sampling, with MCNPX-PoliMi validation. *Nuclear Science and Engineering*, 181(1), 72 - 81.
- Marini, J. (2011). *Characterization of DRIE etched Si pn junction diodes*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Mejia, I., Salas-Villasensor, A. L., Murphy, J. W., Kunnen, G. R., Cantley, K. D., Allee, D. R., . . . Quevedo-Lopez, M. A. (2013). High performance logic circuits using solution based, low temperature semiconductors for flexible electronics. *SPIE 2013 Defense Security & Sensing Symposium*. Baltimore, MD.

- Michalopoulos, D. P. (2008). *Prioritization and optimization in stochastic network interdiction problems*. University of Texas at Austin. Austin, TX: University of Texas at Austin.
- Michalopoulos, D. P., Barnes, J. W., & Morton, D. P. (n.d.). *Prioritized interdiction of nuclear smuggling via tabu search*. Retrieved from Optimization Letters: <http://dx.doi.org/10.1007/s11590-014-0829-4>
- Michalopoulos, D. P., Morton, D. P., & Barnes, J. W. (2013). Prioritizing network interdiction of nuclear smuggling. In H. I. Gassmann, S. W. Wallace, & W. T. Ziemba (Eds.), *Stochastic Programming: Applications in Finance, Energy and Logistics*. World Scientific.
- Miller, E. C., Clarke, S. D., Flaska, M., Pozzi, S. A., & Padovani, E. (2012). MCNPX-PoliMi post-processing algorithm for detector response simulations. *Journal of Nuclear Materials Management*, *XL*(2), 34 - 41.
- Miller, E. C., Dolan, J. L., Clarke, S. D., Pozzi, S. A., Tomanin, A., Perrani, P., . . . Mattingly, J. K. (2013). Time-correlated pulse-height measurements of low-multiplying nuclear materials. *Nuclear Instruments and Methods in Physics Research A*, *729*, 108 - 116.
- Miller, E. C., Mattingly, J. K., Clarke, S. D., Pozzi, S. A., Solomon, C. J., Dennis, B., & Meldrum, A. (2014). Computational evaluation of neutron multiplicity measurements of polyethylene-reflected plutonium metal. *Nuclear Science and Engineering*, *176*(2), 167 - 185.
- Miller, L. F., Uffer, M. J., Mabe, A. N., Uppal, R., Penumadu, D., & Schweitzer, G. (2014). Secondary Electron Energy Deposition in Thin Polymeric Films for Neutron-Photon Discrimination. *IEEE Transactions on Nuclear Science*, *61*, 1381 - 1388.
- Monterial, M., Marleau, P., Clarke, S., & Pozzi, S. A. (2015). Application of Bayes' theorem for pulse shape discrimination. *Nuclear Instruments and Methods in Physics Research A*, *795*, 318 - 324.
- Morton, D. P. (2011). Stochastic network interdiction. In J. J. Cochran, L. A. Cox, P. Keskinocak, J. P. Kharoufeh, & J. C. Smith (Eds.), *Encyclopedia of Operations Research and Management Science*. John Wiley and Sons.
- Morton, D. P., Pan, F., & Saeger, K. J. (2007). Models for nuclear smuggling interdiction. *IIE Transactions on Operations Engineering*, *38*, 3 - 14.
- Moses, D. (2015). Efficient scalable solid-state neutron detector. *Review of Scientific Instruments*, *86*, 065103.
- Mumpower, J., Shi, L., Stoutenborough, J. W., & Vedlitz, A. (2013). Psychometric and demographic predictors of the perceived risk of terrorist threats and the willingness to pay for terrorism risk management programs. *Risk Analysis*, *33*(10), 1802 - 1811.

- Murphy, J. W., Kunnen, G. R., Mejia, I., Quevedo-Lopez, M. A., Allee, D., & Gnade, B. (2012). Optimizing diode thickness for thin-film solid state thermal neutron detectors. *Applied Physics Letters*, 101(14), 5.
- Murphy, J. W., Kunnen, G., Mejia, I., Cantley, K. D., Allee, D. R., Gnade, B. E., & Quevedo-Lopez, M. A. (2013). Sol gel ZnO films doped with Mg and Li evaluated for charged particle detectors. *SPIE 2013 Defense Security & Sensing Symposium*. Baltimore, MD.
- Naeem, S. F., Scarpelli, M., Miller, E., Clarke, S. D., & Pozzi, S. A. (2014). Response of liquid scintillator assemblies as a function of detector angle. *Nuclear Instruments and Methods in Physics Research A*, 749, 35 - 41.
- Nehme, M. V. (2009). *Two-person games for stochastic network interdiction: Models, methods, and complexities*. University of Texas at Austin. Austin, TX: University of Texas at Austin.
- Nehme, N. V., & Morton, D. P. (2009). Tightening a network interdiction model. *Proceedings of the IIE Research Conference*.
- Nehme, N. V., & Morton, D. P. (2010). Efficient nested solutions of the bipartite network interdiction problem. *Proceeding of the IIE Research Conference*.
- Nguyen, S. L., Malliakas, C. D., Peters, J. A., Liu, Z. F., Im, J., Zhao, L. D., . . . Kanatzidis, M. G. (2013). Photoconductivity in Tl₆Si₄: A Novel Semiconductor for Hard Radiation Detection. *Chemistry of Materials*, 25, 2868 - 2877.
- Ojaruega, M., Becchetti, F. D., Villano, A. N., Jiang, H., Lawrence, C., Torres-Isea, R., . . . Roberts, A. (2011). Evaluation of Large Deuterated Scintillators for Fast Neutron Detection (E=0.5-20 MeV) using the D(d,n)³He, ¹³C(d,n) and ²⁷Al(d,n) reactions. *Nuclear Instruments and Methods in Physics Research A*, 652, 397 - 399.
- Okwechime, I. O., Egarievwe, S. U., Hossain, A., Hales, Z. M., Egarievwe, A. A., & James, R. B. (2014). Chemical treatment of CdZnTe radiation detectors using hydrogen bromide and ammonium-based solutions. *Proc. SPIE 9213, Hard X-Ray, Gamma-Ray, and Neutron Detector Physics XVI*. doi:10.1117/12.2063067
- Osborn, J. M. (2014). *Trace fission product ratios for nuclear forensics attribution of weapons-grade plutonium from fast breeder reactor blankets*. Texas A&M University, Nuclear Engineering Department. College Station, TX: Texas A&M University.
- Osborn, J. M., & et. al. (2013). Neutronics analysis of fast breeder reactor core to support the plutonium fingerprinting for forensics (PuFF) project. *Proc. 54th INMM Annual meeting*. Palm Desert, CA.
- Osborn, J. M., & et. al. (2014). Trace fission product ratios for nuclear forensics attribution of weapons-grade plutonium separated from fuel irradiated in thermal and fast reactor types. *Proc. 55th INMM Annual meeting*. Atlanta, GA.

- Paff, M. G., Ruch, M. L., Poitrasson-Riviere, A., Sagadevan, A., Clarke, S. D., & Pozzi, S. A. (2015). Organic liquid scintillation detectors for on-the-fly neutron/gamma alarming and radionuclide identification in a pedestrian radiation portal monitor. *Nuclear Instruments and Methods in Physics Research A*, 789, 16 - 27.
- Pan, F., & Morton, D. P. (2008). Minimizing a stochastic maximum-reliability path. *Networks*, 52, 111 - 119.
- Peters, J. A., Sebastian, M., Nguyen, S., Liu, Z. F., Im, J., Freeman, A. J., . . . Wessels, B. W. (2014). Optical investigation of defects in semi-insulating Tl614S single crystals. *Physical Review B*, 90(035205).
- Plimley, B., Chivers, D., Coffer, A., & Vetter, K. (2013). Experimental Benchmark of Electron Trajectory Reconstruction Algorithm for Advanced Compton Imaging. *IEEE Transaction Nuclear Science*, 60, 2308.
- Plimley, B., Chivers, D., Coffer, A., Aucott, T., Wanga, W., & Vetter, K. (2011). Reconstruction of electron trajectories in high-resolution Si devices for advanced Compton imaging. *Nuclear Instruments and Methods in Physics Research A*, 652, 595.
- Polack, J. K., Flaska, M., Enqvist, A., Sosa, C. S., Lawrence, C. C., & Pozzi, S. A. (2015). An algorithm for charge-integration, pulse-shape discrimination and estimation of neutron/photon misclassification in organic scintillators. *Nuclear Instruments and Methods in Physics Research A*, 795, 253 - 267.
- Pozzi, S. A., Bourne, M. M., & Clarke, S. D. (2013). Pulse shape discrimination in the plastic scintillator EJ-299-33. *Nuclear Instruments and Methods in Physics Research A*, 723, 19 - 23.
- Pozzi, S. A., Bourne, M. M., Dolan, J. L., Polack, K., Lawrence, C., Flaska, M., . . . Perrani, P. (2014). Plutonium metaPlutonium metal vs. oxide determination with the pulse-shaped-discrimination-capable plastic scintillator EJ-299-33. *Nuclear Instruments and Methods in Physics Research A*, 767, 188 - 192.
- Pozzi, S. A., Clarke, S. D., Flaska, M., & Perrani, P. (2009). Pulse Height Distributions of Neutron and Gamma Rays for Plutonium-Oxide Samples. *Nuclear Instruments and Methods in Physics Research A*, 608, 310 - 315.
- Pozzi, S. A., Wieger, B., Enqvist, A., Clarke, S. D., Flaska, M., Marcath, M., . . . Padovani, E. (2014). Correlated neutron emissions from Cf-252. *Nuclear Science and Engineering*, 178(2), 250 - 260.
- Pozzi, S. A., Xu, Y., Zak, T., Clarke, S. D., M. Bourne, F. M., Downar, T. J., . . . Protopopescu, V. (2010). Fast neutron spectrum unfolding for nuclear nonproliferation and safeguards applications. *Il Nuovo Cimento*, 33C(1).

- Ragusa, J., Guermond, J. L., & Kanschat, G. (2012). A Robust SN-DG-approximation for Radiation Transport in Optically Thick and Diffusive Regimes. *Journal of Computational Physics*, 231(4), 1947 - 1962.
- Rahman, M. (2015). *Electrophoretic Deposition of Boron Carbide In High Aspect Ratio Trenches In Silicon For Neutron Detector Application*. Rensselaer Polytechnic Institute. Troy, NY: Rensselaer Polytechnic Institute.
- Rengarajan, T., Dimitrov, N., & Morton, D. P. (2013). Convex approximations of a probabilistic bicriteria model with disruptions. *INFORMS Journal on Computing*, 25, 147 - 160.
- Robinson, S. E., Liu, X., & Vedlitz, A. (2011). Public support for the Department of Homeland Security. *Journal of Homeland Security and Emergency Management*, 8(1), 1 - 16. Retrieved from <http://dx.doi.org/10.2202/1547-7355.1764>
- Robinson, S. E., Liu, X., Stoutenborough, J. W., & Vedlitz, A. (2013). Explaining popular trust in the Department of Homeland Security. *Journal of Public Administration Research and Theory*, 23(3), 713 - 733. Retrieved from <http://dx.doi.org/10.1093/jopart/mus025>
- Robinson, S. E., Scott, E., Liu, X., & Vedlitz, A. (2011). Public Support for the Department of Homeland Security. *Journal of Homeland Security and Emergency Managergement*, 8(1), 1 - 16.
- Ruch, M. L., Flaska, M., & Pozzi, S. A. (2015). Pulse shape discrimination performance of stilbene coupled to low-noise silicon photomultipliers. *Nuclear Instruments and Methods in Physics Research A*, 793, 1 - 5.
- Ryan, C. M., Marianno, C. M., Charlton, W. S., & James, W. D. (2011). Neutron Activation Analysis of Concrete for Cross-Border Nuclear Security. *Journal of Radioanalytical and Nuclear Chemistry*, 291(1), 267 - 272.
- Ryan, C. M., Marianno, C. M., Charlton, W. S., Solodov, A. A., & Livesay, R. J. (2011). Determining the Effect of Concrete Roadways on Gamma-ray Background for Radiation Portal Monitoring Systems. *Proceedings of the 33rd ESARDA Annual Meeting Symposium*. Budapest, Hungary.
- Sahi, S., & Chen, W. (2013). Luminescence Enhancement in CeF₃/ZnO Nanocomposites For Radiation Detection. *Radiation Measurements*, 59, 139 - 143.
- Sahi, S., Chen, W., & Jiang, K. (2015). Luminescence enhancement of PPO/PVT scintillators by CeF₃ nanoparticles. *Journal of Luminescence*, 159, 105-109.
- Schiffer, R. T., Flaska, M., Pozzi, S. A., Carney, S. E., & Wentzloff, D. D. (2011). A scalable FPGA-based digitizing platform for radiation data acquisition. *Nuclear Instruments and Methods in Physics Research A*, 652, 491 - 493.
- Semyonov, O., Subashiev, A. V., Chen, Z., & Luryi, S. (2012). Photon Assisted Levy Flights of Minority Carriers in n-InP. *Journal of Luminescence*, 132, 1935 - 1943.

- Semyonov, O., Subashiev, A. V., Chen, Z., & Luryi, S. (2014). Edge Excitation Geometry for Studying Intrinsic Emission Spectra of Bulk n-InP. *Journal of Luminescence*, 147, 168 - 172.
- Semyonov, O., Subashiev, A., Chen, Z., & Luryi, S. (2010). Epitaxial InGaAsP/InP photodiode for registration of InP scintillation. *Journal of Applied Physics*, 108, 1 - 7.
- Semyonov, O., Subashiev, A., Shabalov, A., Lifshitz, N., Chen, Z., Hosoda, T., & Luryi, S. (2012). Reflectance Reduction of InP Wafers After High-temperature Annealing. *Applied Optics*, 51, 5425 - 5431.
- Sen, I., Penumadu, D., Williamson, M., Miller, L. F., Green, A. D., & Mabe, A. N. (2011). Thermal Neutron Scintillator Detectors Based on Poly (2-Vinylnaphthalene) Composite Films. *IEEE Transactions on Nuclear Science*, 58, 1386 - 1393.
- Sen, I., Urffer, M., Penumadu, D., Young, S. A., Miller, L. F., & Mabe, A. N. (2012). Polyester Composite Thermal Neutron Scintillation Films. *IEEE Transactions on Nuclear Science*, 59, 1781 - 1786.
- Shi, S., Hossu, M., Jiang, K., & Chen, W. (2012). Solution combustion synthesis, photoluminescence and X-ray luminescence of Eu-doped Nanoceria CeO₂:Eu. *Journal of Material Chemistry*, 22, 23461.
- Solodovnikov, D., Weber, M. H., Haven, D. T., & Lynn, K. G. (2012). Single crystal Cd doped scintillator material with garnet structure sensitive to gamma ray and neutron radiation. *Journal of Crystal Growth*, 352, 99 - 102.
- Soundararajan, R., & Lynn, K. G. (2012). Effects of excess tellurium and growth parameters on the band gap defect levels in Cd_xZn_{1-x}Te. *Journal of Applied Physics*, 112, 073111.
- Spence, G. R., & Charlton, W. S. (2011). A Boron Loaded Approach to Directionally Sensitive Neutron Detectors. *Proceedings of the 2011 Annual Meeting of the Institute of Nuclear Materials Management*. Palm Springs, CA.
- Stand, L., Zhuravleva, M., & Melcher, C. L. (2015). Patent No. WO2015010055-A1; WO2015010055-A4. International patent application (PCT).
- Stand, L., Zhuravleva, M., Lindsey, A., & Melcher, C. L. (2015). Growth and characterization of potassium strontium iodide: A new high light yield scintillator with 2.4% energy resolution. *Nuclear Instruments and Methods in Physics Research Section A*, 780, 40 - 44.
- Stand, L., Zhuravleva, M., Wei, H., & Melcher, C. L. (2015). Crystal growth and scintillation properties of potassium strontium bromide. *Optical Materials*, 46, 59 - 63.
- Subashiev, A. V., & Luryi, S. (2013). Lévy Flight of Photoexcited Minority Carriers in Moderately Doped Semiconductors: Theory and Observation. In S. Luryi, J. M. Xu, & A. Zaslavsky (Ed.), *Future Trends in Microelectronics: Frontiers and Innovations* (pp. 359 - 372). Hoboken, NJ: Wiley.
Retrieved from <http://arxiv.org/abs/1212.3001>

- Subashiev, A. V., Semyonov, O., Chen, Z., & Luryi, S. (2014). Temperature controlled Lévy flight of minority carriers in photoexcited bulk n-InP. *Physics Letters A*, 378, 266-269.
- Subashiev, A., & Luryi, S. (2009). Optical power transmission through adhesive and bonding layers. *IEEE Journal of Lightwave Technology*, 27, 5192 - 5201.
- Subashiev, A., & Luryi, S. (2010). Semiconductor gamma radiation detectors: band structure effects in energy resolution. *Future Trends in Microelectronics: From Nanophotonics to Sensors to Energy* (pp. 347 - 363). Hoboken, NJ: Wiley.
- Subashiev, A., & Luryi, S. (2010). Semiconductor gamma radiation detectors: band structure effects in energy resolution. *Physical Review E*, 81, 021123.
- Subashiev, A., & Luryi, S. (2010). Semiconductor Scintillator for 3-Dimensional Array of Radiation Detectors. *Future Trends in Microelectronics: From Nanophotonics to Sensors to Energy* (pp. 347 - 363). Hoboken, NJ: Wiley.
- Subashiev, A., Semyonov, O., Chen, Z., & Luryi, S. (2010). Urbach Tail Studies by Luminescence Filtering in Moderately Doped Bulk InP. *Applied Physics Letters*, 97, 181914.
- Sullivan, K. M., Morton, D. P., Pan, F., & Smith, J. C. (2014). Securing a border under asymmetric information. *Naval Research Logistics*, 61, 91 - 100.
- Sullivan, K. M., Smith, J. C., & Morton, D. P. (2014). Convex hull representation of the deterministic bipartite network interdiction problem. *Mathematical Programming*, 145, 349 - 376.
- Sun, Z., Li, Y., Zhang, X., Yao, M., Ma, L., & Chen, W. (2009). Luminescence and Energy Transfer in Water Soluble CeF₃ and CeF₃:Tb³⁺ Nanoparticles. *Journal of Nanoscience and Nanotechnology*, 9(11), 6283 - 6291.
- Swain, S., Jones, K. A., Datta, A., & Lynn, K. G. (2011). Study of different Cool down schemes during Crystal growth of detector grade CdZnTe. *IEEE Transactions on Nuclear Science*, 58(5), 2341 - 2345.
- Swinney, M. W. (2015). *Experimental and computational assessment of trace nuclide ratios in weapons grade plutonium for nuclear forensics analysis*. Texas A&M University, Nuclear Engineering Department. College Station, TX: Texas A&M University.
- Swinney, M. W., & Chirayath, S. S. (2014). Comparison of FBR and HFIR monte-carlo simulations with validation from gamma spectroscopy in support of the NFASP project. *Proc. 2014 ANS Winter meeting*. Anaheim, CA.
- Thoreson, G. G. (2009). *A framework for efficient detection probability computation in smuggled nuclear material interdiction*. University of Texas at Austin. Austin, TX: University of Texas at Austin.

- Thoreson, G. G. (2011). *A general nuclear smuggling threat scenario analysis platform*. University of Texas at Austin. Austin, TX: University of Texas at Austin.
- Thoreson, G. G., & Schneider, E. A. (2009). A computationally efficient method for simulating smuggled nuclear material scenarios. *Transactions of the American Nuclear Society*, 101.
- Thoreson, G. G., & Schneider, E. A. (2010). A new method for rapid nuclear material interdiction analysis. *Proceedings of the 51st Annual Meeting of the Institute for Nuclear Materials Management*.
- Thoreson, G. G., & Schneider, E. A. (2010). Efficient calculation of detection probabilities. *Nuclear Instruments and Methods in Physics Research A*, 615, 313 - 325.
- Thoreson, G. G., & Schneider, E. A. (2012). The application of high energy resolution Green's functions to threat scenario simulation. *IEEE Transactions on Nuclear Science*, 59, 389 - 402.
- Thoreson, G. G., Schneider, E. A., Armstrong, H., & van der Hoeven, C. A. (2015). The application of neutron transport Green's functions to threat scenario simulation. *IEEE Transactions on Nuclear Science*, 62, 236 - 249.
- Tong, F. (2010). *Important factors in predicting detection probabilities for radiation portal monitors*. University of Texas at Austin. Austin, TX: University of Texas at Austin.
- Uppal, R., Sen, I., Penumadu, D., Young, S. A., Urffer, M. J., & Miller, L. F. (2014). "Li-6 Embedded Biaxially Stretched Scintillation Films for Thermal Neutron Detection and Neutron/Gamma Discrimination. *Advanced Engineering Materials*, 16, 196 - 201.
- Vetter, K., Chivers, D., & Quiter, B. (2015). Advanced Concepts in Multi-Dimensional Radiation Detection and Imaging. In S. Apikyan (Ed.), *Nuclear Threats and Security Challenges*. Springer.
- Vetter, K., Chivers, D., Plimley, B., Coffey, A., Aucott, T., & Looker, Q. (2011). First demonstration of electron-tracking based Compton imaging in solid-state detectors. *Nuclear Instruments and Methods in Physics Research A*, 652, 599.
- Villano, A. N., Becchetti, F. D., Kolata, J. J., Ojaruega, M., & Roberts, A. (2010). Efficiency measurements of deuterated liquid scintillators using d(d,n)3He coincidence events. *Nuclear Instruments and Methods in Physics Research A*, 652, 280 - 283.
- Wahl, C. G. (2011). *Image, Detection and Identification Algorithms for Position-Sensitive Gamma-Ray Detectors*. University of Michigan . Ann Arbor: University of Michigan .
- Wahl, C. G., & He, Z. (2011). Gamma-Ray Point-Source Detection in Unknown Background Using 3D-Position-Sensitive Semiconductor Detectors. *IEEE Transactions on Nuclear Science*, 58(3), 605-613.
- Wahl, C. G., Bernard, E. P., Kachulis, C., Edwards, B., Larsen, N. A., Tennyson, B., . . . Gai, M. (2012). Status and Design of Two-Phase Liquid-Xenon Compton-Imaging Detector. *Proceedings of 2012*

IEEE Nuclear Science Symposium and Medical Imaging Conference, (pp. 1541-1546). Anaheim, CA.

- Wahl, C. G., Jaworski, J. M., & He, Z. (2012, August). UMIImaging: A Software Package for Image Reconstruction from 3D-Position-Sensitive Gamma-Ray Detectors. *IEEE Transactions on Nuclear Science*, 59(4), 1672-1680.
- Wang, P. L., Liu, Z., Pice, C., Peters, J. A., Tan, G., Im, J., . . . Kanatzidis, M. G. (2015). Hard Radiation Detection from the Selenophosphate Pb₂P₂Se₆. *Advanced Functional Materials*, 25(30), 4874 - 4881.
- Wang, S. C., Liu, Z. F., Peters, J. A., Sebastian, M., Nguyen, S. L., Malliakas, C. D., . . . Kanatzidis, M. G. (2014). Crystal Growth of Tl₄CdI₆: A Wide Band Gap Semiconductor for Hard Radiation Detection. *Crystal Growth & Design*, 14, 2401 - 2410.
- Wang, W., Kaye, W., Kim, J. C., Zhang, F., & He, Z. (2012). Improvement of Compton imaging efficiency by using side-neighbor events. *Nuclear Instruments and Methods in Physics Research A*, 687, 62-68.
- Wang, W., Wahl, C. G., Jaworski, J. M., & He, Z. (2012, April). Maximum-Likelihood Deconvolution in the Spatial and Spatial-Energy Domain for Events With Any Number of Interactions. *IEEE Transactions on Nuclear Science*, 59(2), 469-478.
- Washington, A. L., Wright, J. S., Duff, M. C., Burger, A., Groza, M., Matei, L., & Buliga, V. (2014). Change in the bulk resistivity of CdZnTe with selected near IR light. *Proceedings of SPIE*, 9213, 92131K.
- Weltz, A., Torres, B., McElwain, L., Dahal, R., Huang, J., Bhat, I., . . . Danon, Y. (2015). Development of a modular directional and spectral neutron detection system using solid-state detectors. *Nuclear Instruments and Methods in Physics Research A*, 792, 28 - 37.
- Williamson, M. R., Miller, L. F., & Sen, I. (2012). Measurement and Modeling of Light Yield Nonproportionality in Neutron Detectors. *Nuclear Technology*, 177, 413 - 420.
- Wu, S. -H., Kuo, Y., & Lin, C. C. (2012). Light wavelength effects on the performance of a-Si: H PIN photodiode. *2112 MRS Proceedings*, 1426, pp. 199-204.
- Wu, S. H., Kuo, Y., & Lin, C. C. (2012). Light wavelength effects on the performance of a-Si:H PIN photodiode. *MRS Symp. A: Amorphous and Polycrystalline Thin-Film Silicon Science and Technology*.
- Xiumei, H., Guiyuan, Z., Xiwei, Q., Xiaoqiang, W., Mingya, L., Xudong, S., & Chen, W. (2014). Synthesis and luminescence properties of BiPO₄:Ce,Tb nanorods. *Journal of Luminescence*, 152, 37 - 39.
- Xun, X., Mallick, B., Carroll, R., & Kuchment, P. (2011). Bayesian Approach to Detection of Small Low Emission Sources. *Inverse Problems*, 27.

- Yang, G., Bolotnikov, A. E., Fochuk, P. M., Cui, Y., Camarda, G. S., Hossian, A., . . . James, R. B. (2012). Post-growth Annealing of Cadmium Zinc Telluride Crystals for Room-Temperature Radiation Detectors. *Journal of Electronic Materials*, 41(10), 2912 - 2916.
- Yang, K., Zhuravleva, M., Uffer, M., Miller, L. F., & Melcher, C. L. (2011). Synthesis and scintillation properties of CsGd₂Cl₇:Ce³⁺ for gamma ray and neutron detection. *Nuclear Instruments & Methods in Physics Research Section A*, 656, 92 - 95.
- Yang, Y., Deshpande, H., Choi, G., & Gratz, P. (2012). Exploiting Path Diversity for Low-Latency and High-Bandwidth with the Dual-Path NoC Router. *Proceedings of IEEE ISCAS*. Seoul, South Korea.
- Yao, M., Chen, W., Mohite, D. P., Leventis, N., Lu, N., Churu, G., . . . Lu, H. (2013). Luminescent LaF₃:Ce-doped organically modified nanoporous silica xerogels. *Journal of Applied Physics*, 113, 013111.
- Yao, M., Joly, A. G., & Chen, W. (2010). Formation and Luminescence Phenomena of LaF₃:Ce³⁺ Nanoparticles and Lanthanide-Organic Compounds in Dimethyl Sulfoxide. *Journal of Physical Chemistry*, 114, 826 - 831.
- Yao, M., Li, Y., Hossu, M., Joly, A. G., Liu, Z., Liu, Z., & Chen, W. (2011). Luminescence of Lanthanide-Dimethyl Sulfoxide Compound Solutions. *Journal of Physical Chemistry B*, 115(30), 9352 - 9359.
- Yao, M., Zhang, X., Ma, L., Chen, W., Joly, A. G., Huang, J., & Wang, Q. (2010). Luminescence Enhancement of CdTe Nanostructures in LaF₃:Ce/CdTe Nanocomposites. *Journal of Applied Physics*, 108, 10310.
- Yemam, H. A., Mahl, A., Koldemir, U., Remedes, T., Parkin, S., Greife, U., & Sellinger, A. (2015). Boron-rich Benzene and Pyrene Derivatives for the Detection of Thermal Neutrons. *Scientific Reports*, 5, 13401.
- Young, S. A., Sen, I., & Penumadu, D. (2012). Investigation of Li-6 Enriched Particle Dispersion in Fluorescent Electrospun Polymer Nanofibers to be Used as Thermal Neutron Scintillators. *Journal of Engineering Materials and Technology*, 134.
- Yun, X., & Stanaćević, M. (2009). An Adaptive Front-end Readout System for Radiation Detection. *Proc. IEEE Int. Symp. Circuits and Systems*. Taipei, Taiwan.
- Yun, X., Luryi, S., & Stanaćević, M. (2010). Low-power Charge Sensitive Amplifier for Semiconductor Scintillator. *Proc. IEEE Int. Symp. Circuits and Systems*. Paris.
- Yun, X., Stanacevic, M., & Luryi, S. (2011). Low-power Amplifier for Readout Interface of Semiconductor Scintillator. *IEEE Trans. Nuclear Science*, 58, 2129 - 2136.
- Yun, X., Stanaćević, M., Kuzminsky, V., & Gouzman, M. (2008). Current-mode Preamplifier for Response Measurement of Semiconductor Scintillator. *Proc. 51st. IEEE Midwest Symp. on Circuits and Systems*. Knoxville, TN.

- Zak, T., Clarke, S. D., Bourne, M. M., Pozzi, S. A., Xu, Y., Downar, T. J., & Perrani, P. (2010). Neutron spectroscopy of plutonium oxide using matrix unfolding approach. *Nuclear Instruments and Methods in Physics Research A*, 622, 191 - 195.
- Zhang, N., Yeckel, A., Burger, A., Cui, Y., Lynn, K. G., & Derby, J. J. (2011). Anomalous segregation during electrodynamic gradient freeze growth of cadmium zinc telluride. *Journal of Crystal Growth*, 325, 10 - 19.
- Zhang, R., Candra, S., Vetter, K., & Zakhor, A. (2015). Sensor Fusion for Semantic Segmentation of Urban Scenes. *IEEE International Conference on Robotics and Automation (ICRA)*.
- Zhou, H., Coates, N. E., Hernandez-Sosa, G., & Moses, D. (2012). New configuration of solid-state neutron detector made possible with solution-based semiconductor processing. *Advanced Functional Materials*, 22, 3279 - 3283.