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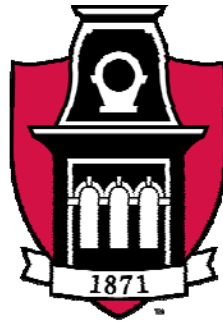
College of Engineering

2015-2016

Annual Report

University of Arkansas

College of Engineering

September 1, 2016

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College of Engineering
2016 Annual Report

- In FY 16, the College of Engineering received 132 new research grants, totaling $28.7 million.
- College of Engineering faculty produced 402 publications.
- Enrollment increased by 8.4 percent in the fall of 2015, with 3,265 students.
- The College also welcomed 9 new tenure/tenure track faculty members, one research assistant professor and two new department heads. One of our new tenured faculty members, Morten Olgaard Jensen, associate professor of biomedical engineering, is an Arkansas Research Alliance Scholar.
- In the 2017 edition of *U.S. News & World Report Best Graduate Schools*, the University of Arkansas College of Engineering ranked 112 out of 215 schools. Among engineering programs at public research universities, the college ranked 70. Among several key metrics involved in the calculation of the rankings, the college showed an improvement over the previous year.
- In *U.S. News & World Report's* rankings of the 2016 best online programs, the University of Arkansas College of Engineering's master's degrees programs in engineering and electrical engineering ranked No. 33.

Achievements in Teaching
- Three current engineering students and two graduates received Graduate Research Fellowships from the National Science Foundation.
- The International Engineering Program, which allows students to earn undergraduate degrees in both German and engineering within five years, was created.
- The Department of Civil Engineering has been selected to receive the 2016 Walter LeFevre Award in the large program category by the American Society of Civil Engineers.
- Seven engineering students were selected to represent the U of A at the 2016 Clinton Global Initiative University meeting.
- A team of chemical engineering and biology students received two awards at the Environmental Protection Agency's People, Prosperity and the Planet Competition.
- Chemical engineering student teams received a first place and two second-place finishes in the International Environmental Design Contest.
- Several engineering students received awards at the annual conference of the Institute of Industrial and Systems Engineers.
- Matt Barlow, graduate electrical engineering student, received a Best Session Presentation Award at the Applied Power Electronics Conference and Exposition.
- Adrian Beirise, graduate biological engineering student, won the Graduate Poster Competition at the annual Institute of Biological Engineering meeting in South Carolina.
- Nathan Burford, a graduate microelectronics-photonics student, was recognized by the Institute of Electrical and Electronics Engineers Antennas and Propagation Society for his research on terahertz radiation. He also received a doctoral research fellowship from IEEE.
- Richard Deschenes, graduate civil engineering student, has recently been awarded the ACI BASF Construction Chemicals Student Fellowship for the 2015-16 academic year.
- Ryan DuChanois, senior honors civil engineering major, has been selected as one of 35 U.S. Gates Cambridge Scholars.
- Danielle Neighbour, senior honors civil engineering student, has been named a 2016 Truman Scholar. Neighbor also received the Daniel W. Mead Prize for Students from the American

Society of Civil Engineers. This prize is awarded annually for a student paper on professional ethics.

- Karla Morrissey, senior honors chemical engineering student, was awarded a Barry M. Goldwater Scholarship.
- Payam Parsa, graduate industrial engineering student, has been awarded the Electrification and Controls Manufacturers Association Honor Scholarship by the Material Handling Education Foundation Inc.
- Morgan Roddy, graduate microelectronics-photonics student, was awarded the Arkansas Space Grant Consortium Fellowship. Rodd with receive $12,500 towards his research and the opportunity to visit the NASA Space Flight Center in Huntsville, Alabama.
- Sayan Seal, graduate electrical engineering student, received first place in the student presentation competition at the Ceramic Interconnect and Ceramic Microsystems Technologies conference. Atanu Dutta, graduate electrical engineering student, tied for second place.
- Arturo Nuñez Uribe, junior industrial engineering major, has received the 2016-2017 Myrtle & Earl Walker Scholarship from the SME Education Foundation.

Achievements in Research
- The University of Arkansas was ranked 19th among U.S. institutions for its contributions to operations research practice literature in the 11th Rothkopf Rankings, which were published May 25 in the journal *Interfaces.* The ranking was based on research conducted by the Department of Industrial Engineering.
- Engineering researchers at the University of Arkansas will help lead a new center that will focus on designing and developing vehicle electrical systems that are more powerful, efficient and heat-resistant. The Power Optimization for Electro-Thermal Systems Center, a National Science Foundation Engineering Research Center, is funded with a grant for $18.5 million.
- A new national center devoted to cyber-security for electric power utilities will be led by University of Arkansas engineering researchers. The center, called the Cybersecurity Center for Secure Electric Energy Delivery Systems, is made possible by a grant of $12.2 million from the U.S. Department of Energy and $3.3 million from research partners.
- A new federally funded research center led by the University of Arkansas will partner with Arkansas industries and create new products for use in manufacturing, aerospace and defense, agriculture, forestry, oil and gas, food packaging and health care. The Center for Advanced Surface Engineering will be funded with a $20 million grant from the National Science Foundation.
- Juan Balda, University professor of electrical engineering and holder of the Twenty-First Century Leadership Chair in Engineering, has a received a grant for $300,000 from the National Science Foundation to help convert U.S. data centers from AC to DC power.
- Jamie Hestekin, associate professor and holder of the Jim L. Turpin Endowed Professorship in Chemical and Biochemical Separations, has received two grants totaling $145,250 from a local technology development firm to help the company convert woody biomass into bio-oil and eventually liquid biofuel.
- Alan Mantooth, distinguished professor of electrical engineering and holder of the Twenty-First Century Research Leadership Chair, received a grant of $200,000 to study modeling of gallium nitride devices, and a $360,000 grant to research and develop new mathematical models and several new features for the tool to analyze mechanical and thermal reliability.

- Ashlea Bennett Milburn, assistant professor of industrial engineering, received a $500,000 grant from the National Science Foundation through the Faculty Early Career Development Program to research how social media can be used to improve emergency response.
- Timothy Muldoon, an assistant professor in the biomedical engineering department, received an Academic Research Enhancement Award from the National Cancer Institute for $442,000.
- Kyle Quinn, associate professor of biomedical engineering, was awarded a $744,992 grant by the National Institute of Health. This grant will improve the imaging and early detection of chronic wounds and guide treatments.
- Xintao Wu, professor of computer science and holder of the Charles D. Morgan/Acxiom Graduate Research Chair, has received a grant of $436,713 to research ways to protect the identities of participants of genomic studies, as well as a $348,758 from the National Science Foundation to conduct research on detecting fraud and cyberattacks against online social networks.
- Shui-Qing "Fisher" Yu, associate professor of electrical engineering, will lead research and design of new solar cells to power space missions, with support from a NASA/EPSCoR grant of $750,000 to the Arkansas Space Grant Consortium Office.
- Min Zou, professor and holder of the Twenty-First Century Professorship in Mechanical Engineering, received a $450,000 grant from the National Science Foundation to further the study of a novel approach that significantly improves wear resistance of polytetrafluoroethylene coatings. Zou also co-founded a company, SurfTec LLC, along with Samuel Beckford, a graduate mechanical engineering student. Their company has received a $225,000 grant from the National Science Foundation to commercialize its patent-pending technology.

Achievements in Service
- The University of Arkansas Science and Engineering Partnership, created by the College of Engineering, received a three-year grant of $1.7 million from the Arkansas Department of Education, to work with 130-150 teachers from schools in areas of Arkansas with high levels of poverty. The program will aim to help teachers understand and implement the new standards for science, technology, engineering, and math in K-4 classrooms.
- Michelle Bernhardt, assistant professor of civil engineering, and graduate student Behdad Mofarraj, will participate in research of soil effected by recent flooding across the midwest as part of the Geotechnical Extreme Events Reconnaissance Association team.
- Andrew Braham, assistant professor of civil engineering, has received an Award of Recognition from the Association of Asphalt Pavement Technologists.
- Christophe Bobda, computer science and computer engineering professor, was named an honorary professor by Brandenburg Technical University.
- Richard Cassady, professor of industrial engineering and director of the Freshman Engineering Program, received the Annual Alan O. Plait Tutorial Excellence Award at the Annual Reliability and Maintainability Symposium. Cassady also received the Albert G. Holzman Distinguished Educator Award from the Institute of Industrial and Systems Engineers.
- Frances Griffith, associate director of the Center for Training Transportation Professionals, has been elected to the board of direction of the American Concrete Institute.
- Marty Matlock, professor of biological and agricultural engineering, received the Excellence in Freedom to Operate Award from the United Soybean Board during the Commodity Classic Agricultural Trade Show in New Orleans.

- Marty Matlock, professor of biological and agricultural engineering, led talks with the French ministries of agriculture and environment, members of the French National Assembly and Senate, several university groups, conservation organizations, sustainability think tanks and journalists to share ideas and methods for agricultural sustainability.
- Ashlea Bennett Milburn, assistant professor of industrial engineering, received the Teaching Excellence Award in Transportation and Logistics from the Institute of Industrial and Systems Engineers.
- Heather Nachtmann, professor of industrial engineering and associate dean for research for the College of Engineering, was awarded the title of fellow by the Institute of Industrial and Systems Engineers.
- Harry Pierson, assistant professor of industrial engineering, was among seven United States representatives invited to present research at the 11th Sino-American Technology & Engineering Conference on Smart Robotics in China.
- Edward Pohl, professor and head of the Department of Industrial Engineering received the John L. Imhoff Global Excellence Award from the American Society for Engineering Education.
- Tish Pohl, clinical assistant professor of industrial engineering, has been awarded a Certificate of Merit for Faculty Academic Advising from the National Academic Advising Association.
- Jim Rankin, vice provost for research and economic development, has been elected to the board of directors of the American Institute of Aeronautics and Astronautics. Rankin has a faculty appointment in the Department of Electrical Engineering
- Panneer Selvam, professor of civil engineering and holder of the James T. Womble Endowed Professorship in Computational Mechanics and Nanotechnology Modeling, gave the inaugural speech and a keynote speech at Peru's National Congress of Civil Engineering in November.
- Steve Tung, professor of mechanical engineering and a leader in the design and development of micro and nano-fluidic systems for biological and biomedical applications, was elected as a fellow of the American Society of Mechanical Engineers.
- Lalit Verma, head of the Department of Biological and Agricultural Engineering, made presentations on the Global Initiative of the American Society of Biological and Agricultural Engineers in Denmark and China.
- John A. White Jr., chancellor emeritus and Distinguished Professor of industrial engineering, was honored with the Marvin H. Agee Distinguished Alumni Award from Virginia Polytechnic Institute and State University.
- Clinton Wood, assistant professor of civil engineering, traveled to Ecuador with the Geo-engineering Extreme Events Reconnaissance mission sponsored by the National Science Foundation. He studied the effects of the magnitude 7.8 earthquake that struck the South American country April 16.
- Wenchao Zhou, assistant professor of mechanical engineering and holder of the Twenty-First Century Professorship in Mechanical Engineering, has received the Ralph E. Powe Junior Faculty Enhancement Award from Oak Ridge Associated Universities.
- Min Zou, professor and holder of the Twenty-First Century Professorship in Mechanical Engineering, was named a fellow by the Arkansas Research Alliance for her research and development of nanoscale surfaces such as friction-reducing coatings in electronics. She was elected as a fellow of the American Society of Mechanical Engineers.

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FACULTY HONORS
2015-2016 COLLEGE OF ENGINEERING

<u>COLLEGE OF ENGINEERING OUTSTANDING TEACHER</u>

Ben Runkle, Biological & Agricultural Engineering
Michelle Kim, Biomedical Engineering
Bob Beitle, Chemical Engineering
Andrew Braham, Civil Engineering
Dale Thompson, Computer Science and Computer Engineering
Hameed Naseem, Electrical Engineering
Ashlea Milburn, Industrial Engineering
Rick Couvillion, Mechanical Engineering

<u>COLLEGE OF ENGINEERING OUTSTANDING RESEARCHER</u>

Jun Zhu, Biological & Agricultural Engineering
Jeff Wolchok, Biomedical Engineering
Jamie Hestekin, Chemical Engineering
Rick Coffman, Civil Engineering
Xinatao Wu, Computer Science and Computer Engineering
Jingxian Wu, Electrical Engineering
Heather Nachtmann, Industrial Engineering
Min Zou, Mechanical Engineering

<u>COLLEGE OF ENGINEERING OUTSTANDING SERVICE TO STUDENTS</u>

Yi Lang, Biological & Agricultural Engineering
Kartick Balachandran, Biomedical Engineering
Shannon Servoss, Chemical Engineering
Rod Williams, Civil Engineering
Gordon Beavers, Computer Science and Computer Engineering
Simon Ang, Electrical Engineering
Shengfan Zhang, Industrial Engineering
David Albers, Mechanical Engineering

<u>UNIVERSITY & COLLEGE AWARDS</u>

Dale Thompson	2015-16 John Imhoff Outstanding Teaching Award
Alan Mantooth	2015-16 John Imhoff Outstanding Research Award
Jin-Woo Kim	2015-16 Most Engaging Research Faculty Award
Kartik Balachandran	2015-16 Rising Star Award
Alan Mantooth	2015-16 Senior Faculty Award

APPENDIX B

2015-2016 COLLEGE OF ENGINEERING STUDENT HONORS

COLLEGE OF ENGINEERING SENIOR SCHOLARS

Trevor Caldarera	Biomedical Engineering
Daniel Fritsche	Industrial Engineering
Aubrey Hale	Mechanical Engineering
Robert Imhoff	Industrial Engineering
Hannah Koehn	Industrial Engineering
Darren Warford	Civil Engineering

COLLEGE OF ENGINEERING OUTSTANDING SENIOR

Ryan DuChanois	Civil Engineering

DEPARTMENTAL OUTSTANDING SENIORS

Christian Heymsfield	Biological and Agricultural Engineering
Kristina Maxwell	Biomedical Engineering
Kaylee Smith	Chemical Engineering
Alexander Anderson	Computer Science Computer Engineering (CE)
Joseph Sirrianni	Computer Science Computer Engineering (CS)
Ryan DuChanois	Civil Engineering
Brett Schauwecker	Electrical Engineering
Daniel Fritsche	Industrial Engineering
Samuel Jenkins	Mechanical Engineering

PORTER STONE CO-OP AWARDS

Kimberly Cribbs	Chemical Engineering
Devin Hazlett	Chemical Engineering
Andrew Hinckley	Mechanical Engineering
Adeola Yusuf	Industrial Engineering
Seth Arnold	Mechanical Engineering
Ian Fraser	Industrial Engineering

PRESIDENTIAL SCHOLAR

Ty Austin	Chemical Engineering

APPENDIX C

I. Books (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Book Title	Publisher	Place of Publication	Publication Date
Muldoon, T. Greening, G., H.M. James, ISBN: 9781510600324	Optical Phantoms: Diffuse and Subdiffuse Imaging and Spectroscopy Validation.	SPIE Publications		2015
Rossetti, M.D.	Simulation Modeling and Arena, 2nd Edition	John Wiley & Sons	New York, NY	2015
Darvishmanesh, S., Qian, X., **Wickramasinghe, S. R.**	"Responsive membranes, in: Chemoresponsive Materials Stimulation by Chemical and Biological Signals, RSC Smart Materials"	Editor: Hans-Jörg Schneider, Royal Society of Chemistry.	Cambridge, UK	2015

II. Book Chapters (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Chapter Title	Book Title	Publisher	Place of Publication	Publication Date
Ang, Simon S. H. A. Mantooth	Reliability of Power Electronic Packaging	Reliability of Power Electronic Converter Systems	IET		2015
Jensen, M.O.	Biomechanical Aspects of Mitral Valve Function and Repair	Doctor of Medical Science		Aarhus University, Denmark	2015
Jensen, M.O., Grbic S., Thomas F. Easley, Tommaso Mansi, Charles H. Bloodworth, Eric L. Pierce, Ingmar Voigt, Dominik Neumann, Julian Krebs, David D. Yuh, Dorin Comaniciu, Ajit P. Yoganathan	Multi-modal Validation Framework of Mitral Valve Geometry and Functional Computational Models	Statistical Atlases and Computational Models of the Heart - Imaging and Modeling Challenges			2015
Ing-Chang Jong, B.G. Rogers	Chapter 9-Kinematics of Particles (pp. 1–51)	Engineering Mechanics: Dynamics	Oxford University Press		2015
Ing-Chang Jong, B.G. Rogers	Chapter 10-Kinetics of Particles: Force, Mass, and Acceleration (pp. 52–95)	Engineering Mechanics: Dynamics	Oxford University Press		2015
Ing-Chang Jong, B.G. Rogers	Chapter 11-Kinetics of Particles: Energy and Momentum (pp. 96–173)	Engineering Mechanics: Dynamics	Oxford University Press		2015
Ing-Chang Jong, B.G. Rogers	Chapter 12-Plane Kinematics of Rigid Bodies (pp. 174–231)	Engineering Mechanics: Dynamics	Oxford University Press		2015

Ing-Chang Jong, B.G. Rogers	Chapter 13-Plane Kinetics of Rigid Bodies: Force, Mass, and Acceleration (pp. 232–281)	Engineering Mechanics: Dynamics	Oxford University Press		2015
Liao, H.T. and Guo. H.R.	Reliability Modeling and Sequential Repairs for Systems Considering Aging and Repair Effects - Chapter 10 –pg. 157-174	Through-life Engineering Services: Motivation, Theory and Practice, 3rd Edition Edited by Redding, L. and Roy, R.,	Springer International Publishing	Antigua, United Kingdom	2015
Muldoon, T., Jenkins, S.V., Chen	Plasmonic Nanostructures for Biomedical and Sensing Applications.	Metallic Nanostructures	Springer International Publishing	Switzerland	2015
Nachtmann, Heather	Estimating Cash Flows	The Economic Analysis of Industrial Projects, 3rd Edition;, 2015).	Oxford University Press	New York, New York	2015
Qian, X., S. Darvishmanesh, and S.R. Wickramasinghe	Responsive membranes'	Chemoresponsive Materials: Stimulation by Chemical and Biological Signals,	Royal Society of Chemistry		2015
Zaharoff, D.A 64(6):689-96	Intravesical Chitosan/IL-12 Immunotherapy Induces Tumor-Specific Systemic Immunity against Bladder Cancer	Cancer Immunology Immunotherapy			2015
Gresham, R. M., Canter, N. M., Zabawski, E. S. and **Zou, Min**	Lubrication and Lubricants	Kirk-Othmer Encyclopedia of Chemical Technology			2015

IIIa. Refereed Journal Articles (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Article Title	Journal Title	Publication Date	Volume	Number	Pages
Aklah, Z. and **Andrews, D**.	A Flexible Multilayer Perceptron Co-Processor for FPGAs	11th International Symposium on Applied Reconfigurable Computing	Apr-15			427-434
Ma, S., Aklah, Z. and **Andrews, D.**	A Run Time Interpretation Approach for Creating Custom Accelerators	25th International Conference on Field Programmable Logic and Applications	Sept. 2015			472-475
George, N., Lee, H., Novo, D., Owaida, M., **Andrews, D.,** Olukotun, K., and Ienne, P.	Automatic Support for Multi-Module Parallelism from Computational Patterns	25th International Conference on Field Programmable Logic and Applications	Sept. 2015			93-100
Lv, Jian, H. Li, and **S. S. Ang**	A curvature compensated high PSRR CMOS Bandgap reference	Analog Integrated Circuits and Signal Processing	Mar-15	82	3	675-682
Balachandran K, Lam NT	The Mechanobiology of Drug-Induced Cardiac Valve Disease	Journal of Long-Term Effects of Medical Implants.	2015	25	2-Jan	27-40
Barnes Arthur, **J.C. Balda**, Escobar Mejía	A Semi-Markov Model for Control of Energy Storage in Utility Grids and Microgrids with PV Generation	IEEE Transactions on Sustainable Energy	2015	6	2	546-556

Beckford, S.PhD, Mathurin, L., Chen, J., and Zou, M.	The Influence of Cu Nanoparticles on the Tribological Properties of Polydopamine/PTFE + Cu Films	Tribology Letters	2015	59:11:00		
Fruchtl, M., J. Sakon and **R. Beitle**	"Expression of a Collagen-binding Domain Fusion Protien: Effect of Amino Acid Supplementation, Inducer Type, and Culture Conditions."	Biotechnology Progress	2015		31	503-509
Mefenza, M., Saldanha, L.B., Yonga, F. and **Bobda, C.**	A Framework for Design and Verification of Embedded Vision Applications	Journal of Real-Time Image Processing	Jun-15			
Saldanha, L.B. and **Bobda, C.**	An Embedded System for Handwritten Digit Recognition	Journal of Systems Architecture - Embedded Systems Design	2015	61	10	693-699
Yonga, F., Mefenza, M. and **Bobda, C.**	ASP-Based Encoding Model of Architecture Synthesis for Smart Cameras in Distributed Networks	ACM Transactions on Design Automation of Electronic Systems	Mar-15	20	2	28 pages
Mefenza, M., **Bobda, C.,** and Yonga, F.	Mefenza, M., Bobda, C., and Yonga, F., "Component Interconnect and Data Access Interface for Embedded Vision Applications	Springer Journal of Real-Time Image Processing,	Jul-15			
Zarezadeh, A.A., **Bobda, C.,** Yonga, F., and Mefenza, M.	Efficient Network Clustering for Traffic Reduction in Embedded Smart Camera Networks	Springer Journal of Real-Time Image Processing	Apr-15			
K. Schneider, **C.R. Cassady**	Comparison of Alternative Fleet-Level Selective Maintenance Models	Reliability Engineering & System Safety	2015	134		178-187

Carmack, Joseph M., Millett, P.C.	Numerical Simulations of Bijel Morphology in Thin Films with Complete Surface Wetting.	The Journal of Chemical Physics	2015		143	154701.00
Aurora A and **Carrier DJ**	Understanding the pine dilute acid pretreatment system for enhanced enzymatic hydrolysis.	ACS Sustainable Chemistry and Engineering	2015	3		2423-2428
Lau C, Bunnell K and **Carrier DJ**	Kinetic modeling of switchgrass-derived xylose oligomers degradation during pretreatment in dilute acid or in water	ACS Sustainable Chemistry and Engineering	2015	3		2030–2035
Mohanram, S, Rajan K, **Carrier DJ**, Nain L and Arora A.	Insights into biological delignification of rice straw by Trametes hirsute and Myrothecium roridum and comparison of saccharification yields with dilute acid pretreatment.	Biomass and Bioenergy	2015	76		54-60
Sinha A, Martin E, Lim K, **Carrier DJ**, Haewook H, Zharov V, and Kim J.	Cellulose nanocrystals as advanced "Green" materials for biological and biomedical engineering.	Journal of Biosystems Engineering	2015	40		373-393
Chen H-H, Rajan K, **Carrier, DJ** and Singh V	Separation of xylose oligomers from autohydrolyzed Miscanthus x giganteus using centrifugal partition chromatography	Food and Bioproducts Processing	2015	95		125-132

			2015	189		99-106
Kapoor R, Rajan K and **Carrier, DJ**	Elucidating the expanding role of different Trametes versicolor laccases in the pretreatment of biomass hydrolyzates.	Bioresource Technology				
Do TD, **Chimka JR**, and Fairey JL	Improved (and singular) disinfectant protocol for indirectly assessing organic precursor concentrations of trihalomethanes and dihaloacetonitriles	Environmental Science & Technology	2015	49	16	9858-9865
Chimka, J.	A note on the beta distribution of lot percent defective	Economic Quality Control	2015	30	2	111-113
Chimka, J.	Regression-based monitors of North American border-crossing activity	International Journal of Society Systems Science	2015	7	4	368-373
Cook & **J. Chimka**	Gender and self-selection among engineering students	International Journal of Quality Assurance in Engineering & Technology Education	2015	4	1	14-21
Crandall, P.G., C.A. O'Bryan, S.A. Killian, N. Jarvis, D.E. Beck and **E.C. Clausen**	"A Comparison of the Degree of Student Participation Using a Simulation or a Traditional Wet Lab to Teach Physical Properties of Ice"	Journal of Food Science Education	2015	14		24-29
Crandall, P.G., R.E. Engler III, D.E. Beck, C.A. O'Bryan, S.A. Killian, N. Jarvis and **E.C. Clausen**	"Development of an Augmented Reality Game to Teach Abstract Concepts in Food Chemistry"	Journal of Food Science Education	2015	14		18-23

Authors	Title	Journal	Year	Vol	Issue	Pages
Race, M.L., **Coffman, R.A**	Load Tests on Drilled Shaft Foundations in Moderately Strong to Strong Limestone	Deep Foundations Institute Journal	2015	9	1	42410.00
Salazar, S.E., **Coffman, R.A**	Discussion of A Photogrammetry-based Method to Measure Total and Local Volume Changes of Unsaturated Soils During Triaxial Testing by X. Zhang, L. Li, G. Chen, and R. Lytton	Acta Geotechnica	2015	10	4	42373.00
Race, M.L., Bey, S.M., **Coffman, R.A.**	Statistical Analysis to Determine Appropriate Design Methodologies for Drilled Shafts Foundations	Geotechnical and Geological Engineering	2015	33	3	713-726
Race, M.L., **Coffman, R.A.**	Response of Drilled Shaft Foundation Constructed in Redrilled Shaft Excavation Following Collapse	Deep Foundations Institute Journal	2015	9	2	60-73
Jernigan, A. and **C. Hestekin**	"Capillary Electrophoresis-Single Strand Conformational Polymorphisms (CE-SSCP) as a Method to Differentiate Algal Species."	Journal of Analytical Methods in Chemistry	2015		Article ID 272964	7 pages
Zhou, L., Parameswaran, R., Parsan, F.A., Smith, S.C. and **Di, J**.	Multi-Threshold NULL Convention Logic (MTNCL): An Ultra-Low Power Asynchronous Circuit Design Methodology	Journal of Low Power Electronics and Applications	May-15	5	2	81-100
Nair, R., Smith, S.C., and **Di, J.**	Delay Insensitive Ternary CMOS Logic for Secure Hardware	Journal of Low Power Electronics and Applications	Sept. 2015	5	3	183-215

Author	Title	Journal	Date	Volume	Issue	DOI	Pages
Zhou, L., Smith, S.C. and **Di, J.**	Radiation Hardened NULL Convention Logic Asynchronous Circuit Design	Journal of Low Power Electronics and Applications	Oct-15	5	4		216-233
Alzoubi, Omar. H., T. M. Said, M. A. Alher, **S. El-Ghazaly**, and H. A. Naseem	Broadband High Efficiency Silicon Nanowire Arrays with Radial Diversity within Diamond-like Geometrical Distribution for Photovoltaic Applications	Optical Express	2015	23	15		A767-A778
Acklin, Scarlett.-M., and **M. El-Shenawee**	Terahertz Imaging Platform to Characterize the Growth of In-Vitro Breast Tumors	Inquiry Undergraduate Research Journal	2015	19			53-60
Bowman, Tyler.C., **M. El-Shenawee**, and L.K. Campbell	Terahertz Imaging of Excised Breast Tumor Tissue on Paraffin Sections	IEEE Transactions on Antennas and Propagation	May-15	63	5		2088-2097
Gashler, M.S. and Ashmore, S.C.	Modeling Time Series Data with Deep Fourier Neural Networks	Neurocomputing Journal	2015				
Yanfen Zhou, Karen K. Dixon, and **J. L. Gattis**	Influences of Cross-Sectional Design Elements at Urban Arterial Driveway Locations	Transportation Research Record	2015	2486			64-73
Torrey, J.D., J.P. Killgore, N.M. Bedford and **L.F. Greenlee**	"Durability of Iron Nanoparticles"	Environmental Science: Water Research & Technology	2015	1		DOI: 10.1039/c4ew00068d	146-152
Torrey, J.D., T.L. Kirschling and **L.F. Greenlee**	"Processing and Characterization of Nanoparticle Coatings for Quartz Crystal Microbalance Testing"	Journal of Research of the National Institute of Standards & Technology	2015			DOI: 10.6025/jres.120.001	

Authors	Title	Journal	Date	Volume	Issue	Pages
Decrossas, Emmanuel, **M. Glover**, K. Porter, T. Cannon, T. Stegeman, N. Allen-McCormack, M. C. Hamilton, H.A. Mantooth	High performance and high data rate quasi-coaxial LTCC vertical interconnect transitions for multichip modules and system-on-package applications	IEEE Trans. on Components, Packaging, and Materials Technology	Mar-15	5	3	307-313
Scott, J.T. and **B.E. Haggard**	Implementing effects-based water quality criteria for eutrophication in reservoirs: linking standard development and assessment methodology	Journal of Environmental Quality	2015	44		1503-1512
Bymaster, J., Dang, C., Floyd, R., and **Hale, W**.	Prestress Losses in Pretensioned Concrete Beams Cast with Lightweight Self-Consolidating Concrete	Structures	2015	2		50-57
Dang, C., Murray, C., Floyd, R., **Hale, W.**, and Marti-Vargas, J.	Bond Stress-Slip Model for 0.6 in. (15.2 mm) Diameter Strands	ACI Structural Journal	2015	112	5	625-634
Floyd, R., **Hale, W.**, and Bymaster, J.	Effect of Aggregate and Cementitious Material on Developing Lightweight Self-Consolidating Concrete Mixtures for Prestressed Members	Construction and Building Materials	2015	85	15	91-99
Marti-Vargas, J., **Hale, W.**, Garcia-Taengua, E., ElBatanouny, M., and Ziehl, P.	Bibliometric Analysis of WoS-Indexed Scientific Articles on Concrete Segmental Bridges	PCI Journal	2015	60	1	118-133
Tong, Jingjing, **Heather Nachtmann** and Edward A. Pohl	Value-Focused Assessment of Cargo Value Decreasing Rate	Engineering Management Journal	2015	27		73-85

Authors	Title	Journal	Date	Volume		Pages
Raper, T. B., **C. G. Henry**, L. Espinoza, M. Ismanov and D. M. Oosterhuis	Response of Two Inexpensive Commercially Produced Soil Moisture Sensors to Changes in Water Content and Soil Texture	Agricultural Sciences	2015	6		1148-1163
Hernandez, S., and Ritchie, S.G.	Motivating Students to Pursue Transportation Careers: Implementation of a service learning project on transit	Transportation Research Record	2015	2480		30-37
Hyun, K., **Hernandez, S**., Tok, A., and Ritchie, S.G	Estimating truck volume and weight distribution by body configuration using Weigh-in-Motion (WIM) data	Transportation Research Record	2015	2478		103-112
Heymsfield Ernie & Kuss, Mark	Supplementing Current Visual Bridge Inspections with Gigapixel Technology	ASCE Journal of Performance of Constructed Facilities	27-Feb-15			
Heymsfield, Ernest, Deschenes, Richard, A., Hale, W.M. and Kuss, M.L	Alkali Silica Reaction (ASR) Identification at Northwest Arkansas Regional Airport	ASCE Journal of Performance of Constructed Facilities	20-Jul-15			
Huang, M., Lai, C., Shi, X., Hao, Z. and You, H.	Study of Parallel Programming Models on Computer Clusters with Intel MIC Coprocessors	International Journal of High Performance Computing Applications	Apr-15			
Guan, Z., Shi, X., **Huang, M.** and Lai, C.	A Hybrid Parallel Cellular Automata Model for Urban Growth Simulation Over GPU/CPU Heterogeneous Architectures	International Journal of Geographical Information Science	May-15			

Asgharpour, M., B. Rodgers and **J. A. Hestekin**	"EPA from Porphyridium cruentum: Increasing Growth and Productivity of Microalgae for Pharmaceutical Products"	Energies	2015	8		10487-10503
Lopez, A. M. and **J. A. Hestekin**	"Improved Organic Acid Purification through Wafer Enhanced Electrodeionization Utilizing Ionic Liquids"	Journal of Membrane Science	2015	493		200-205
Jensen, M.O., Bechsgaard, T. Jesper Langhoff Honge, Hans Nygaard	In Vivo Wireless Monitoring System of Cardiovascular Force Data	Cardiovascular Engineering and Technology	2015	6	1	42407.00
Jensen, M.O., Drach, Andrew, Amir H. Khalighi, Fleur M. Ter Huurne, Chung-Hao Lee, Charles Bloodworth, Eric L. Pierce, Ajit P. Yoganathan, and Michael S. Sacks	Population-Averaged Geometric Model of Mitral Valve From Patient-Specific Imaging Data 1	J. Med. Devices Journal of Medical Devices 9	2015	3		30952.00
Jensen, M.O., Jensen, H., Sten L. Nielsen	Surgical Treatment of Functional Ischemic Mitral Regurgitation	Review paper, J Heart Valve Dis	2015	24	1	30-42
Jensen, M.O., Levine, R., Albert Hagege, Daniel Judge, Muralidhar Padala, Jacob Dal-Bianco, Elena Aikawa, Jonathan Beaudoin, Joyce Bischoff, Nabila Bouatia-Naji, Patrick Bruneval, Jonathan Butcher, Alain Carpentier, Miguel Chaput, Adrian Chester, Catherine Clusel, Francesca Nesta Delling, Harry Dietz, Christian Dina, Ronen Durst, Leticia Fernandez, Mark Handschumacher, , Xavier	Unifying Concepts of Mitral Valve Disease: From Morphology to Mechanisms and Beyond	Nature Reviews Cardiology	2015	12		689-710

Jeunemaitre, Hervé Le Marec, Thierry Le Tourneau, R Markwald, Jean Mérot, Emmanuel Messas, David Milan, Tui Neri, Russell Norris, David Peal, Maelle Perrocheau, Vincent Probst, Michael Puceat, Nadia Rosenthal, Jorge Solis-Martin, Jean-Jacques Schott, Ehud Schwammenthal, Susan Slaugenhaupt, Jae-Kwan Song, and Magdi Yacoub						
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Jensen, M.O., Skov S.N., Diana M. Røpcke, Kristine Telling, Christine Ilkjær, Marcell J. Tjørnild, Hans Nygaard, Sten L. Nielsen	Simultaneous in- and out-of-plane Mitral Valve Annular Force Measurements	Cardiovascular Engineering and Technology 2015 special issue on Mitral Valve Function, Pathology, and Therapeutic Options	2015			185-192
Jensen, M.O., Toma M, Daniel R. Einstein, Ajit P. Yoganathan, Richard P. Cochran, Karyn S. Kunzelman	Fluid-Structure Interaction Analysis of Papillary Muscle Forces Using a Comprehensive Mitral Valve Model with 3D Chordal Structure	Annals of Biomedical Engineering	2015			42381.00
Deneke, W., **Li, W.N.** and Thompson, C.	An AI Planning Approach for Generating Big Data Workflow	International Journal of Artificial Intelligence & Application	Sep-15	6	5	

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Zhang, Y.* and **H. T. Liao**	Analysis of Destructive Degradation Tests for a Product with Random Degradation Initiation Time	IEEE Transactions on Reliability	2015	64	1	516-527
Li, R., J. Wang, **H.T. Liao**, and N. Huang	A New Method for Reliability Allocation of Avionics Connected via an Airborne Network	Journal of Network and Computer Applications	2015	48		14-21
Liu, D., J. Zhou, **H.T. Liao**, Y. Peng, and X. Peng	A Health Indicator Extraction and Optimization Framework for Lithium-ion Battery Degradation Modeling and Prognostics	IEEE Transactions on Systems, Man, and Cybernetics: Systems	2015	45	6	915-928
Liu, D., W. Xie*, **H.T. Liao**, and Y. Peng, Y.	An Integrated Probabilistic Approach to Lithium-ion Battery Remaining Useful Life Estimation	IEEE Transactions on Instrumentation & Measurement	2015	64	1	660-670
Harding, A.C., Nutter, D.W. and **Y. Liang**	Unit operation energy intensities for a poultry broiler processing plant	Journal of Energy Engineering	2015	113	1	21-52
Fletcher, K.K., **Liu, X.F.**, and Tang, M.	Elastic Personalized QoS Preference and Trade-off based Service Selection	ACM Transactions on the Web	Jan-15	9	1	42395.00
Puthenveetil, S.C., Daphalapurkar, C.P., Zhu, W., Leu, M.C., **Liu, X.F.**, Gilpin-Mcminn, J.K., and Snodgrass, S.D.	Computer-automated Ergonomic Analysis Based on Motion Capture and Assembly Simulation	Journal of Virtual Reality	Jun-15	19	2	119-128
Modekurthy, V., **Liu, X.F.,** Fletcher, K. and Leu, M.	Design and Implementation of a Broker for Cloud Additive Manufacturing Services	Journal of ASME Manufacturing Science and Engineering	Aug-15	137	4	
Bert Huis in 't Veld, Ludger Overmeyer, Michael Schmidt, Konrad Wegener, **Ajay Malshe**, Paulo Bartolo	Micro additive manufacturing using ultra short laser pulses	CIRP Annals - Manufacturing Technology	2015	64	Issue 2	701-724

Greg Schwartz, **Ajay P. Malshe**, Wenyang Zhang, Melanie Murphy	Super-additive Packages: The Next Generation of Lubrication Performance Enhancing Additives	Journal of National Lubrication Grease Institute	2015	79	1	38.00
Marie, Mohammed; S. Mandal, and **M. O. Manasreh**,	An Electrochemical Glucose Sensor Based on Zinc Oxide Nanorods	Sensors	Jul-15	15	8	18714 - 18723
Nusir, Ahmad. I. and **M. O. Manasreh**	Self-Powered Near-Infrared Photodetector Based on Asymmetrical Schottky Interdigital Contacts	IEEE Electron Device Letters	2015	36		1172-1175
Wu, Jiang; B. Passmore, and **M. O. Manasreh**	The impact of quantum dot filling on dual-band optical transitions via intermediate quantum states	J.Appl.Phys	2015	118	8	84501.00
Nusir, Ahmad. I.; A. M. Hill, **M. O. Manasreh,** and J. B. Herzog	Near-infrared metal-semiconductor-metal photodetector based on semi-insulating GaAs and interdigital electrodes	Photonic Research	2015	3	1	42373.00
Santi, Enrico, K. Peng, **H. A. Mantooth**, J. L. Hudgins	Modeling of Wide Bandgap Power Semiconductor Devices – Part II	IEEE Trans. On Electron Devices	Feb-15	62	2	434-442
Mantooth, H. Alan, K. Peng, E. Sangi, J. L. Hudgins	Modeling of Wide Bandgap Power Semiconductor Devices – Part I	IEEE Trans. On Electron Devices	Feb-15	62	2	423-433
Kirac, E., **A.B. Milburn**, C.L. Wardell	The traveling salesman problem with imperfect information with application in disaster relief tour planning	IIE Transactions	2015	47	8	783-799

Millett, Paul C.	A time-dependent Ginzburg-Landau model for non-frustrated linear ABC triblock terpolymers	Physical Review	2015	E	92	22602.00
Mohanty, B., Ivanoff, T. A.[PhD], Alagoz, A.S., Karabacak, T., and Zou, M.	Study of the Anisotropic Frictional and Deformation Behavior of Surfaces Textured with Silver Nanorods	Tribology International	2015	92		439-445
Muldoon, T.J., Greening GJ, Powless AJ, Hutcheson JA, James HM, Dierks MK, Rajaram N.	Fiber-bundle microendoscopy with sub-diffuse reflectance spectroscopy and intensity mapping for multimodal optical biopsy of stratified epithelium	Biomedical Optics Express	2015	6	12	4934-4950
Muldoon, T.J., Hutcheson, J.A., Majid, A.A., Powless, A.J.	A widefield fluorescence microscope with a linear image sensor for image cytometry of biospecimens: Considerations for image quality optimization.	Review of Scientific Instruments	2015	86	9	93709.00
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Nachtmann, Heather, Collins, J. Chimka & Tong	Development of a balanced scorecard for flight line maintenance activities	Journal of Quality in Maintenance Engineering	2015	21	4	436-455
Neuman, Y., T.C.L. Alves, K.D. Walsh, and **K. L. Needy**	A quantitative analysis of supplier quality surveillance practices in EPC projects	Journal of Construction Engineering and Management	Nov. 2015	141	11	

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AlMaian, R.Y., **K.L. Needy**, K.D. Walsh and T.C.L. Alves	Supplier quality management inside and outside the construction industry	Engineering Management Journal	2015	27	1	42696.00
Claypool, E., B.A. Norman and **K.L. Needy**	Design for supply chain: An analysis of key risk factors	Industrial Engineering & Management	2015	4	1	
Paul, Clint and **Nair, Arun K.**	Interface property of collagen and hydroxyapatite in bone	Inquiry	2015	19		61-69
Al-Kabi, Sattar, S. A. Ghetmiri, J. Margetis, W. Du, A. Mosleh, M. Alher, W. Dou, G. Sun, R. A. Soref, J. Tolle, B. Li, M. Mortazavi, **H. A. Naseem**, S.-Q. Yu	Optical characterization of Si-based Ge1-xSnx alloys with Sn compositions up to 12%	Journal of Electronic Materials	2015	45	1	42378.00
Mosleh, Aboozar, M. A. Alher, L. Cousar, W. Du, S.A. Ghetmiri, T. Pham, G. Sun, R.A. Soref, B. Li, , **H.A. Naseem**, S. Yu	Direct growth of Ge1-xSnx films on Si using a cold-wall ultra-high vacuum chemical vapor deposition system	Frontiers in Materials	2015	2		30.00
Kannon, T.E., **S.G. Nurre**, B.J. Lunday, and R.R. Hill	The aircraft routing problem with refueling	Optimization Letters	2015	9		1609-1624
Algarni, S. and **Nutter, Darin**	Survey of Sky Effective Temperature Models Applicable to Building Envelope Radiant Heat Transfer	ASHRAE Transactions – Research	2015	121(2)		351-363
Algarni, S. and **Nutter, Darin**	Effect of Clouds and Dust Storms on the Sky Radiation Exchange for Buildings Located in Hot-Dry Climates	Science and Technology for the Built Environment	2015	21		403-412

Algarni, S. and **Nutter, Darin W.**	Influence of Dust Accumulation on Building Roof Thermal Performance and Radiant Heat Gain in Hot-Dry Climates	Energy and Buildings	2015	104		181-190
Almutairi, K., Thoma, G., Burek, J., Algarni, S., and **Nutter, Darin W.**	Life cycle assessment and economic analysis of residential air conditioning in Saudi Arabia	Energy and Buildings	2015	102		370-379
Omran, O.S. and **Panda**, B.	A Data Partition Based Model to Enforce Security in Cloud Databases	Journal of Internet Technology and Secured Transactions	2015	3	4-Mar	311-319
Matthews, A., Bobovych, S., Banerjee, N., **Parkerson, J.P.,** Robucci, R., and Patel, C.	Perpetuu: A Tiered Solar-powered GIS Microserver	ACM Transactions on Embedded Computing Systems	2015	14	4	78:1-78:21
Hilliard, H., **G. Parnell** and Edward A. Pohl	Evaluating the Effectiveness of the Global Nuclear Detection Architecture Using Multiobjective Decision Analysis	Journal of Systems Engineering	2015	18	5	441-452
Medal, H., **Edward A. Pohl**, and M. Rossetti	Allocating Protection Resources to Facilities When the Effect of Protection is Uncertain	IIE Transactions	Online: 04 Sep 2015			
Hendricks, J., **Patitz, M.J**., Rogers, T.A. and Summers, S.M.	The Power of Duples (in self-assembly): It's Not So Hip to Be Square	Theoretical Computer Science	Dec-15			
Ghafoori, E., Motavalli, M., Nussbaumer, A., Herwig, A., **Prinz, G.S**., and Fontana, M	Determination of minimum CFRP pre-stress levels for fatigue crack prevention in retrofitted metallic beams	Engineering Structures	2015	84		29-41

Prinz, G.S. and Richards, P.W.	Demands on reduced beam section connections with out-of-plane skew	J. Structural Engineering, ASCE	2015				
Ghafoori, E., Motavalli, M., Nussbaumer, A., Herwig, A., **Prinz, G.S.**, and Fontana, M.	Design criterion for fatigue strengthening of riveted beams in a 120-year-old railway metallic bridge using pre-stressed CFRP plates	Composites Part B	2015	68			
Qian, X., H. Du,	The hydration properties of carboxybetaine zwitterion brushes',	Journal of Computational Chemistry	2015	10	1002		24234.00
Quinn, K. P.,Liu, Z., L. Speroni, L. Arendt, C. Kuperwasser, C. Sonnenschein, A.M. Soto, I. Georgakoudi	Rapid three-dimensional quantification of voxel-wise collagen fiber orientation	Biomedical Optics Expres	2015	6			2294-2310
Quinn, K. P., A. Golberg, G. F. Broelsch, S. Khan, M. Villiger, B. Bouma, W. G. Austen, R. L. Sheridan, M. C. Mihm, M.L. Yarmush, I. Georgakoudi	An automated image processing method to quantify collagen fibre organization within cutaneous scar tissue	Experimental Dermatology	2015	24			78-80
Quinn, K.P., Xylas, J., A. Varone, , D. Pouli, M. E. McLaughlin-Drubin, H. Thieu, M. Garcia-Moliner, M. House, M. Hunter, K. Münger, I. Georgakoudi,	Noninvasive assessment of mitochondrial organization in three-dimensional tissues reveals changes associated with cancer development	International Journal of Cancer	2015	136			322-332
Quinn, K.P., Bellas, E., A. Rollins, J. E. Moreau, T. Lo, N. Fourligas, I. Georgakoudi, G. G. Leisk, M. Mazan, K. E. Thane, O. Taeymans, A. M. Hoffman, D. L. Kaplan, C. A. Kirker-Head	Equine model for soft tissue regeneration	Journal of Biomedical Materials Research Part B	2015	103			1217-1227

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Quinn, K.P., Ozkucur, N., J. C. Pang, I. Georgakoudi, E. Miller, M. Levin, D. L. Kaplan	Membrane potential depolarization causes alterations in neuron arrangement and connectivity in cocultures	Brain and Behavior	2015	5		24-38
Rajaram, N, Reesor AF, Mulvey CS, Frees AE, Ramanujam N.	Non-invasive, simultaneous quantification of vascular oxygenation and glucose uptake in tissue.	PLoS ONE	2015	10	1	E0117132
Berry, K., J. Dunklin, P.A. Blake, and **D.K. Roper**	"Thermal Dynamics of Plasmonic Nanoparticle Composites"	J. Phys. Chem. C.	2015	119(19): 10550-10557	DOI: 10.1021/jp512701v	
Dunklin, J.R., G.T. Forcherio and **D.K. Roper**	"Gold Nanoparticle-polydimethylsiloxane Thin Films Reflect Light Internally by Optical Diffraction and Mie Scattering"	Mater. Res. Express 2	2015	85005	DOI:10.1088/2053-1591/2/8/085005	
Forcherio, G.T., D. DeJarnette, M.U. Sreeram, P.A. Blake and **D.K. Roper**	"Coupled Dipole Plasmonics of Nanoantennas in Discontinuous, Complex Dielectric Environments"	J. Quant. Spectr. Rad. Transf.	2015	166		93-101
Lisunova, M., **D.K. Roper**, J.R. Dunklin, J. Chen and S.V. Jenkins	"The Unusual Photothermal Response of Free Standing Multilayered Films Based on Plasmonic Bimetallic Nanocages"	R.S.C. Advances	2015	5: 15719-15727	DOI: 10.1039/C5RA00682A	

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Wu, D., **M. D. Rossetti** and J. Tepper	Possibility of Inventory Pooling in China's Public Hospital and Appraisal about its Performance	Applied Mathematical Modeling	2015	39	23-24	7277-7290
Atungulu, G. D. Smith, S. Wilkson, H. Zhong, **S. Sadaka** and S. Rogers	Assessment of One-Pass Drying of Rough Rice with an Industrial Microwave System on Milling Quality	Applied Engineering in Agriculture.	2015	In press		
Atungulu, G., A. Okeyo, S. Thote and **S. Sadaka**	Assessment of the Performance of a Scaled-Up Continuously Fed Radiant Heating System for Rough Rice Drying	Food and Bioprocess Technology: An International journal.	2015	Submitted		
Griffiths, G., H. Zhong, S. Thote, A. Okeyo, A. Couch, **S. Sadaka** and T. Siebenmorgen	Microbial Prevalence on Freshly Harvested Long-Grain Hybrid, Long Grain Pure- Line and Medium-grain Rice	Arkansas Rice Research Studies Research	2015	626		306-313
Sharara, M, **S. Sadaka**, S., T. Costello, K. VanDevender, J. Carrier, M. Popp, G. Thoma, and A. Djioleu	Combustion Kinetics of Swine Manure and Algal Solids	Journal of Thermal Analysis and Calorimetry	2015	123		687-696
Sharara, M. and **S. Sadaka**	Gasification of Phycoremediation Algal Biomass	BioResources	2015	10	2	2609-2625
Ubhi, G. and **S. Sadaka**	Temporal Valuation of Corn Respiration Rates Using Pressure Sensors.	Journal of Stored Products Research	2015	61		39-47

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Wilson, S., A., Griffiths, C., Couch and **S. Sadaka**	Radiant Heating and Tempering Treatments for Improving Rate of Moisture Removal during Drying of Shelled Corn	Applied Engineering in Agriculture	2015	31	5	799-808
Sadaka, S., and K. VanDevender	Evaluation of Chemically Coagulated Swine Manure Solids as Value added Products	Journal for Sustainable Bioenergy Systems	2015	Volume 5	4	136-150
Sadaka, S., H. Liechty, M. Pelkki and M. Blazier	Pyrolysis and Combustion Kinetics of Raw and Carbonized Cottonwood and Switchgrass Agroforests	BioResources	2015	10	3	4498-4518
Ahmed, N. and **R. P. Selvam**	Ridge effects on tornado path deviation	International Journal of Civil and Structural Engineering Research	2015	3		273-294
Gorecki, P.M. and **R. P. Selvam**	Rankin combined vortex interaction with rectangular prism	International Journal of Computational Fluid Dynamics	2015	29		120-132
Strasser, M.N. and **R. P. Selvam**	The variation in the maximum loading of a circular cylinder impacted by a 2D vortex with time of impact	Journal of Fluids and Structures	2015	58		66-78
Servoss, S.L., M.A. Moss and J.P. Turner	"Peptoids and Methods for Treating Alzheimer's Disease."	Provisional Patents Submitted	July, 2015			
Jingyi Wang, Niandong Jiao, **Steve Tung** and Lianqing Liu	Magnetic microrobot and its application in a microfluidic system	Robotics and Biomimetics	2015	1	18	
Sullivan, K.M., D.T. Abdul-Malak, J.P. Kharoufeh and R.O. Baldwin	Optimally Locating Application Virtualization Resources on a Network	Military Operations Research	2015	20		42510.00

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Johnston, R. Z., H.N. Sandefur, P. Bandekar, M.D. Matlock, B.E. Haggard and **G. Thoma**	"Predicting Changes in Yield and Water Use in the Production of Corn in the United States under Climate Change Scenarios"	Ecological Engineering	Sept. 2015	82	DOI:10.1016/j.ec oleng.2015.05.02 1		555-565
Wiedemann, S., E. McGahan, C. Murphy, M.-J. Yan, B. Henry, **G. Thoma**, and S. Ledgard	"Environmental Impacts and Resource Use of Australian Beef and Lamb Exported to the USA Determined using Life Cycle Assessment"	J. Clean. Prod.	2015		PII:S0959652615 000773		
Savin, M.C., D.C. Wolf, K.J. Davis, E.E. Gbur and **G.J. Thoma**	"Nematodes as Bioindicators of Ecosystem Recovery During Phytoremediation of Crude Oil Contaminated Soil"	Int. J. Phytoremediation	2015	17	2		182-190
Thompson, C [PhD]. and Zou, M.	Polyvinylpyrrolidone Adhesion Layer for Increased Uniformity and Optical Transmittance of Silica Nanoparticle Antireflective Coatings	Journal of Adhesion Science and Technology,	2015	29			943-953
Yao, P., Liu, Z., **Tung, S**teve, Dong, Z., Liu, L.	Fully Automated Quantification of Insulin Concentration Using a Microfluidic-Based Chemiluminescence Immuoassay	Journal of Laboratory Automation	2015				
Kim, J.-W., **Tung, Steve**	Bio-hybrid micro/nanodevices powered by flagellar motor: challenges and strategies	Frontiers in Bioengineering and Biotechnology	2015				
Srinivasan, B., **Tung, Steve**	Development and Applications of Portable Biosensors	Journal of Laboratory Automation	2015	20	4		365-389

Xie, S., Jiao, N., **Tung, Steve**, Liu, L.	Fabrication of SWCNT-Graphene Field-Effect Transistors	Micromachines	2015	6	9	1317-1330
Jacob Lum, Ronghui Wang, Billy Hargis, **Steve Tung**, Walter Bottje, Huaguang Lu and Yanbin Li	An Impedance Aptasensor with Microfluidic Chips for Specific Detection of H5N1 Avian Influenza Virus	Sensors	2015	15	8	18565-18578
Wickramasinghe, S. R. and X. Qian,	"Magnetically Responsive Membranes"	Encyclopedia of Membranes	2015	1431	1	
Wickramasinghe, S. R., X. Qian, M. Ulbricht and Q. Yang	"Catalytic Membranes and Applications Thereof"		2015			
Darvishmanesh, S., X. Qian and **S.R. Wickramasinghe**	"Responsive Membrane for Advanced Separations"	Current Opinions in Chemical Engineering	2015	8		98-104
Malmali, M., **S.R. Wickramasinghe**, J. Tang and H. Cong	"Sugar Fractionation Using Surface-modified Nanofiltration Membranes"	Separation and Purification Technology	2015			
Sirkar, K. K., A.G. Fane, X. Wang and **S.R. Wickramasinghe**	"Process Intensification with Selected Membrane Processes"	Chemical Engineering and Processing	2015	87		16-25
Vu, A. T., X. Wang, **S.R. Wickramasinghe**, H. Yuan, B. Yu, H. Cong and J. Tang	"Inverse Colloidal Crystal, Membranes for Hydrophobic Interaction Chromatography"	Journal of Separation Science	2015	38		2819-2825
Yu, B., H. Cong, Z. Li, H. Yuan, Q. Peng, M. Chi, S. Yang, R. Yang, **S.R. Wickramasinghe** and J. Tang	"Fabrication of Highly Ordered Porous Membranes of Cellulose Triacetate on Ice Substrates using Breath Figure Method"	Journal of Polymer Science, Part B: Polymer Physics	2015	53	8	552-558

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Wolchok JC, Hurd S, Bhatti N, Walker A, Kasukonis B	Development of a biological scaffold engineered using the extracellular matrix secreted by skeletal muscle cell	Biomaterials	2015	49		42630.00
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Wotherspoon, L.M., Orense, R.O., Bradley, B.A., Cox, B.R., **Wood, C.M.**, Green, R.A.	Soil Profile Characterisation of Christchurch Central Business District Strong Motion Stations	Bulletin of the New Zealand Society for Earthquake Engineering	2015	48	3	147-157
Sun, Ning., **J. Wu**, and P. Fan	Optimum pilot designs for high mobility wireless systems with channel estimation errors	IET Commun.	Sept. 2015	9		1677-1682
Wang, Gang, **J. Wu**, and Y. R. Zheng	An accurate frame error rate approximation of coded diversity systems	Wireless Personal Communications	Aug-15			42379.00
Zhou, Guoqing, and **J. Wu**	Unifying energy harvesting, sensing, and communication for ultra-low power structure health monitoring	EURASIP J. Wireless Commun. Networking	2015			

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Zhou, Weixi., **J. Wu**, and P. Fan	High mobility wireless communications with Doppler diversity: fundamental performance limits	IEEE Transactions on Wireless Communications	2015	14	12	6981-6992
Hu, Dali, **J. Wu,** and P. Fan	Minimizing end-to-end delays in linear multi-hop networks	IEEE TransaCtions on Vehicular Technology	2015	99		
Wang, Zuoen, **J. Wu,** J. Yang, and H. Lin	Energy-efficient wireless sensing for level set estimations	IEEE Access	2015	3		1480-1490
Zheng, Yahong. R., **J. Wu,** and C. Xiao	Turbo equalization for single-carrier underwater acoustic communications	IEEE Commun. Mag	2015	53		79-87
Wu, Jingxian, and J. Yang	On the asymptotic equivalence between stochastic and deterministic energy sources in energy harvesting sensing systems	EURASIP J. Wireless Commun. Networking	2015			
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Hu, D., Su, B., Zheng, S., Zhao, Z.Q., **Wu, X.** and Wu, X.	Security and Privacy Protocols for Perceptual Image Hashing	International Journal of Sensor Networks	2015	17	3	146-162
Pan, K., **Wu, X.** and Xie, T.	Program-Input Generation for Testing Database Applications Using Existing Database States	Automated Software Engineering	2015	22	4	439-473
Zhang, Z., **Y. Zhao,** W. Qiao, L. Qu.	A Discrete-Time Direct Torque Control for Direct-Drive PMSG-Based Wind Energy Conversion Systems,	IEEE Transactions on Industry Applications	July-August 2015	51	4	3504-3514
Hammer, J.C. and **Yan, T**.	Your Logical Status can be Revealed by Mobile Phone Usage Statistics	IEEE Computer, special issue on wearable computing	Jun-15			
Yang, Jing, X. Wu, and J. Wu	Optimal scheduling of collaborative sensing in energy harvesting sensor Networks	IEEE J. Selected Areas Comm.	2015	33		512-523
Pham, Thach N., W. Du, B. R. Conley, J. Margetis, G. Sun, R. A. Soref, J. Tolle, B. Li and **S.-Q. Yu**	Si based Ge0.9Sn0.1 photo detector with a peak responsivity of 2.85 A/W and a longwave cutoff at 2.4 μm	Electronics Letters	2015	51		854.00
Steele, Julian A., J. Horvat, R. A. Lewis, M. Henini, D. Fan, Yu. I. Mazur, V. G. Dorogan, P. C. Grant, **S.-Q. Yu** and G. J. Salamo	Mechanism of periodic height variations along selfaligned VLS-grown planar nanostructures	Nanoscale	2015	7		20442-20450

Authors	Title	Journal	Year	Vol.	Issue	Pages
Alher, Murtadha, A. Mosleh, L. Cousar, W. Dou, P. C. Grant, S.A. Ghetmiri, S. Al-Kabi, W. Du, M. Benamara, B. Li, M. Mortazavi, **S.-Q. Yu,** H. A. Naseem	CMOS Compatible Growth of High Quality Ge, SiGe and SiGeSn for Photonic Device Applications	ECS Trans.	2015	69	5	169-278
Mosleh, Aboozar, M. Alher, L. Cousar, H. Abu-safe, W. Dou, P. C. Grant, S. Al-Kabi, S.A. Ghetmiri, B. Alharthi, H. Tran, W. Du, M. Benamara, B. Li, M. Mortazavi, **S.-Q. Yu,** H. Naseem	Enhancement of Material Quality of (Si)GeSn Films Grown By SnCl4 Precursor	ECS Transactions	2015	69	5	279-286
Madadi, M., **Shengfan Zhang** and L.M. Henderson	Evaluation of Breast Cancer Mammography Screening Policies Considering	European Journal of Operational Research	2015	247	2	630-640
Zhang Y, Millett P. C., Tonks M. R., Bai X., Biner, S. B.	Preferential Cu segregation at extended defects in bcc Fe: An atomistic study	Computational Materials Science	2015		101	181-188
Gibbons, A., Brye, K., Dunn, S., Gbur , E. E., Sharpley, A., **Zhang, W**.	Increased Effluent Dosage Effects on On-Site Wastewater Treatment Systems of Differing Architecture Type	Journal of Environmental Protection	2015	6	6	651-670
Yao, B., Peng, C., Zhang, **W., Zhang**, Q., Niu, J., and Zhao, J	A novel Fe (III) porphyrin-conjugated TiO2 visible-light photocatalyst.	Applied Catalysis B: Environmental	2015	174		77-84
Zhao, Yue, Qiao, W., Wu, L	Dead-Time Effect Analysis and Compensation for a Sliding-Mode Position Observer-Based Sensorless IPMSM Control System	IEEE Transactions on Industry Applications	May-June 2015	51	3	2528-2535

Zhao, Yue, Zhang, Z., Qiao, W., Wu, L.,	An Extended Flux Model-Based Rotor Position Estimator for Sensorless Control of Salient-Pole Permanent-Magnet Synchronous Machines	IEEE Transactions on Power Electronics	Aug-15	30	8	4412-4422
Zhou, Wenchao	Lattice Boltzmann simulation of coalescence of multiple droplets on nonideal surfaces	Physical Review E	2015	92	5	53307.00
Rezayat, H., **Zhou, Wenchao,** Siriruk, A., Penumadu, D., & Babu, S. S.	Structure-mechanical property relationship in fused deposition modelling	Materials Science and Technology	2015	31	8	895-903
Zhou, Wenchao, List, F. A., Duty, C. E., & Babu, S. S	Sintering Kinetics of Inkjet-Printed Conductive Silver Lines on Insulating Plastic Substrate	Metallurgical and Materials Transactions B	2015	46	3	1542-1547
Zhou, Wenchao, Loney, D., Fedorov, A. G., Degertekin, F. L., & Rosen, D. W.	Shape evolution of multiple interacting droplets in inkjet deposition	Rapid Prototyping Journal	2015	21	4	373-385
Lin, H, X. Wu, **J. Zhu**.	Kinetics, equilibrium and thermodynamics of ammonium sorption from swine manure by natural chabazite	Separation Science and Technology	2015	51	2	202-213
Wu, X., **J. Zhu**	In-depth Observations of Fermentative Hydrogen Production from Liquid Swine Manure Using an Anaerobic Sequencing Batch Reactor	Journal of Integrative Agriculture	2015			
Wu, X., **J. Zhu**, J. Cheng	Simultaneous removal of nutrients from milking parlor wastewater using an AO2 sequencing batch reactor (SBR) system	J. Environ. Sci. Health Part A	2015	150	4	396-405

Wu, X., **J. Zhu**, J. Cheng, and N. Zhu	Optimization of three operating parameters for a two-step fed sequencing batch reactor (SBR) system to remove nutrients from swine wastewater	Applied Biochemistry and Biotechnology	2015	175	6	2857-2871
Cheng J., F. Kong, **J. Zhu**, and X. Wu	Characteristics of oxidation-reduction potential, VFAs, SCOD, N, and P in an ATAD system under different thermophilic temperatures	Applied Biochemistry and Biotechnology	2015	175	1	166-181
Cheng J., F. Kong, **J. Zhu**, and X. Wu	Effects of stabilization and sludge properties in a combined process of anaerobic digestion and thermophilic aerobic digestion	Environmental Technology	2015	36	21	2786-2795
Cheng J., **J. Zhu**, F. Kong, and C. Zhang	Influence of temperature on the single-stage ATAD process predicted by a thermal equilibrium model	J. Environmental Management	2015	156		257-265

IIIb. Refereed Conference Proceedings (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Paper Title	Conference Name	Month	Year	Location
Aklah, Z. and **Andrews, D**.	A Flexible Multilayer Perceptron Co-Processor for FPGAs	11th International Symposium on Applied Reconfigurable Computing	April	2015	
Ma, S., Aklah, Z. and **Andrews, D.**	A Run Time Interpretation Approach for Creating Custom Accelerators	25th International Conference on Field Programmable Logic and Applications	Sept.	2015	
George, N., Lee, H., Novo, D., Owaida, M. **Andrews, D.,** Olukotun, K., and Ienne, P.	Automatic Support for Multi-Module Parallelism from Computational Patterns	25th International Conference on Field Programmable Logic and Applications	Sept.	2015	
Ang, Simon S. and H. Zhang	High Temperature Power Electronic Modules	CSTIC	March	2015	Shanghai
Que, Longcheng, J. Lv, and **S. S. Ang**	Design of a high voltage gate driver module	ASICON 2015	Nov.	2015	Chengdu, China
Zhang, Hao, and **S. S. Ang**	Simulation of A Power Package with Underfill Resin and Silicone Gel	IEEE workshop on Wide Bandgap Power Devices and Applications	Nov.	2015	Blacksburg, VA, US
Dutta, Atanu and **S.S. Ang**	Electromagnetic Interference Simulations of Power Electronic Modules	International Workshop on Integrated Power Devices	May	2015	Chicago, Illinois, USA
Balachandran, K., Lam NT, Rajaram N,	Changes in remodeling activity of single valve interstitial cells in response to altered stretch	Biomedical Engineering Society Annual Meeting	October	2015	Tampa Bay, Florida
Balachandran, K., Morales J, Diaz N, Martindale C	Consequences of Elevated Serotonin in Angiotensin-II-induced Hypertensive Mice	Biomedical Engineering Society Annual Meeting	October	2015	Tampa Bay, Florida
Balachandran, K., Khang A, Ravishankar P, Krishnaswamy A,	Engineering Biphasic Janus-type Polymer-Protein Nanofibers via Centrifugal Jet Spinning	Biomedical Engineering Society Annual Meeting	October	2015	Tampa, Florida

Balachandran, K., Wyatt J, Walker A, , Wolchok JC	Exploring the Mechanobiology of Astrocytes Under Traumatic Brain Injury Conditions	Biomedical Engineering Society Annual Meeting	October	2015	Tampa, Florida
Balachandran, K., Sturdivant NM, Smith SG, Wolchok JC	Traumatic Brain Injury Resulted in Increased Aquaporin-4 Expression – Relevance to Post Injury Edema	Biomedical Engineering Society Annual Meeting	October	2015	Tampa, Florida
Balachandran, K., Sturdivant NM, Smith SG, Wolchok JC	Traumatic Brain Injury Resulted in Increased Aquaporin-4 Expression – Relevance to Post Injury Edema	Summer Biomechanics, Bioengineering and Biotransport Conference	June	2015	Park City, Utah
Balachandran, K., Razavi A, Morales J	Valve Interstitial Cell Structure Regulates Cell Function and Phenotype	Summer Biomechanics, Bioengineering and Biotransport Conference	June	2015	Park City, Utah
Garcia Rodriguez Luciano, A. Escobar-Mejia, **J.C. Balda**, A. Mallela	A SST Topology Based on Boost Three-Level AC/DC Converters for Applications in Electric Power Distribution Systems	2015 IEEE Energy Conversion Congress and Exposition	Sept	2015	Montreal, Canada
Liu, Yusi, C. Farnell, S. Ahmed, **J.C. Balda**, A. Mantooth	750-kW Interleaved Buck Converter DC Supply Control Implementation in a Low-Cost FPGA	IEEE 2015 Applied Power Electronics Conference	March	2015	Charlotte, NC, USA
Liu, Yusi, C. Farnell, **J.C. Balda**, A. Mantooth	A 13.8-kV 4.75-MVA Microgrid Laboratory Test Bed	IEEE 2015 Applied Power Electronics Conference	March	2015	Charlotte, NC, USA
García Montoya, Roderick, A. Mallela, **J.C. Balda**	An Evaluation of Selected Solid-State Transformer Topologies for Electric Distribution Systems	IEEE 2015 Applied Power Electronics Conference	March	2015	Charlotte, NC, USA
Liu Yusi, C. Farnell, K. George, **J.C. Balda**, A. Mantooth	Resonance Propagation of LCL Filters in Large-Scale Microgrid	IEEE 6th Symposium on Power Electronics for Distributed Generation Systems (IEEE PEDG 2015)	June	2015	Aachen, Germany
Barnes Arthur, **J.C. Balda**, L. García	Complexity Analysis and Verification of Real-Time Operation for a Semi-Markov Process Model of Photovoltaic Intermittency	IEEE 6th Symposium on Power Electronics for Distributed Generation Systems (PEDG 2015)	June	2015	Aachen, Germany

García Rodriguez Luciano., J. Gonzales-Llorente, E. Williams, **J.C. Balda**	Control of a Flyback Converter Operating in BCM using the Natural Switching Surface	IEEE 6th Symposium on Power Electronics for Distributed Generation Systems (PEDG 2015)	June	2015	Aachen, Germany
Metzner, M., Lizarraga, J. and **Bobda, C.**	Architecture Virtualization for Run-Time Hardware Multithreading on Field Programmable Gate Arrays	11th International Symposium on Applied Reconfigurable Computing	April	2015	Bochum, Germany
Saldanha, L.B. and **Bobda, C.**	A System on Reconfigurable Chip for Handwritten Digit Recognition	23rd IEEE International Symposium on Field-Programmable Custom Computing Machines	May	2015	Vancouver, British Columbia
Thomas, N., Felder, A. and **Bobda, C.**	Adaptive Controller Using Runtime Partial Hardware Reconfiguration for Unmanned Aerial Vehicles (UAVs)	International Conference on Reconfigurable Computing and FPGAs	December	2015	Cancun, Mexico
Hategekimana, F., Tbatou, A., **Bobda, C.**, Kamhoua, C.A., Kwiat, K.A.	Hardware Isolation Technique for IRC-based Botnets Detection	International Conference on Reconfigurable Computing and FPGAs	December	2015	Cancun, Mexico
Mefenza, M., Edwards, N. and **Bobda, C.**	Interface Based memory Synthesis of Image Processing Chains in FPGA	International Symposium on Highly Efficient Accelerators and Reconfigurable Technologies	June	2015	Boston, MA
Yang, S., **Braham, A**., Chowdhury, N., Hossain, Z.	Linking the Field and Lab Performance of Interstate Pavements	International Symposium on Systematic Approaches to Environmental Sustainability in Transportation	Aug	2015	Fairbanks, AK
Chowdhury, N., Hossain, Z., Yang, S., **Braham, A.**	A Framework for Premature Pavement Distress Evaluation,	International Foundations Congress and Equipment Expo (IFCEE)	March	2015	San Antonio, TX
Schneider, K. and **C.R. Cassady**	An Introduction to Probabilistic Methods in Reliability and Maintainability	61st Annual Reliability and Maintainability Symposium (RAMS)	January	2015	Palm Harbor, FL

Chen, Zhong, Salman, A, Mathur, G. Boselli, G.	Design and optimization on ESD self-protection schemes for 700V LDMOS in high voltage power IC	Electrical Overstress/Electrostatic Discharge Symposium (EOS/ESD)	Sept	2015	Anaheim, CA, USA
DeStefano, Charlie B.., Jensen, D**.**	Utilizing Failure Information form Mission Analysis for Complex Systems	2015, International Conference on Engineering Design	July	2015	Milan, Italy
Chen, S., Chen, J., Wang, L., Forte, D., Tehranipoor, M. and **Di, J**.	Chip-Level Anti-Reverse Engineering using Transformable Interconnects	28th IEEE Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems	August	2015	University of Massachusetts Amherst
Zhang, X., Sun, G., Zhang, C., Zhang, W., Liang, Y., Wang, T., Chen, Y. and **Di, J**.	Fork Path: Improving Efficiency of ORAM by Removing Redundant Memory Accesses	48th Annual IEEE/ACM International Symposium on Microarchitecture (MICRO)	December	2015	Waikiki, Hawaii
Kuhns, N., Caley, L., Rahman, A., Ahmed, S., **Di, J**., Mantooth, H.A., Francis, A.M. and Holmes, J.	High Temperature Testing Results of Synchronous and Asynchronous Digital Silicon Carbide Integrated Circuits	Government Microcircuit Applications & Critical Technology Conference (GOMACTech)	March	2015	St. Louis, Mo.
Li, Q., Ross, C., Yang, J., **Di, J**., Balda, J.C. and Mantooth, H.A.	The Effects of Flooding Attacks on Time-Critical Communications in the Smart Grid	IEEE PES Conference on Innovative Smart Grid Technologies (ISGT)	February	2015	Washington, D.C.
Brady, John, A. M. Francis, J. Holmes, **J. Di**, H. A. Mantooth	An Asynchronous Cell Library for Operation in Wide-Temperature & Ionizing-Radiation Environments	IEEE Aerospace Conference	March	2015	Big Sky, MT, USA
Li, A., Li, Q., Hu, V. and **Di, J.**	Evaluating the Capability and Performance of Access Control Policy Verification Tools	2015 Premier International Conference for Military Communications (MILCOM)	October	2015	Tampa, FL
Brady, J., Francis, A.M. and **Di, J.**	Analyzing the Radiation Hardness of an NCL Library	24th Annual Single Event Effects (SEE) Symposium	May	2015	San Diego, CA
Lo, C., Men, L., Brady, J. and **Di, J.**	Asynchronous and Synchronous Designs for Low-Power FDSOI CMOS Process Optimized for Subthreshold Operation at 0.3V VDD	IEEE SOI-3D-Subthreshold Microelectronics Technology Unified Conference	October	2015	California

Zhang, X., Sun, G., Chen, Y. and **Di, J.**	err-PUF: Exploiting Cell Error Distribution for Secure NVM Authentication	IEEE/ACM Design Automation Conference (DAC)	June	2015	San Francisco, CA
Guo, Z., Forte, D., Tehranipoor, M. and **Di, J.**	Investigation of Obfuscation-based Anti-Reverse Engineering for Printed Circuit Boards	IEEE/ACM Design Automation Conference (DAC)	June	2015	San Francisco, CA
Smith, Nick., L. Rivera, N. Burford, T. Bowman, **M. El-Shenawee**, and G. DeSouza	Towards Root Phenotyping in situ Using Terahertz Imaging,	0th International Conference IRMMW-THz	August	2015	Hong Kong
Arnold, Christopher C, and **M. El-Shenawee**	Design of Multi-Band Uniplanar MIMO Antenna for Mobile Devices with LTE/WLAN Operation	IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting	July	2015	Vancouver, Canada
Burford, N., and **M. El-Shenawee**	Enhancement of Terahertz Imaging of Packaged Power Electronic Devices	IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting	July	2015	Vancouver, Canada
Burford, Nathan, and **M. El-Shenawee**	Modeling of Plasmonic Terahertz Antennas using COMSOL Multiphysics	IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting	July	2015	Vancouver, Canada
Omolewu, Abayomi, T. Bowman, and **M. El-Shenawee**	Numerical Simulation of THz Reflection Imaging of Breast Cancer Tissue	IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting	July	2015	Vancouver, Canada
Bowman, T.C., **M. El-Shenawee**, and L. Campbell	Z-Scan Terahertz Imaging of Embedded Three-Dimensional Breast Cancer Tissue	IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting	July	2015	Vancouver, Canada

Bowman, Tyler C., **M. El-Shenawee,** and L. K. Campbell	Experimental Terahertz Z-Scan Imaging of Three-Dimensional Paraffin Embedded Breast Cancer Tissue.	IEEE MTT-S International Microwave Symposium	June	2015	Phoenix. AZ, USA
Bowman, T. C., Y. Wu, A. Walter, **J. Gauch**, M. El-Shenawee, and L. Campbell	Time of Flight THz Imaging of 3D Ex-Vivo Breast Cancer Tumor Tissues	40th International Conference IRMMW-THz	August	2015	Hong Kong
J. L. Gattis	Examining The Safety Threshold For Roadway Design	94th Annual Meeting of the Transportation Research Board	Jan	2015	Washington, DC
Croteau, Paul, S. Seal, R. Witherell, **M. Glover**, S. Krishnamurthy, H. A. Mantooth	Test results of sintered nano-paste silver die attach for high temperature applications	IMAPS International Conference and Exhibition on High Temperature Electronics Network (HiTEN)	July	2015	Cambridge, England
Seal, Sayan, **M. Glover,** H. A. Mantooth	Nanosilver preform assisted die attach for high temperature applications	IEEE Applied Power Electronics Conference (APEC)	March	2015	Long Beach, CA, USA
Seal, Sayan, **M. Glover,** H. A. Mantooth	Design of a Reduced Form Factor Passive Heat Sink for High Power Applications	IEEE Int. Workshop on Integrated Power Packaging	May	2015	Chicago, IL, USA
Seal, Sayan, **M. Glover,** H. A. Mantooth	Application and reliability analysis of sintered silver preforms for die attachment of wide bandgap devices	The 3rd IEEE Workshop on Wide Bandgap Power Devices and Applications (WiPDA)	Nov.	2015	Blacksburg, VA, USA
Ding, H. and **Huang, M**.	Exploiting Hardware Abstraction for Hybrid Parallel Computing Framework	2015 International Conference on Reconfigurable Computing and FPGAs (ReConFig 2015)	December	2015	Cancun, Mexico
Ding, H. and **Huang, M**.	An Automatic Design Flow for Hybrid Parallel Computing on MPSoCs (abstract only)	23rd ACM/SIGDA International Symposium on Field-Programmable Gate Arrays	February	2015	Monterey, CA
Ding, H. and **Huang, M.**	Achieving Energy-efficiency on MPSoCs: Performance and Power Optimizations	2015 International Conference on Reconfigurable Computing and FPGAs (ReConFig 2015)	December	2015	Cancun, Mexico

Ding, H. and **Huang, M.**	Performance and Energy Optimization on MPSoCs by Enabling STT-MRAM LUTs	23rd IEEE International Symposium on Field-Programmable Custom Computing Machines (FCCM)	May	2015	Vancouver, British Columbia
Chen, G., Lai, C. and **Huang, M.**	Parallel Sparse Coding for Seafloor Image Analysis	Sixth International Symposium on Highly Efficient Accelerators and Reconfigurable Technologies (HEART)	June	2015	Boston, MA
Lai, C., **Huang, M.,** and Chen, G.	Towards Optimal Task Distribution on Computer Clusters with Intel MIC Coprocessors	2015 International Conferences on High Performance Computing and Communications (HPCC)	August	2015	New York
Ma, S., Ding, H., **Huang, M.,** and Andrews, D.	Archborn: An Open Source Tool for Automated Generation of Multiprocessor Architecture	Proceedings of 2015 International Conference on Reconfigurable Computing and FPGAs (ReConFig 2015)	December	2015	Cancun, Mexico
Liu, X., R. Li, R. and **H.T. Liao**	Maximizing the Lifetime of Heterogeneous Wireless Sensor Networks	61st Annual Reliability and Maintainability Symposium (RAMS)	January	2015	Palm Harbor, FL
Zhang, Y., **H.T. Liao** and Y. Hong	Planning Accelerated Destructive Degradation Tests with Initiation Time	61st Annual Reliability and Maintainability Symposium (RAMS)	January	2015	Palm Harbor, FL
Jin, T.D., W. Xie, **H.T. Liao** and W. Otieno	System Availability under Redundancy Sharing of Standby Components	61st Annual Reliability and Maintainability Symposium (RAMS)	January	2015	Palm Harbor, FL
El-Shenawee, Magda, T. Bowman, N. Burford	Terahertz Imaging and Spectroscopy for Biomedical, Security and Industrial Applications at the University of Arkansas	PittCon	March	2015	New Orleans, LA, USA

Godfrey, L.B. and **Gashler, M.S.**	A Continuum among Logarithmic, Linear, and Exponential Functions, and Its Potential to Improve Generalization in Neural Networks	7th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management: KDIR	November	2015	Lisbon, Portugal
Smith, M.R., **Gashler, M.S.** and Martinez, T.	A Hybrid Latent Variable Neural Network Model for Item Recommendation	IEEE International Joint Conference on Neural Networks IJCNN'15	July	2015	Killarney, Ireland
Ashmore, S.C. and **Gashler, M.S.**	A Method for Finding Similarity between Multi-Layer Perceptrons by Forward Bipartite Alignment	IEEE International Joint Conference on Neural Networks IJCNN'15	July	2015	Killarney, Ireland
Gashler, M.S. and Kindle, K.	A Minimal Architecture for General Cognition	IEEE International Joint Conference on Neural Networks IJCNN'15	July	2015	Killarney, Ireland
Kevin Labille and **Susan Gauch**	Conceptual Impact-Based Recommender System for CiteSeerx	2nd Workshop on New Trends in Content-Based Recommender Systems (CBRecSys)	September 16-20	2015	Vienna, Austria
Syed Billah and **Susan Gauch**	Social Network Analysis for Predicting Emerging Researchers	7th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (KDIR 2015)	November 12-14	2015	Lisbon, Portugal
Sultan Alfarhood and **Susan Gauch**	Traveltant: Social Network-Based Restaurant Recommender System	14th International Conference on WWW Internet (ICWI 2015)	October 26-28	2015	Dublin, Ireland
Jensen, David, Beck, D	Self-Evaluation of Design Decision-Making Skills Gained Through Student Generated Learning Aids	2015 ASEE Annual Conference and Exposition	June	2015	Seattle, WA
Jensen, David, Beck, D.	Learning Design through Student-Generated Learning Aids.	2015 ASME International Design Engineering Technical Conferences, Design Education Conference	August	2015	Boston, MA

Authors	Title	Conference	Month	Year	Location
Hunter, S., **Jensen, David**, Tumer, I.Y., Hoyle, C.	Validating Model-Based Design Simulation: The Impact of Abstraction and Fidelity Levels	2015 IEEE International Conference on Complex Systems Engineering	November	2015	Storrs, CT
Jensen, David, Huisman, N	Biologically Inspired Fault Adaptive Strategies for Engineered Systems	2015, International Conference on Engineering Design	July	2015	Milan, Italy
McIntire, M., Hoyle, C., Tumer, I.Y., **Jensen, David**	Safety Informed Design: Using Clustering Analysis to Elicit Hazardous Emergent Failure Behavior in Complex Systems	ASME 2015 International Mechanical Engineering Congress and Exposition	November	2015	Houston, TX
Jensen, M.O., Drach A., Amir H. Khalighi, Chung-Hao. Lee, Charlie H. Bloodworth, Ajit P. Yoganathan, Michael S. Sacks	Population-averaged geometric model of mitral valve from patient-specific imaging data	14th Annual Design of Medical Devices Conference	April	2015	Minneapolis, Minnesota
Jensen, M.O., Khalighi, A.H., Andrew Drach, Fleur M. ter Huurne, Chung-Hao Lee, Charles Bloodworth, Eric Pierce, Ajit P. Yoganathan, and Michael S. Sacks	Multi-Scale Geometric Framework for Population-Averaging of the Mitral Valve Apparatus	2015 BMES Frontiers in Medical Devices Conference: Innovations in Modeling and Simulation	May	2015	Washington, D.C.
Jensen, M.O., Lee, C-H., Charles H. Bloodworth, Ajit P. Yoganathan, Michael S. Sacks	Predictive Computational Simulations of the Functioning Mitral Valve	2015 BMES Frontiers in Medical Devices Conference: Innovations in Modeling and Simulation	May	2015	Washington D.C.
Jensen, M.O., Toma, M., Daniel Einstein, Ajit P. Yoganathan, Richard P. Cochran, Karyn Kunzelman	Validating Fluid Structure Interaction in Medical Device Design with Force Measurements	2015 BMES Frontiers in Medical Devices Conference: Innovations in Modeling and Simulation	May	2015	Washington D.C.
Jensen, M.O., Grønlund, J., Niklas Telinius, Soren N. Skov, Vibeke E Hjortdal	A validation study of near infrared fluorescence imaging of lymphatic vessels in humans	25th annual meeting of the Scandinavian Society for Research in Cardiothoracic Surgery	February	2015	Geilo, Norway

Jensen, M.O., Røpcke, D.M. Christine Ilkjær, Tine Hejslet, AV Sørensen, Henrik Jensen, Vibeke E Hjortdal, Sten L Nielsen	Functional and biomechanical performance of stentless extracellular matrix tricuspid tubegraft in pigs	25th annual meeting of the Scandinavian Society for Research in Cardiothoracic Surgery	February	2015	Geilo, Norway
Jensen, M.O., Skov, S.N., Diana M. Røpcke, Andrew W. Siefert, Christine Ilkjær, Marcell J. Tjørnild, Ajit Yoganathan, Hans Nygaard, Ssten L. Nielsen	New concept for quantifying two-dimensional forces acting on an implanted mitral annuloplasty ring	25th annual meeting of the Scandinavian Society for Research in Cardiothoracic Surgery	February	2015	Geilo, Norway
Jensen, M.O., Alfaori Q., Ashok Saxena, Hanna Jensen	Rupture in Abdominal Aortic Aneurysms	42nd Annual Symposium on Vascular and Endovascular Issues	November	2015	New York, New York
Jensen, M.O., Khalighi, A., Andrew Drach, Fleur M Ter Huurne, Chung-Hao Lee, Charles Bloodworth, Eric L Pierce, Ajit P Yoganathan, Michael Sacks	A Complete Framework for the Charactrization of Complete Mitral Valve Geometry for the Development of A Population-averaged Model	8th International Conference on Functional Imaging and Modeling of the Heart	June	2015	Maastricht, Netherlands
Jensen, M.O., Pierce E.L., Danielle Spragan, Charles Bloodworth, Tomonori Kawamura, Joseph Gorman, Tetsushi Takayama, Andrew Siefert, Eric Pierce, Robert Gorman, Ajit Yoganathan	Can Optimized Annuloplasty Ring Size and Shape Mitigate Risk of Dehiscence?	American Association of Thoracic Surgery Mitral Conclave	April	2015	New York, New York
Jensen, M.O., Khalighi, A.H., Andrew Drach, Chung-Hao Lee, Charles Bloodwoth, Eric L. Pierce, Robert C. Gorman, Joseph H. Gorman, Ajit P. Yoganathan, and Michael S. Sacks	Development of a Population-Averaged Model of the Complete Mitral Valve Geometry	Biomedical Engineering Society 2015 Annual Meeting	October	2015	Tampa, Florida

Jensen, M.O., Pierce E.L.,, Deborah M. Paul, Sarah K. Wells, Charles H. Bloodworth, Andrew W. Siefert, Robert C. Gorman, Joseph H. Gorman, Ajit P. Yoganathan	Why is Annuloplasty Ring Dehiscence More Common on the Posterior Mitral Valve Annulus?	Inaugural Meeting of New International Heart Valve Society	May	2015	Monte Carlo, Monaco
Jensen, M.O., Drach A., Amir H. Khalighi, Fleur M. ter Huurne, Chung-Hao Lee, Charles Bloodworth, Ajit P. Yoganathan, Michael S. Sacks	Population-Averaged Geometric Model of Mitral Valve from Patient-Specific Imaging Data	Proceedings of the Design of Medical Devices Conference	June	2015	Minneapolis, Minnesota
Jensen, M.O., Bloodworth IV, C. H., Eric L. Pierce, Thomas F. Easley, Milan Toma, Amir Khalighi, Chung-Hao Lee, Michael Sacks, Andrew W. Siefert, Ajit P. Yoganathan	Design of an In Vitro Simulation Pipeline for the Development of Computational Mitral Valve Modeling	Proceedings of the SB3C 2015 Summer Biomechanics, Bioengineering and Biotransport Conference	June	2015	Snowbird Resort, Utah
Jensen, M.O., Pierce, E.L., Charles H. Bloodworth IV, Ajay Naran, Thomas F. Easley, Ajit P. Yoganathan	Novel Medical Imaging Technique for Soft Tissue Deformation Tracking – Application to The Mitral Valve	Proceedings of the SB3C 2015 Summer Biomechanics, Bioengineering and Biotransport Conference	June	2015	Snowbird Resort, Utah
Jensen, M.O., Toma M., Daniel R. Einstein, Ajit P. Yoganathan, Richard P. Cochran, Karyn S. Kunzelman	Fluid-Structure Interaction Analysis of Mitral Valve Forces Using a Comprehensive Model With 3D Chordal Structure: Synergy of Modeling and Experiments	Proceedings of the SB3C 2015 Summer Biomechanics, Bioengineering and Biotransport Conference (Podium Presentation)	June	2015	Snowbird Resort, Utah
Jensen, M.O., Bloodworth, C.H., Eric L. Pierce, Thomas F. Easley, Milan Toma, Ajit P. Yoganathan	Capturing Detailed 3D Mitral Valve Geometry for Computational Valve Modeling	SB3C2015 Summer Biomechanics, Bioengineering and Biotransport Conference	June	2015	Snowbird, Utah

Author	Title	Conference	Month	Year	Location
Jensen, M.O., Pierce, E.L., Danielle Spragan, Charles Bloodworth, Tomonori Kawamura, Joseph Gorman, Tetsushi Takayama, Andrew Siefert, Eric Pierce, Robert Gorman, Ajit Yoganathan	Novel Micro-Computed Tomography Technique for Soft Tissue Deformation Tracking – Application to the Mitral Valve	SB3C2015 Summer Biomechanics, Bioengineering and BIotransport Conference	June	2015	Snowbird, Utah
Jensen, M.O., Khalighi, A.H., Andrew Drach, Fleur M. ter Huurne, Chung-Hao Lee, Charles Bloodworth, Eric L. Pierce, Ajit P. Yoganathan, Michael S. Sacks	On the Characterization of Mitral Valve Geometry and Development of a Population-Averaged Model	SB3C2015 Summer Biomechanics, Bioengineering and Biotransport Conference	June	2015	Snowbird, Utah
Jensen, M.O., Lee C.H., Charlie H. Bloodworth, Ajit P. Yoganathan, M.S. Sacks	Effects of leaflet microstructure and constitutive model on the closing behavior of the mitral valve	Summer Biomechanics, Biongineering and Biotransport Conference (SB3C2015)	June	2015	Snowbird, Utah
Jiyu Cai, Austin Vanhorn, Casey Mullikin, Jennifer Stabach, Zach Alderman, and Wenchao Zhou	4D Printing of Soft Robotic Facial Muscles	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, Texas
John Gauch, Magda El-Shenawee	Adaptive Enhancement and Visualization Techniques for 3D Terahertz Images of Breast Cancer Tumors	SPIE Photonics West		2015	San Francisco, CA
Lee, John & Huang, Adam	"Water Based Propellant for Cold Gas Thruster"	IMECE2015-52776, 2015 ASME International Mechanical Engineering Congress and Exposition	November	2015	Houston, TX
Fan, J., **Li, Q.** and Cao, G.	Privacy-Aware and Trustworthy Data Aggregation in Mobile Sensing	IEEE Conference on Communications and Network Security (CNS)	September	2015	Florence, Italy

Authors	Title	Conference	Month	Year	Location
Li, Qinghua, C. Ross, J. Yang, J. Di, J. C. Balda, H. A. Mantooth	The effects of flooding attacks on time-critical communications in the smart grid	IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT)	October	2015	Montevideo, Uruguay
Cao, B., **Liu, X.F.**, Liu, J. and Tang, M.	Effective Mashup Service Clustering Method by Exploiting LDA Topic Model from Multiple Data Sources	2015 Asia-Pacific Services Computing Conference	December	2015	Bangkok, Thailand
Fletcher, K.K. and **Liu, X.F.**	A Collaborative Filtering Method for Personalized Preference-based Service Recommendation	2015 IEEE International Conference on Web Services (ICWS)	June	2015	New York
Modekurthy, V.P., Fletcher, K.K., **Liu, X.F.**, and Leu, M.C.	Personal Preference and Trade-Off Based Additive Manufacturing Web Service Selection	2015 IEEE International Conference on Web Services (ICWS)	June	2015	New York
Chanda, N.P. and **Liu, X.F.**	Intelligent Analysis of Software Architecture Rationale for Collaborative Software Design	2015 International Conference on Collaboration Technologies and Systems (CTS)	June	2015	Atlanta, GA
Umuhoza, Janvier, Y. Zhang, Y. Liu, J. Moquin, C. Farnell, **H. A. Mantooth**	Interleaved flyback based micro-inverter for residential photovoltaic application in remote areas	16th IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)	July	2015	Vancouver, Canada
Liu, Yusi, C. Farnell, V. Jones, K. George, **H. A. Mantooth**, J. C. Balda	Resonance propagation of ac filters in a large-scale microgrid	IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG)	June	2015	Aachen, Germany
Liu Yusi, C. Farnell, K. George, **A. Mantooth**, J.C. Balda	A Scaled-Down Microgrid Laboratory Testbed	2015 IEEE Energy Conversion Congress and Exposition	Sept	2015	Montreal, Canada
Rahman, Ashfaqur, P.D. Shepherd, S. A. Bhuyan, S. Ahmed, S. K. Akula, L. Caley, **H. A. Mantooth**, J. Di, A. M. Francis, J. Holmes	A Family of CMOS analog and mixed signal circuits in SiC for high temperature electronics	IEEE Aerospace Conference	March	2015	Big Sky, MT, USA

Sissons, Benjamin, **H. A. Mantooth**, J. Di, J. Holmes	SiGe BiCMOS Comparator for Extreme Environment Applications	IEEE Aerospace Conference	March	2015	Big Sky, MT, USA
Francis, A. Matthew, J. Holmes, **H. A. Mantooth**	Towards Standard Component Parts in Silicon Carbide CMOS	IEEE Aerospace Conference	March	2015	Big Sky, MT, USA
Zhang, Yuzhi, J. Umunoza, H. Liu, C. Farnell, **H. A. Mantooth**	Optimizing efficiency and performance for single-phase photovoltaic inverter with dual-half bridge converter	IEEE Applied Power Electronics Conference (APEC)	March	2015	Long Beach, CA, USA
Zhang, Yuzhi, J. Umunoza, H. Liu, F. Hossain, C. Farnell, **H. A. Mantooth**	Realizing an integrated system for residential energy harvesting and management	IEEE Applied Power Electronics Conference (APEC)	March	2015	Long Beach, CA, USA
Rahman, Ashfaqur, S. Roy, R. Murphee, **H. A. Mantooth**, A. M. Francis, and J. Holmes	A SiC 8-Bit DAC at 400° C	The 3rd IEEE Workshop on Wide Bandgap Power Devices and Applications (WiPDA)	Nov.	2015	Blacksburg, VA, USA
Rahman, Ashfaqur, K. Addington, M. Barlow, S. Ahmed, **H. A. Mantooth,** and A. M. Francis	A High Temperature Comparator in SiC CMOS	The 3rd IEEE Workshop on Wide Bandgap Power Devices and Applications (WiPDA)	Nov.	2015	Blacksburg, VA, USA
Delgado Hidalgo, Liliana, **Heather Nachtmann**, and Jingjing Tong	Analytic Hierarchy Approach to Inland Waterway Cargo Prioritization and Terminal Allocation	American Society for Engineering Management Conference Proceedings	October	2015	Indianapolis, IN
Mosleh, Aboozar, M. Alher, W. Du, L. C. Cousar, S. A. Ghetmiri, S. Al-Kabi, W. Dou, P. C. Grant, B. R. Conley, G. Sun, R. A. Soref, B. Li, **H. A. Naseem**, and Shui-Qing Yu	Growth and characterization of buffer-free SiGeSn epitaxial layers on Si for photonic applications	2015 Electronic Material Conference	June	2015	Columbus, OH, USA
Al-Kabi, Sattar, S. A. Ghetmiri, W. Du, H. Tran, G. Sun, R. Soref, J. Tolle, J. Margetis, B. Li, **H. A. Naseem**, and S.-Q. Yu	Material and Optical Characterizations for Both Bulk and NIP Double Heterostructure of Germanium Tin	2015 Electronic Material Conference	June	2015	Columbus, OH, USA

Du, W., S. A. Ghetmiri, Y. Zhou, A. Mosleh, J. Margetis, J. Tolle, G. Sun, R. A. Soref, B. Li, **H. A. Naseem**, and Shui-Qing Yu	Si-Based GeSn Edge-Emitting LEDs with Sn Compositions up to 8%	2015 IEEE Summer Topical Conference	July	2015	Nassau, Bahamas
Ghetmiri, Seyed A., W. Du, Y. Zhou, J. Margetis, T. Pham, A. Mosleh, B. Conley, A. Nazzal, G. Sun, R. Soref, J. Tolle, **H. A. Naseem**, and S.-Q. Yu	Temperature-dependent characterization of Ge0.94Sn0.06 light-emitting diode grown on Si via CVD	CLEO: Applications and Technology	May	2015	San Jose, CA, USA
Pham, T., B. Conley, J. Margetis, H. Tran, S. A. Ghetmiri, A. Mosleh, W. Du, G. Sun, R. Soref, J. Tolle, **H. A. Naseem**, and S.-Q. Yu	Enhanced responsivity up to 2.85 A/W of Si-based Ge0.9Sn0.1 photoconductors by integration of interdigitated electrodes	CLEO: Science and Innovations	May	2015	San Jose, CA, USA
Du, Wei, T. Pham, J. Margetis, H. Tran, S. A. Ghetmiri, A. Mosleh, G. Sun, R. A. Soref, J. Tolle, **H. A. Naseem**, B. Li, S.-Q. Yu	Optical Sensing, Imaging, and Photon Counting: Nanostructured Devices and Applications	SPIE	August	2015	San Diego, CA, USA
Pham, Thach, W. Du, J. Margetis, S. A. Ghetmiri, A. Mosleh, G. Sun, R. A. Soref, J. Tolle, **H. A. Naseem**, B. Li and S.-Q. Yu	Temperature-dependent study of Si-based GeSn photoconductors	SPIE	February	2015	San Francisco, CA, USA
Cilli, M., **G. Parnell**, R. Cloutier and T. Zighd	A System Engineering Perspective on the Revised Defense Acquisition System	Systems Engineering	Nov.	2015	
Hilliard, H., **G. Parnell**, and Edward A. Pohl	Evaluating the Effectiveness of the Global Nuclear Detection Architecture Using Multiobjective Decision Analysis	Systems Engineering		2015	
Cozier, A., K. Harned, M. Riley, B. Raabe, A. Sommers and **H. Pierson**	Additive Manufacturing in the Design of an Engine Air Particle Separator	Proceedings of the ASME 2015 International Mechanical Engineering Congress	November	2015	Houston, TX

J. S. Pennington[M.S.], and P.H.A. Huang	Fabrication and Thrust Characterization of a MEMS Resistojet Microthruster	AIAA Region IV Student Conference	April	2015	Houston, TX
Nusir, Ahmad I.; Y. F. Makableh, and **M. O. Manasreh**	Semi-insulating GaAs and Au Schottky barrier photodetectors for near-infrared detection (1280 nm)	Proc. SPIE, Infrared Sensors, Devices, and Application V, 960903	August	2015	San Diego, CA, USA
Maiga, Abdul & Huang, Adam	Swelling-Etching Characterization of PDMS-Copper Particle for the Development of the Nano/Micro-Particle Polymer Composite MEMS Corrosion Sensor	IMECE2015-52776, 2015 ASME International Mechanical Engineering Congress and Exposition	November	2015	Houston, TX
Mantooth, H. A., Y. Liu, C. Farnell, F. Zhang, Q. Li, J. Di	Securing DC and hybrid microgrids	IEEE Proc. Of International Conf. on DC Microgrids	June	2015	Atlanta, GA, USA
Mhiesan, Haider, W. Alhosaini, K. Mackey, **R. McCann**	High Step-Up Ratio Modular Multilevel Transformer-less DC-DC Converter for HVDC Grid of Large Scale Photovoltaic Systems	48th Annual Frontiers of Power Conference	October	2015	Stillwater, OK, USA
Al-Sarray, Muthanna, **R. McCann**	Severity assessment of cybersecurity threats based on transient stability analysis of induced circuit breaker misoperations	48th Annual Frontiers of Power Conference	October	2015	Stillwater, OK, USA
Islam, Rabiul, B. Eckerson, C. Nolen, K. Jeong, **R. McCann**	Experimental study on test-bed vanadium redox flow battery	ASME Power & Energy Conversion Conference	June	2015	San Diego, CA, USA
Saadeh, Mahmood., M. Al-Sarray, **R. McCann**	Analyzing variable time between N-1-1 contingencies for reliability analysis of systems with renewable energy sources	DOE Grid Engineering for Accelerated Renewable Energy Deployment Student Workshop	October	2015	Charlotte, NC, USA
Smith, Nadia; **R. McCann**, Y. Makableh, R. Vasan, and M. O. Manasreh	Performance analysis of a boost inverter with a silicon carbide deice for commercial applications	IEEE Industrial Application Society annual meeting	July	2015	Vancouver, Canada
Saadeh, Mahmood., M. Al-Sarray, **R. McCann**, C. Batten	A proposed benchmark model for wind energy transmission systems	IEEE North American Power Symposium	October	2015	Charlotte, NC, USA

Saadeh, Mahmood., M. Al-Sarray, **R. McCann**	A risk-based planning method for N-1-1 contingency analysis of transmission systems	IEEE North American Power Symposium	October	2015	Charlotte, NC, USA
Sarollahi M., Mishler J., Bauman S.J., Barraza-Lopez S., **Millett Paul C.**, Herzog J. B.	The significance of the number of periods and period size in 2D photonic crystal waveguides	SPIE Proceedings	2015	9556	9556B
Muldoon, T.J, Powless, A., Jenkins, S.V., Chen, J.,	Molecule-specific darkfield imaging using gold nanocages.	Reporters, Proc. SPIE, Markers, Dyes, Nanoparticles, and Molecular Probes for Biomedical Applications VII	February	2015	San Francisco, California
Muldoon, T.J., Greening, G. J., Prieto, S. P., Dierks, M., James, H.M.,	A Multimodal Sub-diffuse Microendoscopy and Spectroscopy Probe for Detection of Epithelial Dysplasia.	Engineering Conferences International Advances in Optics XIV	June	2015	Vail, CO
Muldoon, T.J., Majid, A.A., Hutcheson, J.A., Powless, A.J.	Fluorescent Imaging on a Microfluidics Chip for Quantification of Leukocyte Count.	Engineering Conferences International Advances in Optics XIV	June	2015	Vail, CO
Muldoon, T.J., Khan, F. Z., Jones, B. J., Nash, C. K., Hutcheson, J., Fritsch, I.	Expanding lab-on-a-chip applications for redox magnetohydrodynamic microfluidics through polymer-modified electrodes and enhanced currentmagnet relationships.	Pacifichem	December	2015	Honolulu, HI
Muldoon, T.J., .Prieto, S, Powless, A, Majid, A, Laryea, J, Mizell, J	Qualitative and quantitative comparison of colonic microendoscopy image features to histopathology, Proc.	SPIE, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues XIII	February	2015	San Francisco, California
Muldoon, T.J., Hutcheson, J., Claycomb, A., Powless, A., Prieto, S., Majid, A., Fritsch, I.	High-throughput microfluidic line scan imaging for cytological characterization, Proc.	SPIE, Microfluidics, BioMEMS, and Medical Microsystems XIII	February	2015	San Francisco, California
Muldoon, T.J., Greening, G, Balachandran, K,	Depth sensitivity of a diffuse reflectance and spectroscopic microendoscope in poly(dimethylsiloxane)- based phantoms, Proc.	SPIE, Optical Diagnostics and Sensing XV: Toward Point-of-Care Diagnostics,	February	2015	San Francisco, California

Authors	Title	Venue	Month	Year	Location
Muldoon, T.J., Nash, C.K., Claycomb, A., Khan, F. Jones, B. J., Hutcheson, J., and Fritsch, I.	New Advances and Opportunities of Magnetohydrodynamic Microfluidics.	227th Electrochemical Society Meeting	May	2015	Chicago, IL
Panda, B. and Yaseen, Q.	Defending Integrity against Insiders in Cloud Relational Databases	14th Annual Security Conference	May	2015	Las Vega, NV
Omran, O.B. and **Panda, B.**	Efficiently Managing Encrypted Data in Cloud Databases	2nd IEEE International Conference on Cyber Security and Cloud Computing (CSCloud 2015)	November	2015	New York
Kurra, K., **Panda, B.**, Li, W.N. and Hu, Y.	An Agent Based Approach to Perform Damage Assessment and Recovery Efficiently After a Cyber Attack to Ensure E-Government Database Security	48th Annual Hawaii International Conference on System Science	January	2015	Hawaii
Bobovych, S., Banerjee, N., Robucci, R., **Parkerson, J.P.**, Schmandt, J. and Patel, C.	SunaPlayer: High-Accuracy Emulation of Solar Cells	ACM/IEEE 14th International Conference on Information Processing in Sensor Networks (IPSN)	April	2015	Seattle, WA
Parnell, G., R. Butler, S. Wichmann, M. Tedeschi and D. Merritt	Air Force Cyberspace Investment Analysis	Decision Analysis		2015	
Kari, L., Kopecki, S., Meunier, P., **Patitz, M.J**., and Seki, S.	Binary pattern tile set synthesis is NP-hard	42nd International Colloquium on Automata, Languages, and Programming (ICALP 2015)	July	2015	Kyoto, Japan
Hendricks, J., **Patitz, M.J.** and Rogers, T.A.	Replication of arbitrary hole-free shapes via self-assembly with signal-passing tiles	14th International Conference on Unconventional Computation and Natural Computation (UCNC 2015)	August	2015	Auckland, New Zealand
Hendricks, J., **Patitz, M.J.** and Rogers, T.A.	Reflections on Tiles (in Self-Assembly)	21st International Conference on DNA Computing and Molecular Programming (DNA 2015)	August	2015	Cambridge, MA

Hendricks, J., **Patitz, M.J.** and Rogers, T.A.	The Simulation Powers and Limitations of Higher Temperature Hierarchical Self-Assembly Systems	7th International Conference on Machines, Computations and Universality (MCU'15)	September	2015	North Cypress
Fekete, S.P., Hendricks, J., **Patitz, M.J.**, Rogers, T.A. and Schweller, R.T.	Universal Computation with Arbitrary Polyomino Tiles in Non-Cooperative Self-Assembly	ACM-SIAM Symposium on Discrete Algorithms (SODA 2015)	January	2015	San Diego, CA
Pohl, Letitia M. and Shelly Walters	Instructional Videos in an Online Engineering Economics Course, Best paper award	American Society for Engineering Education	June	2015	Seattle, WA
Quinn, K. P., Liu, Z., L. Speroni, C. Sonnenschein, A. M. Soto, I. Georgakoudi,	Three-dimensional orientation mapping and quantification of collagen fibers in a hormone-sensitive breast tissue model	4th TERMIS World Congress	September	2015	Boston, MA
Quinn, K. P., DesRochers, T. M., S. Shuford, C. Mattingly, T. Bruce, Z. Liu, I. Georgakoudi, D. L. Kaplan, D. Orr, H. Crosswell	Perfused 3D tri-culture breast cancer microtumors for accurate prediction of drug response	American Association for Cancer Research Annual Meeting	April	2015	Philadelphia, Pennsylvania
Quinn, K. P., Morine K, Baugh L, Aronovitz M, Georgakoudi I, Karas RH, Black L, Kapur N	Decellularized Extracellular Matrix Exhibits Reduced Stiffness and Immature Collagen Deposition in a Mouse Model of Left Heart Failure	American Heart Association Scientific Sessions and Resuscitation Science Symposium	November	2015	Orlando, Florida
Quinn, K. P., E. C. Leal, A. Tellechea, A. Kafanas, J. DeFuria, M. E. Auster, J. Garlick, A. Veves, I. Georgakoudi	Multiphoton microscopy reveals altered cell metabolism during skin wound healing	BMES Annual Fall Meeting	October	2015	Tampa, Florida
Quinn, K. P., Baugh, L., G. Huggins, P. Hinds, I. Georgakoudi, L. Black	Two-photon excited fluorescence imaging of heart valves non-invasively identifies calcific nodules	BMES Annual Fall Meeting	October	2015	Tampa, Florida

Quinn, K. P., K. E. Sullivan, Z. Ballard, I. Georgakoudi, L. D. Black	Non-linear optical characterization of extracellular matrix changes following myocardial infarction	Optical Society of America – Optics in the Life Sciences Congress	April	2015	Vancouver, Canada
Quinn, K. P., K. E. Sullivan, C. A. Alonzo, Z. Ballard, I. Georgakoudi, L. D. Black	Non-Linear Optical Characterization of the Extracellular Matrix Changes Following Myocardial Infarction Predicts Alterations in Mechanical Properties	Summer Biomechanics, Bioengineering and Biotransport Conference	June	2015	Snowbird, Utah
Sheikhzadeh, A. and **M.D. Rossetti**	Segmentation Methods for Large-Scale Mulit-Echelon Service Parts Logistics Systems	Industrial and Systems Engineering Research Conference (ISERC) - S. Cetinkaya and J. K. Ryan, eds.	May 30-June 2	2015	Nashville, TN
Rossetti, M. D. and Ahn Pham	Simulation Modeling of Customer Checkout Configurations	Proceedings of the 2015 Winter Simulation Conference, Institute of Electrical and Electronics Engineers, Inc., L. Yilmaz, W. K. V. Chan, I. Moon, T. M. K. Roeder, C. Macal, and M. Rossetti, eds.		2015	Piscataway, New Jersey
Selvam, R.P., N. Ahmed, M.N, Strasser, M. Yousef and Q.S. Ragan	Observations of the Influence of Hilly Terrain on Tornado Path and Intensity from Damage Investigation of the 2014 Tornado in Mayflower, Arkansas	Structures Congress-2015	April	2015	Portland, OR
Monaharan, A., **R Tian,** S. S. Ang	Titanium dioxide nanofiber based biosensor for low level detection of CEA target cells	Arkansas INBRE 2015 Conference	Nov	2015	Fayetteville, AR, USA
Monaharan, A., **R Tian,** S. S. Ang	MoS2/Reduced Graphene Oxide based Nancomposite for Boosting the Energy density of Electric Double-Layer Capacitor (EDLC)	Materials Research Society	Dec	2015	Boston, MA, USA
Al-Dolami, Z., Nair, A., **Tung, Steve**	Electromechanical Properties of One Dimensional Carbon Chains	Proceedings of 9th IEEE International Conference on Nano/Molecular Medicine & Engineering (IEEE-NANOMED)	November	2015	Honolulu, Hawaii

Xie, S., Jiao, N., Liu, L., **Tung, Steve**	Fabrication of Graphene Interdigitated Electrodes and All-Carbon Electronic Devices	Proceedings of the 10th Annual IEEE Annual International Conference on Nano/Mico Engineered and Molecular Systems (IEEE NEMS)	April	2015	Xian, China
Austin Van Horn, **Wenchao Zhou**	Design and Optimization of a High Temperature Microheater for Inkjet Deposition	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, Texas
John Miers, **Wenchao Zhou**	Inkjet Printing at Megahertz Frequency	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, Texas
Wenchao Zhou	Lattice Boltzmann Simulation of Multiple Droplet Interaction on Non-ideal Surfaces for Inkjet Deposition	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, Texas
Wolchok J.C., Kim J, Kasukonis K	Muscle Regenerative Performance of ECM Scaffolds	Annual Meeting of the Biomedical Engineering Society	October	2015	Tampa Bay, Florida
Wolchok J.C., Roberts K, Hestekin J	Hollow Fiber Membranes for ECM Production	North American Membrane Society	June	2015	
Wolchok J.C., Wyatt J, Walker A, Balachandran K	Exploring the Response of Astrocytes to Traumatic Brain Injury Using a Novel Bench Top Crash Tester	Summer Biomechanics, Bioengineering, and Biotransport Conference	June	2015	Salt Lake City, Utah
Wolchok J.C., Kim J, Kasukonis K	Perfusion Decellularized Skeletal Muscle as a Scaffold for the Repair of Volumetric Muscle Loss	Summer Biomechanics, Bioengineering, and Biotransport Conference	June	2015	Salt Lake City, Utah
Wotherspoon LM, Bradley BA, Thomson EM, Hills AJ, Jeong S, **Wood CM** and Cox BR	Development of deep Vs profiles and site periods for the Canterbury region	NZSEE Annual Technical Conference	April	2015	Rotorua, New Zealand
Wood, C.M., Wotherspoon L.M., and Cox B.R.	Influence of a-priori subsurface layering data on the development of realistic shear wave velocity profiles from surface wave inversion	6th International Conference on Earthquake Geotechnical Engineering	Nov	2015	Christchurch, New Zealand

Wood, C.M., Wotherspoon L.M., and Cox, B.R.	Influence of a-priori subsurface layering data on the development of realistic shear wave velocity profiles from surface wave inversion	SAGEEP 2015	March	2015	Austin, TX
Wu, Jingxian, I. Akingeneye, and J. Yang	Optimum Sensing of a Time-Varying Random Event with Energy Harvesting Power Sources	ISIT '15	June	2015	Hong Kong
Sakai, Manabu, H. Lin, K. Yamashita, and **J. Wu**	Clock timing mismatch compensation in direct sampling receiver	AOCC 2015	October	2015	Kyoto, Japan
Wang, Zuoen, **J. Wu**, J. Yang, and H. Lin	Optimum level set estimation of a time-varying random field under a power constraint	Globecom'15	Dec	2015	San Diego, CA, USA
Li, Jian, **J. Wu**, Mugen Peng, Wenbo Wang, and Vicent Lau	Queue-aware joint remote radio head activation and beamforming for green cloud radio access networks	Globecom'15	Dec	2015	San Diego, CA, USA
Zhou, Weixi, **J. Wu**, and P. Fan	On the maximum Doppler diversity of high mobility systems with imperfect channel state information	ICC'15	June	2015	London, UK
Alqatawneh, Ali, **J. Wu**, and H. Lin	Circular-shift division multiple access with oversampling receivers	ICC'15	June	2015	London, UK
Zhou, Weixi, **J. Wu**, and P. Fan	Spectral efficient Doppler diversity transmissionsin high mobility systems with channel estimation errors	VTC'15	May	2015	Nanjing, China
Zhao, Jing, **J. Wu,** and P. Fan	MMSE-Beamforming for multi-user multiple-input multiple-output systems with distributed antennas	ICNC'15 E-MIMO Workshop	Feb	2015	Anaheim, CA, USA
Wang, Y., Si, C. and **Wu, X**.	Regression Model Fitting under Differential Privacy and Model Inversion Attack	International Joint Conference on Artificial Intelligence (IJCAI)	July	2015	Buenos Aires, Argentina
Li, Y., **Wu, X**. and Lu, A.	Analysis of Spectral Space Properties of Directed Graphs using Matrix Perturbation Theory with Application in Graph Partition	Proceedings of the IEEE International Conference on Data Mining (ICDM)	November	2015	Atlantic City, NJ

Hu, X., Wu, L., Lu, A. and **Wu, X.**	Block-Organizer Topology Visualization for Visual Exploration of Signed Networks	IEEE ICDM Workshop on Data Mining Meets Visual Analytics at Big Data Era (DAVA'15)	November	2015	Atlantic City, NJ
Luo, Z., Wang, Y., **Wu, X.,** Cai, W. and Chen, T.	On Burst Detection and Prediction in Retweeting Sequence	19th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)	May	2015	Ho Chi Minh, Vietnam
Yang, Jing, X. Wu, and J.Wu	Adaptive sensing scheduling for energy harvesting sensors with finite battery	ICC'15	June	2015	London, UK
Yang, Jing, and J. Wu	Online throughput maximization in an energy harvesting multiple access channel with fading	ISIT '15	June	2015	Hong Kong
Alher, Murtadha, A. Mosleh, L. Cousar, W. Dou, P. C. Grant, S.A. Ghetmiri, S. Al-Kabi, W. Du, M. Benamara, B. Li, M. Mortazavi, **S.-Q. Yu**, and H. A. Naseem	CMOS Compatible Growth of High Quality Ge, SiGe and SiGeSn for Photonic Device Applications	2015 ECS	October	2015	Phoenix, AZ, USA
Mosleh, A, M. Alher, L. Cousar, H. Abu-safe, W. Dou, P. C. Grant, S. Al- Kabi,, S.A. Ghetmiri, B. Alharthi, H. Tran, W. Du, M. Benamara, B. Li, M. Mortazavi, **S.-Q. Yu**, and H. Naseem	Enhancement of Material Quality of (Si)GeSn Films Grown By SnCl4 Precursor	2015 ECS	October	2015	Phoenix, AZ, USA
Yu, Shui-Qing and W. Du	Si based mid-infrared GeSn photo detectors and light emitters on silicon substrates	2015 SPIE Optical Sensing, Imaging and Photon Counting—Nanostructured Devices and Application	August	2015	San Diego, CA, USA
Yu, Shui-Qing, S. A. Ghetmiri, W. Du, J. Margetis, Y. Zhou, A. Mosleh, S. Al-Kabi, A. Nazzal, G. Sun, R. A. Soref, J. Tolle, B. Li, and H. A. Naseem	Si based GeSn light emitter: mid-infrared devices in Si photonics	SPIE Photonics West	Feb	2015	San Francisco, CA, USA

Zaharoff, D.A.	Colony stimulating factors secreted by irradiated autologous tumor cell vaccines inhibit immunity.	Annual Meeting and Associated Programs of the Society for Immunotherapy of Cancer	November	2015	National Harbor, Maryland
Zaharoff, D.A.	Heparin-based delivery of IL-12 immunotherapy differs between mouse and human	Biomedical Engineering Society (BMES) Annual Meeting	October	2015	Tampa, Florida
Zaharoff, D.A.	Local Delivery of CTLA-4 Blockade Inhibits Growth of Pancreatic Tumors	Biomedical Engineering Society (BMES) Annual Meeting	October	2015	Tampa, Florida
Zaharoff, D.A.	Localized Immunotherapy Delivery Using Injectable in situ Forming Chitosan Hydrogel	Biomedical Engineering Society (BMES) Annual Meeting	October	2015	Tampa, Florida
Zaharoff, D.A.	TNF-a and IFN-g Immunomodulation of Breast Cancer Cells for Whole Tumor Cell Vaccine Delivery	Biomedical Engineering Society (BMES) Annual Meeting	October	2015	Tampa, Florida
Zaharoff, D.A.	D.A. Effector Cells in Chitosan/Interleukin-12 Immunotherapy of Bladder Tumors in Mice	CRI-CIMT-EATI-AACR International Cancer Immunotherapy Conference	September	2015	New York, NY
Zaharoff, D.A.	Characterization of an autologous tumor cell vaccine against breast cancer in mice	San Antonio Breast Cancer Symposium	December	2015	San Antonio, Texas
Dollar, E., and **Shengfan Zhang**	Exploring Hospitalization Characteristics for Heart Disease Patients With Diabetes	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Wei, Chun., Qiao, W., **Zhao, Y**.	Sliding-mode observer-based sensorless direct power control of DFIGs for wind power applications	IEEE Power & Energy Society General Meeting	July	2015	Denver, CO, USA

IV. Unrefereed Publications and Proceedings (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Publication Title	Month	Year
Austin, B., E. Scott, S. Entrekin, M. Evans-White, and B. Haggard.	Monitoring water resources of the Gulf Mountain Wildlife Management Area to evaluate possible effects of natural gas development. Arkansas Water Resources Center, Technical Publication MSC 375.		2015
Balachandran, K., Morales J,	Consequences of 5HT signaling and hypertension on aortic valve remodeling	April	2015
Balachandran, K., Carradini J	Development of a Valve-On-Chip to Study Endothelial-Mesenchymal Transformation	April	2015
Balachandran, K., Sonaty G, Morrison G	Multiplexed microfluidic loop-mediated isothermal amplification of the 16s rRNA gene for the diagnosis of neonatal sepsis in resource-limited environments.	April	2015
Balachandran, K., Reynolds RE	The Effect of 5-hydroxytryptamine on the Mechanical Properties of the Cardiac Valve	April	2015
Scott, T. and **B. Haggard**	Evaluating the assessment methodology for the chlorophyll-a and Secchi transparency at Beaver Lake, Arkansas. Arkansas Water Resources Center, Technical Publication MSC 372.		2015
Scott, T. and **B. Haggard**	Simulated use of 'first-order' ponds to reduce peakflow in an eroding river system. Arkansas Water Resources Center, Technical Publication 374.		2015
Gaspar, J.P., **C. G. Henry,** M.M. Anders, M. Duren, D. Hendrix, and A.P. Horton	Effects of Water-Savings Rice Cultivation Methods on Yield, Water Use, and Water-Use Efficiency. In R.J. Norman and K.A. Moldenhauer (eds). B.R. Wells Rice Research Studies 2015. University of Arkansas Agricultural Experiment Station Research Series. 236-237 Fayetteville, Ark.		2015
Gaspar, J. **C. Henry,** P. B. Francis, L. Espinoza, M. Ismanov, S. Hirsh, A. Horton and H. James	The Effects of Deep Tillage and Gypsum Amendment, Across a Range of Irrigation Deficit for Furrow Irrigated Soybeans in Three Different Arkansas Soil Types. Submitted to 2015 Arkansas Soybean Research Series.		2015
Henry, C. G	Do you really have enough water to fully irrigate? Delta Farm Press	December	2015
Henry, C.G., W. M. McDougall, M. L. Reba	A Study of Arkansas Irrigation Pumping Plant Efficiency. Submitted to 2015 Arkansas Soybean Research Series		2015

Henry, C.G., R. Wimberly, M. Daniels, A. Sharpley	Arkansas Discovery Farms: Increasing Water Sustainability with Irrigation Scheduling. Submitted to 2015 Arkansas Soybean Research Series		2015
J. LloydB.S., S. MatlockB.S., M. NieberdingB.S., and **P. Adam Huang**	Permanent Magnet Active Attitude Control of a CubeSat for Space Instruments	March	2015
Liang, Y. and Z. Liang	Monitoring thermal environment on live haul broiler trucks. ASABE Annual Meeting, Paper No. 152189918. St. Joseph, Mich.: ASABE.		2015
Liang, Y	Air Quality Guide for Ground-Level Ozone Ground-Level Ozone – the Seasonal Air Pollutant. University of Arkansas Division of Agriculture, CES factsheet, under review	June	2015
Liang, Y. and T.A. Costello	Saving Energy with Ventilation Heat Recovery in Poultry Barns. University of Arkansas Division of Agriculture, CES factsheet, under review	June	2015
Liang, Y. Daniels, Hardke, Kelley, Pittman, Wamishe, McCullough, Watkins, Roberts	Managing Crop Residues to Reduce Particulate Matter Emissions.	June	2015
Pham, Thach, H. Tran, W. Du, **H. A. Naseem**, B. Li, and S-Q. Yu	Enhanced Responsivity up to 2.85A/W and Cutoff Wavelength at 2.6μm of Si – based Ge0.9Sn0.1 Photodetectors	Sept	2015
Ahler, Murtadha, H. Al-Ahmad, S. Al-Kabi, A. Mosleh, S. A. Ghetmiri, M. Mortazavi, **H. A. Naseem**, B. Li, and S-Q. Yu	GeSn and GePb crystallization using thermal evaporator	Sept	2015
Alher, Murtadha, S. F. Banihashemian, A. Sadoon, H. Abusafe, A. Mosleh, **H. A. Naseem**, B. Li, and S.-Q. Yu,	Nano wires and chains for solar cell applications	Sept	2015
Ghetmiri, Seyed, A., Y. Zhou, W. Dou, S. Al-Kabi, A. Mosleh, W. Du, M. Alher, **H. A. Naseem**, B. Li, and S-Q. Yu	Si-based Mid-Infrared Ge1-xSnx Light Emitters with Electroluminescence Beyond 2 μm	Sept	2015
Grant, Perry C., A. Mosleh, M. Alher, W. Dou, S. A. Ghetmiri, W. Du, **H. A. Naseem**, and S-Q. Yu	SiGeSn Growth for Group IV Photonics	Sept	2015
Harding, A. C. and **Nutter, Darin W.**	A systems approach helps Rockline Industries retrofit a compressed air system	May	2015

Rossetti, M. D., P. Parsa, Edward A. Pohl, and Shengfan Zhang	A Decision Support Tool for Continuous Replenishment Program Analysis		2015
Rossetti, M. D., H. Pierson, D. Booth and M. Center	Fabrication Division Logistics Process Modernization		2015
Rossetti, M. D. and K. Webb	Variation Identification System for Operational Risks (VISOR) in Inventory Systems		2015
Sadaka, S	Extension, utility experts urge caution, planning during post-harvest burns. Ryan McGeeney. Stuttgart Daily Leader	September	2015
Sadaka, S	Arkansas Grain Drying and Storage. University of Arkansas - Division of Agriculture. http://www.uaex.edu/farm-ranch/crops-commercial-horticulture/Grain_drying_and_storage/	June	2015
Sadaka, S	On-Farm Corn Drying and Storage. University of Arkansas - Division of Agriculture. http://1www.uaex.edu/farm-ranch/crops-commercial-horticulture/Grain_drying_and_storage/corn_drying_and_storage.aspx	June	2015
Sadaka, S	On-Farm Grain Sorghum Drying and Storage. University of Arkansas - Division of Agriculture. http://www.uaex.edu/farm-ranch/crops-commercial-horticulture/Grain_drying_and_storage/sorghum_drying_and_storage.aspx	June	2015
Sadaka, S	On-Farm Rice Drying and Storage. University of Arkansas - Division of Agriculture. http://www.uaex.edu/farm-ranch/crops-commercial-horticulture/Grain_drying_and_storage/rice_drying_and_storage.aspx	June	2015
Sadaka, S	On-Farm Soybean Drying and Storage. University of Arkansas - Division of Agriculture. http://www.uaex.edu/farm-ranch/crops-commercial-horticulture/Grain_drying_and_storage/soybean_drying_and_storage.aspx	June	2015
Sadaka, S	On-Farm Wheat Drying and Storage. University of Arkansas - Division of Agriculture. http://www.uaex.edu/farm-ranch/crops-commercial-horticulture/Grain_drying_and_storage/wheat_drying_and_storage.aspx	June	2015
Sadaka, S., G. Atungulu, S. Osborn.	On-Farm Wheat Drying and Storage. Chapter 10 Arkansas Wheat Production Handbook. UA Division of Agriculture Publication.	March	2015

Sadaka, S., S. Osborn, G. Atungulu, and G. Ubhi	On-Farm Grain Sorghum Drying and Storage. Chapter 10 Arkansas Grain Sorghum Production Handbook. UA Division of Agriculture Publication	September	2015
Scott, E., B. Smith, M. Leh, B. Arnold, and B. Haggard.	Bacteria monitoring in the Upper Illinois River Watershed. Arkansas Water Resources Center, Technical Publication 376.		2015
Scott, E., Z. Simpson, and B. Haggard.	Constituent load estimation in the Lower Ouchita-Smackover Watershed. Arkansas Water Resources Center, Technical Publication MSC 373		2015
VanDevender, K	Cattle Traffic Areas: Thinking and Planning Ahead for Wet Weather, Dairy E-News, December. http://www.uaex.edu/farm-ranch/animals-forages/dairy-cattle/DairyDigestDec2015.pdf	December	2015
VanDevender, K	With Warming Weather, It's Time to Start Thinking About Heat Stress. Dairy E-News, June. http://www.uaex.edu/farm-ranch/animals-forages/dairy-cattle/Dairy615web.pdf	June	2015

V. Invited Lectures and Conference Presentations (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Presentation Title	Event	Month	Year	Location
Andrews, David	It's Not Your Father's Computer	Distinguished Lecture Series	October	2015	Brigham Young University
Andrews, David	Can We Finally Allow Software Programmers to Create Hardware Accelerators?	Invited talk at ETH Zurich	April	2015	Zurich
Andrews, David	Will the Future Success of Reconfigurable Computing Require a Paradigm Shift in Our Research Communities Thinking?	Keynote talk at 11th International Symposium on Applied Reconfigurable Computing	April	2015	Bochum, Germany
Andrews, David	Future Directions for Research within NSFs CNS Core Programs	NSF presentation	July	2015	Washington, D.C.
Andrews, David	Reconfigurable Computing for the Masses, Really?	Workshop at the 25th International Conference on Field Programmable Logic and Applications		2015	London, England
Chimka, J.	Multimodal transport and trans-load facilities in Arkansas	AHTD Transportation Research Committee Meeting	May	2015	North Little Rock
Coffman, Richard A.	Development of a Topographic Differential Absorption LiDAR and Corresponding Decision Support System for Unstable Soil Characterization.	Transportation Research Board Annual Meeting	Jan	2015	Washington, DC
Coffman, Richard A.	DEMO 8: Remote Sensing Based Assessment for Evaluating Risk to Transportation Infrastructure Following Wildfires	United States Department of Transportation Commercial Remote Sensing and Spatial Information Technologies Workshop 2	Dec	2015	Oklahoma City, OK

Di, Jia	ASCENT-Bridging the Gap between Food and Cyber Security	Arkansas Association of Food Protection Annual Conference	September	2015	Fayetteville, AR
Di, Jia	Cross-Department and Cross-College Cybersecurity Education Programs	National Initiative for Cybersecurity Education Conference	November	2015	San Diego, CA
Di, Jia	ASCENT-Arkansas Security Research and Education Institute	Southeast Symposium for Contemporary Engineering Topics Conference	September	2015	New Orleans, LA
El-Shenawee, M.	Terahertz Imaging and Spectroscopy for Biomedical, Security and Industrial Applications at the University of Arkansas	PittCon Conference on Terahertz Imaging and Spectroscopy	March	2015	New Orleans, LA
Gile, J., E. Scott, and **B. Haggard**	Source water quality affects chlorine demand at Beaver Water District, Arkansas	American Water Resources Association Annual Conference	November	2015	Denver, CO
Edgar, L., T. Johnson, J. Rucker, and **B. Haggard**	The importance of water: a look at student perceptions of the [state] water resources center, water resources and water issues	Association for International Agricultural and Extension Education, Annual Meeting	April	2015	Wageningen, Netherlands
Simpson, Z., and **B. Haggard**	Water quality trends in the Upper White River basin, Northwest Arkansas	Oregon State University Student Water Conference	April	2015	Corvallis, OR
Hardgraves, N., B. Austin, S. Entrekin, **B. Haggard**, and M. Evans-White	Effect of cations associated with natural gas drilling on algal growth.	Society of Freshwater Sciences Annual Meeting	May	2015	Milwaukee, Wisconsin
Austin, B., N. Hardgrave, S. Entrekin, **B. Haggard**, and M. Evans-White	Natural gas development alleviates nutrient limitation of algal growth in Fayetteville Shale streams	Society of Freshwater Sciences Annual Meeting	May	2015	Milwaukee, Wisconsin

Mishra, J. and **C. G. Henry**	Optimization of a Paddle-Wheel Style Flowmeter impeller for Agricultural Irrigation.	2015 Arkansas Crop Protection Association Research Conference.		2015	
Daniels, M., **C. Henry**, A. Sharpley, B. Robertson, C. Hallmark, J. Hesselbein.	Documenting Irrigation Efficiency for Cotton via the Arkansas Discovery Farms	Cotton Beltwide	January	2015	San Antonio, Texas
Ismanov, I., L. Espinoza and **C. Henry**	Soil Moisture, Plant Water Use, and Infiltration in Different Arkansas Soils	Cotton Beltwide	January	2015	San Antonio, Texas
Kandapal, V., **C.G. Henry,** J. Gospar, A.P. Horton	Preliminary Development of Soil Moisture Irrigation Thresholds for Arkansas Soil Types.				
Henry, C. G. W. M. McDougall and M.L. Reba	A Study or Irrigation Pumping Plant Performance in Arkansas	Cotton Beltwide	January	2015	San Antonio, Texas
Jensen, M. O.	Nanoscale Materials and Sensors in Cardiovascular Medicine	Invited keynote speaker at the Sixth Nanotechnology for Health Care Conference	December	2015	Winthrop Rockefeller Institute, Morrilton, Arkansas
Jensen, M.O.	A Team of Hearts, Jensen Cardiovascular Research; the Past, the Present and the Future	Invited guest lecturer at the National Center for Toxicological Research	November	2015	Jefferson, AR
Li, Qinghua	SEEDS Research Overview	DoE Center on Secure, Evolvable Energy Delivery Systems Kickoff Workshop		2015	
Li, Qinghua	The Effects of Flooding Attacks on Time-Critical Communications in the Smart Grid	IEEE PES Innovative Smart Grid Technologies Conference	February	2015	Washington, D.C.

Liang, Y	Heat Recovery Ventilators for Exhausting Humid Air from Recirculating Aquaculture System Buildings	Aquaculture America		2015	New Orleans, LA
Liang, Y. and Z. Liang	Monitoring thermal environment on live haul broiler trucks. ASABE Annual Meeting, Poster Presentation		July	2015	New Orleans, LA
Liao, H.T. and Y. Xu	Approximation Methods for Modeling Failure Time Distributions of Complex Systems	IIE Annual Conference and Expo	July	2015	Nashville, TN
Liao, H.T.	The Role of Reliability Engineering in Improving Service Logistics	Joint APICS and ASQ Tucson Chapter meeting	April	2015	Tucson, AZ
Liao, H.T.	Design of Multifunctional Sensing System and A New Method for Modeling Event Time Data	Seminar - School of Automation, Beijing Institute of Technology	July	2015	Beijing, China
Liao, H.T.	A New Method for Modeling Event Time Distributions and Its Applications	Seminar - School of Reliability Engineering, Beijing University	July	2015	Beijing, China
Kilinc, M., **A.B. Milburn**	Comparing efficiency and quality in the home health care industry	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Hadian, M. and **A.B. Milburn**	Inventory routing problem with time windows	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Lian, K., **A.B. Milburn**, A.B. and R. Rardin	Study on multi-objective periodic vehicle routing problem with service consistency	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Kirac, E., **A.B. Milburn**	Social media usage in static disaster relief routing plans (poster)	University of Arkansas Faculty Poster Showcase for Cyber, Smartgrid and Logistics		2015	Fayetteville, AR

Ajay Malshe and Arpana Verma	Nano Engineered Lubricants for Advanced Mechanical Applications	ILMA Annual Meeting		2015	Florida
Malshe, Ajay	Advanced Nanoengineering Surface Engineering	Cameron Fellows		2015	Houston, TX
Malshe, Ajay	Micro additive manufacturing using ultra short laser pulses	CIRP General Assembly		2015	South Africa
Malshe, Ajay	Nanoengineering and Tech Transfer	Georgia Tech Marcus Nanotechnology Research Center		2015	Atlanta, GA
Mantooth, H. A.	Advancing Power Electronics Through Integration of Heterogeneous Technologies	International Symposium on Power Semiconductor Devices (ISPSD)	May	2015	Hong Kong
Mantooth, H. A.	Reliability of SiC integrated circuits for power electronic applications	International Workshop on WBG Power Electronics	April	2015	Taiwan
Mantooth, H.A.	High Density Power Electronics for Transportation Applications	Japan Science & Technology Super Cluster Internal Forum on Power Electronics for Advanced Wide Bandgap Semiconductors	Dec	2015	Kyoto, Japan
McCann, R. A.	Case Study in using Synchrophasors for Real-Time Determination of Network Admittance Parameters	6th Southeast Symposium on Contemporary Engineering Topics (SSCET)	Sept	2015	New Orleans, LA
McCann, R. A.	A Risk-Based Method for Assessing N-1-1 Contingencies	Electric Power Research Institute Risk-Based Planning Workshop	Nov	2015	Little Rock, AR
Milburn, A.B., B. Li, M.D. Rossetti	An analysis of current and alternative forecasting	Center for Excellence in Logistics and Distribution Industrial Advisory Board Meeting and Research Symposium		2015	Chicago, IL
Milburn, A.B.	The logistics of home health care	University of Arkansas Freshman Engineering Program Honors Research Colloquium		2015	Fayetteville, AR

Millett, Paul C.	Multi-scale Computer Simulation of Fission Gas Bubble Morphology on Oxide Grain Boundaries	Materials Research Society (MRS) Spring Meeting	Spring	2015	San Francisco, CA
Muldoon, T.J.	Basic science and translational applications of microendoscopy and spectroscopy systems	Breast Cancer Honors Colloquium invited talk, University of Arkansas		2015	
Muldoon, T.J.	Optical imaging and spectroscopy for translational biomedical applications	Chemistry / Biochemistry Seminar invited talk, University of Arkansas		2015	
Nachtmann, Heather, Kenneth N. Mitchell, Chase E. Rainwater, Corey Winton, Fereydoun Adbesh	Dredging Equipment / Environmental Windows Optimization of Navigation Systems in the Gulf of Mexico	92nd U.S. Army Corps of Engineers Coastal Engineering Research Board Meeting	September	2015	Galveston, TX
Nachtmann, Heather	Regional Economic Impact Study of the McClellan-Kerr Arkansas River Navigation System	Transportation Committee Senate and House Transportation Committee	November	2015	Pine Bluff, AR
Nair, Arun K.	Multiscale Modeling to Find Mechanical Properties of Biomaterials	Graduate student seminar, Biomedical Engineering, University of Arkansas		2015	Fayetteville, AR
Nurre, S.G. and C. Hergenreter	Multi-Graph Vitality Measures with Applications to A Communications Network	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Algarni, S. and **Nutter, Darin**	Survey of Sky Effective Temperature Models Applicable to Building Envelope Radiant Heat Transfer	ASHRAE Annual Conference	June	2015	Atlanta, GA
Osborn, G.S	BlueInGreen Technology for Water and Wastewater Treatment.	Arkansas Society of Professional Engineers	March	2015	Little Rock, AR
Osborn, G.S	Engineering and Entrepreneurship	Chi Epsilon Civil Engineering Honor Society	March	2015	Fayetteville, AR

Osborn, G.S	Navigating a Research Program Through the Emerging Stream of Ecological Engineering.	NRES Distinguished Lecture Series. ASABE Annual International Meeting	July	2015	New Orleans, LA
Osborn, G.S	BlueInGreen: An example of a successful federally funded startup company	U.S. Department of Transportation Commercial Remote Sensing Program Workshop # 2 – Commercialization Framework.	December	2015	Oklahoma City, OK
Osborn, G.S., C. Brewer	BlueInGreen Case Study	Arkansas Commercialization Retreat	June	2015	Petit Jean, AR
Beirise, A., **G.S. Osborn**	Developing an Improved Method for Measuring Sediment Oxygen Demand In Lakes	Arkansas Water Resources Center Conference	July	2015	
Parnell, Gregory	Advise for Researchers "on the frontiers between Management Science and Engineering"	Centre for Management Studies of Instituto Superior Tecnico (CEG-IST) External Advisory Committee	October	2015	Lisbon, Portugal
Hendricks, J., **Patitz, M.J.** and Rogers, T.A.	Replication of Arbitrary Hole-free Shapes via Self-assembly with Signal-passing Tiles	Proceeding of the 14th International Conference on Unconventional Computation and Natural Computation	August	2015	Auckland, New Zealand
Patitz, Matt	Theoretical and Computational Modeling of Nanoscale Self-Assembling Systems	1st International Workshop on Nano-Bio Photonics	August	2015	Pohang, Korea
Patitz, Matt	Theoretical Modeling of Algorithmic Self-Assembling Systems	Workshop on self-assembly and self-organization in Computer Science and Biology Schloss Dagstuhl	October	2015	
Pierson, H.	3D Printing: The Process, the Promise, and the Problems	Invited Presentation, American Production and Inventory Control Society, NW Arkansas Chapter Meeting	March	2015	Fayetteville, AR
Pierson, H. and S. Brown	A Process for Digital Design Integrity	Invited Seminar, Air Force Research Laboratory	August	2015	Wright-Patterson AFB, OH

Cozier, A., K. Harned, M. Riley, B. Raabe, A. Sommers and **H. Pierson**	Additive Manufacturing in the Design of an Engine Air Particle Separator	2015 International Mechanical Engineering Congress	November	2015	Houston, TX
Cozier, A., K. Harned, M. Riley, B. Raabe, A. Sommers and **H. Pierson**	Additive Manufacturing in the Design of an Engine Air Particle Separator	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Prinz, G.S.	Re-visiting the fatigue capacity of shear connectors in composite bridge girders	AASHTO T-14 Committee and Bridge Task Force Design Advisory Group (DAG)	Aug	2015	Philadelphia, PA
Qian, X.	The effects of salt on the hydrophobic-to-hydrophilic transition of PVCL', Symposium on Thermodynamics and Transport	8th Joint Sino-US Chemical Engineering Conference	October	2015	Shanghai, China
Qian, X.	Responsive hydrophobic interaction chromatography for protein separations', Symposium on Separation Technology	8th Joint Sino-US Chemical Engineering Conference,	October	2015	Shanghai, China
Qian, X.	Investigating antifouling mechanism of zwitterionic materials from molecular dynamics simulations'	Engineering Conferences International on Advanced Membrane Technology VI: Water, Energy, and New Frontiers	February	2015	Sicily, Italy
Qian, X.	The hydration properties of carboxybetaine zwitterion brushes	Huazhong University of Science and Technology	June	2015	Wuhan, China
Qian, X.	Adsorptive membranes for ammonia removal from fishery water'	Indo-US symposium for CO2 capture and other frontiers, CHEMCON	December	2015	Guwahati, India
Qian, X.	Understanding the effect of salt ions on protein adsorption in novel responsive hydrophobic interaction membrane chromatography'	Symposium for Advanced Membrane Separations Pacifichem	December	2015	Honolulu,

Qian, X.	Development of adsorptive membranes for ammonia removal'	Symposium on membrane technology for water treatment, 8th Joint Sino-US Chemical Engineering Conference	October	2015	Shanghai, China
Quinn, K. P	Label-free non-linear optical microscopy techniques to assess tissue microstructure and metabolism	Invited seminar a thet Center for Engineering in Medicine and Shriners Burns Hospital	February	2015	Boston, MA
Quinn, K. P	Quantitative biomarkers for non-invasive, real time assessment of tissue structure and function to diagnose disease or trauma and guide therapies	Invited seminar for International Society for Optics and Photonics (SPIE) Student Chapter at the University of Wisconsin	November	2015	Madison, WI
Rainwater, Chase, K. Ellis, B. Ferrel and P. Kaminsky	Barriers to Horizontal Collaboration in US Logistics	2nd Annual Physical Internet Conference	July	2015	Paris, France
Kemayou, B. N. Ahmed, **R. P. Selvam**,and H.R. Bosch	Aeroelastic analysis of bridge deck sections by FDM using LES: Improving the performance through Implementation of parallel computing	XIX National Congress of Civil engineering-2015	Nov	2015	Huaraz, Peru
Strasser, M.N and **R.P. Selvam**	Evaluation of pressure drop in air and slat-based thermocline thermal energy storage systems, Proceedings	XIX National Congress of Civil engineering	Nov	2015	Huaraz, Peru
Ubhi, G. and **S. Sadaka**	Preliminary Investigation of Non-Isothermal Drying Kinetics of Wheat as Affected by Initial Moisture Content and Heating Rate Using Model-Fitting Technique.	ASABE Annual International Meeting	July	2015	New Orleans, LA
Ubhi, G. and **S. Sadaka**	Advances in Grain Drying, Handling and Storage Technologies.	University of Arkansas	June	2015	Fayetteville, AR

Ubhi, G. and **S. Sadaka**	Grain Respiration Assessment Using Pressure Sensors: An Indirect Measurement Approach		July	2015	New Orleans, LA
Sadaka, S. and G. Ubhi	Evaluating the Suitability of Drying Rough Rice Using Heated Husk as Moisture Adsorbent.	ASABE Annual International Meeting	July	2015	New Orleans, LA
Sadaka, S. and K. VanDevender	Assessment of Chemically Precipitated Swine Manure Solids as Biofuel and Soil Amendment Sources	From Waste to Worth	March	2015	Seattle, WA
Scott, E., B. Smith, M. Leh, B. Arnold, and B. Haggard	E. coli numbers in streams are related to land cover in the stream buffer zone.	GIS Day, University of Arkansas	December	2015	Fayetteville, AR
Scott, E., J. Gile and B. Haggard	Relation of chlorine demand to the water quality of Beaver Lake, Beaver Water District		February	2015	Lowell, AR
Wang, F., **Shengfan Zhang** and K. Jozkowski	Assessment of Individualized Human Papillomavirus Vaccination Strategies	Industrial and Systems Engineering Research Conference	May 30-June 2	2015	Nashville, TN
Sullivan, K.M., C. Rainwater and F. Enayaty	Interdicting Cloud Infrastructure with Targeted Denial of Service Attacks	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Sullivan, K.M.	Network-Based Models for Optimization in Reliability	INFORMS Computing Society Conference	January	2015	Richmond, VA
Sullivan, K.M., S. Nurre, B. Lunday, and M. Robbins	Flow Networks with Interdependent Commodities	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
T.A. Costello, J.B. Carter, D.J. Carrier, C.V. Maxwell, , S.S. Sadaka, K.W. VanDevender, W. Zhang	Swine Waste as Irrigation and Nutrient Source for Periphytic Algae Production	Waste Conversion Technology Conference	August	2015	San Diego, CA

Tung, Steve	From Microfluidics to Nanofluidics	Biological and Agricultural Research Colloquium	October	2015	Fayetteville, AR
VanDevender, K	East Arkansas Poultry Litter: Challenges & Opportunities	Arkansas Association of Conservation Districts Annual Meeting	February	2015	N Little Rock, AR
VanDevender, K	Calcium Enhanced Precipitation Of Swine Manure: Supporting Concepts And Lab Scale Trial Findings	Waste 2 Worth Poster	March	2015	Seattle, WA
Wejinya, Uchechukwu	Automation for Formed Meat Products	5th Annual IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems	June	2015	Shenyang, China
Wejinya, Uchechukwu	Opportunities in MEMS Sensors Using Nanomaterial	Peking University Wuxi Campus	July	2015	Wuxi, China
Wejinya, Uchechukwu	Hydrogen Sensor Development Based on Graphene and Palladium	Shenyang Institute of Automation, Chinese Academy of Sciences	June	2015	Shenyang, China
White, John A.	Real-Options Analysis: An Undergraduate Tutorial	ISERC (Invited presentation to the Engineering Economy Division as 2014 Wellington Award recipient)	May 30-June 2	2015	Nashville, TN
Wu, J.	Optimal Online Sensing Scheduling for Energy Harvesting Sensors with Infinite and Finite Batteries	2015 International Forum on Advances in Information Coding and Wireless Communications (AIcWC)	Oct	2015	Chengdu, China
Wu, Xintao	Social Computing in Big Data Era – Privacy Preservation, Fraud Detection, and Fairness Awareness	Spring Colloquium of the Doctoral Program in Integrated Computing	April	2015	University of Arkansas at Little Rock
Yang, J	Adaptive Sensing Scheduling for Energy Harvesting Sensors with Finite Battery	Information Theory and Applications (ITA) Workshop	February	2015	

Yu, S.-Q.	Si based mid-infrared GeSn photodetectors and light emitters on silicon substrates	2015 SPIE Optical Sensing, Imaging and Photon Counting—Nanostructured Devices and Applications,	August	2015	San Diego, CA
Yu, S.-Q.	Recent Progress of SiGeSn Material and Device development, What Can We Learn from III-V-Bismide Research?	6th International Workshop on Bismuth-Containing Semiconductors	July	2015	Madison, WI
Yu, S.-Q., W. Du, B. R. Conley, S. A. Ghetmiri, A. Mosleh, T. Pham, Y. Zhou, A. Nazzal, G. Sun, R. A. Soref, J. Margetis, J. Tolle, and H. A. Naseem	GeSn Photodetector and Light Emitter: Mid-Infrared Devices in Silicon Photonics	SPIE Photonic West	February	2015	San Francisco, CA
Yu, S-Q	SiGeSn Based Materials and Devices for Si-Photonics Applications	2015 IEEE Summer Topical	July	2015	Nassau, Bahamas
Zhu, Jun	Bioenergy and value added chemicals production from agricultural waste materials	College of Biosystems Engineering and Food Science	October	2015	Zhejiang, China
Shen, J., **J. Zhu**	Determination of Kinetic Parameters in Methane Production of Anaerobic Co-Digestion from Methane Volume and COD Balance	ASABE Annual International Meeting	July	2015	New Orleans, LA
Shen, J., **J. Zhu**	Optimization of Methane Production in Anaerobic Co-Digestion at different Solid Concentrations and ratios of Poultry Litter to Wheat Straw using a Developed Statistical Model	ASABE Annual International Meeting	July	2015	New Orleans, LA

	Strategies to optimize a Two-Step Fed Sequencing Batch Reactor (SBR) System to Remove Nutrients from Swine Wastewater	ASABE Annual International Meeting	July	2015	New Orleans, LA
Wu, X., **J. Zhu**					
Carter, B., **J. Zhu**	The Effects of Algae Pre-Treatment on the Biomethane Potential of Swine Waste	ASABE Annual International Meeting	July	2015	New Orleans, LA

VI. Other Lectures, Papers, and Conference Presentations (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Presentation Title	Event	Month	Year	Location
Yang, S., **Braham, A**.	Dynamic Modulus, Fracture Toughness, and R-Curve of Asphalt Concrete	Association of Asphalt Paving Technologists	Mar	2015	Portland, OR
Smith, S., **Braham, A.**	Comparing Layer Types for the Use of MEPDG for FDR Design	Association of Asphalt Paving Technologists	Mar	2015	Portland, OR
Henrichs, C., **Braham, A.**	Laboratory Comparison of Full Depth Reclamation Stabilization Techniques Using Arkansas Field Materials	Laboratory Comparison of Full Depth Reclamation Stabilization Techniques Using Arkansas Field Materials	Mar	2015	Portland, OR
Schneider, K. with **C.R. Cassady**	An Introduction to Probabilistic Methods in Reliability and Maintainability	61st Annual Reliability and Maintainability Symposium (RAMS)	January	2015	Palm Harbor, FL
Cai, Jiyu[MS], Zhou, W., and Zou, M.	Surface Hydrophilic/Hydrophobic Patterning for Stem Cell Differentiation to Neurons	ABI Fall Research Symposium	October	2015	Fayetteville, AR
Cai, Jiyu[MS] and Zou, M.	Effects of PDA adhesive layer on the tribological properties of graphite particle coating on stainless steel surfaces	STLE Annual Meeting and Exhibition	May	2015	Dallas, TX
Cai, Jiyu , Austin Vanhorn, Casey Mullikin, Jennifer Stabach, Zach Alderman, and Wenchao Zhou	4D Printing of Soft Robotic Facial Muscles	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, TX
Fleming, Robert A.[PhD] and Zou, M.	Deformation Behavior in Al/a-Si Core-shell Nanostructures and Layered Thin-films	42th International Conference On Metallurgical Coatings And Thin Films ICMCTF	April	2015	San Diego, CA
Fleming, Robert A.[PhD] and Zou, M.	Friction and Deformation Study of Patterned Al Nanodots and Al/a-Si Core-shell Nanostructures	STLE Annual Meeting and Exhibition	May	2015	Dallas, TX

Gashler, Mike	Predicting Time Series with Deep Neural Networks	Models, Machine Learning and Applications – Wal-Mart Event	January	2015	Bentonville, AR
Gashler, Mike	Waffles (a machine learning toolkit)	Models, Machine Learning and Applications – Wal-Mart Event	January	2015	Bentonville, AR
Gattis, J. L.	Recommended Practice for Timing Yellow and All Red Intervals	Midwestern ITE District Annual Meeting	June	2015	Branson, MO
J. Lloyd[B.S.], S. Matlock[B.S.], M. Nieberding[B.S.], and **P. Adam Huang**	Permanent Magnet Active Attitude Control of a CubeSat for Space Instruments	46th Lunar and Planetary Science Conference	March	2015	The Woodlands, TX
Lee, John & Huang, Adam	Water Based Propellant for Cold Gas Thruster	IMECE2015-52776, 2015 ASME International Mechanical Engineering Congress and Exposition	November	2015	Houston, TX
Lynch-Caris, Terri and **Letitia M. Pohl**	Ergonomics Topics for the Undergraduate Classroom	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Xu, Yiwen Xu with **H.T. Liao**	Reliability Analysis of Systems Containing Multi-functional Components	IIE Annual Conference and Expo	May	2015	Nashville, TN
Hamidi, Maryam with **H.T. Liao**	Competitive and Cooperative Game-theoretic Models for Usage-based Lease Contracts	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Fathi Aghdam, Faranak with **H.T. Liao**	Reliability Study of High-k Bi-layer Dielectrics with Non-Weibullian Failure Time Distribution	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Xu, Yiwen with **H.T. Liao**	Optimal Decision Making for Systems with Multi-functional Components	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Maiga, Abdul & Huang, Adam	Swelling-Etching Characterization of PDMS-Copper Particle for the Development of the Nano/Micro-Particle Polymer Composite MEMS Corrosion Sensor	IMECE2015-52776, 2015 ASME International Mechanical Engineering Congress and Exposition	November	2015	Houston, TX

Manasreh, O.	Antireflection Coating for Photovoltaic devices		May	2015	German Jordan University
Manasreh, O.	Nanomaterials		May	2015	Jerash University, Jordan
Manasreh, O.	Nanomaterials for detectors, emitters and biosensors		May	2015	University of Jordan
Li, B. with **A.B. Milburn** and M.D. Rossetti	An analysis of current and alternative forecasting (poster)	Center for Excellence in Logistics and Distribution Industrial Advisory Board Meeting and Research Symposium		2015	Atlanta, GA
Gedik, R. and E. Kirac with **A.B. Milburn** and C. Rainwater	A Constraint Programming Approach for the Team Orienteering Problem with Time Windows	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Kilinc, M. with **A.B. Milburn** and J. Heier Stamm	Measuring the potential spatial accessibility of home healthcare services	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Li, B., with **A.B. Milburn** and S.J. Mason	Parallel machine scheduling with unrelated machines and job splitting	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Lian, K., with **A.B. Milburn** and R. Rardin	Study on multi-objective periodic vehicle routing problem with service consistency	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Kirac, E. with **A.B. Milburn**	Uncertain social media with application in multi-objective disaster relief tour planning	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Gedik, R., E. Kirac, **A.B. Milburn** and Chase Rainwater	A Constraint Programming Approach for the Team Orienteering Problem with Time Windows	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA

Li, B. with **A.B. Milburn** and S.J. Mason	Heuristic approach for an unrelated parallel machine scheduling problem with ready times and due dates	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Kirac, E. with **A.B. Milburn**	Multiple-scenario approach for a dynamic disaster relief routing problem with uncertain social data	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Millett, Paul C.	Mesoscopic Simulations of Electric-Field-Aligned Bijel Films for Designable Porous Membranes	Materials Research Society (MRS) Fall Meeting	Fall	2015	Boston, MA
Millett, Paul C.	Computational Study of Particle Assembly in Two-Phase Fluids to Fabricate Porous, Functionalized Materials and Membranes	US National Congress on Computational Mechanics (USNCCM)		2015	San Diego, CA
Muller, Scott E. and Nair, A.K.	Fracture Mechanics of metal-graphene nanocomposites	TMS		2015	Orlando, FL
Muller, Scott E. and Nair, A.K.	Nanoscale properties of apatite crystals	TMS		2015	Orlando, FL
Oztanriseven, Furkan with **Heather Nachtmann**	System Dynamics in Navigable Inland Waterways	Decision Sciences Institute	November	2015	San Francisco, CA
Oztanriseven, Furkan with **Heather Nachtmann**	Economic Impacts of Potential Disruptions on McClellan-Kerr Arkansas River System	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Tong, Jingjing with **Heather Nachtmann**	Heuristic Comparison for the Cargo Prioritization and Terminal Allocation Problem	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Madadi, Mahboubeh with **Heather Nachtmann**	Stochastic Decision Modeling for Inland Waterway Disruptions	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Delgado Hidalgo, Liliana with **Heather Nachtmann**	Cargo Prioritization and Terminal Allocation in Case of Inland Waterway Disruption	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA

Oztanriseven, Furkan with **Heather Nachtmann**	Inland Waterway System Dynamics	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Nachtmann, Heather and Chase Rainwater	Optimal Dredge Fleet Scheduling within Environmental Work Windows	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Al-Dolami, Zeina, **Nair, A. K.** and Tung, S	Electromechanical Properties of One Dimensional Carbon Chains	IEEE-NANOMED		2015	
Paul, C. and **Nair, A.K**	Interface properties of collagen and apatite in bone	ASME NEMB		2015	Minneapolis, MN
A.C. Deymier-Black, **Arun K. Nair**, B. Depalle, Z. Qin, K. Arcot, C.H. Yoder, M.J. Buehler, S. Thomopoulos, G.M. Genin, J.D. Pasteris	Effects of Carbonate Substitution on the Morphology of Biomimetic Apatites	Orthopedic Research Society		2015	Orlando, FL
Needy, K.L.	Leadership through Service – A Win-Win!	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Needy, K.L.	IE for Life! Leading the IE Profession by Serving	Institute of Industrial Engineers Mid-Atlantic Conference	February	2015	Clemson, SC
Needy, K.L.	Growing Women Leaders in STEM Fields	Westinghouse Nuclear	March	2015	Cranberry Township, PA
Widrick, R.S., **S.G. Nurre** and M.J. Robbins	Optimal Policies for the Management of an Electric Vehicle Battery Swap Station	Faculty Poster Showcase for Cyber, Smartgrid, and Logistics	October	2015	Fayetteville, AR
Schneider, Kellie with **S.G. Nurre**	Improve the Site Visit Schedule of a Hunger Relief Charity	INFORMS Cincinnati-Dayton Fall Technical Conference	October	2015	Dayton, OH

Lunday, Brian with **S.G. Nurre**	A Maximal Conditional Covering location Problem to Relocate Emergency Response Enterprise Units	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Hernandez, S.V., **S.G. Nurre** and A. Gaddy	A National Model for Truck Parking Utilization under Hours of Service Regulations	Research Collaboration Meeting and Presentation at J.B. Hunt	October	2015	Lowell, AR
Nurre, S.G.	Integrated Network Design and Scheduling Problems with Applications in Infrastructure Restoration and Supply Chain Design	University of Arkansas, Supply Chain Management Brown Bag Series	December	2015	Fayetteville, AR
Algarni, S. and **Nutter, D**	Survey of Sky Effective Temperature Models Applicable to Building Envelope Radiant Heat Transfer	ASHRAE Transactions – Research 121(2):351-363, paper AT-15-029, Atlanta, GA, June 26 – July 1.	June	2015	
Patitz, Matt	Interfacing Computer Science and Nanoscale Self-Assembly	FEP Honors Research Colloquium	September	2015	University of Arkansas
Patitz, Matt	Mathematical Modeling of Algorithmic Self-Assembly	University of Arkansas Mathematics Club	September	2015	University of Arkansas
Pierson, H. and S. Brown	A Process for Digital Design Integrity	Prepared for Air Force Research Lab (RXMS)		2015	
Pohl, Edward A. and T. Yeung	An Introduction to Optimization Methods in Reliability and Maintainability	IEEE Reliability and Maintainability Symposium	January	2015	Tampa, FL
Pohl, Edward A., H. Guo and A. Gerokostopoulos	Determining the Right Sample Size for Your Test: Theory and Application - Tutorial	IEEE Reliability and Maintainability Symposium	January	2015	Tampa, FL
Pohl, Edward A.	Cost Analysis in Trade-Off Studies	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Jiang, L. with **Edward A. Pohl** and K.M. Sullivan	A Framework for Multistage Reliability growth	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN

Gharari, A. with **Edward A. Pohl**	Developing a Transportation Network for a UAV Delivery Service	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Guerra-Garcia, D. with **Edward A. Pohl**	Modeling Information Reliability and Maintenance: A Systematic Literature Review	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Talafuse, T. with **Edward A. Pohl**	Modeling Reliability Growth using Grey Systems	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Talafuse, T. with **Edward A. Pohl**	Application of Markov Decision Processes for Optimization of Reliability Growth	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Ali Gharai, A. with **Edward A. Pohl**	Developing a Transportation Network for UAV delivery	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Mahadi, M. with **Edward A. Pohl**, Chase Rainwater and Shengfan Zhang	Minimizing Over Diagnosis in Cancer Screening	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Enayaty, F. with **Chase Rainwater** and T. Sharkey	A Decomposition Approach for Dynamic Network Interdiction Models	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Baycik, O. with **Chase Rainwater** and T. Sharkey	Interdicting Cloud Infrastructure with Targeted Denial of Service Attacks	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
St. John, D. with **Chase Rainwater** and C. Smith	Scalable Parallel Algorithm for Solving Network Interdiction Problems	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Enayaty, F. with **Chase Rainwater** and T. Sharkey	A Decomposition Framework for Dynamic Interdiction Models	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA

Baycik, O. with **Chase Rainwater** and T. Sharkey	Novel Bilevel Programming Approaches for Interdicting Multi-tiered Illegal Supply Chains	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Parsa, P. with **M.D. Rossetti**, Edward A. Pohl and Shengfan Zhang	Partner Selection in Continuous Replenishment Programs	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Shbool, M. with **M.D. Rossetti** and Edward A. Pohl	Survey Insights into Physician Preference Item Management	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Booth, D., **M.D. Rossetti** and H.A. Pierson	Final Project Report: Fabrication Division Logistics Process Modernization (CELDi)	Prepared for Red River Army Depot		2015	
Rossetti, M. D. and J. Bright	Segmentation Methods for Large-Scale Mulit-Echelon Service Parts Logistics Systems	Industrial and Systems Engineering Research Conference (ISERC) - S. Cetinkaya and J. K. Ryan, eds.	May 30 – June 2	2015	Nashville, TN
Rossetti, M. D. and Ahn Pham	Simulation Modeling of Customer Checkout Configurations	Presented at the 2015 Winter Simulation Conference - L. Yilmaz, W. K. V. Chan, I. Moon, T. M. K. Roeder, C. Macal, and M. Rossetti, eds.		2015	Piscataway, New Jersey
Rossetti, M.D. and H. Pierson	Fabrication Division Logistics Process Modernization	Red River Army Depot	July	2015	Red River Army Depot, TX
Thomas, K. and F. Wang with **Shengfan Zhang** and Edward A. Pohl	A Decision Support Tool for Outpatient Scheduling Considering No-Show Behavior	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Madadi, M. with **Shengfan Zhang** and Edward A. Pohl	Minimizing Over Diagnosis Risk in Cancer Screening	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN

Lee, Hueon with **Shengfan Zhang** and John A. White	A Markov Decision Process Model for the Dynamic Block Stacking Problem	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Wang, F. with **Shengfan Zhang**	Adaptive Decision-Making of Breast Cancer Mammography Screening: A Heuristic-Based Regression Model	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Heydari, M. with **K.M. Sullivan**	Optimal Allocation of Resources in Reliability Growth Testing	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Ahadi, K. with **K.M. Sullivan**	Selecting Inland Waterway Maintenance Projects under Consideration of Random Disruptions	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2	2015	Nashville, TN
Heydari, M. and **K.M. Sullivan**	Algorithms for Optimal Allocation of Resources in Reliability Growth Testing	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Ahadi, K. and **K.M. Sullivan**	Selecting Inland Waterway Maintenance Projects under Consideration of Random Disruptions	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Sullivan, K.M. and S.G. Nurre	Flow Networks with Interdependent Commodities	Institute for Operations Research and Management Science: INFORMS	November	2015	Philadelphia, PA
Austin Van Horn, Wenchao Zhou	Design and Optimization of a High Temperature Microheater for Inkjet Deposition	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, TX
Wejinya, Uchechukwu	Palladium-Graphene Based H_2 Sensing	*MEEG-NSF REU Nanotechnology Seminar*	July	2015	University of Arkansas, MEEG 212
John Miers, **Wenchao Zhou**	Inkjet Printing at Megahertz Frequency	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, TX
Wenchao Zhou	Lattice Boltzmann Simulation of Multiple Droplet Interaction on Non-ideal Surfaces for Inkjet Deposition	26th International Solid Freeform Fabrication Symposium	August	2015	Austin, TX

Tutam, Mahmut with **John A. White**	A Conventional Warehouse Design with Multiple Docks (Best Paper Award)	Industrial and Systems Engineering Research Conference (ISERC)	May 30-June 2		2015	Nashville, TN
Tutam, Mahmut with **John A. White**	Effects of Multiple Docks on Expected Distance Traveled in a Unit-Load Warehouse with a Cross-Aisle	Institute for Operations Research and Management Science: INFORMS	November		2015	Philadelphia, PA
Wu, J.	Active Sparse Sensing for Level Set Estimation of Spatial-temporally Correlated Random Fields	Southwest Jiantong University	July		2015	China
Yu, S-Q	SuGeSn Baesd Materials and Devices for Si-Photonics Applications	NASA EPSCoR/OAI Power and Energy Forum	July		2015	Cleveland, OH
Yu, S-Q	SiGeSn for Mid-IR Integrated PhotonicsSiGeSn for Mid-IR Integrated Photonics	School of Electrical, Computer and Energy Engineering, Arizona State University	Nov		2015	Tempe, AZ
Harrison, K., Chamberlin, J., and **Zhang, W**	New Methods of Quantifying Microalgae in Biofuel Production and Wastewater Treatment	Institute of Biological Engineering Conference	Mar		2015	St. Louis, MO
Moloney, C., Carbonero, F., and **Zhang, W.**	Methods Comparison of Nucleic Acid Extraction from Environmental Samples Using Next Generation Sequencing	Institute of Biological Engineering Conference	Mar		2015	St. Louis, MO

VII. Other Creative Endeavors such as recitals, concerts, shows, performances, and comparable activities (alphabetized by the first UA author, add rows as necessary)

Authors (Bold first UA author)	Title	Event	Month	Year	Location
Dharmendra Saraswat and **Chris Henry**	Developed a mobile application for Multiple Inlet for Rice Irrigation. It is available on Google Play for android devices. The application provides a map for the user to draw field boundaries, levee boundaries, and pipe location. The user enters in the flow rate for the well and the application determines the pipe size, length, number of rolls required and provides a gate punch and setting plan for the field. Multiple fields can be entered and saved and the user can have the plan emailed to them and saved as a pdf. The iOS version of this application is under development.			2015	
Huang, Adam	FRL/AFOSR University Nanosatellite Program-8	Flight Competition Review	January	2015	
Huang, Adam	NASA Fact Sheet-Solid State Inflation Balloon Active Deorbiter			2015	
Ajay P. Malshe (PI), Interim reports, Leggett & Platt Aluminum Group (now Pace Industries).	Exploring Implementation of Laser-assisted Hardening and Application Specific Modifications of a Die Tool for Extended Die Tool Life and Advanced Performance for Retired as well as New Die Tools			2015	
Chase Rainwater	College of Engineering Mentor for Springdale School of Innovation Robotics Team (2015-Present)			2015	
Nutter, Darin	Arkansas Industrial Energy Clearinghouse 2014 Annual Report	Annual Report	February	2015	
Nutter, Darin	Industrial Assessment Report 930, recycled plastic building materials (facility #2)		November	2015	

Nutter, Darin	Industrial Assessment Report 929, recycled plastic building materials (facility #1)		November	2015	
Nutter, Darin	Industrial Assessment Report 927, high precision metal parts		October	2015	
Nutter, Darin	Industrial Assessment Report 926, perishable sweet potato products		October	2015	
Nutter, Darin	Industrial Assessment Report 921, polyethylene tubes		August	2015	
Nutter, Darin	Industrial Assessment Report 917, fiberglass tanks		June	2015	
Nutter, Darin	Industrial Assessment Report 908, polyester gel coatings		March	2015	
Nutter, Darin	Industrial Assessment Report 904, circuit board assemblies		January	2015	
Richard Cassady	Coaching First Lego League			2015	
Steve Tung and Carlton McMullen	3D Printed Active Microfluidic Devices using Micro Extrusion and Thermoplastic Elastomer	Provisional Patent Application No. 62187440	May	2015	
Tung, Steve	Development of an Electron Tunneling Based Nanochannel System for DNA Sequencing	Annual Report	March	2015	National Science Foundation
Zou, Min	NUE: Integrating Nanotechnology into Undergraduate Engineering Education at the University of Arkansas	NSF project Annual Report	August	2015	
Zou, Min	Nanoscale Surface Engineering for Neuroregeneration	Annual Report for ABI	July	2015	

VIII. Patent Issued (alphabetized by the first UA inventor, add rows as necessary)

Inventors (Bold first UA inventor)	Patent Title	Patent Office	Patent Number	Issue Date
S. C. Smith, **J. Di**, J. Frenkil, A. Arthurs, and R. Foster	Single Component Sleep-Convention Logic (SCL) Modules	US Patent	9,094,013 B2	28-Jul-15
S. C. Smith and **J. Di**	Multi-Threshold Sleep Convention Logic without NSleep	US Patent	9,083,337 B2	14-Jul-15
Hutchings, Douglas, S.Shumate, **H.Naseem**	Ultra-large grain polycrystalline semiconductors through top-down aluminum induced crystallization (TAIC,)	US Patent Office	9,087,694	7/21/2015
Wickramasinghe, S. R., X. Qian, M. Ulbricht and Q. Yang	"Catalytic Membranes and Applications Thereof"	US National patent	9,339,803	2015
Wickramasinghe, S.R., Xianghong Qian, Heath Himstedt, Mathias Ulbricht, Michael Semens	Magnetically Responsive Membranes	US national patent	9,132,389 B2	9/15/2015

APPENDIX D

COLLEGE OF ENGINEERING
CHAIRS, PROFESSORSHIPS, DISTINGUISHED PROFESSORSHIPS AND LECTURESHIPS

Charles D. Morgan/Acxiom Endowed Graduate Research Chair in Data Base, Xintao Wu, Professor, Computer Science and Computer Engineering

Irma F. and Raymond F. Giffels Endowed Chair in Engineering, John R. English, Professor, Industrial Engineering & Dean of Engineering

John L. Imhoff Endowed Chair in Industrial Engineering, Chase Rainwater, Professor, Industrial Engineering

Maurice E. Barker Endowed Chair in Chemical Process Safety and the Environmental Fate of Chemicals, Tom Spicer, Distinguished Professor, Chemical Engineering

Rodger S. Kline Endowed Chair in Computer Science and Computer Engineering, Frank Liu, Professor, Computer Science and Computer Engineering

The Twenty-First Century Endowed Chair in Materials, Manufacturing and Integrated Systems, Ajay Malshe, Distinguished Professor, Mechanical Engineering

The Twenty-First Century Research Leadership Chair, Alan Mantooth, Professor, Electrical Engineering

The Twenty-First Century Leadership Chair in Mechanical Engineering, Jim Leylek, Professor, Mechanical Engineering

The Twenty-First Centruy Leadership Endowed Leadership Chair, Kevin Hall, Professor, Civil Engineering

Bates Teaching Endowed Professorship in Chemical Engineering, Greg Thoma, Professor, Chemical Engineering

Charles W. Oxford Endowed Professorship in Emerging Technologies, D. Keith Roper, Associate Professor, Chemical Engineering

James T. Womble Endowed Professorship in Computational Mechanics and Nanotechnology Modeling, R. Panner Selvam, Professor, Civil Engineering

Jim L. Turpin Endowed Professorship in Chemical and Biochemical Separations, Jamie Hestekin, Assistant Professor, Chemical Engineering

The Twenty-First Century Professorship in Engineering, Ed Pohl, Professor, Industrial Engineering

Thomas Clinton Mullins Endowed Chair in Engineering, David Andrews, Professor, Computer Science and Computer Engineering

The Twenty First Century Professorship in Mechanical Engineering, Wenchao Zhou, Assistant Professor, Mechanical Engineering

The Twenty First Century Professorship in Mechanical Engineering, Min Zou, Professor, Mechanical Engineering

The Twenty First Century Professorship in Mechanical Engineering, David Jensen, Assistant Professor, Mechanical Engineering

Ralph E. Martin Endowed Professorship in Chemical Process Engineering, Shannon Seurynck-Servoss, Assistant Professor, Chemical Engineering

Ross E. Martin Endowed Chair in Emerging Technologies, Ranil Wickramasinghe, Professor, Chemical Engineering

John A. White Term Chair, John A. White, Distingished Professor, Industrial Engineering

Ansel and Virginia Condray Endowed Professorship in Biochemical and Chemical Separations, Christa Hestekin, Associate Professor, Chemical Engineering

The Twenty-First Century Leadership Chair in Electrical Engineering, Juan Balda, University Professor, Electrical Engineering

George M. and Boyce W. Billingsley Endowed Chair in Engineering, Raj Rao, Professor, Biomedical Engineering

Ralph E. Martin Endowed Leadership Chair in Chemical Engineering, Ed Clausen, Professor, Chemical Engineering

The Twenty-First Century Endowed Professorship in Biomedical Engineering, David Zaharoff, Associate Professor, Biomedical Engineering

Louis Owen Endowed Professorship in Green Chemical Process Design and Development, Lauren Greenlee, Assistant Professor, Chemical Engineering

James M. Hefley and Marie G. Hefley Endowed Professorship in Logistics and Entrepreneurship, Haitao Liao, Professor, Industrial Engineering

The Twenty-First Century Research Leadership Chair, Jia Di, Professor, Computer Science and Computer Engineering

Tyson Endowed Chair in Biosensing Engineering, Yanbin Li, Professor, Biologial and Agricutural Engineering

<u>Vacant Chairs</u>

John and Mary Lib White Endowed Systems Integration Chair in Industrial Engineering

Ray C. Adam Endowed Chair in Chemical Engineering

Robert E. Babcock, Sr. Endowed Professorship in Chemical Process Safety and the Environmental Fate of Chemicals