

List of WINLAB Publications and Talks

(2005 to Fall 2008)

Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Acharya, J.	Yates, R.D.	Conference Paper	Two Dimensional Spreading for Dispersive Channels	Proceedings of 2005 Military Communications Conference (MILCOM '05), Atlantic City, NJ, October 2005, pp.1-7.	Radio/PHY
Chen, H.	Zhong, J., Saraf, G., Lu, Y., Hill, D.H., Hsu, S.T., Ono, Y.	Journal Paper	Interface Properties of ZnO Nanotips Grown on Si Substrates	TMS & IEEE Journal on Electronic Materials, Vol. 35, No. 6, pp. 1241-1245, June 2006.	Radio/PHY
Chen, Y.	Saraf, G., Wittstruck, R.H., Emanetoglu, N.W., and Lu, Y.	Conference Paper	ZnO and Mg _x Zn _{1-x} O Thin Film Resonators for Mass Sensing	Proceedings of the 2005 Joint IEEE International Frequency Control Symposium and Precise Time and Time Interval (PTTI) Systems and Applications Meeting, Vancouver, BC, Canada, August 2005.	Radio/PHY
Chen, Y.	Emanetoglu, N.W., Saraf, G., Wu, P., and Lu, Y.	Journal Paper	Analysis of SAW Properties in ZnO/A _{1-x} Ga _{1-x} N/c-A ₁ O ₃ Structures	IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control, Vol. 52, No. 7, pp. 1161-1169, July 2005.	Radio/PHY
Clark, M.V.	Greenstein, L.J.	Journal Paper	The Relationship between Fading and Bandwidth for Multipath Channels	IEEE Transactions on Wireless Communications, Vol. 4, No. 4, pp. 1372-1376, July 2005.	Radio/PHY
Domazetovic, A.	Greenstein, L.J., Mandayam, N.B., and Seskar, I.	Journal Paper	Propagation Models for Short-Range Wireless Channels with Predictable Path Geometries	IEEE Transactions on Communications, Vol. 53, No. 7, pp.1123-1126, July 2005.	Radio/PHY
DuPasquier, A.	Chen, H. and Lu, Y.	Journal Paper	Dye Sensitized Solar Cells Using Well-Aligned ZnO Nanotip Arrays	Applied Physical Letters, No. 89, 253513, 2006.	Radio/PHY
Firner, B.	Medhekar, S., Zhang, Y., Howard, R., Trappe, W., Wolniansky, P. and Fenson, E.	Conference Paper	PIP Tags: Hardware Design and Power Optimization	Proceedings of the Fifth Workshop on Embedded Networked Sensors (HotEmNets 2008), Charlottesville, VA, June 2008.	Radio/PHY
Foschini, G.J.	Karakayali, K. and Valenzuela, R.A.	Invited Article	Coordinating Multiple Antenna Cellular Networks to Achieve Enormous Spectral Efficiency	IEE Proceedings – Communications, Vol. 153, No.4, pp. 548-555, August 2006.	Radio/PHY
Foschini, G.J.	Huang, H.C., Karakayali, K., Valenzuela, R.A. and Venkatesan, S.	Conference Paper	The Value of Coherent Base Station Coordination	Proceedings of the Conference on Information Sciences and Systems (CISS '05), The John Hopkins University, March 2005.	Radio/PHY
Galoppini, E.	Rochford, J., Chen, H., Saraf, G., Lu, Y., Hagfeldt, A. and Boschloo, G.	Journal Paper	Fast Electron Transport in MOCVD Grown Dye-Sensitized ZnO Nanorod Solar Cells	Physical Chemical Letters B 110 (33) p16159, 2006.	Radio/PHY
Ghassemzadeh, S.S.	Greenstein, L.J., Sveinsson, T., Kavcic, V. and Tarokh, V.	Journal Paper	UWB Delay Profile Models for Residential and Commercial Environments	IEEE Transactions on Vehicular Technology, Vol. 54, No. 4, pp. 1235-1244, July 2005.	Radio/PHY
Greenstein, L.J.	Ghassemzadeh, S.S., Hong, S.C. and Tarokh, V.	Journal Paper	Comparison Study of UWB Indoor Channel Models	IEEE Transactions on Wireless Communications. Vol. 6, No. 1, pp.128-135, January 2007.	Radio/PHY
Greenstein, L.J.	Ghassemzadeh, S.S.	Conference Paper	Comparing Three Models for UWB Indoor Power Delay Profile	Proceedings of the Conference on Information Sciences and Systems (CISS '06), Princeton, NJ, March 2006, pp. 626-631.	Radio/PHY

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Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Ivkovic, G.	Spasojevic, P. and Seskar, I.	Conference Paper	Localization of Packet Based Radio Transmitters in Space, Time and Frequency	Proceedings of the 42 nd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, October 2008.	Radio/PHY
Ivkovic, G.	Spasojevic, P. and Seskar, I.	Conference Paper	Radio Scene Analysis using Trilinear Decomposition	Proceedings of the 42 st Conference on Information Sciences and Systems (CISS 2008), Princeton, NJ, March 2008, pp. 128-133.	Radio/PHY
Kaya, A.O.	Greenstein, L. and Trappe, W.	Conference Paper	Characterizing Indoor Wireless Channels via Ray Tracing, and Validation Via Measurements	Proceedings of the IEEE Global Telecommunications Conference (GLOBECOM 2008), New Orleans, LA, December 2008.	Radio/PHY
Kaya, A.O.	Greenstein, L. and Trappe, W.	Conference Paper	Modeling Temporal Channel Variations in Indoor Wireless Environments	Proceedings of the Military Communications Conference (MILCOM 2008), San Diego, CA, November 2008.	Radio/PHY
Kaya, A.O.	Greenstein, L., Chizhik, D. Valenzuela, R. and Moayeri, N.	Conference Paper	Emitter Localization and Visualization (ELVIS): A Backward Ray Tracing Algorithm for Locating Emitters	Proceedings of the Conference on Information Sciences and Systems (CISS 2007), Baltimore, MD, March 2007, pp. 376-381.	Radio/PHY
Kishore, S.	Greenstein, L.J., Poor, H.V. and Schwartz, S.C.	Journal Paper	Uplink User Capacity in a Multicell CDMA System with Hotspot Microcells	IEEE Transactions on Wireless Communications, Vol. 5, No. 6, pp. 1333-1342, June 2006.	Radio/PHY
Kishore, S.	Greenstein, L.J., Poor, H.V. and Schwartz, S.C.	Journal Paper	Uplink User Capacity in a CDMA System with Hotspot Microcells: Effects of Finite Transmit Power and Dispersion	IEEE Transactions on Wireless Communications, Vol. 5, No. 2, pp. 417-426, February 2006.	Radio/PHY
Kishore, S.	Schwartz, S., Greenstein, L.J. and Poor, H.V.	Journal Paper	Uplink Throughput in a Single-Macrocell/Single-Microcell System, with Application to Data Access Points	IEEE Transactions on Wireless Communications, Vol. 4, No. 4, pp. 1302-1306, July 2005.	Radio/PHY
Kishore, S.	Greenstein, L.J., Schwartz, S.C. and Poor, H.V.	Journal Paper	Soft Handoff and Uplink Capacity in a Two-Tier CDMA System	IEEE Transactions on Wireless Communications, Vol. 4, No. 4, pp. 1297-1301, July 2005.	Radio/PHY
Kleisouris, K.	Chen, Y., Yang, J. and Martin, R.	Conference Paper	The Impact of Using Multiple Antennas on Wireless Localization	Proceedings of the 5 th Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON 2008), San Francisco, CA, June 2008, pp. 55-63.	Radio/PHY
Lai, J.	Mandayam, N.B.	Journal Paper	Performance of Turbo-coded WCDMA with Downlink Space-time Block Coding in Correlated Fading Channels	IEEE Transactions on Wireless Communications, Vol.4, No. 2, pp. 802-807, March 2005.	Radio/PHY
Lei, J.	Gao, W.	Conference Paper	A Code-Matched Interleaver Design for LDPC Codes over Surrogate Channel	To appear in the Proceedings of the IEEE Wireless Communication and Networking Conference (WCNC 2009), Budapest, Hungary, April 2009.	Radio/PHY
Lie, J.	Greenstein, L. and Yates, R.D.	Conference Paper	Link Gain Matrix Estimation in Distributed Wireless Networks Based on Maximum Entropy Sampling	Proceedings of the IEEE Global Telecommunication Conference (GLOBECOM 2008), New Orleans, LA, November 2008.	Radio/PHY

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Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Lie, J.	Gao, W.	Conference Paper	Fast Identification of Error-Prone Patterns for LDPC Codes under Message Passing Decoding	Proceedings of the IEEE Global Telecommunication Conference (GLOBECOM 2008), New Orleans, LA, November 2008.	Radio/PHY
Lei, J.	Gao, W.	Conference Paper	Matching Graph Connectivity of LDPC Codes to High-Order Modulation by Bit Interleaving	Proceedings of the 46 th Allerton Conference on Communication, Control and Computing, Champaign, IL, September 2008.	Radio/PHY
Lei, J.	Gao, W.	Conference Paper	A Backward Compatible Solution for Next Generation Digital Video Broadcasting Systems	Proceedings of the IEEE International Conference on Communication (ICC '08), Beijing, China, May 2008, pp. 1962-1966.	Radio/PHY
Lei, J.	Yates, R.D. and Greenstein, L.J.	Journal Paper	A Generic Model for Optimizing Single-Hop Transmission Policy of Replenishable Wireless Sensors	To appear in the IEEE Transactions on Wireless Communications.	Radio/PHY
Lei, J.	Yates, R.D., Greenstein, L.J. and Liu, H.	Journal Paper	Mapping Link SNRs of Real-World Wireless Networks onto an Indoor Testbed	To appear in the IEEE Transactions on Wireless Communications.	Radio/PHY
Lei, J.	Yates, R. and Greenstein, L.J.	Conference Paper	Optimal Transmission Policy for Renewable Sensor Networks	Proceedings of the Conference on Information Sciences and Systems (CISS '06), Princeton, NJ, March 2006, pp. 81-86.	Radio/PHY
Lei, J.	Yates, R., Greenstein, L.J. and Liu, H.	Conference Paper **Best Paper Award"	Mapping Link SNRs of Wireless Mesh Networks onto an Indoor Testbed	Proceedings of the IEEE Second International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TRIDENTCOM 2006), Barcelona, Spain, March 2006, pp. 7.	Radio/PHY
Lei, J.	Yates, R., Greenstein, L. and Liu, H.	Conference Paper	Wireless Link SNR Mapping onto an Indoor Testbed	Proceedings of the IEEE First International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TRIDENTCOM 2005), Trento, Italy, February 2005, pp. 130-135.	Radio/PHY
Li, Z.	Yates, R.D. and Trappe, W.	Conference Paper	Secrecy Capacity Region of a Class of One-Sided Interference Channel	Proceedings of the IEEE International Symposium on Information Theory (ISIT), Toronto, Canada, July 2008, pp. 379-383..	Radio/PHY
Li, Z.	Yates, R.D. and Trappe, W.	Conference Paper	Secure Communication with a Fading Eavesdropper Channel	Proceedings of the IEEE International Symposium on Information Theory (ISIT 2007), Nice, France, June 2007, pp. 1296-1300.	Radio/PHY
Li, Z.	Trappe, W. and Yates, R.D.	Conference Paper	Secret Communication via Multi-antenna Transmission	Proceedings of the 41 st Annual Conference in Information Sciences and Systems (CISS 2007), Baltimore, MD, March 2007, pp. 905-910.	Radio/PHY
Li, Z.	Yates, R. and Trappe, W.	Conference Paper	Secrecy Capacity of Independent Parallel Channels	Proceedings of the 44 th Annual Allerton Conference, Champaign, IL, September 2006.	Radio/PHY

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Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Li, Z.	Xu, W., Miller, R. and Trappe, W.	Conference Paper	Securing Wireless Systems via Lower Layer Enforcements	Proceedings of the ACM Workshop on Wireless Security (WiSe 2006), Los Angeles, September 2006, pp. 33-42.	Radio/PHY
Lim, G.	Cimini, L.J. and Greenstein, L.J.	Conference Paper	Analysis and Results for H-MIMO – A Hybrid of Spatial Multiplexing and Adaptive Beamforming	Proceedings of the 2005 Military Communications Conference (MILCOM 2005), Atlantic City, NJ, October 2005, pp.1187-1192.	Radio/PHY
Lin, L.	Yates, R.D. and Spasojevic, P.	Journal Paper	Adaptive Transmission with Finite Code Rates	IEEE Transactions on Information Theory, Vol. 52, No. 5, pp. 1847-1860, May 2006.	Radio/PHY
Liu, R.	Luo, J. and Spasojevic, P.	Journal Paper	Adaptive Transmission with Variable-Rate Turbo Bit-Interleaved Coded Modulation	IEEE Transactions on Wireless Communications, Vol.6, No. 11, pp. 3926-3936, November 2007.	Radio/PHY
Liu, R.	Spasojevic, P. and Soljanin, E.	Journal Paper	Incremental Redundancy Cooperative Coding for Wireless Networks: Cooperative Diversity, Coding, and Transmission Energy Gains	IEEE Transactions on Information Theory, Vol. 54, No. 3, pp. 1207-1224, March 2008.	Radio/PHY
Liu, R.	Liang, Y., Poor, H.V. and Spasojevic, P.	Conference Paper	Secure Nested Codes for Type II Wiretap Channels	Proceedings of IEEE Information Theory Workshop (ITW '07), Lake Tahoe, CA, September 2007, pp. 337-342.	Radio/PHY
Liu, R.	Spasojevic, P.	Conference Paper	On the Bhattacharya Rate for BISOM Channels and its Code Threshold	Proceedings of IEEE Information Theory Workshop (ITW '06), Chengdu, China, October 2006, pp. 224-228.	Radio/PHY
Liu, R.	Maric, I., Yates, R.D. and Spasojevic, P.	Conference Paper	The Discrete Memoryless Multiple Access Channel with Confidential Messages	Proceedings of IEEE International Symposium on Information Theory (ISIT 2006) Seattle, WA, July 2006, pp. 957-961.	Radio/PHY
Liu, R.	Spasojevic, P. and Soljanin, E.	Journal Paper	Reliable Channel Regions for Good Binary Codes Transmitted over Parallel Channels	IEEE Transactions on Information Theory, Vol. 52, No. 4, pp. 1405-1424, April 2006.	Radio/PHY
Liu, R.	Spasojevic, P. and Soljanin, E.	Journal Paper	On the Weight Spectrum of Good Linear Binary Codes	IEEE Transactions on Information Theory, Vol. 51, No. 12, pp. 4369-4373, December 2005.	Radio/PHY
Liu, R.	Spasojevic, P. and Soljanin, E.	Conference Paper	Cooperative Coding for Wireless Networks: Cluster Behavior via a Geometric Distance Profile	Proceedings of the WICAT Workshop on Cooperative Communications, New York, NY, October 21, 2005.	Radio/PHY
Liu, R.	Spasojevic, P.	Conference Paper	On the Rate-Diversity Function for MIMO Channels with a Finite Input Alphabet	Proceedings of the 43 rd Annual Allerton Conference of Communication, Control and Computing, Monticello, IL, September 2005.	Radio/PHY
Liu, R.	Spasojevic, P. and Soljanin, E.	Conference Paper	Cooperative Diversity with Incremental Redundancy Turbo Coding for Quasi-static Wireless Networks	Proceedings of the IEEE 6 th Workshop on Signal Processing Advances in Wireless Communications (SPAWC 2005), New York, NY, June 2005, pp. 791-795.	Radio/PHY
Liu, S.	Greenstein, L.J.	Conference Paper	Emission Characteristics and Interference Constraint of Overhead Medium-Voltage Broadband Power Line (BPL) Systems	Proceedings of the IEEE Global Telecommunications Conference (GLOBECOM 2008), New Orleans, LA, December 2008.	Radio/PHY

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Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Liu, S.	Greenstein, L.J.	Conference Paper	Radiation Characteristics and Interference of Large Broadband Power Line (BPL) Deployments	Proceedings of the IEEE International Conference on Communications (ICC '08), Beijing, China, May 2008, pp. 2071-2075.	Radio/PHY
Liu, S.	Greenstein, L.J.	Conference Paper	Modeling and Interference Evaluation of Overhead Medium-voltage Broadband Power Line (BPL) Systems	Proceedings of the 50 th Annual IEEE Global Telecommunications Conference (GLOBECOM 2007), Washington, DC, November 2007, pp. 134-139.	Radio/PHY
Loiacono, M.	Rosca, J. and Trappe, W.	Conference Paper	The Snowball Effect: Detailing Performance Anomalies of 802.11 Rate Adaptation	Proceedings of IEEE Global Telecommunications Conference (GLOBECOM 2007), Washington, DC, November 2007, pp. 5117-5122.	Radio/PHY
Lu, G.	Greenstein, L.J. and Spasojevic, P.	Journal Paper	Spectral and Spatial Properties of Antennas for Transmitting and Receiving UWB Signals	IEEE Transactions on Vehicular Technology, Vol. 57, No. 1, pp. 243-249, January 2008.	Radio/PHY
Lu, G.	Greenstein, L. J. and Spasojevic, P.	Journal Paper	A New Probability Density Function Enhancing Packet Detection Analysis for Low SNR Links	Transactions on Vehicular Technology, Vol. 56, No. 3, pp.1230-1238, May 2007.	Radio/PHY
Lu, G.	Greenstein, L.J. and Spasojevic, P.	Conference Paper	Symmetry Properties of Antennas in Transmitting and Receiving UWB Signals	Proceedings of IEEE International Workshop on Antenna Technology: Small Antennas and Novel Metamaterials, White Plains, NY, March 2006, pp. 76-79.	Radio/PHY
Lu, G.	Spasojevic, P. and Greenstein, L.J.	Conference Paper	Receive Response Design Compensating Direction-dependent Impulse Responses of UWB Antennas	Proceedings of IEEE International Workshop on Antenna Technology: Small Antennas and Novel Metamaterials, White Plains, NY, March 2006, pp. 384-387.	Radio/PHY
Lu, G.	Greenstein, L. and Spasojevic, P.	Conference Paper	A New Probability Density Function Enhancing Packet Detection Analysis for Low SNR Links	Proceedings of the 48 th Annual IEEE Global Telecommunications Conference (GLOBECOM 2005) St. Louis, MO, November 2005, pp. 1273-1278.	Radio/PHY
Lu, G.	Spasojevic, P. and Greenstein, L.	Conference Paper	A Technique for Reducing Frame Synchronization Errors in OFDM UWB Systems with Multipath	Proceedings of IEEE 62 nd Semi-Annual Vehicular Technology Conference – Fall 2005, Dallas, TX, September 2005, pp. 68-72.	Radio/PHY
Lu, Y.	Emanetoglu, N.W., and Chen, Y.	Book Chapter	Chapter 13: ZnO Piezoelectric Devices	In Zinc Oxide Bulk, Thin Films and Nanostructures: Processing, Properties and Applications, Elsevier Limited, USA, ISBN 0-0804-4722-8, 2006.	Radio/PHY
Lu, Y.	Zhu, J., Zhong, J., Chen, Y, Saraf, G., Chen, H., Zhang, Z. and Wu, P.	Conference Paper	ZnO-based Novel Devices for Aviation Applications	Proceedings of Aviation Technologies – Looking Toward Tomorrow Conference – F.A.A Technical Center, Pomona, NJ, July 2006.	Radio/PHY
Lu, Y.		Keynote Speech	ZnO Material Growth, Nanostructures and Devices	ACCG, Bedminster, NJ, November 16, 2005.	Radio/PHY
Lu, Y.		Invited Talk	ZnO Detectors and Other Devices	Proceedings of EMRS 2005 Spring Meeting, June 2005.	Radio/PHY

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Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Luo, J.	Blum, R.S., Cimini, L.J., Greenstein, L.J. and Haimovich, A.M.	Conference Paper	Decode-and-Forward Cooperative Diversity with Power Allocation in Wireless Networks	Proceedings of the 48 th Annual IEEE Global Telecommunications Conference (GLOBECOM 2005) St. Louis, MO, November 2005, pp. 3048-3052. Transactions on Wireless Communications, Vol. 6, No. 3, pp. 793-799, March 2007.	Radio/PHY
Luo, J.	Yates, R.D. and Spasojevic, P.	Journal Paper	Service Outage Based Power and Rate Allocation for Parallel Fading Channels	IEEE Transactions on Information Theory, Vol. 51, No. 7, pp. 2594-2611, July 2005.	Radio/PHY
Maric, I.	Yates, R.D. and Kramer, G.	Invited Paper	The Capacity Region of the Strong Interference Channel with Common Information	Proceedings of the 39 th Asilomar Conference on Signals, Systems and Computers, Monterey, CA, November 2005, pp. 1737-1741.	Radio/PHY
Mehta, N.B.	Molisch, A.F. and Greenstein, L.	Journal Paper	Macrocell-Wide Behavior of the Orthogonality Factor in WCDMA Downlinks	IEEE Transactions on Wireless Communications, Vol. 5, No. 12, pp. 3394-3399, December 2006.	Radio/PHY
Mehta, N.B.	Molisch, A.F. and Greenstein, L.	Journal Paper	Statistics of Orthogonality Factor in COST259 Macrocellular Environments for WCDMA Downlinks	To appear in IEEE Transactions on Wireless Communications	Radio/PHY
Mehta, N.B.	Molisch, A.F. and Greenstein, L.J.	Conference Paper	Orthogonality Factor in WCDMA Downlinks in Urban Microcellular Environments	Proceedings of the 48 th Annual IEEE Global Telecommunications Conference (GLOBECOM 2005) St. Louis, MO, November 2005, pp. 3378-3382.	Radio/PHY
Miljanic, Z.	Spasojevic, P.	Conference Paper	Resource Virtualization and Programmable Radio Processing Platform	Proceedings of the 4 th International Wireless Internet Conference (WICON 2008), Maui, HI, November 2008.	Radio/PHY
Popescu, D.C.	Rose, C.	Journal Paper	Codeword Optimization for Uplink CDMA Dispersive Channels	IEEE Transactions on Wireless Communications, Vol. 4, No. 4, pp.1563-1574, July 2005.	Radio/PHY
Samardzija, D.	Mandayam, N.B.	Journal Paper	Impact of Pilot Design on Achievable Rates in Multiple Antenna Multiuser TDD Systems	IEEE Journal on Selected Areas of Communications, Vol. 25, No. 7, September 2007, pp. 1370-1379.	Radio/PHY
Samardzija, D.	Xiao, L. and Mandayam, N.B.	Conference Paper	Impact of Pilot Assisted Channel State Estimation on Multiple Antenna Multiuser TDD Systems with Spatial Filtering	Proceedings of the Conference on Information Sciences and Systems, (CISS 2006), Princeton, NJ, March 2006, pp. 381-385.	Radio/PHY
Samardzija, D.	Mandayam, N.B.	Conference Paper	Unquantized and Uncoded Channel State Information Feedback on Wireless Channels	Proceedings of the IEEE Wireless Communications and Networking Conference (WCNC 2005), New Orleans, LA, March 2005, pp. 1059-1065.	Radio/PHY
Saraf, G.	Zhong, J., Dulub, O., Diebold, U., Siegrist, T. And Lu, Y.	Journal Paper	Surface and Interface Properties of MOCVD Grown A-Plane Mg _x Zn _{1-x} O (0<X<=0.3)	To appear in Journal of Electronic Materials, 2007.	Radio/PHY
Saraf, G.	Zhong, J., Lu, Y., Dulub, O., Diebold, U., Siegrist, T.	Conference Paper	Surface and Interface Characterization of A-Plane ZnO and Mg _x Zn _{1-x} O Films	Proceedings of the 48 th TMS Electronic Materials Conference, Pennsylvania State University, University Park, PA, June 2006, p.71	Radio/PHY

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Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Saraf, G.	Chen, Y., Siegrist, T., Wielunski, L.S. and Lu, Y.	Journal Paper	Hybrid Deposition of Piezoelectric $(1\bar{1}\bar{2}0)$ $Mg_xZn_{1-x}O$ $0 \leq x \leq 0.3$ on $(01\bar{1}2)R$ -Sapphire Substrates Using RF Sputtering and MOCVD	To appear in TMS and IEEE Journal of Electronic Materials, June 2006.	Radio/PHY
Shin, O-S.	Ghassemzadeh, S.S., Tarokh, V. and Greenstein, L.J.	Conference Paper	Performance Evaluation of MB-OFDM and DS-UWB Systems for Wireless Personal Area Networks	Proceedings of the International Conference on UWB (ICU), Zurich, Switzerland, September 2005.	Radio/PHY
Sun, M.	Lu, Y.	Journal Paper	Non-Linearity in ESD Robust InGaAs p-i-n Photodiode	To appear in IEEE Transactions on Electron Devices.	Radio/PHY
Sun, M.	Lu, Y.	Journal Paper	A New ESD Protection Structure for High Speed GaAs RF Ics	IEEE Electron Device Letters, Vol. 36, No. 3, pp.133-135, March 2005.	Radio/PHY
Sun, M.	Lu, Y.	Journal Paper	ESD Protection FOR 10 Gb/s Optical Receivers	IEEE Electronic Letters, Vol. 41, No. 2, pp. 68-69, January 2005.	Radio/PHY
Sun, X.	Cimini, L.J., Greenstein, L.J., Chan, D. and Douglas, B.	Conference Paper	Performance of Quantized Feedback Beamforming in MIMO-OFDM Links over Time-Varying Frequency-Selective Channels	Proceedings of the 2007 Military Communications Conference (MILCOM 2007), Orlando, FL, October 2007, pp. 1-6.	Radio/PHY
Sun, X.	Cimini, L.J., Chan, D. and Greenstein, L.J.	Conference Paper	Enhanced IEEE 802.11n Quantized Feedback Beamforming with Power Allocation	Proceedings of the Conference on Information Sciences and Systems (CISS '08), Princeton, NJ, March 2008, pp. 908-912.	Radio/PHY
Sun, X.	Cimini, L.J., Greenstein, L.J., Chan, D. and Douglas, B.	Conference Paper	Performance Evaluation of Quantized Feedback Beamforming in IEEE 802.11n Wireless Networks	Proceedings of the Conference on Information Sciences and Systems (CISS 2007), Baltimore, MD, March 2007, pp. 884-888.	Radio/PHY
Tang, X.	Liu, R., Spasojevic P. and Poor, H.V.	Journal Paper	On the Throughput of Secure Hybrid-ARQ Protocols for Gaussian Block-fading Channels	To appear in IEEE Transactions on Information Theory, 2009.	Radio/PHY
Tang, X.	Liu, R., Spasojevic, P. and Poor, H.V.	Conference Paper	The Gaussian Wiretap Channel with a Helping Interferer	Proceedings of IEEE International Symposium on Information Theory (ISIT 2008), Toronto, Ontario, Canada, July 2008, pp. 389-393.	Radio/PHY
Tang, X.	Liu, R., Spasojevic, P. and Poor, H.V.	Conference Paper	Interference-Assisted Secret Communication	Proceedings of the IEEE Information Theory Workshop (ITW 2008), Porto, Portugal, May 2008, pp. 164-168.	Radio/PHY
Tang, X.	Liu, R., Spasojevic, P. and Poor, H.V.	Conference Paper	Coding Schemes for Confidential Communications	Proceedings of Workshop on Information Theory and Applications (ITA 2008), UCSD, La Jolla, CA, Jan/Feb 2008, pp. 370-378.	Radio/PHY
Tang, X.	Liu, R., Spasojevic, P and Poor, H.V.	Conference Paper	Multiple Access Channels with Generalized Feedback and Confidential Messages	Proceedings of the IEEE Information Theory Workshop on Frontiers in Coding Theory (ITW 2007), Lake Tahoe, CA, September 2007, pp. 608-613.	Radio/PHY

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Tang, X.	Liu, R. and Spasojevic, P.	Conference Paper	An Achievable Secrecy Throughput of Hybrid-ARQ Protocols for Block-Fading Channels	Proceedings of the IEEE International Symposium on Information Theory (ISIT 2007), Nice, France, June 2007, pp. 1311-1315.	Radio/PHY
Tang, X.	Liu, R. and Spasojevic, P.	Conference Paper	On the Achievable Secrecy Throughput of Block-Fading Channels with no Channel State Information at the Transmitter	Proceedings of the IEEE Conference on Information Sciences and Systems (CISS 2007), Baltimore, MD, March 2007, pp. 917-922.	Radio/PHY
Taratula, O.	Galoppini, E., Wang, D., Chu, D., Zhang, Z., Chen, H., Saraf, G. and Lu, Y.	Journal Paper	Binding Studies of Molecular Linkers to ZnO and MgZnO Nanotip Films	Journal of Physical Chemistry B, Vol. 110, No. 13, pp. 6506-6515, April 2006.	Radio/PHY
Wang, H.	Mandayam, N.B.	Journal Paper	Opportunistic File Transfer Over a Fading Channel Under Energy and Delay Constraints	IEEE Transactions on Communications, Vol. 53, No. 4, pp. 632-644, April 2005.	Radio/PHY
Willis, T.M.	Greenstein, L.J.	Conference Paper	Propagation Modeling and Other Challenges for Non-Line-of Sight Wireless Systems in the 4-6 GHz Bands	Proceedings of the IEEE International Microwave Symposium, San Francisco, CA, June 2006, pp. 835-838.	Radio/PHY
Wittstruck, R.H.	Emanetoglu, N.W., Lu, Y., Laffey, S. and Ballato, A.	Journal Paper	Properties of Transducers and Substrates for High Frequency Resonators and Sensors	Journal of the Acoustic Society of America, Vol. 118, No. 3, pp. 1414-1423, September 2005.	Radio/PHY
Wu, D.	Spasojevic, P.	Conference Paper	Adaptive Rate QS-CDMA UWB Systems Using Ternary OVFS Codes with a Zero-Correlation Zone	Proceedings of the IEEE Wireless Communications and Networking Conference (WCNC 2006), Las Vegas, NV, April 2006, pp. 1068-1073.	Radio/PHY
Wu, D.	Spasojevic, P.	Conference Paper	Acquisition of the Kronecker Sequence Using Recursive Soft Sequential Estimation for DS-SS Systems in Multipath Channels	Proceedings of the 39 th Conference on Information Sciences and Systems (CISS '05), Baltimore, MD, March 2005.	Radio/PHY
Wu, D.	Spasojevic, P. and Seskar, I.	Conference Paper	Orthogonal Variable-Spreading-Factor Codes with Zero-Correlation Zone for TS-UWB	IEEE Wireless Communications and Networking Conference 2005 (WCNC '05), New Orleans, LA, March 2005, pp. 807-812.	Radio/PHY
Wu, P.	Saraf, G., Hill, D.H., Arena, D.A., Bartynski, R.A., Cosandey, F., Al Sharab, J.F., Wielunski, L., Gateau, R. Dvorak, J., Moodenbaugh, A., Raley, J.A., Yeo, Y.K. and Lu, Y.	Journal Paper	Magnetic Properties of Fe Implanted ZnO Nanotips	To appear in the Journal of Electronic Materials, 2007.	Radio/PHY
Wu, P.	Saraf, G., Lu, Y., Hill, D.H., Arena, D.A., Bartynski, R.A., Wielunski, L., Raley, J.A. and Yeo, Y-K.	Conference Paper	Ferromagnetism in Fe-implanted ZnO Films and Nanotips	Proceedings of the 48 th TMS Electronic Materials Conference, Pennsylvania State University, University Park, PA, June 2006, pp. 104.	Radio/PHY
Wu, P.	Saraf, G., Lu, Y., Hill, D.H., Arena, D.A., Bartynski, R.A., Wielunski, L., Raley, J.A. and Yeo, Y-K.	Journal Paper	Ferromagnetism in Fe-implanted ZnO Films and Nanotips	To appear in the Journal of Electronics Materials, 2006.	Radio/PHY
Wu, P.	Saraf, G., Lu, Y., Hill, D.H., Bartynski, A., Siegrist, T., Ryu, M. Raley, J.A. and Yeo, Y.K.	Journal Paper	Room Temperature Ferromagnetism in Fe-implanted a-plane ZnO Films	To appear in Applied Physics Letters, 2006.	Radio/PHY

List of WINLAB Publications and Talks (...continued)

(2005 to Fall 2008)

Author	Co-Authors	Paper/Talk	Title	Where/When	Category
Xiao, L.	Greenstein, L.J., Mandayam, N.B. and Trappe, W.	Journal Paper	Using the Physical Layer for Wireless Authentication in Time-variant Channels	IEEE Transactions of Wireless Communications, Vol. 7, No. 9, pp. 2571-2579, July 2008.	Radio/PHY
Xiao, L.	Greenstein, L.J., Mandayam, N.B. and Periyalwar, S.	Journal Paper	Distributed Measurements for Estimating and Updating Cellular System Performance	IEEE Transactions on Communications, Vol. 56, No. 6, pp. 991-998, June 2008	Radio/PHY
Xiao, L.	Greenstein, L.J., Mandayam, N.B. and Trappe, W.	Conference Paper	A Physical-Layer Technique to Enhance Authentication for Mobile Terminals	Proceedings of the IEEE International Conference on Communications (ICC '08), Beijing, China, May 2008, pp. 1520-1524.	Radio/PHY
Xiao, L.	Greenstein, L.J., Mandayam, N.B. and Trappe, W.	Conference Paper	MIMO-Assisted Channel-Based Authentication in Wireless Networks	Proceedings of the Conference on Information Sciences and Systems (CISS '08), Princeton, NJ, March 2008, pp. 642-646.	Radio/PHY
Xiao, L.	Greenstein, L.J., and Mandayam, N.B.	Journal Paper	Sensor-assisted Localization in Cellular System	IEEE Transactions of Wireless Communications, Vol. 6, No. 12, pp. 4244-4248, December 2007.	Radio/PHY
Xiao, L.	Greenstein, L.J., Mandayam, N.B. and Trappe, W.	Conference Paper	Fingerprints in the Ether: Using the Physical Layer for Wireless Authentication	Proceedings of the IEEE International Conference on Communications (ICC 2007), Glasgow, Scotland, June 2007, pp. 4646-4651.	Radio/PHY
Zhang, Z.	Chen, H., Zhong, J., Lu, Y., Rivillon, S., Chabal, Y.J., Nuber, A. and Madey, T.	Conference Paper	The Fast and Reversible Wettability Transitions of ZnO Nanostructures	To appear in the Proceedings of the 2006 II-VI Workshop, Newport Beach, CA, October 2006. JEM web published online May 10, 2007.	Radio/PHY
Zhang, Z.	Chen, H., Zhong, J., Chen, Y. and Lu, Y.	Conference Paper	ZnO Nanotip-based QCM Biosensors	Proceedings of the 2006 IEEE Frequency Control Symposium, Miami, FL, Miami, FL, June 2006, pp. 545-549.	Radio/PHY
Zhang, Z.	Emanetoglu, N.W., Saraf, G., Chen, Y., Wu, P., Zhong, J., Lu, Y., Chen, J., Mirochnitchenko, O., and Inouye, M.	Journal Paper	DNA Immobilization and SAW Response in ZnO Nanotips Grown on LiNbO ₃ Substrates	IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control, Vol. 53, No.4, pp. 786-792, April 2006.	Radio/PHY
Zhang, Z.	Emanetoglu, N.W., Saraf, G., Chen, Y., Wu, P., Zhong, J. and Lu, Y.	Journal Paper	SAW Bio-Sensor Using ZnO Nanostructures in LiNbO ₃ Substrate	Accepted by IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control.	Radio/PHY
Zhong, J.	Saraf, G., Chen, H., Lu, Y., Ng, Hoch M., Siegrist, T., Parekh, A., Lee, D. and Armour, E.A.	Journal Paper	Structural and Optical Properties of ZnO Nanotips Grown on GaN Using Metalorganic Chemical Vapor Deposition	To appear in TMS & IEEE Journal of Electronics Materials	Radio/PHY
Zhong, J.	Chen, H., Saraf, G., Lu, Y., Choi, C.K., Song, J.J., Mackie, D.M. and Shen, H.	Journal Paper	Integrated ZnO Nanotips on GaN Light Emitting Diodes for Enhanced Emission Efficiency	Applied Physical Letters, Vol. 90, N. 20, May 2007.	Radio/PHY
Zhong, J.	Chen, H., Saraf, G., Lu, Y., Ng, H.M., Choi, C.K., Song, J.J.	Conference Paper	Photoluminescence and Electroluminescence Properties of ZnO Nanotips Grown on P-Type GaN	Proceedings of the 48 th TMS Electronic Materials Conference, Pennsylvania State University, University Park, PA, June 2006, p.89	Radio/PHY

List of WINLAB Publications and Talks (...continued)

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Zhong, J.	Saraf, G., Chen, H., Lu, Y., Ng, H.M., Siegrist, T., Parekh, A. and Armour, E.A.	Journal Paper	Structural and Optical Properties of ZnO Nanotips Grown on GaN Using Metalorganic Chemical Vapor Deposition	To appear in TMS & IEEE Journal of Electronics Materials, 2006.	Radio/PHY
Zhong, J.	Saraf, G., Chen, H., Lu, Y. Ng, H.M., Siegrist, T., Parekh, A., Lu, D., Armour, E.A.,	Conference Paper	Structural and Optical Properties of ZnO Nanotips Grown on GaN	Proceedings of 2005 Electronic Materials Conference, Santa Barbara, CA, June 2005.	Radio/PHY
Zhu, J.	Chen, Y., Saraf, G., Emanetoglu, N.W. and Lu, Y.	Conference Paper	ZnO Based Multimode Voltage Tunable SAW Devices	Proceedings of the 4 th International Workshop on ZnO and Related Materials, University of Giessen, Germany, October 2006.	Radio/PHY
Zhu, J.	Chen, Y., Saraf, G., Emanetoglu, N.W. and Lu, Y.	Journal Paper	Voltage Tunable Surface Acoustic Wave Phase Shifter Using Semiconducting/ Piezoelectric ZnO Dual Layers Grown on r-A1 ₂ O ₃	Applied Physical Letters, Vol. 89, pp 103513, 2006.	Radio/PHY
Zhu, J.	Saraf, G., Zhong, J., Sheng, H.F., Yakshinskiy, B.V. and Lu, Y.	Journal Paper	SiCl ₄ -Based Reactive Ion Etching of ZnO and Mg _x Zn _{1-x} O Films on R-sapphire Substrates	TMS & IEEE Journal on Electronic Materials, Vol.35, No.6, pp.1311-1315, June 2006.	Radio/PHY