Books

- Sun, Y., A. Behal and C.-.K.R. Chung, New Development in Robot Vision, 10 chapters, 198 pages, Springer-Verlag Berlin Heidelberg, November 2014, ISBN 978-3-662-43858-9.
- Han, Y., S. Dong, and J. J. Liou, Design, Methodology, and Implementation of Electrostatic Discharge for Integrated Circuits, 12 chapters, 400 pages, China Science and Technology Publisher, Beijing, July 2014,
- Cui, Q., J. J. Liou, et al., On-Chip ESD Protection for Radio-Frequency/Microwave Integrated Circuits, 6 chapters, 250 pages, Springer Publisher, New York, Feb. 2015, ISBN: 978-3-319-10819-3.

Book Chapters

Jain, A.K. and A. Behal, "Modeling and Control of STATCOMs," Static Compensators in Power Systems, Springer, 2014, Chapter 10, pp. 339-369.

Abdolvand, R., J. Gonzales, J. and H. Gavin, "Finite Element Modeling of Resonators," in Resonant MEMS: Fundamental, Implementation, and Application, John Wiley & Sons, 2015, Chapter 5, pp. 97-116.

Jin, Y., D. Maliuk, Y. Makris, Y., "Hardware Trojan Detection in Analog/RF Integrated Circuits" in Secure System Design and Trustable Computing, Springer, 2015, Chapter 7, pp. 241-268.

Al-Abri, S. and Z. Qu, "Autonomous Coverage Expansion of Mobile Agents via Cooperative Control and Cooperative Communication" in A. Natraj, S. Cameron, C. Melhuish and M.Witkowski (Eds.): Towards Autonomous Robotic Systems, Lecture Notes in Computer Science, Springer, 2014, Chapter 23, pp.222-234.

Journal Publications

- 1. Modarres-Zadeh, M.J., and R. Abdolvand, "High-Responsivity Thermoelectric Infrared Detectors with Stand-Alone Sub-Micrometer Polysilicon Wires," Journal of Micromechanics and Microengineering, Vol. 24, No. 12 (December 2014) 25013 (IF=1.725).
- 2. Mehdizadeh, E., J. C. Chapin, J. M. Gonzales, A. Rahafrooz, R. Abdolvand, B. W. Purse, and S. Pourkamali, "Microelectromechanical Disk Resonators for Direct Detection of Liquid-Phase Analytes," Sensors and Actuators A: Physical, Vol. 216, (September 2014) pp.136-141 (IF=1.94).
- 3. Chan-Ching Hsu, J. Morris Chang, Zi-Tsan Chou and A. Zakhia, "Optimizing Spectrum-Energy Efficiency in Downlink Cellular Networks," IEEE Transactions on Mobile Computing (TMC), Vol. 13, No. 9 (September 2014).
- 4. Atia, G., "Change Detection with Compressive Measurements," IEEE Signal Processing Letters, Vol. 22, No. 2, (Feb 2015). (IF = 1.639).

- 5. Ligo, J., G. Atia and V. Veeravalli, "A Controlled Sensing Approach to Graph Classification," IEEE Transactions on Signal Processing, Vol. 62, No. 24 (December 2014) pp.6468-6480, (IF = 3.198).
- 6. Alnaser1, W.E., W. Alnaser, I. Batarseh, "Bahrain's BAPCO 5MWp PV Grid-Connected Solar Project," International Journal of Power and Renewable Energy Systems, Vol. 1 (October 2014), pp.72-84.
- 7. Alnaser1, W.E., A. Dakhel, M. Othman, I. Batarseh, J. Lee, S. Najmaii, W. Alnasser, "Dust Accumulation Study on the Bapco 0.5 MWp PV Project at University of Bahrain," International Journal of Power and Renewable Energy Systems, Vol. 2, No. 1 (January 2015) pp.38-54.
- 8. Cassarim M., Battipede, P., Marzocca and A. Behal, "A Comparison of Adaptive Contgrol architectures for Flutter Suppression," AIAA Journal of Guidance, Control and Dynamics, Vol. 38, No. 2, (February 2015) pp 346-355, DOI: 10.2514/1G00707.
- 9. Chan, C.-Y. and P. M. Goggans, "Multiobjective Design of Linear Antenna Arrays Using Bayesian Inference Framework," IEEE Transactions on Antennas and Propagation, Vol. 62, No. 11 (November 2014), 5524-5530. DOI: 10.1109/TAP.2014.2350521.
- 10. Alawad, M., R. F. DeMara, and M. Lin, "Stochastically Estimating Modular Criticality in Large-Scale Logic Circuits Using Sparsity Regularization and Compressive Sensing," Journal of Low Power Electronics and Applications, Vol. 5, No. 1 (March 2015) pp.3-37.
- 11. Bai, Y., M. Alawad, R. F. DeMara, and M. Lin, "Optimally Fortifying Logic Reliability through Criticality Ranking," Electronics, Vol. 4, No. 1 (February 2015) pp. 150-172.
- 12. Imran, N., R. A. Ashraf, and R. F. DeMara, "Power and Quality-Aware Image Processing Soft-Resilience using Online Multi-Objective GAs," International Journal of Computational Vision and Robotics, Vol. 5, No. 1 (January 2015) pp. 72 98. DOI: 10.1504/IJCVR.2015.067154.
- 13. Imran, N., R. A. Ashraf, J. Lee, and R. F. DeMara, "Activity-based Resource Allocation for Motion Estimation Engines," Journal of Circuits, Systems, and Computers, Vol. 24, No. 1, January 2015, pp. 1-32. DOI: 10.1142/S0218126615500048
- 14. Karnati, K., Y. Shen, M. Trampler, S. Ebadi, P. Wahid and X. Gong, "A BST-integrated capacitively-loaded patch for Ka- and X-band beamsteerable reflectarray antennas in satellite communications," IEEE Transactions on Antennas and Propagation, Vol. 63, No. 4 (April 2015) pp. 1324-1333. DOI: 10.1109/TAP.2015.2389252.
- 15. Cheng, H., X. Ren, S. Ebadi, Y. Chen, L. An, and X. Gong, "Wireless passive temperature sensors using integrated cylindrical resonator/antenna for harsh-environment applications," IEEE Sensors Journal, Vol. 15, No. 3 (March 2015) pp. 1453-1462. DOI: 10.1109/JSEN.2014.2363426.
- 16. Cheng, H., S. Ebadi, X. Ren, and X. Gong, "Wireless passive high-temperature sensor based on multifunctional reflective patch antenna up to 1050 degrees centigrade," Sensors and Actuators A: Physical, Vol. 222, (February 2015), pp. 204-211. DOI: 10.1016/j.sna.2014.11.010.

- 17. Cheng, H., G. Shao, S. Ebadi, X. Ren, K. Harris, J. Liu, C. Xu, L. An, and X. Gong, "Evanescent-mode-resonator-based and antenna-integrated wireless passive pressure sensors for harsh-environment applications," Sensors and Actuators A: Physical, Vol. 220, (December 2014) pp. 22-33. DOI: 10.1016/j.sna.2014.09.010.
- 18. Karnati, K., Y. Yusuf, S. Ebadi, and X. Gong, "Q factor analysis of reflectarray elements investigating the effects from angle of incidence using Floquet modes," IEEE Transactions on Antennas and Propagation, Vol. 62, No. 10 (October 2014) pp. 5017-5028. DOI: 10.1109/TAP.2014.2340896.
- 19. Luther, J., S. Ebadi, and X. Gong, "A low-cost 2×2 planar array of 3-element microstrip electrically-steerable parasitic array radiator (ESPAR) subcells," IEEE Transactions on Microwave Theory and Techniques, Vol. 62, No. 10 (October 2014) pp. 2325-2336. DOI: 10.1109/TMTT.2014.2345335.
- 20. Jin, Y., "Hardware Security: Past, Current, and Future," VLSI Circuits and Systems Letter, Vol. 1, No. 1, pp. 11-15, 2015.
- 21. Sullivan, D., Y. Jin, "What is Hardware-based Cybersecurity?" ACM/SIGDA E-Newsletter, Vol. 45, No. 4 (April 2015).
- 22. Oliveira, D., N. Wetzel, M. Bucci, J. Navarro, D. Sullivan, and Y. Jin, "Hardware-Software Collaboration for Secure Coexistence with Kernel Extensions," ACM SIGAPP Applied Computing Review, Vol. 14, No. 3 (2014) pp. 22-35.
- 23. Alsweiss, S., R. Hanna, P. Laupattarakasem, W. L. Jones, C. C. Hennon and R. Chen*, "A Non-MLE Approach for Satellite Scatterometer Wind Vector Retrievals in tropical Cyclones", Remote Sens. 2014, Vol. 6, No. 5 (May 2014) pp. 4133-4148. DOI:10.3390/rs6054133.
- 24. Lane, J., T. Kasparis, P. T. Metzger and W. L. Jones, "In Situ Disdrometer Calibration using Multiple DSD Moments", Acta Geophysica, Vol. 62, No. 6 (December 2014) pp. 1450-1477. DOI:10.2478/s11600-013-00??-?
- 25. Santos-Garcia, A., M. M. Jacob, W. E. Asher, Y. Hejazin, H. Ebrahimi, W. L. Jones and M. Rabolli, "Investigation of Rain Effects on Aquarius Sea Surface Salinity Measurements", Journal of Geophys Research: Oceans, Vol. 119, No. 11 (November 2014) pp. 7605-7624. DOI: 10.1002/2014JC010137.
- 26. Lin, M., S. Chen, R. DeMara, and J. Wawrzynek; "ASTRO: Synthesizing application-specific reconfigurable hardware traces to exploit memory-level parallelism", Microprocessors and Microsystems, Vol. 10, No. 5 (March 2015) pp. 10-22. DOI:10.1016/j.micpro.2015.03.005. (IF=0.59)
- 27. Alawad, M., R. F. DeMara, M. Lin. "Stochastically Estimating Modular Criticality in Large-Scale Logic Circuits Using Sparsity Regularization and Compressive Sensing". Journal of Low Power Electronics and Applications, Vol. 5, No. 1 (March 2015) pp. 3-37. http://www.mdpi.com/2079-9268/5/1/3/pdf. (IF=0.485)

- 28. Bai, Y., M. Alawad, R. F. DeMara, M. Lin. "Optimally Fortifying Logic Reliability through Criticality Ranking". Journal of Electronics, Vol. 4, No. 1(2015) pp. 150-172. http://www.mdpi.com/2079-9292/4/1/50/pdf.
- 29. Meng, M., J. J. Hajjar, P. Zhou, J. Salcedo, and J. J. Liou, "Compact failure modeling for devices subject to electrostatic discharge stresses—a review pertinent to CMOS reliability simulation," Microelectronics Reliability, Vol. 55, No. 1 (January 2015) pp. 15-23. IF = 1.2.
- 30. Garcia-Sanchez, F., A. Ortiz-Conde, J. Muci, and J. J. Liou, "A unified look at the use of successive differentiation and integration in MOSFET model parameter extraction", Microelectronics Reliability, Vol. 55, No. 2 (February 2015) pp. 293-307. IF = 1.2
- 31. Luo, S., J. Salcedo, P. Zhou, J. J. Hajjar, and J. J. Liou, "A novel product-level human metal model characterization methodology," IEEE Trans. Devices and Materials Reliability, Vol. 14, No. 2 (July 2014) pp. 772-774. IF = 2.4
- 32. Wang, Z., R. C. Sun, J. J. Liou, and D. G. Liu, "Optimized PMOS-triggered bidirectional SCR for low-voltage ESD protection applications," IEEE Trans. Electron Devices, Vol. 61, No. 7 (July 2014) pp. 2588-2594. IF = 2.8
- 33. He, L., T. K. Chiang, J. J. Liou, and Z. Liu, "A new analytical subthreshold potential/current model for quadruple-gate junctionless MOSFETs," IEEE Trans. Electron Devices, Vol. 61, No. 6 (June 2014) pp. 1972-1978. IF = 2.8.
- 34. Xi, Y., S. Malobabic, V. Vashchenko, and J. J. Liou, "Miscorrelation between air gap discharge and human metal model stresses due to multi-finger turn-on effect," IEEE Trans. Devices and Materials Reliability, Vol. 14, No. 3 (September 2014) pp. 864-868. IF = 2.4.
- 35. Ho, C., S. C. Chen, and J. J. Liou, "A reliable Si3N4/Al2O3-HfO2 stack MI capacitor for high voltage analog applications," IEEE Trans. Electron Devices, Vol. 61, No. 8 (August 2014) pp. 2944-2949. IF = 2.8.
- 36. Luo, S., J. Salcedo, J. J. Hajjar, and J. J. Liou, "In-situ ESD protection structures for variable voltage interface applications in 28-nm CMOS process," IEEE Trans. Devices and Materials Reliability, Vol. 14, No. 4 (December 2014) pp.1061-1067. IF = 2.4.
- 37. Zhen, J., S. Dong, and J. J. Liou, "Design and analysis of area-efficient high holding voltage ESD protection devices," IEEE Trans. Electron Devices, Vol. 62, No. 2 (February 2015) pp. 606-614. IF = 2.8.
- 38. Deng, W. and J. J. Liou, "An explicit surface potential calculation and compact current model for AlGaN/GaN HEMTs," IEEE Electron Device Letters, Vol. 36, No. 2 (February 2015) pp. 108-110. IF = 3.0.
- 39. Wang, Z. and J. J. Liou, "Direct-connected SCR for ESD protection solutions with minimal snapback and reduced overshoot voltage," IEEE Electron Device Letters, Vol. 36, No. 5 (May 2015) pp. 424-426. IF = 3.0.
- 40. Ge, K., J. J. Liou, W. Li, and P. Li, "Total ionizing dose sensitivity of function blocks in FRAM," Microelectronics Reliability, Vol. 55, No. 6 (May 2015) pp. 873-878. DOI:10.1016/j.microrel.2015.03.001 (IF = 1.2).

- 41. Youngquist, R.C., M.A Nurge, B.H. Fisher, and D.C. Malocha, "A Resistivity Model for Ultrathin Films and Sensors," Sensors Journal, IEEE, Vol. 15, No. 4 (April 2015) pp. 2412-2418.
- 42. Malocha, D.C., B. Fisher, R. Youngquist, A. Weeks, and M. Gallagher, "Surface Acoustic Wave Pulsed-Correlator Transceiver for Aerospace Applications," Sensors Journal, IEEE, Vol. 14, No. 11 (November 2014) pp. 3775-3781.
- 43. Rodriguez, L.M., D.R. Gallagher, M.W. Gallagher, B.H. Fisher, J.R. Humphries, and D.C. Malocha, "Wireless SAW Sensor Temperature Extraction Precision," Sensors Journal, IEEE, Vol. 14, No. 11 (November 2014) pp. 3830-3837.
- 44. Malocha, D.C., "Surface acoustic wave design fundamentals," Archives of Acoustics, Vol. 21, No. 4, 2014, pp. 387-398.
- 45. Kim, J., R. Luis, M.S. Smith, J.A. Figueroa, D.C. Malocha, and B.H. Nam, "Concrete temperature monitoring using passive wireless surface acoustic wave sensor system," Sensors and Actuators A: Physical, Vol. 224, (April 2015) pp. 131-139.
- 46. Parkey, C. R. and W. B. Mikhael, "Linearized Adaptation of Non-Linear Post Conversion Correction for TIADCs: A Behavioral Model Study," AUTOTESTCON, 2014 IEEE, September 2014, pp. 78-80. DOI: 10.1109/AUTEST.2014.6935125
- 47. Hosani, M. A., Z. Qu, and H. Zeineldin, "A Transient Stiffness Measure for Islanding Detection of Multi-DG Systems," IEEE Transactions on Power Delivery, Vol. 30, No. 2 (April 2015) pp.986-995.
- 48. Hamidi, R. J., S. H. Hosseinian, S. H. H. Sadeghi and Z. Qu, "A Novel Approach to Utilize PLC to Detect Corroded and Eroded Segments of Power Transmission Lines," IEEE Transactions on Power Delivery, Vol. 30, No. 2 (April 2015) pp.746-754.
- 49. Hosani, M. A., Z. Qu, and H. Zeineldin, "Development of Current Dynamic Estimator for Islanding Detection of Inverter Based Distributed Generation," IEEE Transactions on Power Delivery, Vol. 30, No. 1 (February 2015) pp.428-438.
- 50. Li, C., Z. Qu, and M. A. Weitnauer, "Distributed Extremum Seeking and Formation Control for Nonholonomic Mobile Network," Systems & Control Letters, Vol. 75, No. 1 (January 2015) pp.27-34.
- 51. Xin, H., Y. Liu, Z. Qu, and D. Gan, "Distributed Estimation and Control for Optimal Dispatch of Photovoltaic Generations," IEEE Transactions on Energy Conversion, Vol. 29, No. 4 (December 2014) pp.988-996.
- 52. Qu, Z. and M. A. Simaan, "Modularized Design for Cooperative Control and Plug-And-Play Operation of Networked Heterogeneous Systems," Automatica, Vol. 50, No. 9 (September 2014) pp.2405-2414.
- 53. Maknouninejad, A., Z. Qu, F. Lewis, and A. Davoudi, "Optimal, Nonlinear, and Distributed Designs of Droop Controls for DC Microgrid," IEEE Transactions on Smart Grid, Vol. 5, No. 5 (September 2014) pp.2508-2516.

- 54. Velez C., Z. Qu, K.C. Lin and S. Jin, "Design, Modeling and Optimization of an Ocean Wave Power Generation Buoy," Marine Technology Society Journal, Vol. 48, No. 4, (July/August 2014) pp.51-60.
- 55. Maknouninejad, A. and Z. Qu, "Realizing Unified Microgrid Voltage Profile and Loss Minimization: a Cooperative Distributed Optimization Approach," IEEE Transactions on Smart Grid, Vol. 5, No. 4, (July 2014) pp.1621-1630.
- 56. Li, C. and Z. Qu, "Distributed Finite-time Consensus of Nonlinear Systems Under Switching Topologies," Automatica, Vol. 50, No. 6, (June 2014) pp.1626-1631.
- 57. Wu, Y., F. Hu, S. Kumar, Y. Zhu, A. Talari, N. Rahnavard, and J. D. Matyjas, "A Learning-Based QoE-Driven Spectrum Handoff Scheme for Multimedia Transmissions over Cognitive Radio Networks," IEEE Journal on Selected Areas in Communications (JSAC), Vol. 32, No. 11 (November 2014) pp. 2134-2148. (IF=4.14).
- 58. Sahin, I., M. A. Simaan, and A. J. Kearsley, "Successive Frequency Domain Minimization for Time Delay Estimation," Signal Processing, Vol. 98, (May 2014) pp. 96-101.
- 59. Qu, Z. and M.A. Simaan, "Modularized Design for Cooperative Control and Plug-and-Play Operation of Networked Heterogeneous Systems," Automatica, Vol. 50, No. 9, (September 2014) pp. 2405-2414.
- 60. Pittner, J. and M. A. Simaan, "Control of the Tandem Hot Strip Mill Under Expanded Uncertainties and Disturbances," IEEE Transactions on Industry Applications, Vol. 50, No. 5, (Sept/Oct 2014) pp. 3086-3094.
- 61. Lin, W., Z. Qu, and M.A. Simaan, "Nash Strategies for Pursuit-Evasion Differential Games Involving Limited Observations," IEEE Transactions on Aerospace and Electronics Systems, Vol. 51, No. 2, (April 2015) pp. 1347-1356.
- 62. Prakash, A. and K. B. Sundaram, "Studies on Electrical Properties of RF Sputtered Deposited Boron Carbon Nitride Thin Films", ECS Journal of Solid State Science and Technology, Vol. 4, No. 5, (2015) N25-29.
- 63. Prakash, A., V. Todi, K. B. Sundaram, L. Ross, G. Xu, M. French, P. Henry, and S. W. King, "Investigation of the Dielectric and Mechanical Properties of Magnetron Sputtered BCN Thin Films," ECS Journal of Solid State Science and Technology, JSS Focused Issue on Advanced Interconnects: Materials, Processing and Reliability, Vol. 4, No. 1 (2015) N3122-3126.
- 64. Karnati, K. K., Y. Shen, M. E. Trampler, S. Ebadi, P. F. Wahid, and X. Gong, "A BST-Integrated Capacitively-Loaded Patch for Ka- and X-band Beamsteerable Reflectarray Antennas in Satellite Communications," Special Issue, IEEE Transactions on Antennas and Propagation, Vol. 63, No. 4 (April 2015) pp. 1324 1333.
- 65. Wan, J., X. Qu, N. Zhao, J. Wang, and C. Xie. "ThinRAID: Thinning Down RAID Array for Energy Conservation," IEEE Transactions on Parallel and Distributed Systems, Vol. 26, No. 10, (September 2014), DOI: 10.1109/TPDS.2014.2360696. ISSN: 1045-9219.

- 66. Chen, J., J. Wang, Z. Tan, and C. Xie. "Recursive Updates in Copy-on-Write File Systems Modeling and Analysis," Journal of Computers, Vol. 9, No. 10, (2014) pp. 2342-2351.
- 67. Zhang, J., J. Yin, J. Zhou, and J. Wang. "PERP: Attacking the Balance among Energy, Performance and Recovery in Storage Systems" Journal of Parallel and Distributed Computing, Vol. 78, (April 2015) pp. 65–77.
- 68. Yin, J., J. Zhang, J. Wang and W. Feng. "SDAFT: A Novel Scalable Data Access Framework for Parallel BLAST," Parallel Computing, Vol. 40, Issue 10, (2014) pp. 697-709.
- 69. Malocha, D.C., B. Fisher, R. Youngquist, A. Weeks, and M. Gallagher, "Surface Acoustic Wave Pulsed-Correlator Transceiver for Aerospace Applications", Special issue on IEEE Sensor in space, IEEE Sensor Journal, Vol. 14, No. 11, (November 2014). I.F.=1.85.
- 70. Yuan, J. S., Y. Xu, S. D. Yen, Y. Bi, and G. W. Hwang, "Hot Carrier Injection Stress Effect on 65nm LNA at 70 GHz," IEEE Transactions Device and Materials Reliability, Vol. 14, No. 3, (September 2014) pp. 931-934.
- 71. Yuan, J. S. and Y. Bi, "Process and Temperature Robust Voltage Multiplier Design for RF Energy Harvesting," Microelectronics Reliability, Vol. 55, No. 1, (January 2015) pp. 107-113.
- 72. Yeh, W. K., C.-L. Lin, T.-H. Chou, K. Wu, and J. S. Yuan, "The Impact of Junction Doping Distribution on Device Performance Variability and Reliability for Fully Depleted Silicon on Insulator with Thin BOX Layer MOSFETs," IEEE Transactions Nanotechnology, Vol. 14, No. 2, (March 2015) pp. 330-337.

Conference Papers

- 1. Modarres-Zadeh, M. J., N. Akhter, R. Hellmer, M. Aragon, and R. Abdolvand. "Thermal Conductivity Characterization of In-Situ Fabricated Polysilicon Nanowires for Uncooled Thermoelectric Infrared Detectors." In SPIE Defense+Security, pp. 946730-946730. May 2015.
- 2. Fatemi, H., M. J. Modarres-Zadeh, and R. Abdolvand. "Passive wireless temperature sensing with piezoelectric MEMS resonators." Micro Electro Mechanical Systems (MEMS), 2015 28th IEEE International Conference, Estoril, Portugal, pp. 909-912. January 2015.
- 3. Malekzadeh, M., G. Atia, and N. Catbas, "A Hybrid Data Interpretation Framework for Automated Performance Monitoring of Infrastructures," Proceedings of the Structures Congress, Portland, OR, April 2015.
- 4. Aldhahab, A., G. Atia and W. Mikhael, "Supervised Facial Recognition Based on Eigenanalysis of Multiresolution and Independent Features", IEEE 58th Intl Midwest Symposium on Circuits & Systems (MWSCAS), Texas, August 2015.
- 5. Chehata, R., W. Mikhael and G. Atia, "Facial Recognition Employing Transform Domain Mutual Principal Component Analysis", To appear in the proceedings of the IEEE 58th Intl Midwest Symposium on Circuits & Systems (MWSCAS), Texas, August 2015.

- 6. Mardani, D., G. Atia, and A. F. Abouraddy, "Compressive Interferometry for Optical Modal Analysis in Arbitrary Degrees of Freedom," Proceedings of the Information Theory and Applications Workshop (ITA), San Diego, CA, February 2015.
- 7. Nguyen, V., M. Guirguis and G. Atia, "A Unifying Approach for the Identification of Application-driven Stealthy Attacks on Mobile CPSs," Proceedings of the 52nd Allerton Conference on Communication, Control and Computing, Monticello IL, October 2014.
- 8. Paris, A., A. Vosoughi and G. Atia, "Whitening 1/f-type Noise in Electroencephalogram Signals for Steady-State Visual Evoked Potential Brain-Computer Interfaces," Proceedings of the 48th Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2014. (Finalist for best paper award)
- 9. Sarayanibafghi, O., G. Atia, M. Malekzadeh, and N. Catbas "Compressed Change Detection for Structural Health Monitoring," 48th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 2014.
- 10. Aldhahab, A., G. Atia and W. Mikhael, "Supervised Facial Recognition based on Multiresolution Analysis with Radon Transform," Proceedings of the 48th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 2014. (Top 10 student paper award).
- 11. Mardani, D. and G. Atia, "Adaptive Sequential Compressive Detection," Proceedings of the 48th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 2014.
- 12. Aldhahab, A., G. Atia and W. Mikhael "Supervised Facial Recognition Based on Multi-Resolution Analysis and Feature Alignment," Proceedings of the IEEE 57th Intl Midwest Symposium on Circuits & Systems (MWSCAS), Texas, August 2014.
- 13. R. Chehata, W. Mikhael and G. Atia, "A Transform Domain Modular Approach for Facial Recognition Using Different Representations and Windowing Techniques," Proceedings of the IEEE 57th Intl Midwest Symposium on Circuits & Systems (MWSCAS), Texas, August 2014.
- 14. Tan, V. and G. Atia, "Strong Impossibility Results for Noisy Group Testing," Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Florence, Italy, May 2014.
- 15. Sarayanibafghi, O. and G. Atia, "Compressed Change Detection," Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Florence, Italy, May 2014.
- 16. Tayebi, S. M., S. Sindy, C. Jourdan, and I. Batarseh, "Recent Advanced in Micro-Inverter for Distributed Power and Micro-Grid Applications," Proceedings of the Space Workshop, Aerospace Corporation, Manhattan Beach, CA, May 10-14, 2015.
- 17. Naseer, A. A., R. A. Ashraf, D. Dechev, and R. F. DeMara, "Designing Energy-Efficient Approximate Adders using Parallel Genetic Algorithms," Proceedings of the IEEE SoutheastCon 2015 (SECon-2015), Fort Lauderdale, FL, April 9-12, 2015.

- 18. Salehi, S. and R. DeMara, "Energy and Area Analysis of a Floating-Point Unit in 15nm CMOS Process Technology," Proceedings of the IEEE SoutheastCon 2015 (SECon-2015), Fort Lauderdale, FL, April 9-12, 2015.
- 19. Zhang, K., N. Khoshavi, J. M. Alghazo, and R. F. DeMara, "Organic Embedded Architecture for Sustainable FPGA Soft-Core Processors," in Proceedings of the IEEE 61st Reliability and Maintainability Symposium (RAMS-2015), Palm Harbor, FL, January 26-29, 2015.
- 20. Oreifej, R., R. Al-Haddad, R. A. Ashraf, and R. F. DeMara, "Sustainability Assurance Modeling for SRAM-based FPGA Evolutionary Self-Repair," Proceedings of the IEEE International Conference on Evolvable Systems (ICES-2014), Orlando, FL, December 9-12, 2014, pp. 17-22.
- 21. Khoshavi, N., R. A. Ashraf, and R. F. DeMara, "Applicability of Power-Gating Strategies for Aging Mitigation of CMOS Logic Paths," Proceedings of the IEEE 57th International Midwest Symposium on Circuits and Systems (MWSCAS-2014), College Station, TX, USA, August 3-6, 2014, pp. 929-932.
- 22. Ashraf, R. A., A. Alzahrani, and R. F. DeMara, "Extending Modular Redundancy to NTV: Costs and Limits of Resiliency at Reduced Supply Voltage," Proceedings of the Workshop on Near Threshold Computing (WNTC-2014, Minneapolis, MN, June 14, 2014.
- 23. Karnati, K. and X. Gong, "A continuous Ka-Band Beam-Scanning Reflectarray Integrated with BST," Proceedings of the 2015 IEEE AP-S Int. Symposium, Vancouver, BC, Canada, July 19-25, 2015.
- 24. Trampler, M., K. Karnati, and X. Gong, "A Tunable BST Integrated V-Band Patch Element with Interdigital Gap Configuration," Proceedings of the 2015 IEEE AP-S Int. Symposium, Vancouver, BC, Canada, July 19-25, 2015.
- 25. Shirazi, M., T. Li, and X. Gong, "A New Design of Reconfigurable Slot-Ring Antenna using PIN diodes," Proceedings of the 2015 IEEE AP-S Int. Symposium, Vancouver, BC, Canada, July 19-25, 2015.
- 26. Li, T. and X. Gong, "Effects of the Ground Plane Size on Radiation Pattern of Reconfigurable Slot-ring Antennas," Proceedings of the 2015 IEEE AP-S Int. Symposium, Vancouver, BC, Canada, July 19-25, 2015.
- 27. Karnati, K., Y. Shen, W. Zhu, M. Trampler, S. Ebadi, P. Wahid, and X. Gong, "Tunable and Flexible Electronics Employing Monolithically-Integrated BST Thin Film," Proceedings of the 2015 IEEE MTT-S International Microwave Workshop Series on Advanced Materials and Processes for RF and THz Applications, Suzhou, China, July 1-3, 2015.
- 28. Shirazi, M., T. Li, and X. Gong, "Effects of PIN diode Switches on the Performance of Reconfigurable Slot-ring Antenna," Proceedings of the 16th IEEE Wireless and Microwave Technology Conference, Cocoa Beach, FL, Apr. 13-15, 2015.

- 29. Lovato, R., T. Li, and X. Gong, "Electrically Tunable Integrated Patch Antenna with Planar Filter," Proceedings of the 16th IEEE Wireless and Microwave Technology Conference, Cocoa Beach, FL, Apr. 13-15, 2015.
- 30. Li, T., H. Cheng, and X. Gong, "Integrated Single-fed Circularly-polarized Patch Antennas with High-Q Cavity Filters," Proceedings of the 2014 IEEE AP-S Int. Symposium, Memphis, TN, July 6-11, 2014. DOI: 10.1109/APS.2014.6905263.
- 31. Karnati, K., and X. Gong, "Effects from Angle of Incidence on Reflection Properties of Reflectarray Elements," Proceedings of the 2014 IEEE AP-S Int. Symposium, Memphis, TN, July 6-11, 2014. DOI: 10.1109/APS.2014.6904732.
- 32. Zhu, W., Y. Shen, and X. Gong, "Ka-band loaded-line phase shifter design on flexible substrate," Proceedings of the 2014 IEEE AP-S Int. Symposium, Memphis, TN, July 6-11, 2014. DOI: 10.1109/APS.2014.6905170.
- 33. Trampler, M., K. Karnati, and X. Gong, "Tunable Ring-loaded Patch Element for Beamsteerable Reflectarray applications," Proceedings of the 2014 IEEE AP-S Int. Symposium, Memphis, TN, July 6-11, 2014. DOI: 10.1109/APS.2014.6904840.
- 34. Li, T., K. Karnati, and X. Gong, "Approach to Realize Wide-scan-angle Phased Array with Enhanced Bandwidth and Filtering Function by using Integrated Filter/Patch," Proceedings of the Microwave Symposium (IMS), 2014 IEEE MTT-S International, Tampa, FL, June 2014. DOI: 10.1109/MWSYM.2014.6848546
- 35. Liu, Y., S. Hu, J. Wu, Y. Shi, Y. Jin, Y. Hu, and X. Li, "Impact Assessment of Net Metering on Smart Home Cyberattack Detection," Proceedings of the IEEE/ACM Design Automation Conference (DAC'15), San Francisco, CA, June 2015.
- 36. Guo, X., R. G. Dutta, Y. Jin, F. Farahmandi, and P. Mishra, "Pre-Silicon Security Verification and Validation: A Formal Perspective," Proceedings of the IEEE/ACM Design Automation Conference (DAC'15), San Francisco, CA, June 2015.
- 37. Davi, L., M. Hanreich, D. Paul, A. R. Sadeghi, P. Koeberl, D. Sullivan, O. Arias, and Y. Jin, "HAFIX: Hardware-Assisted Flow Integrity eXtension," Proceedings of the IEEE/ACM Design Automation Conference (DAC'15), San Francisco, CA, June 2015. DOI: 10.1145/2744769.2744847
- 38. Konstantinou, C., M. Maniatakos, F. Saqib, S. Hu, J. Plusquellic, and Y. Jin, "Cyber-Physical Systems: A Security Perspective," Test Symposium (ETS), 2015 20th IEEE European, Cluj-Napoca, Romania, May 2015. DOI: 10.1109/ETS.2015.7138763
- 39. Biggers, J., T. Meade, S. Zhang, Y. Pino, and Y. Jin, "Automated RTL Code Rebuilding through Netlist Analysis," Proceedings of the Government Microcircuit Applications and Critical Technology Conference (GOMACTech-15), St. Louis, MO, March 2015, pp. 155-158.
- 40. Bi, Y., P-E. Gaillardon, X. Hu, M. Niemier, J. S. Yuan, and Y. Jin, "Leveraging Emerging Technology for Hardware Security Case Study on Silicon Nanowire FETs and Graphene SymFETs," Proceedings of the Asian Test Symposium (ATS), Hangzhou, China, November 2014, pp. 342-247. DOI:10.1109/ATS.2014.69

- 41. Jin, Y., "Design-for-Security vs. Design-for-Testability: A Case Study on DFT Chain in Cryptographic Circuits," Proceedings of the IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Tampa, FL, July 2014, pp. 19-24. DOI:10.1109/ISVLSI.2014.54
- 42. Jin, Y., "Embedded System Security in Smart Consumer Electronics," Proceedings of the 4th International Workshop on Trustworthy Embedded Devices (TrustED 2014), Scottsdale, AZ, November 2014, pp. 59-59.
- 43. Farrar, S. and W. Linwood Jones, "GPM Microwave Imager, on-orbit Radiometric Calibration using a Satellite Deep Space Calibration Maneuver", Proceedings of the 2013 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Quebec City, Canada, July 13-18, 2014.
- 44. Ebrahimi, H., S. Datta and W. Linwood Jones, "Radiometric Intercalibration of Satellite Microwave Humidity Sounders using the GPM Microwave Imager", Proceedings of the 2013 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Quebec City, Canada, July 13-18, 2014.
- 45. Schneider, L. and W. Linwood Jones, "Empirical Determination of 6.8 GHz Atmospheric Propagation Extinction Coefficients during Strong Convective Rain Events," Proceedings of the IEEE SoutheastCon. 2015, Ft. Lauderdale, FL, April 10-13, 2015.
- 46. Ashraf, R. A., A. Al-Zahrani, N. Khoshavi, R. Zand, S. Salehi, A. Roohi, M. Lin, and R. F. DeMara, "Reactive Rejuvenation of CMOS Logic Paths using Self-Activating Voltage Domains," Proceedings of IEEE International Symposium on Circuits and Systems (ISCAS-2015), Lisbon, Portugal, May 24 27, 2015.
- 47. Alawad, M., and M. Lin. "Energy-Efficient Imprecise Reconfigurable Computing Through Probabilistic Domain Transformation," Proceedings of the 2014 IEEE Dallas Circuits and Systems Conference (DCAS 2014) IEEE, Dallas, TX, October 2014.
- 48. Alawad, M., and M. Lin. "FIR Filter Based on Stochastic Computing with Reconfigurable Digital Fabric," Proceedings of the 23rd IEEE International Symposium on Field-Programmable Custom Computing Machines (FCCM 2015) IEEE, Vancouver, BC, May 2015.
- 49. Alawad, M., and M. Lin. "Quality-Scalable Signal Processing via Probabilistic Computing," Proceedings of The Sixth International Symposium on Highly Efficient Accelerators and Reconfigurable Technologies (HEART2015), Boston, MA, June 2015.
- 50. Bai, Y. and M. Lin, "Energy-Efficient Discrete Signal Processing with Field Programmable Analog Arrays (FPAAs)," Proceedings of the 2015 ACM/SIGDA International Symposium on Field-Programmable Gate Arrays (FPGA '15) ACM, Monterey, CA, February 2015, pp. 84-93. DOI=10.1145/2684746.2689078
- 51. Alawad, M. and M. Lin, "Energy-Efficient High-Order FIR Filtering through Reconfigurable Stochastic Processing," Proceedings of the 2015 ACM/SIGDA International Symposium on Field-Programmable Gate Arrays (FPGA '15) ACM, Monterey, CA, February 2015. DOI=10.1145/2684746.2689129

- 52. Bai, Yu and M. Lin, "Stochastically Computing Discrete Fourier Transform with Reconfigurable Digital Fabric," Proceedings of the International Conference on ReConFigurable Computing and FPGAs (ReConFig) 2014, Cancún, Mexico, December 2014, pp.1, 7, 8-10. DOI:10.1109/ReConFig.2014.7032558
- 53. Liou, J. J., "Electrostatic Discharge Protection of Automotive Electronics in High Voltage BCD Technology," Proceedings of the IEEE International Symposium on Next-Generation Electronics (Invited), Taipei, Taiwan, May 5-9, 2014, AR = 40%.
- 54. Liou, J. J., "Prospect and Challenges of Electrostatic Discharge Protection in Emerging Si nanowire Technology," Proceedings of the IEEE International Conference on Nanoelectronics (Invited), Sapporo, Japan, July 28-31, 2014, AR = 40%.
- 55. Liou, J. J., "Outlook of Electrostatic Discharge Protection of Modern and Next-Generation Integrated Circuits," Proceedings of the International Electron Devices and Materials Symposium (Invited), Hualien, Taiwan, November 20-21, 2014, AR = 50%.
- 56. Liou, J. J., "Electrostatic Discharge Protection of Automotive Electronics in High Voltage BCD/BiCMOS Technologies," Proceedings of the IEEE International SOC Conference (Invited), Jeju Island, Korea, November 2-6, 2014, AR = 35%.
- 57. Liou, J. J., "New and Effective Methodology for System-Level Electrostatic Discharge Characterization," Proceedings of the China Semiconductor Technology International Conference (Invited), Shanghai, China, March 15-16, 2015, AR = 60%.
- 58. Liou, J. J., "Prospect and Challenge of Electrostatic Discharge Protection in Emerging Technologies," Proceedings of the IEEE International Symposium on Next-Generation Electronics (Invited), Taipei, Taiwan, May 4-6, 2015, AR = 40%.
- 59. Wang, Z. and J. J. Liou, "Evaluation of Geometry Layout and Metal Pattern to Optimize ESD Performance of Silicon Controlled Rectifier," Proceedings of the IEEE International Reliability Physics Symposium, Kona, HI, June 2-7, 2014, AR = 35%.
- 60. Aliaj, B., V. Vashchensko, and J. J. Liou, "Overcoming Nonuniform Multi-Finger Turn-On in HV DIACs using Local Poly-Ballasting," Proceedings of the EOS/ESD Symposium, Anaheim, CA, August 30-September 4, 2014, AR = 40%.
- 61. Humphries, J.R., M.W. Gallagher, and D.C. Malocha, "Analysis of inter-sensor interference for wireless SAW sensors," Proceedings of the IEEE International Ultrasonics Symposium (IUS), Chicago, IL, 2014, pp. 396-399.
- 62. Aldhahab, A., G. Atia, and W. B. Mikhael, "Supervised Facial Recognition Based on Multiresolution Analysis and Feature Alignment," Proceedings of the 57th IEEE Midwest Symposium on Circuits and System, College Station, TX, pp. 137-140, August 3-6 2014. Top 10 Student Paper Award
- 63. Aldhahab, A., G. Atia, and W. B. Mikhael, "Supervised Facial Recognition based on Multiresolution Analysis with Radon Transform," Proceedings of the 48th IEEE Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 2-5 2014.

- 64. Aldhahab, A., G. Atia, and W. B. Mikhael, "Supervised Facial Recognition Based on Eigenanalysis of Multiresolution and Independent Features," Proceedings of the 58th Midwest Symposium on Circuits and System, Fort Collins, CO, August 2-5 2015.
- 65. Chehata, R. C. G., W. B. Mikhael, and G. Atia, "A Transform Domain Modular Approach for Facial Recognition Using Different Representations and Windowing Techniques," Proceedings of the 57th IEEE Midwest Symposium on Circuits and System, College Station, TX, pp. 817-820, August 3-6 2014.
- 66. Chehata, R. C. G., W. B. Mikhael, and G. Atia, "Facial Recognition Employing Transform Domain Mutual Principal Component Analysis," Proceedings of the 58th Midwest Symposium on Circuits and System, Fort Collins, CO, August 2-5 2015.
- 67. McDowell, W. and W. B. Mikhael, "MASINT Fusion of MultiSpectral, Hyperspectral & Kinematic Phenomenology," Proceedings of the 57th IEEE Midwest Symposium on Circuits and System, College Station, TX, pp. 137-140, August 3-6 2014.
- 68. Parkey, C. R. and W. B. Mikhael, "Linearized Adaptation of Non-Linear Post Conversion Correction for TI-ADCs: A Behavioral Study," Proceedings of the IEEE AUTOTESTCON, 2014, St. Louis, MO, September 2014. Best Student Paper Award.
- 69. Daughtery, E. and Z. Qu, "Optimal Design of Cooperative Guidance Law for Simultaneous Strike," Proceedings of the 53rd IEEE Conference on Decision and Control, Los Angeles, CA, December 15-17, 2014, pp.988-993.
- 70. Gusrialdi, A., Z. Qu, and M. A. Simaan, "Scheduling and Cooperative Control of Electric Vehicles' Charging at Highway Service Stations," Proceedings of the 53rd IEEE Conference on Decision and Control, Los Angeles, CA, December 15-17, 2014, pp.6465-6471.
- 71. W. Lin, Z. Qu, M. A. Simaan, "Distributed Game Strategy Design for Multi-Agent Formation Control," Proceedings of the 53rd IEEE Conference on Decision and Control, Los Angeles, CA, December 15-17, 2014, pp.433-438.
- 72. Gusrialdi, A., Z. Qu, and M. A. Simaan, "Robust Design of Cooperative Systems Against Attacks," Proceedings of the 2014 American Control Conference, Portland, OR, June 4-6, 2014, pp.1462-1468.
- 73. Haghi, H. V., Z. Qu, and S. Lotfifard, "Analytics-Based Optimization for Smart Grid Operations," Proceedings of the 2nd IEEE International Workshop on Intelligent Energy Systems, in conjunction with 2014 IEEE International Conference on Systems, Man, and Cybernetics, , San Diego, CA, USA, October 5-8, 2014, pp.58-63.
- 74. Nguyen, M., K. Teague, and N. Rahnavard, "Inter-Cluster Multi-hop Routing in Wireless Sensor Networks employing Compressive Sensing," Proceedings of the IEEE Military Communications (MILCOM), Baltimore, MD, October 2014.
- 75. Boloorchi, A. T., M. H. Samadzadeh and N. Rahnavard, "A New Parallelism-Aware Clustering Algorithm for Wireless Sensor Networks," Proceedings of the 14th IEEE/ACM International Symposium on Cluster, Cloud, and Grid Computing, Chicago, IL, May 2014.

- 76. Joneidi, M., A. Zaeemzadeh, S. Rezaeifar, M. Abavisani, and N. Rahnavard, "LFM Signal Detection and Estimation Based On Sparse Representation," Proceedings of the Conference on Information Sciences and Systems (CISS), Baltimore, MD, March 2015.
- 77. Joneidi, M., A. Zaeemzadeh, N. Rahanvard, and M. Barzegar, "Matrix Coherency Graph: A Tool for Improving Sparse Coding Performance," Proceedings of the Sampling Theory and Application (SampTA), Washington DC, USA, May 2015.
- 78. Wang, Y. and M. A. Simaan, "A New Method for Detecting Aortic Valve Dynamics During Control of the Rotary Left Ventricular Assist Device Support," Proceedings of the 2014 American Control Conference, Portland, OR, June 4-6, 2014, pp. 5483-5488.
- 79. Gusrialdi, A., Z. Qu and M. A. Simaan, "Robust Design of Cooperative Systems against Attacks," Proceedings of the 2014 American Control Conference, Portland, OR, June 4-7, 2014, 1462-1468.
- 80. Wang, Y., G. Faragallah, and M. A. Simaan, "Detecting of Aortic Valve Dynamics in Bridge-to-Recovery Feedback Control of the Left Ventricular Assist Device," Proceedings of the 13th European Control Conference, Strasbourg, France, June 24-27, 2014, pp. 140-145.
- 81. Lin, W., Z. Qu and M. A. Simaan, "Distributed Game Strategy Design for Multi-Agent Formation Control," Proceedings of the 2014 Conference on Decision and Control," Los Angeles, CA, December 15-17, 2014, pp.433-438.
- 82. Gusrialdi, A., Z. Qu and M. A. Simaan, "Scheduling and Cooperative Control of Electric Vehicles' Charging at Highway Service Stations," Proceedings of the 2014 Conference on Decision and Control, Los Angeles, CA, December 15-17, 2014, pp. 6465-6471.
- 83. Pittner, J. and M. A. Simaan, "Advanced Control to Reduce the Likelihood of Cobbles in the Tandem Rolling of Hot Metal Strip," Proceedings of the 2014 IEEE Industry Applications Society Annual Meeting," Vancouver, BC, Canada, October 5-9, 2014 (in Conference CD).
- 84. Pittner, J. and M. A. Simaan, "New Control Technique for Reducing the Likelihood of Cobbles in the Tandem Rolling of Hot Metal Sheet," Proceedings of the 2015 Iron and Steel Technology Conference and Exposition," Cleveland, OH, April 29-May 4, 2015, pp. 2647-2660
- 85. Peelamedu, R., A. Prakash, V. Velez and K. B. Sundaram, "Electrical Properties of Barium Strontium Titanate Thin Films for Embedded Capacitor Applications," Proceedings of the IEEE Southeastcon 2015, Fort Lauderdale, FL, April 9-12, 2015.
- 86. Saikumar, A., G. Skaria and K. B. Sundaram, "ZnO Gate Based MOSFETs for Sensor Applications," Proceedings of the ECS Transactions, 61, Issue 26, Orlando, FL, May 11-15, 2014, pp. 65-69, DOI:10.1149/06126.0065 ECST
- 87. Prakash, A., V. Todi, K. B. Sundaram and S. King "Hardness Studies of RF Sputtered Deposited BCN thin films," Proceedings of the ECS Transactions, 58, Issue 25, 2014, pp. 147-153, DOI: 10.1149/05825.0147.

- 88. Prakash, A. and K. B. Sundaram, "Optical Studies of Reactively Co-Sputtered BCN Thin Films", Proceedings of the ECS Transactions, 61 Issue 26, Orlando, FL, USA, May 11-15 2014, pp. 51-56, DOI: 10.1149/06126.0051.
- 89. Paris, A. Vosoughi and G. Atia, "Whitening 1/f-type Noise in Electroencephalogram Signals for Steady-State Visual Evoked Potential Brain-Computer Interfaces," Proceedings of the IEEE Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2014. (Finalist for best paper award)
- 90. Sani and A. Vosoughi, "Resource Allocation Optimization for Distributed Vector Estimation with Digital Transmission," in Proceedings of the IEEE Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2014.
- 91. Shiraz, M. and A. Vosoughi, "Bayesian Cramer-Rao Bound for Distributed Estimation of Correlated Data with Non-Linear Observation Model," Proceedings of the IEEE Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2014.
- 92. Hajibabaei, Z. and A. Vosoughi, "M-ary Distributed Detection in the Presence of Channel Estimation Error," in Proceedings of the IEEE Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2014.
- 93. Shirazi, M. and A. Vosoughi, "Bayesian Cramer-Rao Bound for Distributed Vector Estimation with Linear Observation Model," Proceedings of the IEEE 25th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), Washington, DC, September 2014.
- 94. Hajibabaei, Z. and A. Vosoughi, "Impact of Wireless Channel Uncertainty upon M-ary Distributed Detection Systems," Proceedings of the IEEE 25th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), Washington, DC, September 2014.
- 95. Karnati, K., Y. Shen, W. Zhu, M. Trampler, S. Ebadi, P. Wahid, and X. Gong, "Tunable and Flexible Electronics Employing Monolithically-Integrated BST Thin film," Proceedings of the 2015 IEEE MTT-S International Microwave Workshop Series on Advanced Materials and Processes for RF and THz Applications, Phoenix, AR, May 17-22, 2015.
- 96. Suseela, S., M. Urdaneta and P. Wahid, "Use of Magnetic Nanoparticles in Microwave Ablation," Proceedings of the IEEE MTT-S Wireless and Microwave Technology Conference, WAMICON 2015, Cocoa Beach, FL, Apr 13-16, 2015.
- 97. Urdaneta, M. and P. Wahid, "Study on Enhanced Hyperthermia Treatment for Liver Cancer using Magnetic Nanoparticles," Proceedings of the IEEE MTT, International Microwave and RF Conference (IMaRC), Bangalore, India, December 15-17, 2014, pp. 255-258.
- 98. Zhao, N., J. Wan, C. Xie, J. Wang, "GreenCHT: A Power-Proportional Replication Scheme for Consistent Hashing based Key Value Storage Systems," Proceedings of the 31st International Conference on Massive Storage Systems and Technology (MSST 2015), Santa Clara, CA, May 30-June 5 2015.

- 99. Yin, J., J. Wang, J. Zhou, T. Lukasiewicz, D. Huang and J. Zhang, "Opass: Analysis and Optimization of Parallel Data Access on Distributed File Systems," Accepted to the 29th IEEE International Parallel & Distributed Processing Symposium. Hyderabad, India.
- 100. Huang, D., J. Yin, X. Zhang, J. Zhang, J. Wang, "A Unified Storage Framework for Hybrid Scientific Workflow," Proceedings of the 2015 International Conference on Cloud Computing and Big Data (CloudCom-Asia).
- 101. Wang, J., R. Wang, J. Yin, H. Zhu, Y. Yang, "Reliability Analysis on Shifted and Random Declustering Block Layouts in Scale-out Storage Architectures," Proceedings of the IEEE NAS 2014, Tianjin, China, August 2014.
- 102. Yin, J. and J. Wang, "Scalable Scheduling for data intensive MPI computing systems," Proceedings of the IEEE ICCCN 2014 (acceptance 28%), Shanghai, China, August 2014.
- 103. Yin, J., X. Zhang, J. Zhang, J. Wang and W. Feng, "Scalable Locality-Aware Middleware for I/O in Scientific Analysis and Visualization," Proceedings of the ACM HPDC 2014 (21 full papers and 16 short papers accepted out of 130 submissions, acceptance rate 30%), Vancouver, Canada, June 2014.
- 104. Zhang, J., J. Yin, J. Zhou, J. W. Chenault and J. Wang, "On Balance among Energy, Performance and Recovery in Storage System," Proceedings of the 4th International Workshop on Data Center Performance held in Conjunction with IEEE ICDCS, 2014.
- 105. Humphries, J.R., M.W. Gallagher, D.R. Gallagher, A. R. Weeks, and D.C. Malocha, "Interrogation of Orthogonal Frequency Coded SAW Sensors Using the USRP," Proceedings of the Joint Conference of the IEEE International Frequency Control Symposium & European Frequency and Time Forum, Denver, CO, USA, April 2015.
- 106. Bi, Y., P. Gaillardon, X. Hu, M. Niemier, J. S. Yuan, and Y. Jie, "Leveraging Emerging Technology for hardware security Case study on silicon nanowire FET and graphene SymFETs," Proceedings of the 23rd Asian Test Symposium, Hangzhou, China, November 16-19, 2014.
- 107. J. S. Yuan, "RF power amplifier design for reliability and variability," Proceedings of the 21st Symposium on Nano Device Technology, Hsin-Chu, Taiwan, May 2014.

Conference Articles without Proceedings

- 1. Ashraf, R. A., A. Alzahrani, and R. F. DeMara, "Exploring Spatial Redundancy to Mitigate Aging-Induced Timing Degradation," ACM/EDAC/IEEE 51st Design Automation Conference (DAC) (poster presentation only), San Francisco, CA, June 1-5, 2014.
- 2. Gong, "Wireless Passive Temperature and Pressure Sensors for Harsh Environment Applications," 16th IEEE Wireless and Microwave Technology Conference, Cocoa Beach, FL, Apr. 13-15, 2015.

- 3. X. Gong, "Beamsteerable reflectarray antennas for millimeter-wave applications," 2015 IEEE International Workshop on Antenna Technology, Seoul, Republic of Korea, Mar. 4-6, 2015.
- 4. Potter, R., Y. Jin, "Don't Touch That Dial: How Smart Thermostats Have Made Us Vulnerable," RSA Conference, San Francisco, CA April 2015 (International).
- 5. Jin, Y., "Security and Privacy in Internet of Things and Wearable Devices," CHASE Conference on Secure/Trustworthy Systems and Supply Chain Assurance, Storrs, CT, April 2015 (National).
- 6. Jin, Y., G. Hernandez, and D. Buentello, "Smart Nest Thermostat: A Smart Spy in Your Home," Black Hat USA 2014, Las Vegas, NV, August 2014 (International).
- 7. Datta, S., W. L. Jones, H. Ebrahimi, R. Chen, A. Santos-Garcia, V. Payne, T. Wilheit and J.Wang, "Sensitivity of Input Geophysical Parameters on Radiative Transfer Model at Water Vapor Sounding Frequencies and Possible Impacts on Radiometric Calibration," PMM Sci. Team Meeting, Baltimore, MD, USA, August 4-7, 2014, International.
- 8. W. L. Jones, H. Erahimi and R. Chen, "Preliminary Results of Radiometric Inter-Calibration (XCAL) of GMI and TMI," PMM Sci. Team Meeting, Baltimore, MD, USA, August 4-7, 2014, International.
- 9. Y. Hejazin and W. L. Jones, "A MWR Ocean Roughness Correction Algorithm for the Aquarius SSS Retrieval," Aquarius Science Team Meeting, Seattle, WA, November 11-14, 2014, International.
- 10. Clymer, B., C. May, L. Schneider, F. Madero, M. Labanda, M. Jacob and W. L. Jones, "On-orbit Validation of Microwave Radiometer (MWR) Beam-pointing for Aquarius/SAC-D Mission", Aquarius Science Team Meeting, Seattle, WA, USA November 11-14, 2014, International.
- 11. Z. Ghazi, W. L. Jones, M. Jacob and A. Santos-Garcia, "CONAE Microwave Radiometer (MWR) Counts to Tb Algorithm and On-orbit Validation," Aquarius Science Team Meeting, Seattle, WA, November 11-14, 2014, International.
- 12. Tauro, Y. Hejazin, M. M. Jacob and W. L. Jones, "Validation of MWR Marine Surface Wind Speed," Aquarius Science team meeting, Seattle, WA, November 11-14, 2014, International.
- 13. Santos-Garcia, A., M. M. Jacob and W. L. Jones, "Rain Accumulation (RA) Product for Aquarius," Aquarius Science Team Meeting, Seattle, WA, November 11-14, 2014, International.
- 14. A. Santos-Garcia, M. M. Jacob, W. L. Jones and W. Asher, "Application of the AQ Rain Accumulation Product for Investigation of Rain Effects on AQ Sea Surface Salinity Measurements," Aquarius Science Team Meeting, Seattle, WA, Nov. 11-14, 2014, International.
- 15. Cecil, D. J., S. K. Biswas and W. L. Jones, "Hurricane Imaging Radiometer (HIRAD)," 69th Inter-departmental Hurricane Conference, Jacksonville, FL, Mar 2-5, 2015, National.

- 16. Prakash, A. and K. B. Sundaram, "Studies on Dielectric Properties of Annealed Reactively Co-sputtered BCN Thin Films," 226th Meeting of the Electrochemical Society, Cancun, Mexico, October 5-9, 2014.
- 17. Velze, V. H., R. G. Mertens and K. B. Sundaram, "The Effect of Etching Temperature upon the Optical Reflectance on Silicon Nanowire Grown by Electroless Etching," 226th Meeting of the Electrochemical Society, Cancun, Mexico, October 5-9, 2014.
- 18. Saikumar, A. K., G. Skaria, and K. B. Sundaram "Investigation of Electrical Characterization of Hetero-Junctions Formed by RF Sputtered Indium Tin Oxide on Silicon," 226th Meeting of the Electrochemical Society, Cancun, Mexico, October 5-9, 2014.
- 19. Velze, V. H., R. G. Mertens and K. B. Sundaram, "Reflectance Studies in Silicon Nanowires grown by electroless etching," 225th Meeting of the Electrochemical Society, Orlando, FL, USA, May 11-15, 2014.
- 20. Mertens, R. G., V. H. Velez and K. B. Sundaram, "Diffusion Mechanism in Silicon Nanowires," 225th Meeting of the Electrochemical Society, Orlando, FL, USA, May 11-15, 2014.
- 21. Yin, J., J. Zhou, and J. Wang, "Sebo: Selective Bulk Analysis Optimization in Big Data Processing," Supercomputing Frontiers 2015, Singapore, March 2015.
- 22. Huang, D., J. Yin, J. Wang, Q. Liu, X. Zhang and J. Zhou, "SideIO: A Side I/O Framework System for Eliminating Analysis Data Migration," Supercomputing Frontiers 2015, Singapore, March 2015.
- 23. J. Yin, and J. Wang, "Optimize Parallel Data Access in Big Data Processing" ACM/IEEE CCGrid 2015 Doctoral Symposium, Shenzhen, China, May 2015.

Plenary and Invited Talks

- 1. Abdolvand, R., "Resonant Micro-Sensing Platform for Ultrasonic Characterization of Blood Coagulation," September 17-20, 2014, The Critical and Point of Care Testing (CPOCT) 25th International Symposium, San Diego, CA.
- 2. Atia, G., "Compressive Interferomerty for Optical Modal Analysis in Arbitrary Degrees of Freedom," February 2015, Information Theory Workshop (ITA), San Diego, CA.
- 3. Atia, G., "Compressive and Coded Change Detection with Applications in Structural Health Monitoring," October 2014, Allerton Conference on Communication, Control and Computing, Monticello IL.
- 4. Atia, G., "Signal Processing Activities at the University of Central Florida", September 2014, Lockheed Martin Fellows Conference.
- 5. Batarseh, I., Gave an invited talk at the University of Bahrain, February 2015.

- 6. Batarseh, I., Made three presentations to potential investors in our DoE Three-phase invertor.
- 7. Imran, N., R. Ashraf, and R. F. DeMara, "Evaluating Quality and Resilience of an Embedded Video Encoder against a Continuum of Energy Consumption," June 1, 2014, 2014 Workshop on Suite of Embedded Applications and Kernels (SEAK-2014), San Francisco, California,
- 8. Jin, Y., "Hardware Security from an Emerging Technology Perspective," October 2014, Tsinghua University, Beijing, China.
- 9. Jin, Y., "Computer System Protection through Hardware-Software Collaboration," October 2014, Institute of Computing Technology, Chinese Academy of Science, Beijing, China.
- 10. Jin, Y., "Computer System Protection through Hardware-Software Collaboration," September 2014, University of Georgia, Athens, GA.
- 11. Jin, Y., "Computer System Protection through Run-Time Hardware-Software Collaboration," September 2014, Pennsylvania State University, State College, PA.
- 12. Jin, Y., Forte, D., "Embedded System Security in Smart Consumer Electronics: A Case Study on Google Nest Thermostat," August 2014, University of Connecticut, Storrs, CT.
- 13. Jin, Y., "Security in Silicon Challenges and Opportunities Ahead," May 2014, Information Sciences Institute/USC, Washington, D.C.
- 14. Jones, W. L., "Microwave Radiometers Design & Theory," Instituto de Astronomía y Física del Espacio (IAFE Radio Astronomy group), May 16, 2014, University of Buenos Aires, Buenos Aires, Argentina.
- 15. Liou, J.J., "Electrostatic discharge protection of integrated circuits: characterization and development," September 2014, Apple Inc., Cupertino, CA.
- 16. Liou, J.J., "Electrostatic discharge protection of integrated circuits: characterization, modeling and design," March 2015, Qualcomm, San Diego, CA, March 2015
- 17. Liou, J.J., "Electrostatic discharge protection of integrated circuits: characterization, modeling and design," March 2015, ON Semiconductor, San Jose, CA.
- 18. Liou, J.J., "Overview of electrostatic discharge protection solutions of RF integrated circuits," April 2015, University of Manchester, U.K.
- 19. Liou, J.J., "On distributed estimation in wireless sensor networks," Information Theory and Applications (ITA) Workshop, February 2015, University of California at San Diego (UCSD) San Diego, CA.
- 20. Wang, J., "SideIO: A Side I/O Framework System for Eliminating Analysis Data Migration," April 1-3, 2015, Oak Ridge National Laboratory, Oak Ridge, TN.
- 21. Wang, J., "SideIO: A Side I/O Framework System for Eliminating Analysis Data Migration," Supercomputing Frontiers 2015, March 2015, Singapore.

- 22. Wang, J., "Scaling up Performance and Scaling out Storage for Cyber Physical System: Research and Opportunities" Cyber Physical System, 2014 IEEE 23rd International Conference on Computer Communications and Networks (ICCCN), August 2014, Shanghai, China.
- 23. Wang, J., "Scalable Locality-Aware Middleware for I/O in Scientific Analysis and Visualization (Poster Session)," NSF CyberBridges Workshop 2014, June 1-3, 2014, Arlington, VA
- 24. Yuan, J., "RF Technology for Smart Things," May 2014, I-Shou University, Taiwan.
- 25. Vousoughi, A., "On Distributed Estimation in Wireless Sensor Networks," February 2015, Information Theory and Applications (ITA) Workshop, University of California at San Diego, CA.